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Aeronautical Information Services Manual

Approved by the Secretary General
and published under his authority

Sixth Edition — 2003

International Civil Aviation Organization

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AMENDMENTS

The issue of amendments is announced regularly in the *ICAO Journal* and in the monthly *Supplement to the Catalogue of ICAO Publications and Audio-visual Training Aids*, which holders of this publication should consult. The space below is provided to keep a record of such amendments.

RECORD OF AMENDMENTS AND CORRIGENDA

[illegible][illegible]

FOREWORD

Annex 15 to the Convention on International Civil Aviation specifies that each Contracting State shall provide an “aeronautical information service”. An aeronautical information service (AIS) is required to collect and distribute information needed to ensure the safety, regularity and efficiency of air navigation. Such information, which includes the availability of air navigation facilities and services and the procedures associated with them, must be provided to flight operations personnel, as well as the air traffic services unit responsible for flight information service and the services responsible for pre-flight information.

The effective functioning of an AIS is dependent upon the cooperative effort of all aeronautical services, such as communications, aerodromes and air traffic services, since the raw information must be originated by such services. It is, therefore, incumbent upon the national aviation authority to ensure that all the required information is supplied to the AIS as promptly as possible.

The purpose of this manual is to explain the basic functions of an AIS and to describe the basic organization it requires. It is also intended that the manual:

- a) assist Contracting States in the uniform application of the Standards and Recommended Practices (SARPs) contained in Annex 15;

- b) promote maximum efficiency in the organization and operation of an AIS; and
- c) assist Contracting States in the training of AIS personnel.

This manual is published in furtherance of Recommendation 4/1 of the Meeting of the Aeronautical Information Services and Aeronautical Charts Division of ICAO (held at Montreal in April 1959). It should be read in conjunction with the latest editions of the following related ICAO documents:

Annex 4 — *Aeronautical Charts*

Annex 15 — *Aeronautical Information Services*

Doc 8697 — *Aeronautical Chart Manual*

Doc 9674 — *World Geodetic System — 1984 (WGS-84) Manual*

Throughout this manual, references to the appropriate Annex 15 SARPs are shown within square brackets.

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SPECIMEN AIP

Chapter 1

INTRODUCTION

1.1 PURPOSE OF AN AERONAUTICAL INFORMATION SERVICE (AIS)

Needs of the operator

1.1.1 The operator of any type of aircraft, be it small private aircraft or large transport aircraft, must have available a variety of information concerning the air navigation facilities and services that may be expected to be used. For example, the operator must know the regulations concerning entry into and transit of the airspace of each State in which operations will be carried out, as well as what aerodromes, heliports, navigation aids, meteorological services, communication services and air traffic services are available and the procedures and regulations associated with them. The operator must also be informed, often on very short notice, of any change affecting the operation of these facilities and services and must know of any airspace restrictions or hazards likely to affect flights. While this information can nearly always be provided before take-off, it must in some instances be provided during flight.

Responsibility of the pilot-in-command

1.1.2 The responsibility of the pilot-in-command to become familiar with all available information appropriate to the intended operation is stated in Chapter 2 of Annex 2. For international commercial air transport, there are stringent ICAO requirements which can only be satisfied by the provision of the type of information usually provided by an AIS. Pilots must be familiar with the regulations and procedures of all States to be overflown. Annex 6, Part I, specifies that certain specific types of information must be carried on board an aircraft, and that no flight may be commenced unless there is reasonable assurance that the facilities and services required for the flight are available and operational. The requirements for international general aviation and international helicopter operations, in Annex 6, Part II and Part III respectively, can also only be satisfied by the provision of the type of information provided by an AIS. Therefore, the ability to

comply with these requirements of Annex 6 is dependent upon the existence of a well-organized and efficient AIS, adequately staffed with personnel trained for this speciality.

Responsibility of an aeronautical information service [3.1]

1.1.3 Annex 15 specifies that each Contracting State must provide an AIS for the collection and distribution of aeronautical information for use by all types of aircraft operations. This is the basic responsibility. A State could also:

- a) make arrangements with one or more Contracting States for the provision of a joint AIS; or
- b) delegate the authority for the provision of aeronautical information services to a non-governmental agency, provided that the Standards and Recommended Practices of Annex 15 are met.

1.1.4 Annex 15 also specifies that the State concerned remains responsible for the aeronautical information published. When the aeronautical information is published on behalf of a State it must be clearly indicated that it is published under the authority of that State.

1.1.5 The philosophy underlying Annex 15, which stems from Article 28 of the Convention on International Civil Aviation, is that each State is responsible for making available to civil aviation interests any and all information which is pertinent to and required for the operation of aircraft engaged in international civil aviation within its territory, as well as in areas outside its territory in which the State has air traffic control or other responsibilities.

1.1.6 Although the Convention and its Annexes are concerned primarily with international air operations, it should be noted that national aviation has the same need for an AIS.

Need for uniformity

1.1.7 In accordance with Article 37 of the Convention, Annex 15 is designed to promote uniformity in the collection and distribution of aeronautical information, in the interest of safety, efficiency and economy of civil aviation.

International exchange of aeronautical information [3.1]

1.1.8 Although the AIS operated by each State is primarily responsible for the provision of information regarding the facilities and services located within its territory, the exchange of similar information with AIS of other States enables the provision of the pre-flight information service needed by international operations which may traverse those States and information required by related air traffic service units for aircraft in flight. It will be apparent that the amount and scope of the information handled by an AIS will vary considerably from State to State.

1.2 INFORMATION HANDLED BY AN AIS

Origin of aeronautical information

1.2.1 An AIS does not normally originate the information it processes and ultimately issues. The “raw data” must be provided by those responsible for the operation of the various air navigation facilities and services. Since an AIS is one of several services that normally come under the control of the aviation administration of a State, and since its effectiveness is highly dependent upon the provision of required information by other services, it is most important that the position of an AIS in the overall picture, and the responsibility of other services for providing the required information, is well understood. The basic purpose of an AIS is to provide information needed to ensure the safety, regularity and efficiency of civil aviation and, regardless of the efficiency of its organization, its ability to perform this important function will be highly dependent upon the adequacy, accuracy and timely provision of the required raw data by each of the State services associated with aircraft operations. To secure this, an easy and effective liaison needs to be established between an AIS and other, related services. Also, the status accorded to the AIS within the

aviation administration, as well as its physical location, should be determined with care to ensure the necessary priorities and liaison.

Scope and type of information

1.2.2 The information handled by an AIS may vary widely in terms of the duration of its applicability. For example, information related to airports and its facilities may remain valid for many years while changes in the availability of those facilities (for instance, due to construction or repair) will only be valid for a relatively short period of time. Information may be valid for as short a time as days or hours.

1.2.3 The urgency attached to information may also vary, as well as the extent of its applicability in terms of the number of operators or types of operations affected by it. Information may be lengthy or concise or include graphics.

1.2.4 Therefore, aeronautical information is handled differently depending on its urgency, operational significance, scope, volume and the length of time it will remain valid and relevant to users. Annex 15 specifies that aeronautical information be published as an Integrated Aeronautical Information Package. It is composed of the following elements: the Aeronautical Information Publication (AIP), including amendment service, AIP Supplements, NOTAM, pre-flight information bulletins (PIB), Aeronautical Information Circulars (AIC), checklists and lists of valid NOTAM. Each element is used to distribute specific types of aeronautical information.

1.3 QUALITY SYSTEM [3.2]

1.3.1 The need, role and importance of aeronautical information/data have changed significantly with the evolution of the Communications, Navigation and Surveillance/Air Traffic Management (CNS/ATM) systems. The implementation of area navigation (RNAV), required navigation performance (RNP) and airborne computer-based navigation systems has brought about exacting requirements for the quality (accuracy, resolution and integrity) of aeronautical information/data.

1.3.2 The users' dependence on the quality of certain aeronautical information/data is evident from Annex 15, paragraph 3.2.8 a) which, when describing critical data, states: “There is a high probability when using corrupted

critical data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe”.

1.3.3 Since corrupt or erroneous aeronautical information/data can potentially affect the safety of air navigation because of the direct dependence upon it by both airborne and ground-based systems, it is imperative that each State ensure that users (aviation industry, air traffic services, etc.) receive timely and quality aeronautical information/data for the period of its intended use.

1.3.4 To achieve this, and to demonstrate to users the required information/data quality, States must establish a quality system and put in place quality management procedures at all stages (receiving and/or originating, collating or assembling, editing, formatting, publishing, storing and distributing) of the aeronautical information/data process. The quality system must be documented and demonstrable for each function stage, ensuring that the organizational structure, procedures, processes and resources are in place in order to detect and remedy any information/data anomalies during the phases of production, maintenance and operational use. Explicit in such a quality management regime is the ability to trace all information/data from any point, back through the proceeding processes, to its origin.

1.3.5 Frequent audits form part of the quality system to ensure consistency and conformity. Where non-conformity is detected, action must be taken to determine the cause and to correct the anomaly. Reports, record keeping and documentation form an integral part of this process.

1.3.6 The International Organization for Standardization (ISO) has developed a set of international standards (ISO 9000 series) dealing with quality management and quality assurance which are in wide use in different sectors throughout the world. Many States have used ISO 9000 standards as the basis for their quality systems. ISO 9000 accreditation is one way that a State's AIS is able to demonstrate that a quality system is in place which will enable them to meet established user requirements.

1.3.7 When formulating a quality assurance programme, an organization should not limit its focus to the processes and procedures that are involved in the provision of the service. It is equally important that the personnel, which are an integral part of the system, possess and utilize the skills and competencies necessary to operate within the quality system. In the context of the quality system, the objectives of skills and competency management must include:

- a) the identification of the functions to be performed;
- b) the identification of the knowledge and skills required for each step of each of the processes; and
- c) the assurance that the personnel assigned to functions have the required knowledge and skills, and are competent to perform those functions.

1.3.8 Additionally, and in accordance with the quality system requirements, appropriate records of skills need to be kept so that the qualifications of personnel assigned to perform specific functions can be confirmed. Appropriate checks must also be undertaken periodically to ensure that personnel continue to meet the required standards and, if shortfalls in knowledge, skills or competencies are detected, corrective measures are taken.

1.4 COMMON REFERENCE SYSTEMS FOR AIR NAVIGATION

[3.7]

Horizontal reference system

1.4.1 World Geodetic System — 1984 (WGS-84) must be used as the horizontal (geodetic) reference system for international air navigation. Consequently, published aeronautical geographical coordinates (indicating latitude and longitude) must be expressed in terms of the WGS-84 geodetic reference datum.

1.4.2 Comprehensive guidance material concerning WGS-84 is contained in the World Geodetic System — 1984 (WGS-84) Manual (Doc 9674).

1.4.3 Specifications governing the determination and reporting (accuracy of field work and data integrity) of WGS-84-related aeronautical coordinates for geographical positions established by air traffic services are given in Annex 11, Chapter 2, and Appendix 5, Table 1, and for aerodrome/heliport-related positions, in Annex 14, Volumes I and II, Chapter 2, and Table A5-1 and Table 1 of Appendices 5 and 1, respectively.

1.4.4 Geographical coordinates that have been transformed into WGS-84 coordinates but whose accuracy of original field work does not meet the requirements in Annex 11, Chapter 2, and Annex 14, Volumes I and II, Chapter 2, must be identified by an asterisk.

1.4.5 The order of publication resolution of geographical coordinates must be that specified in

Annex 15, Appendix 1 and Table A7-1 of Appendix 7 while the order of chart resolution of geographical coordinates must be that specified in Annex 4, Appendix 6, Table 1.

1.4.6 In precise geodetic applications and some air navigation applications, temporal changes in the tectonic plate motion and tidal effects on the Earth's crust should be modelled and estimated. To reflect the temporal effect, an epoch should be included with any set of absolute station coordinates.

1.4.7 The epoch of the latest updated WGS-84 (G1150) reference frame, which includes plate motion model, is 2001.0. G indicates that the coordinates were obtained through Global Positioning System (GPS) techniques, and the number following G indicates the GPS week when these coordinates were implemented in the United States of America's National Geospatial-Intelligence Agency's (NGA's) precise ephemeris estimation process.

1.4.8 Another precise worldwide terrestrial coordinate system is the International Earth Rotation Service (IERS) Terrestrial Reference System (ITRS), and the realization of ITRS is the IERS Terrestrial Reference Frame (ITRF). Guidance material regarding the ITRS is provided in Appendix C of Doc 9674. The most current realization of the WGS-84 (G1150) is referenced to the ITRF 2000 epoch. The WGS-84 (G1150) is consistent with the ITRF 2000 and in practical realization the difference between these two systems is in the one to two centimetre range worldwide, meaning WGS-84 (G1150) and ITRF 2000 are essentially identical.

1.4.9 A brief description of the horizontal (geodetic) reference system used must be provided in the AIP as specified in Annex 15, Appendix 1, GEN 2.1-3.

Vertical reference system

1.4.10 Mean sea level (MSL) datum, which gives the relationship of gravity-related height (elevation) to a surface known as the geoid, must be used as the vertical reference system for international air navigation.

1.4.12 The geoid globally most closely approximates MSL. It is defined as the equipotential surface in the gravity field of the Earth which coincides with the undisturbed MSL extended continuously through the continents.

1.4.13 Gravity-related heights (elevations) are also referred to as orthometric heights while distances of points above the ellipsoid are referred to as ellipsoidal heights.

1.4.13 The Earth Gravitational Model — 1996 (EGM-96), containing long wavelength gravity field data to degree and order 360, must be used by international air navigation as the global gravity model.

1.4.14 At those geographical positions where the accuracy of EGM-96 does not meet the accuracy requirements for elevation and geoid undulation specified in Annex 14, Volumes I and II, on the basis of EGM-96 data, regional, national or local geoid models containing high resolution (short wavelength) gravity field data must be developed and used. When a geoid model other than the EGM-96 model is used, a description of the model used, including the parameters required for height transformation between the model and EGM-96, must be provided in the Aeronautical Information Publication (AIP). (See Annex 15, Appendix 1, GEN 2.1.4.)

1.4.15 Specifications governing determination and reporting (accuracy of field work and data integrity) of elevation and geoid undulation at specific positions at aerodromes/heliports are given in Annex 14, Volumes I and II, Chapter 2, and Table A5-2 and Table 2 of Appendices 5 and 1, respectively.

1.4.16 In addition to elevation referenced to the MSL (geoid), for the specific surveyed ground positions, geoid undulation (referenced to the WGS-84 ellipsoid) for those positions specified in Annex 15, Appendix 1 must also be published in the AIP.

1.4.17 The order of publication resolution of elevation and geoid undulation must be that specified in Annex 15, Appendix 1 and Table A7-2 of Appendix 7, while the order of chart resolution of elevation and geoid undulation must be that specified in Annex 4, Appendix 6, Table 2.

1.4.18 A brief description of the vertical reference system used must be provided in the AIP as specified in Annex 15, Appendix 1, Gen 2.1.4.

Temporal reference system

1.4.19 For international civil aviation, the Gregorian calendar and Coordinated Universal Time (UTC) must be used as the temporal reference system.

1.4.20 Coordinated Universal Time (UTC) is a time scale maintained by the Bureau International de l'Heure (BIH) and the IERS and forms the basis of a coordinated dissemination of standard frequencies and time signals. See Attachment D of Annex 5 for guidance material relating to UTC.

1.4.21 ISO Standard 8601 specifies the use of the Gregorian calendar and 24-hour local or UTC for information interchange while ISO Standard 19108 prescribes the Gregorian calendar and UTC as the primary temporal reference system for use with geographic information.

1.4.22 When a different temporal reference system is used for some applications, the feature catalogue, or the metadata associated with an application schema or a data set, as appropriate, must include either a description of that system or a citation for a document that describes that temporal reference system. ISO Standard 19108, Annex D, describes some aspects of calendars that may have to be considered in such a description.

1.4.23 A description of the temporal reference system employed (calendar and time), as well as an indication of whether or not daylight savings hours are employed, must be provided in the AIP as specified in Annex 15, Appendix 1, GEN 2.1.2.

1.5 HUMAN FACTORS CONSIDERATIONS

[3.6.8]

The organization of an AIS, as well as the design, contents, processing and distribution of aeronautical information, must take into consideration Human Factors principles which facilitate their optimum utilization. Guidance material on Human Factors concepts can be found in the Human Factors Training Manual (Doc 9683).

1.6 USE OF AUTOMATION

[3.6.6]

Wherever practicable, the use of automation in AIS should be introduced with the intent of providing a more efficient service to end users. AIS automation is covered in greater detail in Chapter 9.

1.7 COPYRIGHT AND COST RECOVERY

[3.3, 3.4, 3.5]

Copyright

1.7.1 Some States are applying copyright to their AIS products in accordance with national (and international)

laws to recuperate some of the costs associated with the collection, collation, maintenance, publication and distribution of aeronautical information/data and to ensure control of its use. In accordance with Annex 15, any product of a State's AIS that has been granted copyright protection by that State and has been provided to another State in conformance with the specifications in the Annex, can only be made available to a third party provided the third party has been informed that the product is copyright protected and the product has been so annotated. In addition, States may decide to apply copyright to their AIS products to ensure that aeronautical information/data released for use through a "second generation" information/data provider comes from an authorized source and has the appropriate quality system protection.

1.7.2 The application of copyright does not affect the requirement for States to ensure the free exchange of aeronautical information/data between States in accordance with Articles 28 c) and 37 of the Convention.

Cost recovery

1.7.3 Although Annex 15 provides for the exchange of aeronautical information/data without charge between ICAO Contracting States, there may be occasions where other States or commercial or private entities seek to procure aeronautical information/data and other air navigation documents. In such cases, an AIS may wish to enter into a separate agreement with the party concerned regarding the conditions and costs, if any, that will be applied to the provision of that information/data.

1.7.4 Operators may choose to procure their aeronautical information/data either from the AIS of the State concerned or from a commercial vendor. There are, however, considerable costs associated with the provision of aeronautical information/data: first, the overhead costs associated with the ongoing operation of the AIS; next, the costs associated with collecting, verifying, compiling and collating the information/data; and finally, the costs associated with the publication and distribution of the information/data. States may decide to recover these costs by charging users for the aeronautical information/data provided. It is recommended that these costs be included in the cost basis for airport and air navigation services charges, as appropriate, in accordance with the principles contained in Doc 9082 — ICAO's Policies on Charges for Airports and Air Navigation Services.

Chapter 2

PROVISION OF RAW DATA

2.1 ASSIGNMENT OF RESPONSIBILITY FOR ORIGINATION OF RAW DATA

2.1.1 The State's aviation authority must assign to its technical branches at headquarters the responsibility of originating the raw data required by the aeronautical information service (AIS) for promulgation in the Aeronautical Information Publication (AIP), AIP Supplements, NOTAM, pre-flight information bulletins (PIB) and Aeronautical Information Circulars (AIC). Therefore, the technical branches should ensure that they have speedy and reliable lines of communication with the AIS. On receipt of the raw data, it is the responsibility of the AIS to check, record and edit it in order to distribute it in a standard format. Raw data includes both basic and temporary information and should be submitted to the AIS on the aeronautical information promulgation advice form (see Figure 2-1).

2.1.2 Ideally the aim is for the AIS to be in possession of all information, regularly amended, that is required or likely to be required by national operators flying from the State and international operators flying through the State, with due allowance for occasional flights by charter operators.

2.2 BASIC INFORMATION

Basic information usually covers the more permanent or static material destined for inclusion in the AIP and, as such, should preferably be authorized by the policy branches at headquarters level in order to ensure uniform format and compliance with present or future policy. All basic information should be supplied well in advance to the AIS to permit enough time for processing and distribution, thus affording reasonable advance notice to operators.

2.3 INFORMATION OF A TEMPORARY NATURE AND OF SHORT DURATION

2.3.1 Information of a temporary nature or of short duration may also be originated by the technical branches

or sections, for example, when temporary changes are made to basic information, when special short-term procedures are introduced, or for certain navigational warnings.

2.3.2 Responsibility for origination of the majority of such information (which covers, for example, work in progress at airports/heliports and radio installations, unserviceabilities, or temporary withdrawal or reinstatement of operational facilities) should, however, be delegated to the local authority, who must be given the facilities to communicate directly with the AIS in order to ensure the fastest possible required action.

2.4 WORKING ARRANGEMENTS

2.4.1 To ensure promptness and accuracy in the distribution of aeronautical information, each of the services responsible for providing the AIS with raw data should designate individuals who are to be responsible for maintaining direct and continuous liaison with the AIS.

2.4.2 Additionally, liaison should be arranged and local agreements established, where necessary, between aerodrome/heliport AIS units and those local authorities in aerodromes, communications, meteorology, air traffic services, search and rescue and facilitation responsible for the origination of current information on aerodrome/heliport conditions and services. This would include the serviceability and operational status of visual and non-visual aids and the state of the manoeuvring area. This is to ensure the fast distribution by the AIS of temporary information of concern in the approach, landing and departure phases of flight.

2.5 MODES OF COMMUNICATION

The modes of communication required for submission of raw data to the AIS should include:

- a) *messenger service*: in all cases where such a service exists and time permits (It is necessary to have such

data submitted in typescript on the aeronautical information promulgation advice form as this provides an authoritative record.);

- b) *postal service*: in all cases where a messenger service is not available;
- c) *aeronautical fixed service*: in all cases where the messenger or postal service would not meet the time factor (This should be followed by a completed aeronautical information promulgation advice form.);
- d) *telex*;
- e) *telephonic*: in emergency cases only (This must be confirmed by a completed aeronautical information promulgation advice form.);
- f) *computer network*; and
- g) *Internet (electronic mail and websites)*.

2.6 AERONAUTICAL INFORMATION REGULATION AND CONTROL (AIRAC)

The need for control

2.6.1 Information concerning changes in facilities, services or procedures in most cases requires amendments to be made to airline operations manuals or other documents produced by various aviation agencies. The organizations responsible for maintaining these publications up to date usually work to a pre-arranged production programme. If AIP Amendments or AIP Supplements concerning such information were published indiscriminately with a variety of effective dates, it would be impossible to keep the manuals and other documents up to date. Alternatively, if a schedule of predetermined dates on which changes were to become effective were fixed throughout the year, it would be possible for a production programme to take account of or be based on these predetermined dates.

Regulated system

[6.1.1, 6.1.2, 6.1.4, 6.2.1]

2.6.2 Since many of the changes to facilities, services and procedures can be anticipated and become effective in accordance with a predetermined schedule of effective

dates, Annex 15, 6.1, calls for the use of a regulated system designed to ensure, unless operational considerations make it impracticable, that:

- a) information concerning any circumstances listed in Appendix 4 of Annex 15 will be issued as AIP Amendments or AIP Supplements (see Figure 2-1, verso). These amendments and supplements must be identified by the acronym "AIRAC" and distributed at least 42 days in advance of the effective date for usual changes and 58 days in advance for major changes with the objective of reaching recipients at least 28 days in advance for usual changes and 44 days in advance for major changes;
- b) the AIRAC effective dates must be in accordance with the predetermined, internationally agreed schedule of effective dates based on an interval of 28 days, including 29 January 1998; and
- c) information so notified must not be changed further for at least another 28 days after the indicated effective date, unless the circumstance notified is of a temporary nature and would not persist for the full period.

2.6.3 Essentially, implementation dates other than AIRAC effective dates **must not be used** for pre-planned, operationally significant changes requiring cartographic work and/or updating of navigation databases.

2.6.4 The processing cycle for airborne navigation databases requires the database to be delivered at least seven days before the effective date. At least eight days are necessary to prepare the data in the database; therefore, the navigation data houses generally exercise a cut-off 20 days prior to the effective date in order to ensure that the subsequent milestones are met. Data supplied after the 20-day cut-off will generally not be included in the database for the next cycle (see Figure 2-2).

2.6.5 In addition to the use of a predetermined schedule of effective AIRAC dates, Coordinated Universal Time (UTC) must also be used to indicate the time when the AIRAC information will become effective. Since Annex 15, paragraph 3.2.3, specifies that the Gregorian calendar and UTC must be used as the temporal reference system for international civil aviation, in addition to AIRAC dates, when an effective time other than 0000 UTC is used, the effective time must be included explicitly with the AIRAC information.

Schedule of AIRAC effective dates

2.6.6 The schedule of predetermined, internationally agreed AIRAC effective dates for the years 2009 to 2018 inclusive is given in Table 2-1.

Coordination

2.6.7 In order for the AIRAC system to operate satisfactorily, it is essential that the technical branches of the

State aviation authority that are assigned the responsibility of supplying raw data to the AIS be thoroughly familiar with the AIRAC system. In particular, they must be aware not only of the effective dates but also the latest dates on which the raw data must reach the AIS in order for an AIP Amendment or AIP Supplement to be published and reach recipients at least 28 days in advance of the effective date. It is the responsibility of the AIS to determine these latest dates in order to publish amendments/supplements that will meet the corresponding AIRAC effective dates. A convenient way of informing technical branches of these dates is for the

Table 2-1. Schedule of AIRAC effective dates, 2009-2018

2009	2010	2011	2012	2013
15 January	14 January	13 January	12 January	10 January
12 February	11 February	10 February	9 February	7 February
12 March	11 March	10 March	8 March	7 March
9 April	8 April	7 April	5 April	4 April
7 May	6 May	5 May	3 May	2 May
4 June	3 June	2 June	31 May	30 May
2 July	1 July	30 June	28 June	27 June
30 July	29 July	28 July	26 July	25 July
27 August	26 August	25 August	23 August	22 August
24 September	23 September	22 September	20 September	19 September
22 October	21 October	20 October	18 October	17 October
19 November	18 November	17 November	15 November	14 November
17 December	16 December	15 December	13 December	12 December
2014	2015	2016	2017	2018
9 January	8 January	7 January	5 January	4 January
6 February	5 February	4 February	2 February	1 February
6 March	5 March	3 March	2 March	1 March
3 April	2 April	31 March	30 March	29 March
1 May	30 April	28 April	27 April	26 April
29 May	28 May	26 May	25 May	24 May
26 June	25 June	23 June	22 June	21 June
24 July	23 July	21 July	20 July	19 July
21 August	20 August	18 August	17 August	16 August
18 September	17 September	15 September	14 September	13 September
16 October	15 October	13 October	12 October	11 October
13 November	12 November	10 November	9 November	8 November
11 December	10 December	8 December	7 December	6 December

dates to be printed on the reverse side of the aeronautical information promulgation advice form (see Figure 2-1, verso). In addition, the AIS publishes on a yearly basis, usually in the form of an AIC, a list of AIRAC effective dates, publication dates and latest dates on which material has to reach the AIS. Technical branches should endeavour to forward raw data to the AIS as early as possible and not wait until the latest date. This applies particularly where lengthy or complicated drafts are concerned. Early receipt will allow the AIS to process the data at a normal speed, whereas late receipt will normally mean that processing will be rushed, increasing the possibility of error.

Significant dates

[6.1, 6.2, 6.3]

2.6.8 There are three significant dates associated with the AIRAC system:

- a) the effective date;
- b) the publication date; and
- c) the latest date for raw material to reach the AIS.

2.6.9 There must be an interval of 42 days between the distribution date and the effective date. This allows for a period of up to 14 days' distribution time, **by the most expeditious means**, in order for recipients to receive the information at least 28 days in advance of the effective date.

2.6.10 In cases where major changes (i.e. extensive changes to procedures or services which will impact international air transport) are planned and more advance notice is desirable and practicable, a distribution date of 56 days (or even longer) in advance of the effective date should be used. Examples of major changes are:

- a) the introduction of a new aerodrome;
- b) the introduction of new approach and/or departure procedures at international aerodromes; and
- c) the introduction of new ATS routes.

2.6.11 When the AIS does not receive AIRAC material from the responsible authorities/agencies for publication on the next scheduled AIRAC effective date, it must issue a NIL notification by NOTAM (or other means) at least one cycle (28 days or more) before the AIRAC effective date concerned.

Use of the AIRAC system during holiday periods

[6.1.5]

2.6.12 In some areas of the world the use of an AIRAC effective date that falls within major holiday periods (e.g. Christmas/New Year, Haj, Mardi Gras, summer vacations) creates difficulties in processing the material received because of reduced staff during these periods. In addition, the increased burden on postal services during such periods frequently delays delivery of AIRAC material, causing considerable problems to users.

2.6.13 To improve the situation during the year-end holiday period, it is recommended that the AIRAC cycle date occurring in the 28-day period from 21 December to 17 January inclusive not be used for AIRAC effective dates for the introduction of significant operational changes. States experiencing similar problems during other holiday periods may wish to adopt a comparable system.

2.6.14 It should be emphasized, however, that the AIRAC system provides for considerable flexibility in its application, with a choice of thirteen AIRAC effective dates each calendar year. Bearing in mind that many significant changes to facilities, services and procedures can be anticipated well in advance, a suitable effective date can be selected which does not conflict with a major holiday period. In addition, a publication date can be selected that provides for as much advance notice as possible. Annex 15, 6.2.1, specifies that AIRAC material must reach recipients at least 28 days in advance of the AIRAC effective date. Preferably such material should reach recipients more than 28 days before the effective date (for instance, 42 or 56 days or more). Under the AIRAC system the maximum period of advance notification is essential. If this policy is applied it will give users ample time for processing changes to essential information, even if the effective date falls within a major holiday period.

Provision of aeronautical information in paper copy and electronic forms

[6.2, 6.3]

2.6.15 The AIRAC system has proved to be an effective means of regulating and controlling the provision of aeronautical information affecting operation of aircraft. In addition, the AIRAC system has been used as a basic source of information for the updating of computer-based navigation systems. Recently, States have introduced or are increasingly introducing automation with the objective of improving the speed, accuracy, efficiency and cost-

effectiveness of aeronautical information services. Aeronautical information may soon be provided to the user on line and in real time, which may change the AIRAC system. However, a large sector of the aviation community will continue to require aeronautical information (documentation) in paper copy form and States introducing provision of aeronautical information in electronic form must continue to provide it in paper copy form as well. Therefore, the AIRAC system must apply to the provision of aeronautical information in both the paper and electronic environments.

2.6.16 In view of the above, under the AIRAC system information must always be published in paper copy form and be distributed by the AIS at least 42 days in advance of the AIRAC effective date, to reach the user at least 28 days in advance of the effective date.

2.6.17 States with automated AIS systems must ensure that the effective dates of information in the database are the same as the AIRAC effective dates used for the provision of information in paper copy form. AIS must ensure that AIRAC material provided in electronic form is received by the user at least 28 days in advance of the AIRAC effective date. Where major changes are planned and more advance notice is desirable and practicable, information provided in electronic form should be issued at least 56 days before the AIRAC effective date.

Example

2.6.18 An example of the application of the AIRAC system follows:

- a) On 1 January 2003 the appropriate authority of a State aviation administration decides that it will place in service a new final approach aid at a particular aerodrome within the next three months.
- b) This authority consults the schedule of AIRAC effective dates and decides that 15 May 2003 would be the most suitable.
- c) It further notes that the corresponding publication date is 3 April 2003 and that the information it wishes to issue must be provided to the AIS not later than 27 March 2003, i.e. a week before the date of publication.
- d) The information is provided to the AIS on 25 March 2003, is published along with other similar information on 3 April 2003, and all matters covered by

the AIP Amendment or AIP Supplement concerned become effective on the same effective date — 15 May 2003.

- e) Typical recipients of AIP Amendments or AIP Supplements will know that normally AIRAC material will be published on 3 April 2003, that it usually takes one week to reach them and that they can plan on making the necessary amendments to their publication on or about 10 April 2003. If several States have adopted this procedure, the recipients will be able to prepare one amendment covering the information received from all such States.

Significance

2.6.19 It will be apparent from this example that the benefits to be derived from such a system are almost entirely dependent upon the degree to which the AIRAC effective dates are observed and used by the authorities that are responsible for originating changes in facilities, services or procedures. Such changes must be anticipated by these authorities, and AIRAC effective dates must be selected from the schedule of AIRAC effective dates sufficiently in advance to permit issue of the relevant information in accordance with the prescribed procedure. AIRAC effective dates are used by ICAO, when appropriate, as the date of implementation for amendments to ICAO Standards, Recommended Practices and Procedures.

Late receipt of AIRAC publications

2.6.20 When AIRAC AIP Amendments or Supplements are not received at least 28 days in advance of the AIRAC effective date, it is the responsibility of the recipient AIS to investigate whether late receipt is due to local postal, customs or administrative delays and, if so, to take remedial action as required. Otherwise, the recipient AIS will report this to the originating AIS, whose duty it will be to investigate and eliminate the cause of the delay.

Postponement of changes to aeronautical information

2.6.21 Postponement of changes to circumstances listed in Annex 15, Appendix 4, has the effect of cancelling information notified by AIRAC and reinstating previously valid information. Doing so by NOTAM less than 28 days before the effective date for changes to circumstances listed in Appendix 4, Parts 1 and 3, does not generally allow sufficient time for previously valid information to be

reinstated in airborne navigation databases, with the result that erroneous information would be presented to flight crews. Furthermore, since charts used by flight crews and ATC are updated on a different schedule than airborne navigation databases, it is possible that valid information which is not reflected in the airborne database may nevertheless appear on charts. The resulting mismatch of information would give rise to considerable operational difficulties and potential safety hazards. In the worst case, RNAV procedures that require a navigation database may not be flown (operated).

2.6.22 In order to avoid negative consequences to the safety and efficiency of flights, all possible measures should

be taken to ensure that changes to circumstances listed in Annex 15, Appendix 4, Parts 1 and 3, take place as notified on the AIRAC date. This will require thorough planning of aeronautical information changes and the cooperation of all parties involved, including AIS.

2.6.23 It is important to recognize that a change to the effective date (or postponement) is information to be notified by AIRAC and therefore constitutes “withdrawal” as stated in Annex 15, Appendix 4. Postponement by NOTAM should be issued more than 28 days in advance of the previously indicated effective date unless the circumstances are of a temporary nature and would not persist for the full period.

AIP AMENDMENTS, AIP SUPPLEMENTS AND NOTAM

To: AIS

 Tel.:
 Copy to:

Originator:

 Section:
 Tel.:
 Date:

Originator's file reference	AIP references (as applicable)				Text of NOTAM, AIP Amendment and/or Supplement	Effective date	For promulgation by †
	Page (date)*	Para.	Line	Col.			

† Insert a, b or c as applicable, where:

- a — AIP Supplement and subsequent inclusion in AIP reprint page.
- b — AIP page, when next due for reprinting (AIP Supplement not required).
- c — AIP Supplement only (i.e. temporary information).

AIRAC — If applicable but not applied, please state reasons:

The following Directorates/Branches have been consulted in respect of:

(a) Policy..... (b) Accuracy of information

Signed..... Head of.....

Date..... (Originating Branch)

Signed Head of (Directorate/Branch) Date

28/9/09

No. 2

INFORMATION TO BE NOTIFIED BY AIRAC

(See Annex 15, Chapter 6 and Appendix 4)

Part 1

1. The establishment and withdrawal of, and premeditated significant changes (including operational trials) to:

1.1 Limits (horizontal and vertical), regulations and procedures applicable to:

- a) flight information regions;
- b) control areas;
- c) control zones;
- d) advisory areas;
- e) ATS routes;
- f) permanent danger, prohibited and restricted areas (including type and periods of activity when known) and ADIZ;
- g) permanent areas or routes or portions thereof where the possibility of interception exists.

1.2 Positions, frequencies, call signs, identifiers, known irregularities and maintenance periods of radio navigation aids, communication and surveillance facilities.

1.3 Holding and approach procedures, arrival and departure procedures, noise abatement procedures and any other pertinent ATS procedures.

1.4 Transition levels, transition altitudes and minimum sector altitudes.

1.5 Meteorological facilities (including broadcasts) and procedures.

1.6 Runways and stopways.

1.7 Taxiways and aprons.

1.8 Aerodrome ground operating procedures (including low visibility procedures).

1.9 Approach and runway lighting.

1.10 Aerodrome operating minima if published by a State.

Part 2

2. The establishment and withdrawal of, and pre-meditated significant changes to:

2.1 Position, height and lighting of navigational obstacles.

2.2 Hours of service of aerodromes, facilities and services.

2.3 Customs, immigration and health services.

2.4 Temporary danger, prohibited and restricted areas and navigational hazards, military exercises and mass movements of aircraft.

2.5 Temporary areas or routes or portions thereof where the possibility of interception exists.

Part 3

3. The establishment of, and pre-meditated changes to:

3.1 New aerodromes for international IFR operations.

3.2 New runways for IFR operations at international aerodromes.

3.3 Design and structure of the air traffic services route network.

3.4 Design and structure of a set of terminal procedures (including change of procedure bearings due to magnetic variation change).

3.5 Circumstances listed in Part 1 if the entire State or any significant position thereof is affected or if cross-border coordination is required.

AIRAC predetermined dates

Operational changes to which the regulated system (AIRAC) is applied will be issued as AIP Amendments or Supplements.

The sample table below illustrates the latest dates by which material should reach the AIS in order to be promulgated on one of the selected publication dates. When possible, material should always be forwarded well ahead of these dates. In order to ensure that charts and route manuals are correct on the date of publication, it is essential that an effective date should not be notified until a high degree of certainty that it will be met exists. A complete list of AIRAC effective dates for the years 2009 to 2018 may be found in Doc 8126, Chapter 2.

Date to reach the AIS for major changes	Publication date for major changes*	Date to reach the AIS for normal changes	Publication date normal (Thursday)	Effective date (Thursday)
5 February 2009	12 February 2009	19 February 2009	26 February 2009	9 April 2009
5 March 2009	12 March 2009	19 March 2009	26 March 2009	7 May 2009
2 April 2009	9 April 2009	16 April 2009	23 April 2009	4 June 2009
30 April 2009	7 May 2009	14 May 2009	21 May 2009	2 July 2009
28 May 2009	4 June 2009	11 June 2009	18 June 2009	30 July 2009
		etc.		

* These dates are intended to take account of the time required for processing and subsequent mail delivery to the user, so as to provide adequate advance notice; they may need to be adjusted in light of practical experience.

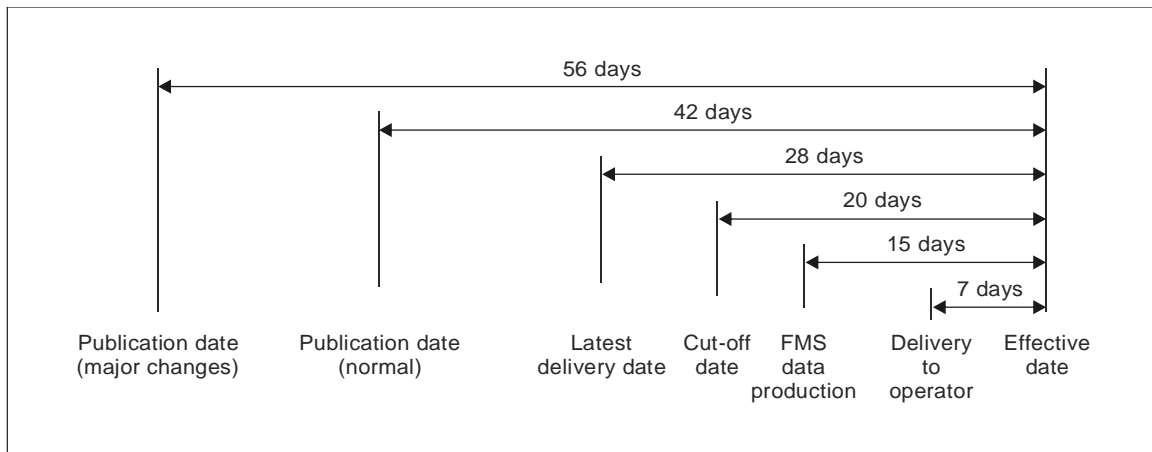


Figure 2-2. Processing cycle for airborne navigation databases

Chapter 3

ORGANIZATION OF AN AERONAUTICAL INFORMATION SERVICE (AIS)

3.1 STATUS OF AN AIS WITHIN THE AVIATION ADMINISTRATION

[Chapter 1]

The object of aeronautical information services

3.1.1 The object of aeronautical information services, as stated in Annex 15, is to ensure the flow of information necessary for the safety, regularity and efficiency of international civil aviation.

Technical orientation, status and establishment

3.1.2 The most obvious user of aeronautical information is the pilot. Another category of user represents those engaged in airline operational control, chart and document producing agencies, and air traffic services. The AIS is thus technically oriented in the nature of the service it provides.

3.1.2.1 In this connection it must be emphasized that:

- a) the State is responsible for the aeronautical information provided by an AIS;
- b) the role and the importance of aeronautical information changed significantly with the implementation of area navigation (RNAV), required navigation performance (RNP) and airborne computer-based navigation systems; and
- c) corrupt or erroneous aeronautical information can potentially affect the safety of air navigation.

3.1.2.2 Consequently, it is essential to establish a high level of technical proficiency within an AIS. In addition, the AIS should be given the appropriate status in the civil aviation administration in accordance with the important

role it has in the provision of accurate aeronautical information.

3.1.2.3 An AIS should be established as a separate entity within a civil aviation administration. This could be as an entity with direct responsibility to the head of the civil aviation administration or as an entity at the same level of other air navigation services, such as the Aerodrome (AGA) Division, Communications (COM) Division or Air Traffic Services (ATS) Division. It should not be established as a part of any of these divisions. In addition, AIS officers should be remunerated at least at the same level as personnel in the AGA, COM and ATS divisions.

3.1.2.4 Suggestions for the location of an AIS in the administrative structure are given in Figure 3-1.

3.2 ORGANIZATION

Size and scope of a State's AIS

3.2.1 The volume of aircraft operations and the extent to which civil aviation facilities are provided will determine the size and scope of a State's AIS. While the amount of information to be processed will vary from State to State, the nature of the responsibilities remains basically the same.

Working arrangements

3.2.2 Efficient working arrangements within individual States have underlined a number of common factors which contribute to a sound organizational base. The main considerations are coordination of AIS headquarters with:

- a) related technical services;

- b) the international NOTAM office (NOF);
- c) aerodrome/heliport AIS units;
- d) cartographic services;
- e) printing and distribution services;

and efficient communication facilities, particularly teletype-writer links, telefax and connection to the Internet (e-mail) for this coordination to function effectively (see Figure 3-2).

Liaison with related services

[3.1, 3.3]

3.2.3 In order to fulfil efficiently the dual role of collecting and distributing information from and to all concerned, an AIS must also establish and maintain a direct and continuous liaison with related services, as follows:

- a) the AIS in other States from which it is necessary to receive information to meet operational requirements within the State for pre-flight information;
- b) technical services within the State that are directly concerned with the provision and maintenance of the various air navigation facilities, services and procedures — this, in turn, is necessary to ensure timely distribution of all significant information both within the State and to other States as required;
- c) military services within the State, as necessary, to receive and distribute information concerning navigation warnings (military exercises, etc.) or any special military facilities or procedures available to or affecting civil aviation;
- d) air traffic services within the State, to ensure immediate transmission of all required information to services for air traffic control and for in-flight information purposes;
- e) all aircraft operating agencies conducting operations in or through the State, to ensure that pre-flight information requirements are adequately met; and
- f) any other services that may either be a source of information of interest to civil aviation or have a legitimate reason for requiring information about civil aviation.

International NOTAM office

[3.3.3, Chapter 9]

3.2.4 Annex 15 defines an international NOTAM office (NOF) as “an office designated by a State for the exchange of NOTAM internationally”. It further states “An aeronautical information service shall arrange, as necessary, to satisfy operational requirements, for the issuance and receipt of NOTAM distributed by telecommunication.”

3.2.5 Each NOF must be connected to the aeronautical fixed service (AFS), and to the following points within the territory for which it provides service:

- a) area control centres and flight information centres; and
- b) aerodromes/heliports at which an information service is established in accordance with Chapter 8 of Annex 15.

The connections must provide for printed communications.

3.2.6 For organizational purposes this usually means that the NOF needs to be staffed on a 24-hour basis, it being the focal point within a State for the issuance and receipt of NOTAM to and from other States.

Availability of service

[3.1.1.3, 3.1.2, 3.3.3]

3.2.7 The provisions of Annex 15 are applicable to all types of international civil aviation and this includes the requirements of international general aviation. It would be impossible for an AIS to meet the need for in-flight information (see Annex 15, 3.1.2) unless the service is available during the period when an aircraft is in flight in the area of responsibility of that service. Further, the requirement in Annex 15, 3.3.3, for an AIS to satisfy operational requirements for the issuance and receipt of NOTAM distributed by telecommunication implies extension of service to meet the operational requirements whenever necessary. Where 24-hour service is not provided, service must therefore be available during the whole period an aircraft is in flight in the area of responsibility of an AIS, plus a period of at least two hours before and after an aircraft enters or leaves the area of responsibility.

3.2.8 In addition, the service must be available at such other time as may be requested by any ground organization legitimately requiring aeronautical information necessary

for the safety, regularity or efficiency of international flight operations, provided that the information sought falls within the responsibility of the service and is relative to a route stage originating at an aerodrome/heliport within its area of responsibility. Units affected by such extensions of service would normally be the NOF(s) and any aerodrome/heliport AIS unit concerned with the flight operation.

Line structure and information flow

3.2.9 For organizational purposes the general principles of line structure and information flow are shown in Figure 3-2. These should be adapted to meet local needs. For example, the smaller aviation administration may find it more convenient and economical to locate the whole AIS organization at the main international airport. Having the AIS headquarters and the NOF at one location facilitates the receipt, checking and dispatch of information. It also reduces the number of units to be administered separately, as well as the number of records and reference documents that have to be maintained. Such collocation thus introduces savings. Also, printing and distribution services are normally quicker and more economical if they are placed under the direct control of AIS, either within the AIS organization or by means of local contract.

3.3 RESOURCES

Adequate resources

3.3.1 As with any other aeronautical service, adequate resources are essential to AIS. Highly skilled and competent staff in sufficient numbers, suitable accommodation and the necessary equipment are prerequisites to expeditious provision of accurate aeronautical information.

Training

3.3.2 Although the operational environment in which AIS personnel work and the tasks they may be required to perform may vary between States, there is a need to establish a common standard for the depth and scope of knowledge, skills and attitude which must be met by all AIS technical officers. Part E-3 of Doc 7192 (*Training Manual*) contains a curriculum of training for AIS technical officers and provides guidance to States for the preparation of their respective curricula to be used in courses for training of AIS technical officers.

Minimum requirements for staff and accommodation

3.3.3 A general guide as to the minimum requirements for staff and accommodation is given in the following table:

	<i>Technical officers</i>	<i>Clerical officers</i>	<i>Space in square metres (square feet)</i>
Headquarters			
large	3	3–6	28–93+ (300–1 000+)
small	2	1–2	14 (150)
NOTAM office (24 hours)			
large	5–6	3	28–37 (300–400)
small	4	1	14 (150)
Aerodrome/heliport AIS unit			
major airport (24 hours)	5–6	5–6	28+ (300+)
airport (limited hours)	2+	2+	14 (150)

Minimum facilities and equipment

3.3.4 The following minimum facilities and equipment, in addition to basic office furniture and stationery, should be provided for the AIS headquarters and each NOF and aerodrome/heliport AIS unit:

AIS headquarters

- personal computers (PCs) for each post, printer and connection to the Internet
- photocopying equipment
- teletypewriter terminal (AFS/AFTN connection)
- telephones
- telefax equipment
- clock.

NOF and aerodrome/heliport AIS unit

- adequate table/counter space for processing information
- adequate filing/card index systems
- full teletypewriter service (receive and transmit) linked to the AFS
- PC/computer terminal, printer, connection to the Internet and typewriter (if necessary)
- photocopier for pre-flight bulletin production
- telephone
- telefax equipment
- a reliable clock and, for the NOF, a time-stamp clock, both showing UTC and, where appropriate, a second clock showing local time
- reference charts and documents required for consultation and pre-flight briefing.

3.4 ARRANGEMENTS FOR EXCHANGE OF AERONAUTICAL INFORMATION WITH OTHER STATES

[3.1.5, 3.3.1, 3.3.4, 3.3.5]

3.4.1 Annex 15 requires that a State's AIS promptly provide the AIS of other Contracting States with any aeronautical information required by them.

3.4.2 Each State is required to designate an office or offices to which all elements of the Integrated Aeronautical Information Package originated by other States are to be addressed. This must be published in the GEN part (GEN 3.1) of a State's aeronautical information publication (AIP). Such office(s) must have the authority and be equipped to deal with requests for information from other States. At least one copy of all elements of the Integrated Aeronautical Information Package in paper, electronic form or both must, on request, be made available without charge to the AIS of other Contracting States. It is usually sufficient to directly approach the AIS of another State to arrange for the necessary copies of AIP, AIP Amendments and Supplements, aeronautical information circulars (AIC), checklists and lists of valid NOTAM and to be placed on their NOTAM distribution list.

3.4.3 In general, the aim should be to:

- a) establish the levels and sources from which information can be gathered reliably;
- b) ensure that new or changed information is promptly made available to the AIS headquarters for processing and distribution, with special regard to the requirements of the AIRAC system of advance notification; and
- c) ensure accuracy in the raw data notified to the AIS as well as immediate notification of errors or omissions in published aeronautical information.

Designation of channels

3.4.4 Arrangements with other States should provide for a single channel to be used for the flow of all information required. This should include, for example, topographic data necessary for the preparation of aeronautical charts. Elements of the Integrated Aeronautical Information Package delivered to foreign subscribers should, however, be sent directly to the subscriber's address. NOTAM are exchanged between NOTAM offices via the AFS.

Preservation of channels

3.4.5 Wherever possible the exchange of aeronautical information should continue even when two States find themselves temporarily in diplomatic disagreement. It must be borne in mind that the information is required not only for the national airlines of the respective States but also for international operators flying routes that connect the States. These operators will, in all probability, have no part in the disagreement and there can be no justification for penalizing them by denying them information essential for the safety of their operations. In such cases, AIS should be treated in the same manner as meteorological services or the World Health Organization and the preservation of existing channels of communication should be guarded in the light of international obligations.

Substitute sources

3.4.6 When information is required from States that have not yet produced an AIP, it is necessary to find a substitute source of information. Quite a lot can be achieved through the intelligent use of NOTAM, if they are

issued. If nothing is published by the civil aviation administration, useful information can often be obtained from military handbooks or manuals produced by private aeronautical service agencies or by airlines. It should be borne in mind, however, that such information may often be abbreviated and intended only for certain types of operations. Furthermore, such information is likely to contain little or nothing relating to formalities and procedures associated with international traffic and accordingly it should be treated with reserve.

3.5 RECORDING, FILING AND DISTRIBUTION OF INFORMATION

General

3.5.1 The essential requirements are that incoming and outgoing material can readily be identified through serial number and date and that supplementary information may be similarly verified and, where necessary, authenticated.

3.5.2 Raw data gathered within a State for publication in the AIP or AIP Supplement should be filed in chronological order on suitable files, together with a record of action taken and a copy of the publication made. It will probably be found necessary to provide a separate file for each subject, part, section or subsection of the AIP and, depending on the volume of information handled and the organization employed, duplicate “policy” files may also be found useful. Ephemeral information can be filed the same way but in the case of short-term information, such as unserviceabilities, for distribution by NOTAM, a card index system may be found adequate and more convenient. A separate card for each facility or aerodrome/heliport is advisable (see Figure 3-3). The period of retention of all domestic information, even when superseded, should be determined by the appropriate authority in each State, bearing in mind possible planning or historical value.

Distribution lists

3.5.3 Normally, the AIS headquarters is responsible for the distribution of relevant information to all aerodrome/heliport AIS units to enable them to maintain and have available up-to-date information. The administrative problems associated with the necessary selective distribution of incoming information, especially NOTAM material, may not be as difficult as they seem. The simplest solution is the adoption of a multi-distribution list system. Some of the incoming material will be common to all aerodrome/heliport AIS units. Such material would be

assigned to List 1. Other items will be common to the majority of aerodromes/heliports and assigned to List 2. Material common to subgroups of aerodromes/heliports would be assigned to subsequent lists until all incoming information has been accounted for. Then, when material is received, all that would be necessary would be to determine which list it relates to and to redistribute it in accordance with that list of addresses.

NOTAM from other States

3.5.4 NOTAM received from other NOFs should be recorded in a signals log as soon as they are received. This log should record:

- a) State of origin;
- b) originator indicator;
- c) series and number;
- d) time of receipt;
- e) time of distribution; and
- f) addresses to which redistributed.

3.5.5 These entries represent the minimum needed for successful operation and for the investigation of complaints of late receipt or non-receipt. After NOTAM have been processed they should be filed. The redistributed copy may be attached to the original. The filing should be done by State and, where there is a large volume of traffic from any one State, it may be considered advisable to further subdivide NOTAM by filing them under facilities or subjects within that State. Where appropriate, NOTAM should also be used to annotate the relevant AIP. This annotation should include the series, number and date of the NOTAM.

3.5.6 The system proposed in 3.5.4 and 3.5.5 is somewhat time-consuming and may only be suitable in a large organization where extensive screening of incoming NOTAM can be performed before redistribution. For a smaller unit the following may be sufficient:

- a) At the communication station serving the NOF, each incoming message should be time-stamped immediately upon receipt. After retransmission at the communication station, a copy of the message should be time-stamped again.
- b) Each incoming message carrying the word “NOTAM” at the beginning of the text should then

be passed on immediately by the teletypewriter operator at the communication station to the NOF, aerodromes/heliport AIS units, aircraft operators, etc. by teletypewriter or telex, using tape relay and without changing the address section of the NOTAM. Some screening would take place as all NOTAM are passed on to the NOF. The NOF could delegate the screening responsibilities to the communication station serving it or to a selected aerodrome/heliport AIS unit. As the message is tape-relayed all the way from the originating station to the NOF, aerodrome/heliport AIS units, aircraft operators, etc., the source of errors during transmission is eliminated. At the NOF and at the aerodrome/heliport AIS units, all messages should be time-stamped upon receipt.

- c) If a NOTAM number is missing, or if the NOTAM is unreadable or some explanation is required, the necessary steps must be taken by the NOF to rectify the inconsistency and the result or action should automatically be transmitted to all concerned. If an AIS unit needs an explanation, the NOF may be able to answer or may need to ask the originator.
- d) At the NOF and the aerodrome/heliport AIS units, NOTAM should be filed in simple binders, one for each originating NOTAM office and the contents divided into suitable sections (consistent with the division of information included in pre-flight information bulletins). In each binder there should be a checklist containing only the series and number of each NOTAM and the section in the binder under which the message is to be found. From that checklist it will be easy to determine if a NOTAM is missing. On cancellation, the number should be struck out and the NOTAM removed from the binder. Thus, the list will always show only the numbers of valid NOTAM and the binders will contain only valid NOTAM.

Validation and verification of incoming NOTAM

3.5.7 It is imperative that all incoming NOTAM be verified since it is possible for figures or groups to be transposed or accidentally corrupted during transmission. When a NOTAM is received relating to, for instance, a runway at a foreign aerodrome/heliport, a check should be made against the AIP of the provider State to ensure that the NOTAM is consistent with published information, before it is redistributed. Such NOTAM should also be checked after transmission to ensure that similar errors have not occurred during this process. (See also Chapter 6.)

AIP Amendments, AIP Supplements and Aeronautical Information Circulars from other States

3.5.8 The AIS headquarters should maintain a record of AIP Amendments, AIP Supplements and AIC and a record of requests for missing material originated through the AIS headquarters. AIP Supplements and AIC should be recorded in a register to show, as appropriate:

- a) State of origin;
- b) serial number and year;
- c) series (if any);
- d) date of receipt;
- e) addresses to which they have been forwarded; and
- f) date of dispatch.

3.5.9 After they have been so recorded, they should be filed by State in series and/or sequence. Cancelled AIP Supplements and AIC should be crossed out in the register and removed from the file. The register should carry the initials of the official authorized to make the entry or deletion, together with the date on which such action was taken. Contrasting colours may be used for entries and deletions. AIP Amendments should be recorded to show:

- a) State of origin;
- b) number and date;
- c) date of receipt;
- d) addresses to which they have been forwarded; and
- e) date of dispatch.

3.6 BASIC REFERENCE MATERIAL (PUBLICATIONS OF ICAO AND OTHER INTERNATIONAL ORGANIZATIONS)

ICAO publications

3.6.1 Since national rules, regulations and procedures, and the characteristics of facilities and services, are based on ICAO regulatory and guidance material, it is advisable to maintain certain ICAO documents for reference

purposes, both at the AIS headquarters and at aerodrome/heliport AIS units.

3.6.2 Annexes concerned with the provision of facilities or services, together with any related procedures for air navigation services, are required as a minimum, i.e.:

Standards and Recommended Practices

- Annex 2 — *Rules of the Air*
- Annex 3 — *Meteorological Service for International Air Navigation*
- Annex 4 — *Aeronautical Charts*
- Annex 5 — *Units of Measurement to be Used in Air and Ground Operations*
- Annex 6 — *Operation of Aircraft*
 - Part I — *International Commercial Air Transport — Aeroplanes*
 - Part II — *International General Aviation — Aeroplanes*
 - Part III — *International Operations — Helicopters*
- Annex 7 — *Aircraft Nationality and Registration Marks*
- Annex 9 — *Facilitation*
- Annex 10 — *Aeronautical Telecommunications* —
 - Volume I — *Radio Navigation Aids*
 - Volume II — *Communication Procedures including those with PANS status*
 - Volume III — *Part I – Digital Data Communication Systems*
- Annex 11 — *Air Traffic Services*
- Annex 12 — *Search and Rescue*
- Annex 14 — *Aerodromes*
 - Volume I — *Aerodrome Design and Operations*
 - Volume II — *Heliports*
- Annex 15 — *Aeronautical Information Services*
- Annex 16 — *Environmental Protection*
 - Volume I — *Aircraft Noise*
 - Volume II — *Aircraft Engine Emissions*
- Annex 17 — *Security*
- Annex 18 — *The Safe Transport of Dangerous Goods by Air*

Procedures for Air Navigation Services

- Doc 4444 — *Air Traffic Management (PANS-ATM)*
- Doc 7030 — *Regional Supplementary Procedures (SUPPS)*
- Doc 8168 — *Aircraft Operations (PANS-OPS)*
 - Volume I — *Flight Procedures*
 - Volume II — *Construction of Visual and Instrument Flight Procedures*

Doc 8400 — *ICAO Abbreviations and Codes (PANS-ABC)*

Designators and indicators

- Doc 7910 — *Location Indicators*
- Doc 8585 — *Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services*
- Doc 8643 — *Aircraft Type Designators*

Manuals

- Doc 8126 — *Aeronautical Information Services Manual*
- Doc 8697 — *Aeronautical Chart Manual*
- Doc 8896 — *Manual of Aeronautical Meteorological Practice*
- Doc 9674 — *World Geodetic System — 1984 (WGS-84) Manual*

3.6.3 Additionally, a number of facility and service documents of worldwide coverage and Air Navigation Plan Publications for each ICAO region are available from ICAO. The latter provide useful information on major facilities planned for international air navigation and give a general picture of the facilities that require inter-State coordination, such as high frequency radiotelephony networks.

Facility and service documents

- Doc 7100 — *Manual of Airport and Air Navigation Facility Tariffs*
- Doc 7101 — *Aeronautical Chart Catalogue*
- Doc 7383 — *Aeronautical Information Services Provided by States*

Air Navigation Plan Publications

- Doc 7474 — *Africa-Indian Ocean Region*
- Doc 7754 — *European Region*
- Doc 8733 — *Caribbean and South American Regions*
- Doc 8755 — *North Atlantic, North American and Pacific Regions*
- Doc 9634 — *North Atlantic Region*
- Doc 9635 — *Facilities and Services Implementation Document (FASID) — North Atlantic Region*
- Doc 9673 — *Asia and Pacific Regions*
- Doc 9708 — *Middle East Region*

Other publications

3.6.4 A number of publications of other international organizations concerned with certain aspects of aviation also provide useful reference material, e.g.:

***International Air Transport Association (IATA)/
International Aeradio Limited (IAL)***

IATA/IAL Air Distances Manual

International Telecommunication Union (ITU)

*List of Broadcasting Stations Operating in Frequency
Bands below 5950 kHz*

*List of Radiodetermination and Special Service Stations
(ITU List VI)*

Radio Regulations

Telegraph Regulations

World Meteorological Organization (WMO)

Weather Reporting — WMO — No. 9. TP. 4

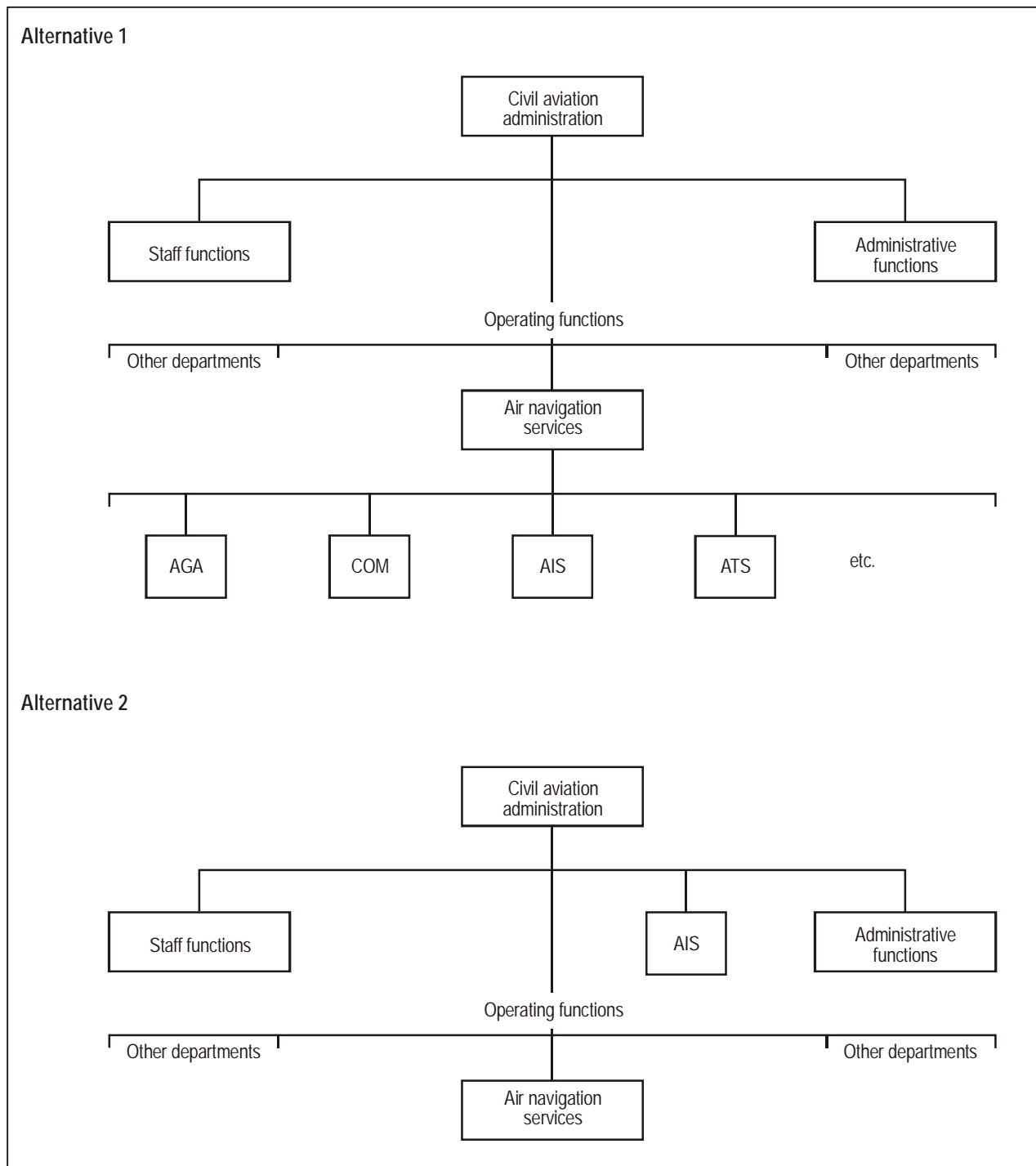
Volume A — Observing Stations

Volume C — Transmission

Manual on Codes

Volume I.1 — International Codes

Part A — Alphanumeric Codes — WMO No. 306

**Figure 3-1. Location of AIS within the aviation administration**

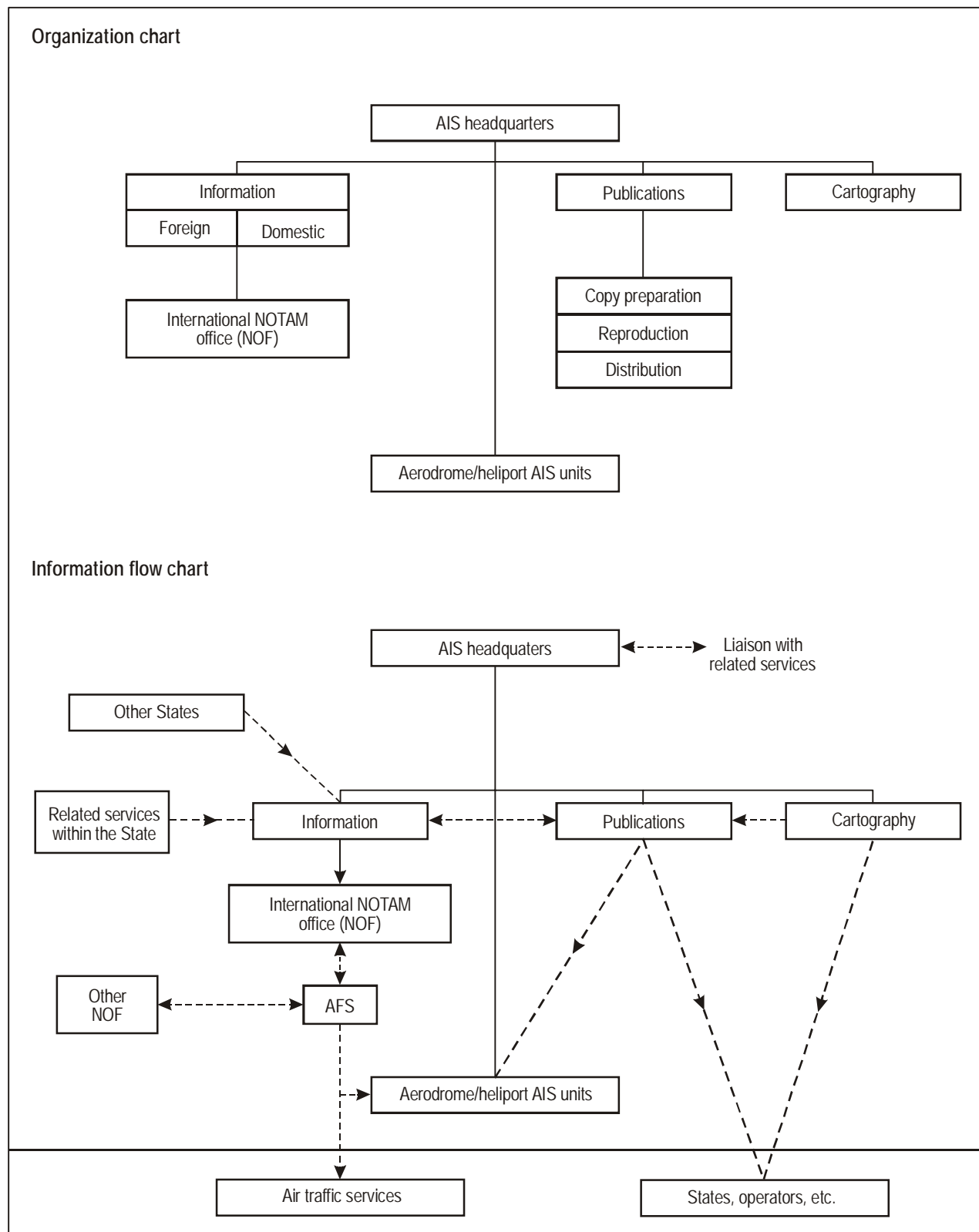


Figure 3-2. Organization and information flow charts

<i>Name of facility or aerodrome/heliport</i>				
<i>NOTAM number</i>	<i>Date</i>	<i>NOTAM text</i>	<i>Cancelled (C)/Replaced (R)</i>	
			<i>NOTAM number</i>	<i>Date</i>
A0121/03	030602	Approach lights RWY 27 U/S	C A0123/03	030603
A0130/03	030607	Surface movement radar on test		

Figure 3-3. Specimen of index card for recording of ephemeral NOTAM information

Chapter 4

INTEGRATED AERONAUTICAL INFORMATION PACKAGE

4.1 GENERAL

[3.1.7, 3.6.1]

4.1.1 The material to be provided by and exchanged between States is published as an Integrated Aeronautical Information Package (i.e. Aeronautical Information Publication (AIP), including amendment service, AIP Supplements, NOTAM, pre-flight information bulletins (PIB), Aeronautical Information Circulars (AIC), checklists and list of valid NOTAM). The elements of the Integrated Aeronautical Information Package are described below and in Figure 4-1.

4.1.2 While the various elements of the Integrated Aeronautical Information Package are all employed in the distribution of aeronautical information, specific criteria exist in Annex 15 for the use of each element. These criteria relate to the duration or “shelf life” of the information, the extent of the changes to existing information and the advance notice of the information. Guidance on handling the different types of information is given in Figure 4-2.

4.1.2 Each element of the Integrated Aeronautical Information Package for international distribution must include English text for those parts expressed in plain language.

4.2 ELEMENTS OF THE INTEGRATED AERONAUTICAL INFORMATION PACKAGE

Aeronautical Information Publication (AIP)

[3.1, 4.1 and Appendix 1]

4.2.1 Some types of information handled by an AIS are not subject to frequent change and can best be provided in the form of a manual. This includes such information as the physical characteristics of an aerodrome and the facilities associated with it, the types and location of navigation aids along air routes, the air traffic management, communications

and meteorological services provided and the basic procedures associated with these facilities and services. Chapter 3 of Annex 15 calls for the production of such a manual, known as an Aeronautical Information Publication, as the basic element of the Integrated Aeronautical Information Package. The types of information to be included in it are specified in Chapter 4 and Appendix 1 of Annex 15. (See also Chapter 5 of this manual.)

AIP Amendments

[4.3]

4.2.2 AIP Amendments are issued whenever new information necessitates a permanent change or addition to the information already contained in the AIP.

AIP Supplements

[4.4]

4.2.3 Temporary changes of long duration (more than three months) or changes requiring the issuance of extensive text and/or graphics which affect the contents of an AIP are published and distributed as AIP Supplements.

NOTAM

[3.1, 4.2, 5.1, 5.2]

4.2.4 Some types of information deal with changes to facilities and services which are of a temporary nature or of short duration. In addition, notification of operationally significant changes of a temporary or permanent nature is sometimes required at short notice. For example, construction at an aerodrome may necessitate the closing of a runway, or a radio navigation aid may be removed from service for 24 to 48 hours for modification or maintenance, or a visual aid may be permanently removed from service. Such information is issued in the form of a notice known as a “NOTAM” and is distributed via the aeronautical fixed service (AFS). Chapter 5 of Annex 15 specifies the types of information to be distributed as NOTAM. (See also Chapter 6 of this manual.)

Aeronautical information circulars (AIC)

[7.1, 7.2]

4.2.5 To provide for the possible need to distribute information that does not qualify for inclusion in the AIP or in NOTAM, Annex 15 includes specifications for Aeronautical Information Circulars (AIC). These cover such matters as long-term advance notifications of major changes in procedures or facilities, information of an explanatory or advisory nature, or information concerning administrative matters. (See also Chapter 7 of this manual.)

Pre-flight information bulletins (PIB)

[Chapter 8]

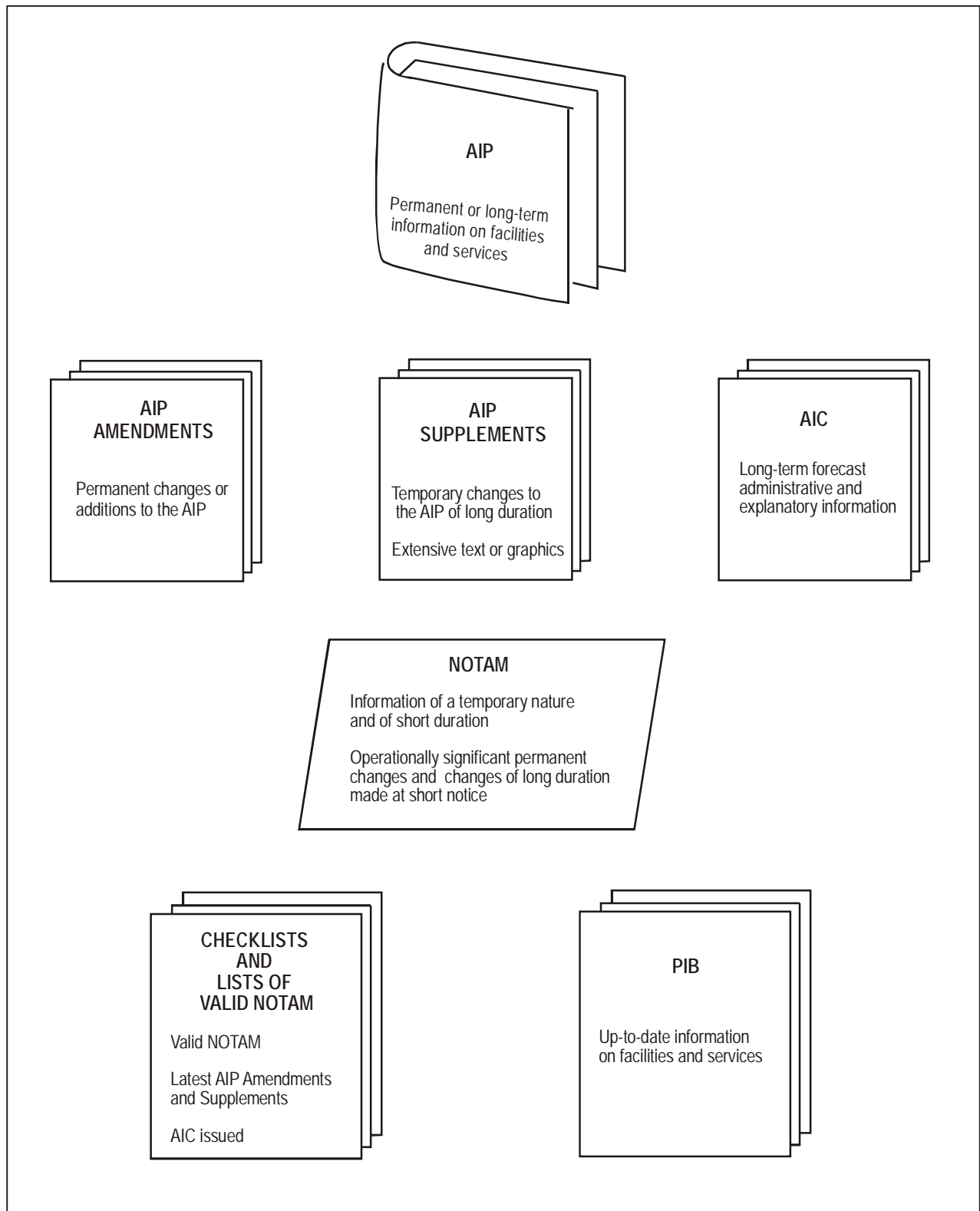
4.2.6 Pre-flight information bulletins contain information on the status of facilities and services taken from

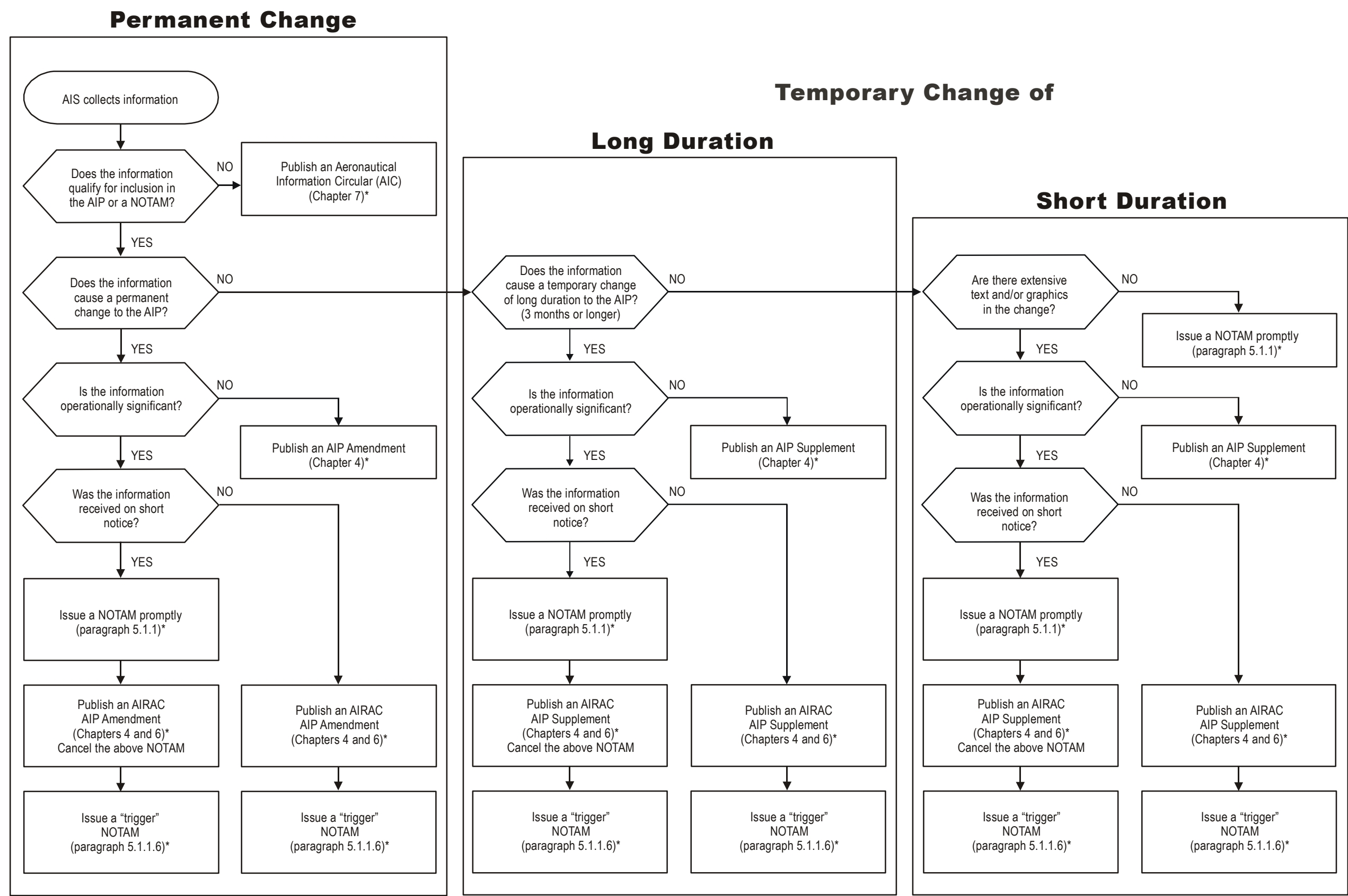
current NOTAM and made available to flight crews. (See also Chapter 8 of this manual.)

Checklists and lists of valid NOTAM

[5.2.8.3]

4.2.7 Checklists of valid NOTAM must be issued periodically (at least once a month) over the AFS. In addition, the checklists must refer to the latest AIP Amendments, AIP Supplements and at least the internationally distributed AIC. Furthermore, a monthly printed plain-language list of valid NOTAM, including references to the latest AIP Amendments, AIC issued, and a checklist of AIP Supplements must be forwarded to all recipients of the Integrated Aeronautical Information Package. (See also Chapter 6 of this manual.)





*See Annex 15 — Aeronautical Information Services

Figure 4-2 Handling of permanent and temporary types of information

Chapter 5

AERONAUTICAL INFORMATION PUBLICATION (AIP)

5.1 INTRODUCTION

[4.1, 4.2]

5.1.1 The AIP forms the basic element of the Integrated Aeronautical Information Package. It contains aeronautical information of a permanent nature and temporary changes to this information of long duration. It is the task of each AIS to provide a comprehensive document, to maintain it up to date and to make it simple to use.

5.1.2 The content of an AIP is governed by 4.1, 4.2 and Appendix 1 of Annex 15, supplemented by the guidance in this manual as to how the requirements might best be met. Taking into consideration the increased use of automation in AIS, the information contained in the AIP was arranged in such a manner that automation could be used, both for the production of the “paper” AIP as well as for creation of a database for retrieval of that information. In addition, duplication of information was avoided. To the extent possible, the AIP was also designed to facilitate its use in flight.

5.1.3 The AIP must contain concise, current information relating to, and arranged under, the subject headings listed in Annex 15, Appendix 1. This facilitates both the locating of information under a specific heading and the storage/retrieval of the information using automated processing. If no facilities or services are provided or no information is available for publication in respect of one of the categories of information specified in Annex 15, Appendix 1, an indication should be given as to which of these circumstances applies (e.g. “NIL” or “Not AVBL”).

5.1.4 The basic structure and referencing must be common to all AIP but at the same time it should allow for the specific requirements of individual States with respect to quantity and nature of information to be included. Each of the specified “compulsory” reference numbers of a section and/or subsection must relate to the same topic in every AIP, except that it might be noted as “not applicable” in some cases and have larger or smaller quantities of information in others. The provision of optional, additional

referencing is decided by each State so that it may add types of information specific to its circumstances.

5.2 CONTENT AND FORMAT

[3.1.7, 4.1, 4.2 and Appendix 1]

5.2.1 The AIP must be self-contained and include a table of contents. It should be published in loose-leaf form, unless the complete publication is re-issued at frequent intervals.

5.2.2 The AIP is divided into three parts:

PART 1 — GENERAL (GEN), consisting of five sections, contains information of an administrative and explanatory nature which is not of such significance/importance that NOTAM need be issued;

PART 2 — EN-ROUTE (ENR), consisting of seven sections, contains information concerning airspace and its use; and

PART 3 — AERODROMES (AD), consisting of four sections, contains information concerning aerodromes/heliports and their use.

5.2.3 Many States will be able to produce the AIP in one volume. Where this is not practicable and the AIP is produced and made available in more than one volume, each volume must include a separate amendment and supplement service, and the following separate sections must be included in each volume:

- Preface
- Record of AIP Amendments
- Record of AIP Supplements
- Checklist of AIP pages
- List of current hand amendments.

5.2.4 When the AIP is published as one volume, the above-mentioned subsections appear only in Part 1 — GEN and the annotation “not applicable” must be entered against each of these subsections in Parts 2 and 3.

5.2.5 When an AIP is published in two or more volumes, each volume should indicate that additional information is to be found in the other volume(s).

5.2.6 When a small number of charts are to be included and chart size is not larger than 210 mm × 297 mm or allows for folding to these dimensions, they should be contained in the AIP. If, on the other hand, there are many charts and they are frequently amended, it may be convenient to place them in a separate volume with a separate subscription service.

5.2.7 The issuing State and publishing authority must be clearly indicated on the cover. When two or more States publish an AIP jointly, this must also be clearly indicated both on the cover and in the table of contents.

5.2.8 Each AIP must be dated. In the case of AIP issued in loose-leaf form, each page must be dated. The date, consisting of the day, month (by name) and year, must be the publication date or the effective date (AIRAC) of the information.

5.3 SPECIMEN AIP AND EXPLANATORY NOTES

5.3.1 A Specimen AIP is provided at the end of this manual (blue pages). It contains an example of AIP pages, tables and charts showing the format and the **required** structure, division and classification. Explanatory notes associated with each part of the Specimen AIP, given in the appendix to this chapter, provide guidance on the selection of information to be included and, where appropriate, on its presentation.

5.3.2 The format and arrangement of an AIP should accord as fully as possible with that of the Specimen AIP. Besides ensuring the desired uniformity in presentation, such a step would lighten the workload of units handling large numbers of AIP and in general make it easier and speedier for users to locate specific information.

5.3.3 Particular care needs to be taken to apply the referencing system shown in the Specimen AIP in order to facilitate the introduction of electronic retrieval of AIP information.

5.3.4 The headings used in the Specimen AIP are guides to the arrangement and location of information. When, however, an AIP or a volume of an AIP is designed specifically to facilitate operational use in flight, the format

and arrangement may be varied provided an adequate table of contents is included.

5.4 COMPILING AND EDITING

[3.2.1, 3.6.1, 4.2.1.1]

5.4.1 The need to use great care in compiling an AIP cannot be over-emphasized. First of all, the information should be carefully checked to ensure its authenticity. Then, it should be edited and presented in the simplest form possible, both to restrict the amount of material in the AIP to that necessary to achieve its purpose and to enable those not thoroughly familiar with the language used to understand and interpret the information. The AIP must not duplicate information within itself or from other sources. When information is considered doubtful, a degree of reliability should be assigned to it and clearly indicated.

Language

5.4.2 The AIP must include English text for those parts expressed in plain language. The necessity to use local languages is of course recognized. If publication in more than one language is undertaken, it is usually more economical to produce a bilingual or multilingual edition rather than a separate edition for each language. It assists in the interpretation of questionable text to have the possibility of comparing two languages. This is particularly true where the producing State is non-English speaking and the translation into English may not be perfect.

Design implications

5.4.3 While the preparation of an AIP will generally conform to the practices established for most loose-leaf publications, there are some practices peculiar to an aviation publication of this type that should be taken into consideration:

- a) print on both sides of the sheet;
- b) do not use a sheet solely for the title page of a section — include any introductory material on the same page;
- c) use dividers sparingly, i.e. only where the parts of the AIP are composed of a significant number of pages;

- d) since most pages will be replaced fairly frequently, do not use fine quality paper;
- e) since speed is more important than quality reproduction, do not use printing methods that will sacrifice speed;
- f) when tabulating data, anticipate the space required to accommodate additional material in future, so that additions can be made without having to reprint/replace a series of pages;
- g) choose a binder that is durable, easy to use at a desk and that allows replacement sheets to be inserted without difficulty.

5.5 PRESENTATION OF INFORMATION

5.5.1 A system of page numbering adaptable to the addition or deletion of sheets should be adopted. The page number should include:

- an identification of the part of the AIP;
- the section; and
- subsection, as applicable;

thus creating a separate set of numbers for each subject (e.g. GEN 2.1-3, ENR 4.1-1 or AD 2.2-3). This system has been used in the Specimen AIP and should be followed as fully as possible, with numbering as indicated therein reserved for pages containing the associated information/tabulation. Any gaps in page sequence would be accounted for by the checklist of pages which should appear at page GEN 0.4-1 (or ENR 0.4-1 and AD 0.4-1 if the AIP is issued in three separate volumes). Maps and charts should be paginated in the same manner as other material.

5.5.2 There are a number of practices common to the presentation of information which have been omitted from the explanatory notes associated with each subject, i.e.:

- a) ICAO abbreviations should be used wherever practicable since this will help reduce the amount of printing and facilitate use of the document by those not familiar with the English language.
- b) When listing locations, the city or town should be given in capital letters followed, where the facility is an aerodrome/heliport or is located at an aerodrome/heliport, by an oblique stroke and the name of the aerodrome/heliport in smaller capital letters or lower case type. Unless otherwise indicated, the list should be in alphabetical order.

- c) The spelling of place names must conform with local usage, transliterated where necessary into the Latin alphabet (see Annex 15, Chapter 3, 3.6.2). There should be a single system of translation for any given language in the transference of names whether from ideograms, the Roman alphabet, syllabic scripts or non-Roman script, and the objective should be to distort names as little as possible in either spelling or pronunciation. This system should invariably be based on the standard system (where one has been internationally adopted) for the romanization of a State's geographical names. Since the accents and diacritical signs which accompany the Roman letters of many languages are an integral part of the spelling of these languages in that they express such essential features as tonic accent, the length and degree of openness of vowels and other significant aspects of pronunciation and meaning, all geographical names officially written in these alphabets by the States concerned should, in international use, remain unmodified and keep their distinguishing marks even when they are written in capital letters.

- d) In the indication of the geographical coordinates of a location:

- the latitude should be given first;
- symbols for degrees, minutes or seconds should be omitted;
- two digits should always be used in expressing values of less than 10 degrees of latitude; and
- three digits should always be used in expressing values of less than 100 degrees of longitude.

For example, 050735N 0652542W means five degrees, seven minutes and thirty-five seconds North, sixty-five degrees, twenty-five minutes and forty-two seconds West.

With effect from 1 January 1998, the geographical coordinates indicating latitude and longitude must be expressed in terms of the World Geodetic System — 1984 (WGS-84) geodetic reference datum. Geographical coordinates which have been transformed into WGS-84 coordinates but whose accuracy of original field work does not meet the requirements in Annex 11, Chapter 2, and Annex 14, Volumes I and II, Chapter 2, must be identified by an asterisk.

- e) Hours of operation of various facilities and services should be given in terms of coordinated universal time (UTC) or by use of one of the following abbreviations:

HJ — Sunrise to sunset
 HN — Sunset to sunrise
 HO — Service available to meet operational requirements
 HS — Service available during hours of scheduled operations
 HX — No specific working hours
 H24 — Continuous day and night service.

- f) When describing periods of activity, availability or operation, use of the term “weekday” should be avoided and the day or days in question should be specified; where “weekend” is used, this should always be qualified by specific dates/days and times to remove any possibility of doubt.
- g) The units of measurement selected for use in the AIP, e.g. dimensions on aerodromes, distances, elevations or altitudes, should be consistently followed and should adhere to Annex 5.

Measurements and calculations should be carried to at least one decimal place more than is required for the final publication value. When more than one application for the final value is involved, the measured or calculated resolution must support the more critical value (such as an approach segment taking prevalence over an en-route segment). The resulting number in the extra decimal place will then be used to provide a publication resolution in accordance with the following rounding convention:

- 1) if the number in the extra decimal place is 5, 6, 7, 8 or 9, the last number of the final publication value will be rounded up by 1;
- 2) if the number in the extra decimal place is less than 5, it and any other numbers that have been extended in the calculation to additional decimal places shall be truncated.

Care must be taken to prevent double rounding. Double rounding can occur when the same calculated value is used for more than one application, each having different publication resolution requirements. For example, the distance of an approach segment is normally calculated to two decimal places and rounded to a published resolution of one tenth of a

nautical mile for chart portrayal. In many cases this approach segment is also applied to an overlaying airway segment where the published chart resolution is to the nearest nautical mile. During these calculations, decimal place values of .45 to .49 will occasionally occur which will be rounded up for the approach segment to the next single decimal value (e.g. 12.46 will be rounded up to 12.5). Care must be taken to ensure the en-route value is rounded down the original two decimal places and not rounded up from the approach value.

5.6 SPECIFICATIONS FOR INDEX MAPS AND DIAGRAMS

[4.1.4]

Charts, maps and diagrams are to be substituted for tabulations and text whenever possible. They are also to be used when necessary to elaborate upon or supplement tabulations or text. Index maps and diagrams included in the AIP should comply with the following specifications:

Base map: The base map should be an outline map of the area adapted from existing material with general details. Graticules, topography and other details should be as simple as possible to permit rapid reproduction and amendment. Political subdivisions should be shown and identified. It should be produced in one colour.

Sheet size and scale: The overall dimensions should be 210 mm × 297 mm. If a larger map is required, it should be folded to conform to this size. A uniform scale should be used for all charts produced as a series and other charts where practicable.

Title and marginal notes: The title should be shown on the top border and should be as short and simple as possible.

Colours: The number of colours used should be kept to a minimum. If more than one colour is used, the colours should offer adequate contrast.

Symbols: Symbols should conform, where practicable, to the ICAO Chart symbols shown in Annex 4, Appendix 2. The basic, general purpose symbols for AIP index maps are a closed circle ● and an open circle ○. Except when the symbols used are self-explanatory, a legend should be provided. For details for which no ICAO symbol has been provided, any appropriate symbol may be chosen provided it does not conflict with any ICAO symbol.

5.7 CHARTS TO BE INCLUDED IN THE AIP

The following charts for aerodromes/heliports listed in Part 3 — Aerodromes (AD) — must, when available, form part of the AIP unless distributed through a separate subscription service. When included in the AIP, these charts should be in Part 3 — Aerodromes (AD), Section 2, Subsection 24 for aerodromes, or Section 3, Subsection 23 for heliports, immediately following the tabulations for the aerodrome or heliport concerned. The charts, as appropriate, should be included in the following sequence:

- Aerodrome/Heliport Chart — ICAO
- Aircraft Parking/Docking Chart — ICAO
- Aerodrome Ground Movement Chart — ICAO
- Aerodrome Obstacle Chart — ICAO Type A (for each runway)
- Precision Approach Terrain Chart — ICAO (precision approach Cat II and III runways)
- Area Chart — ICAO (departure and transit routes)
- Radar Minimum Altitude Chart — ICAO
- Standard Departure Chart — Instrument (SID) — ICAO
- Area Chart — ICAO (arrival and transit routes)
- Standard Arrival Chart — Instrument (STAR) — ICAO
- Instrument Approach Chart — ICAO (for each runway and procedure type)
- Visual Approach Chart — ICAO
- Bird concentrations in the vicinity of the aerodrome.

5.8 NOTIFICATION OF DIFFERENCES IN THE AIP

[4.1.2 and Appendix 1]

5.8.1 The primary purpose of reporting differences is to promote safety and efficiency in air navigation by ensuring that governmental and other agencies, including operators, concerned with international civil aviation are made aware of all national rules and practices in so far as they differ from those prescribed in the ICAO Annexes, Procedures for Air Navigation Services and Regional Supplementary Procedures. If identified in AIP, significant differences would not only provide a clear picture of the operational significance of the differences to users of that document, but facilitate the process of isolating and eliminating those that do not have an important bearing on the safety of air navigation or are inconsistent with the objectives of the ICAO provisions.

5.8.2 Annex 15 requires that a Contracting State record in its AIP any significant differences between its

national regulations and practices and the related ICAO provisions. It is intended that any such differences be included in GEN 1.7 of the AIP. This is to ensure that an AIP will provide up-to-date information on the status of implementation of Standards, Recommended Practices and Procedures (SARPs), particularly those concerned with aircraft operations and the provision of facilities and services. Any deviation from SARPs that needs to be taken into account in aircraft operations, as indicated below, constitutes a “significant difference”.

5.8.3 All significant differences notified to ICAO must also be included in the AIP in a form that will enable a user to differentiate easily between the national rules and practices of a State and the related ICAO provisions. They comprise differences from:

- a) any of the International Standards;
- b) Recommended Practices that are important for the safety of air navigation or, in the case of facilitation, for the speedy handling and clearance through customs, immigration, etc. of aircraft and the loads they carry;
- c) Procedures for Air Navigation Services (PANS) that are important for the safety of air navigation; and
- d) Regional Supplementary Procedures (SUPPS) that are important for the safety of air navigation.

5.8.4 It therefore follows that all the provisions in ICAO Annexes that are Standards are significant, and that any differences between the national regulations or practices of a State and the related ICAO Standards are differences which must be notified. This is an obligation which originates from Article 38 of the Convention. In the matter of Recommended Practices, PANS and SUPPS, only those differences that are important for the safety of air navigation or, in the case of facilitation, to the speedy handling and clearance through customs, immigration, etc. of aircraft and their loads are significant. Because of their nature, most of the Recommended Practices in ICAO Annexes contribute to the safety of air navigation.

5.8.5 Differences from the PANS-ABC (Doc 8400) would not constitute “significant” differences. However, Annex 15, Appendix 1, GEN 2.2 requires the inclusion, in the AIP, of a list of the abbreviations and their respective significations used by the State in its AIP and in the distribution of aeronautical information. In this list any abbreviation or signification that differs from the corresponding ICAO abbreviation or signification must be suitably

annotated. The remainder of Doc 8400 contains signals, designations and codes which are universally applied.

5.8.6 In general, notification of significant differences will be limited to cases where the national regulations or national practices of a State differ from the ICAO Standards, Recommended Practices and Procedures. When national regulations or practices are essentially the same as the ICAO provisions but are not identical, or are in compliance with the ICAO provisions but individual differences exist at particular sites, no difference should be reported since the details of the procedures and facilities existing are the subject of notification through the medium of the AIP. Broadly, the determination should be based on the following criteria, in terms of whether knowledge of the differences is necessary for the safety of international air navigation:

- a) does the difference impose an obligation:
 - within the scope of the Annex, PANS or SUPPS which is not covered by an ICAO provision; or
 - different in character from that of the corresponding ICAO provision; or
- b) is the applicable national regulation or practice more exacting or less protective than the corresponding ICAO provision.

5.8.7 When national regulations or practices are more stringent than the ICAO provisions, no “differences” should be notified, since the State’s AIP should reflect the actual situation. Similar action should be taken in respect of procedures which have not been disapproved by the State but either have not yet been implemented or are being gradually implemented.

5.8.8 In the notification of a difference, it is necessary to make an explicit statement of intent to comply where such intent exists, or where such is not the intent, of the difference or differences that will exist. This statement should be made with respect to the whole of the ICAO Annex or document concerned, i.e. including any associated amendments, and should be with regard to existing as well as new installations. Additionally, where the intention is to comply, an indication should be given in general terms if, for a certain period, there will be cases where facilities will not be provided in accordance with the provisions of an Annex but without giving details of such differences since this will be a matter for notification through the AIP. Where an alternative course of action is provided for in the SARPs, the choice made should be indicated.

5.8.9 The reporting of differences to Annexes such as Annex 11, which deals with the provision of air traffic services, can only be determined by the State concerned, although the recommendations of regional air navigation meetings will provide considerable assistance. In the case of Annex 11, differences will generally fall under two main headings:

- a) the non-adoption of procedures for air traffic services contained in the Annex; and
- b) the non-provision of facilities for air traffic services;

although in this Annex the division between facilities and procedures is less distinct than in others. Differences under a) are likely to be more numerous than those under b).

5.8.9.1 In so far as b) — the non-provision of facilities — is concerned, this is likely to become a question of whether or not the physical equipment specified in the Annex is provided. In practice, the most common cases of “non-provision” are likely to be in respect of the communication and recording equipment necessary to meet the specifications of Annex 11, Chapter 6.

5.8.10 In the case of Annex 3, there would be a notifiable difference if available meteorological information for departing aircraft and for arriving aircraft were observed, computed or presented in a manner that differs substantially from the provisions of the Annex (without the non-standard nature of the meteorological information being known to the pilot). For example, according to 4.7.13 of Annex 3, any observed runway visual range value which does not fit the reporting scale in use should be “rounded down to the nearest lower step in the scale”; similarly, according to 4.11.4 and 4.11.5, QNH or QFE values should be “rounded down to the nearest lower whole hectopascal”. Any rounding up of such values to a higher value, or provision of units different from the hectopascal, would result in non-standard, and possibly misleading, data and should be notified. Such cases, however, are understood to be very rare. In most cases, an AIP should and generally does show which of the alternative formats, methods and means for providing meteorological information that are foreseen in Annex 3 have been chosen and are applied by the State. For example, an AIP should indicate which of the different kinds of flight documentation set out in Annex 3, Chapter 9, are available as well as the procedures and means used for providing them to operators or flight crew members.

5.8.11 In general, significant differences to Annex 14, Volume I, exist when:

- a) *Reference code letters (Chapter 1)*: a different method for classifying aerodromes is used. However, consequential minor differences, which may result from the national practice of classifying aerodromes, should not be notified;
 - b) *Aerodrome data (Chapter 2)*: a different method for either determining or making available aerodrome data is employed;
 - c) *Number and orientation of runways (Chapter 3)*: the criteria or method used for determining the number and orientation of runways differs significantly from that of the Annex;
 - d) *Physical characteristics (Chapter 3)*:
 - 1) State practices are not as protective as the requirements in the Annex;
 - 2) State practices differ in principle from the requirements set forth in Annex 14, Volume I; (It should be noted that the figures contained in Chapter 3 for the dimensions and separation distances of various aerodrome facilities are nearly all minimum requirements and those for slopes, maximum values);
 - e) *Obstacle restriction and removal (Chapter 4)*:
 - 1) State practices for providing obstacle limitation surfaces differ in principle from those of Annex 14, Volume I;
 - 2) the dimension and slopes of an obstacle limitation surface are not as protective as those in Annex 14, Volume I;
 - 3) State practice does not result in the restriction or removal of an object as would be required by the specifications of Annex 14, Volume I;
 - f) *Visual aids (Chapters 5, 6 and 7)*:
 - 1) State practice does not result in the aid being provided in accordance with the criteria specified in Annex 14, Volume I;
 - 2) the characteristics (colour, intensity, flash rate, etc.) or pattern (length, width, light spacing, etc.) differ from those prescribed in Annex 14, Volume I;
 - g) *Secondary power supply (Chapter 8)*:
 - 1) the State does not provide secondary power supply for the conditions or aids specified;
 - 2) the maximum switch-over times are greater than those given in Table 8-1;
 - h) *Services (Chapter 9)*:
 - 1) State practice is not to provide at an aerodrome one of the services specified in Annex 14, Volume I;
 - 2) the provided service does not follow a practice advocated in Annex 14, Volume I.
- 5.8.12 An example of notification of differences is given below:
- The statements contained in the present supplement for paragraphs still apply. The remaining paragraphs in the supplement should be eliminated. In addition, the following differences should be included in the supplement to Annex 14, Volume I:
- Chapter 3, 3.1.1 — Usability may be reduced to 92 per cent (instead of 95 per cent) for code letters D or E.
- Chapter 5, 5.2.2.4 — This administration does not use a zero preceding a single digit runway designation marking.
- Chapter 5, 5.2.7 — Not provided. This administration has the matter of runway side stripe markings under consideration.
- Chapter 8, 8.1.3 — Secondary power supply is available at precision approach runways. However, switch-over times are longer than those specified in Table 8-1.

5.9 AIP AMENDMENTS

[4.2.4, 4.2.8, 4.2.9, 4.3.2]

5.9.1 Permanent changes and additions to information contained in the AIP are issued as AIP Amendments. Any information contained in NOTAM or AIP Supplements that renders necessary an amendment to an AIP must be confirmed by a formal amendment or revision with a minimum

of delay. Each AIP Amendment must be allocated a serial number which must be consecutive. Hand amendments or annotations must be kept to a minimum. The normal method of amendment must be by issue of replacement pages. The AIP must be amended or re-issued at such regular intervals as necessary to ensure the information contained in the AIP is complete and up to date. In this respect, it should be noted that any operationally significant changes to an AIP must be published in accordance with the AIRAC procedures and clearly identified as such. Specimens of AIP Amendment cover pages are given in Figures 5-1 and 5-2. The monthly printed plain-language list of valid NOTAM includes an indication of the latest AIP amendments.

Establishment of the regular interval between amendments

5.9.2 Each State is free to establish the regular interval between amendments to its AIP, which should be selected to meet the particular requirements, circumstances and capabilities of the State, taking into consideration:

- a) the area covered by the AIP and the number of facilities and services contained in it;
- b) the frequency at which the information is expected to change; and
- c) the resources available to the AIS, such as personnel, reproduction and printing facilities.

5.9.3 A State may decide to issue an amendment to its AIP on the first day of each month while another State may find that issuing one amendment per year will serve its purposes. It should be kept in mind, however, that the purpose of issuing amendments to the AIP is to keep the information up to date. An AIP that is not up to date can jeopardize the safety of air navigation.

5.9.4 Some States may prefer to schedule the interval between AIP Amendments every three, four or six months, or more. For example, if it is decided to issue three amendments per year, the publication dates selected could be 1 January, 1 May and 1 September, or 31 March, 31 July and 30 November. If two amendments per year are considered sufficient, the publication dates could be 1 January and 1 July, or 1 March and 1 September. Any combination of dates can be used.

5.9.5 If the AIRAC common effective dates are preferred as a basis for the publication dates, a choice can be made from 13 dates per year (see 2.6.5). It may be

decided that one amendment every three or six AIRAC periods is enough to keep the AIP up to date. Using as an example the AIRAC effective dates for 2003 (see Chapter 2, Table 2-1) the publication dates could be:

- a) for an amendment every three AIRAC periods:
20 February, 15 May, 7 August, 30 October;
- b) for an amendment every six AIRAC periods:
20 February, 7 August.

5.9.6 A State may decide that the AIRAC common effective dates are too far apart to keep their AIP up to date and may decide to issue an amendment every 14 days. Other States may decide to issue amendments on only one AIRAC date per year. Considering that operationally significant changes to the AIP must be published in accordance with AIRAC procedures, States may find the use of AIRAC effective dates more convenient for scheduling the issue of their AIP Amendments. Whenever AIP Amendments are issued in accordance with AIRAC procedures, the acronym "AIRAC" is added to the amendment cover page and in the amendment number on each replacement page. This procedure is explained in greater detail in 2.6.

Publication of the regular interval

5.9.7 When a State has established the regular interval or publication dates for its AIP Amendments, these intervals or publication dates must be published in the AIP, Part 1 — General (GEN). For example, in GEN 3.1 — Aeronautical information services, under 3.1.3 — Aeronautical publications, a paragraph could be included that begins "Amendments to the AIP are issued on" to be completed by "the first day of each month" or "the first day of January, April, July and October" or "each of the AIRAC effective dates" or "every fourth AIRAC effective date including 29 January 1998" or any other schedule or publication dates chosen.

NIL notification when scheduled AIP Amendments will not be published [4.3.7]

5.9.8 A NIL notification must be issued when an AIP Amendment will not be published at the established regular interval or on the publication date. This NIL notification should be included in the monthly printed plain-language list of valid of NOTAM (see 6.1.11).

Publication of AIP Amendments between established regular intervals or publication dates

5.9.9 The established regular intervals or publication dates for AIP Amendments should not prevent the AIS from publishing an additional amendment. However, this should be strictly limited to cases of urgent necessity.

Identification of changes
[4.2.7]

5.9.10 New or revised information contained in AIP replacement pages must be identified by an annotation against it in the margin. A thick black vertical line or, where the change incorporated covers one line only or a part of a line, a thick black horizontal arrow, is sufficient to identify the change.

Publication/effective date
[4.3.3, 4.3.4]

5.9.11 Each AIP Amendment page, including the cover sheet, must show a publication date. Each AIRAC AIP Amendment page, including the cover sheet, must show a publication date and an effective date.

References and indication of subject
[4.3.5, 4.3.6]

5.9.12 When an AIP Amendment is issued, it must include references to the serial numbers of those elements, if any, of the Integrated Aeronautical Information Package that have been incorporated into the amendment. A brief indication of the subjects affected by the amendment must be included on the AIP Amendment cover sheet.

Checklist of pages

5.9.13 Each amendment must include a checklist giving the current date of each loose-leaf page in the AIP, unless there are only two or three replacement sheets involved, and must provide a recapitulation of any outstanding manuscript corrections. The checklist must carry both the page number and date.

5.10 AIP SUPPLEMENTS
[4.2.8, 4.4.1]

5.10.1 Since the AIP is an operational document and therefore subject to frequent change, provisions exist for its

continual updating. In addition, changes of a temporary nature affecting the contents of an AIP are often required to cater for unexpected circumstances or, in some cases, planned modifications to a service/facility. The purpose of an AIP Supplement is to bring to the attention of users both temporary changes of long duration (three months or longer) and information of short duration containing extensive text or graphics which affect one or more parts of the AIP. Operationally significant changes to the AIP issued as an AIP Supplement must be published under the AIRAC procedures (2.6 refers).

Specifications for AIP Supplements
[4.4.2, 4.4.3, 4.4.6, 4.4.7]

5.10.2 An AIP Supplement must be allocated a serial number which must be consecutive and based on the calendar year (e.g. 2/03). The pages should be printed on coloured paper (preferably yellow) in order to be conspicuous. The pages must be kept in the AIP as long as all or part of their contents remain valid. Although it is recommended that AIP Supplement pages be retained as the first item in an AIP binder, it may be more appropriate for States to issue the Supplements divided into specific parts (e.g. GEN, ENR, AD) for insertion in each AIP part, as necessary. This would eliminate the need to continuously refer to the front of the AIP for the required information in cases where the Supplement affects a number of AIP pages. Each AIP Supplement page must show a publication date. Each AIRAC AIP Supplement page must show a publication date and an effective date. Specimens of AIP Supplements are given in Figures 5-3 and 5-4.

AIP Supplement replacing a NOTAM

5.10.3 Temporary changes anticipated to last less than three months are considered to be information of short duration, which is distributed by NOTAM. When this period is exceeded and expected to last for an additional three months or more, an AIP Supplement is issued replacing the NOTAM. Whenever an AIP Supplement is issued as a replacement of a NOTAM, a reference to the series and number of the NOTAM should be included.

Checklist of AIP Supplements
[4.4.5]

5.10.4 A checklist of all AIP Supplements currently in force must be issued at intervals of not more than one month. Such information is to be included in the monthly printed plain-language list of valid NOTAM (see 6.1.11).

5.11 DISTRIBUTION

[4.5, 5.1.1.6]

5.11.1 All AIP, AIP Amendments and AIP Supplements must be distributed to recipients of the Integrated Aeronautical Information Package by the most expeditious means available.

5.11.2 When an AIP Amendment or an AIP Supplement is published in accordance with AIRAC procedures, “trigger” NOTAM must be originated and

promulgated. The intent of this NOTAM is to serve as a reminder in the pre-flight information bulletin (PIB) by signalling the coming into effect of operationally significant permanent or temporary changes to the AIP, thus ensuring that users are aware of changes that may affect their flights. It also serves as a reminder to AIS officers responsible for updating AIP to insert a new AIP Amendment or AIP Supplement in the affected AIP on the amendment or supplement effective date. For guidance on the organization and distribution of trigger NOTAM, see Chapter 6, Appendix A.

<div style="border: 1px solid black; padding: 5px;"><p>TEL: 0123 697 3464 FAX: 0123 697 3474 Telex: 99 1236 AFS: EADDYAYX E-mail: AIS@donc.xx</p></div>	<p>REPUBLIC OF DONLON DEPARTMENT OF CIVIL AVIATION AERONAUTICAL INFORMATION SERVICE P.O. BOX 744 DONLON CITY</p>	<p>AIP Amendment 10 1 April 2003</p>
<p>1. Insert the attached replacement pages. (New information should be identified on these pages by a distinctive symbol or annotation.)</p> <p>2. Destroy the following pages: (Only obsolete pages which are not being replaced need be mentioned here.)</p> <p>3. Record entry of Amendment on page 0-2.</p> <p>4. This amendment incorporates information contained in the following AIP Supplements and NOTAM which are hereby cancelled:</p> <p style="margin-left: 40px;">AIP Supplement: 1/03, 3/03.</p> <p style="margin-left: 40px;">NOTAM: A0101/03, A0305/03.</p>		

Figure 5-1. Specimen of an AIP Amendment cover page

<div style="border: 1px solid black; padding: 5px;"><p>TEL: 0123 697 3464 FAX: 0123 697 3474 Telex: 99 1236 AFS: EADDYAYX E-mail: AIS@donc.xx</p></div>	<p>REPUBLIC OF DONLON DEPARTMENT OF CIVIL AVIATION AERONAUTICAL INFORMATION SERVICE P.O. BOX 744 DONLON CITY</p>	<p>AIRAC AIP</p> <p>Amendment 11 1 May 2003</p>
<p>EFFECTIVE DATE: 12 June 2003</p>		
<p>1. Contents</p> <p style="padding-left: 40px;">AD Donlon/International — Additions to SID and STAR</p> <p>2. On 12 June 2003 remove and insert the following pages:</p> <p style="padding-left: 40px;">AD 2-31</p> <p style="padding-left: 40px;">AD 2-35</p> <p>3. Record entry of Amendment on page 0-2.</p> <p>4. This amendment incorporates information contained in the following AIP Supplements and NOTAM which are hereby cancelled:</p> <p style="padding-left: 40px;">NOTAM A0350/03</p>		

Figure 5-2. Specimen of an AIRAC AIP Amendment cover page

<div style="border: 1px solid black; padding: 5px;"><p>TEL: 0123 697 3464 FAX: 0123 697 3474 Telex: 99 1236 AFS: EADDYAYX E-mail: AIS@donc.xx</p></div>	<p>REPUBLIC OF DONLON DEPARTMENT OF CIVIL AVIATION AERONAUTICAL INFORMATION SERVICE P.O. BOX 744 DONLON CITY</p>	<p>AIP Supplement 15 1 April 2003</p>
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OPERATIONAL HOURS OF ATS, COM AND MET UNITS

1. The operational hours of ATS, COM and MET units at Donlon aerodromes from 26 June 2003, 0100 UTC to 4 September 2003, 0100 UTC are given on pages 3-4.

At some aerodromes the operational hours are subject to frequent changes. Consult latest NOTAM.

2. **Abbreviations:**

H24 = Continuous day and night service

HO = Service available to meet operational requirements

MON.SUN = Days of the week

O/R = On request

3. **Remarks**

3.1 Requests concerning ATC, COM and MET services and rescue and fire fighting services required for aircraft outside the promulgated operational hours should be directed to the aerodrome concerned during office hours.

In urgent cases the request can be inserted in item 18 RMK of the flight plan form. The request shall, however, be confirmed by the aerodrome concerned.

3.2 The Department of Civil Aviation guarantees the appropriate rescue and fire fighting services at its airports during the operational hours of ATC and AFIS units primarily during the hours of scheduled services.

Operators of charter flights, etc. are requested to ascertain the required rescue/fire fighting standard from the airport concerned in advance.

Figure 5-3. Specimen of an AIP Supplement page

<div style="border: 1px solid black; padding: 5px;"><p>TEL: 0123 697 3464 FAX: 0123 697 3474 Telex: 99 1236 AFS: EADDYAYX E-mail: AIS@donc.xx</p></div>	<p>REPUBLIC OF DONLON DEPARTMENT OF CIVIL AVIATION AERONAUTICAL INFORMATION SERVICE P.O. BOX 744 DONLON CITY</p>	<p>AIRAC AIP</p> <p>Supplement 16 1 May 2003</p>
<p>EFFECTIVE DATE: 12 June 2003</p>		
<p>TEMPORARY DISRUPTION OF AIR TRAFFIC SERVICES IN DONLON FIR AND NOVA OCEANIC FIR</p>		
<p>From 12 June 2003, 0001 UTC till 20 June 2003, 2400 UTC air traffic services will be disrupted in the Donlon Flight Information Region (FIR) and Nova Oceanic FIR.</p> <p>Due to the disruption of air traffic services, no international operations will be permitted in the Donlon FIR.</p> <p>In the Nova Oceanic FIR the following will apply:</p> <ul style="list-style-type: none">a) international operations will be provided with flight information service only;b) aircraft fitted with serviceable TCAS and transponder equipment shall have that equipment selected at all times;c) Traffic Information Broadcast by Aircraft (TIBA) procedures shall apply. Position reports and AIREP information shall continue to be provided to Nova Radio on HF. SELCAL is permitted. Pilots shall make TIBA reports and maintain continuous listening watch on 128.95 MHz;d) approved flights shall operate on designated ATS routes only;e) international flights within the Nova Oceanic FIR above FL 245 shall cruise at a flight level appropriate for the direction of flight. Flights shall maintain level flight en-route. Climb and descent procedures are not authorized;f) lights entering Nova Oceanic FIR above FL 245 from adjacent FIR will be vertically separated or horizontally separated at 20 minutes apart when operating on same direction tracks. <p>Reference AIP ENR 2.1, ENR 3.1 and ENR 3.2.</p>		

Figure 5-4. Specimen of an AIRAC AIP Supplement page

Appendix to Chapter 5

EXPLANATORY NOTES ON THE SPECIMEN AIP

1. The Specimen AIP at the end of this manual has been prepared in conformity with Annex 15. It is divided into three parts:

Part 1 — General (GEN), contains information of an administrative and explanatory nature which is not of such significance that NOTAM need be issued;

Part 2 — En-route (ENR), contains information concerning airspace and its use; and

Part 3 — Aerodromes (AD), contains information concerning aerodromes/heliports and their use.

2. The Specimen AIP, together with the explanations of each element provided in this appendix, is designed to cover problems associated with the selection of information to be contained in the AIP, the manner of presentation and the use of correct terminology and is directed towards uniformity in publication of the information. It is impossible to cover all contingencies in the Specimen AIP,

particularly when the character of aviation administrations varies widely from State to State.

3. The numbered items listed in the explanatory notes are those found in Appendix 1 of Annex 15. When these items are listed in headings, either in subsections or in tables, a short description of the title may be used.

4. Charts or diagrams designed to supplement or to take the place of tabular material are provided to a limited extent. Charts should be used, however, wherever they would contribute to a simple presentation of the required information (see Annex 15, Chapter 4, 4.1.3 and 4.1.4).

5. A “Remarks” column has been included in most tabular forms. Unless otherwise indicated, the purpose of this column is the inclusion of information additional to or exceptional to that shown in other columns of the form. Where the application of the information in the remarks column is not obvious, a symbol should be used to identify the relevant item.

PART 1 — GENERAL (GEN)
GEN 0.
GEN 0.1 PREFACE

Brief description of the Aeronautical Information Publication (AIP), including:

1) Name of the publishing authority

An indication of the authority responsible for publishing the AIP.

2) Applicable ICAO documents

A list of ICAO documents relevant to the publication of the AIP and a reference to the location in the AIP where differences, if any, are listed.

3) The AIP structure and established regular amendment interval

A description of the structure of the AIP, including a brief listing of the content of its major components. In addition, a statement should be made regarding the established regular amendment interval.

4) The service to contact in case of detected AIP errors or omissions

An indication of the name and address of the service/office to be contacted when errors and/or omissions are found in the content of the AIP and for general correspondence concerning AIS.

GEN 0.2 RECORD OF AIP AMENDMENTS

A record of AIP Amendments and AIRAC AIP Amendments (which are amendments published in accordance with the AIRAC System). There should be two separate tables, each containing four columns, showing:

1) Amendment number

Consists of the consecutive serial number.

2) Publication date

3) Date inserted

Contains the date inserted in the AIP (for the regular AIP Amendments) or the effective date (for the AIRAC AIP Amendments).

4) Inserted by

The initials of the officer who inserted the amendment.

GEN 0.3 RECORD OF AIP SUPPLEMENTS

The Record of AIP Supplements is one table, containing five columns, showing:

1) Supplement number

Number and year of the AIP Supplement.

2) Supplement subject

Subject matter contained in the AIP Supplement.

3) AIP section(s) affected

Sections of the AIP affected by the AIP Supplement.

4) Period of validity

Time period when the information contained in the AIP Supplement will be valid.

5) Cancellation record

Shows the information/publication which cancelled the AIP Supplement.

GEN 0.4 CHECKLIST OF AIP PAGES

A checklist of AIP pages containing:

1) Page number.

2) Publication or effective date (day, month, year) of the aeronautical information.

GEN 0.5 LIST OF HAND AMENDMENTS TO THE AIP

A list of current hand amendments to the AIP. This subsection of the AIP is a table listing any changes to information contained in the AIP, pending the reissue of the pages concerned. It must contain, in three columns, the following:

- 1) AIP page(s) affected

Reference to/identification of the page(s) on which the correction is made.

- 2) Amendment text

Precise details of the correction to be made.

- 3) AIP amendment number by which a hand amendment was introduced.

GEN 0.6 TABLE OF CONTENTS TO PART 1

A list of sections and subsections contained in Part 1 — General (GEN).

Indicate the section/subsection numbers, their headings and page numbers.

GEN 1. NATIONAL REGULATIONS AND REQUIREMENTS

GEN 1.1 DESIGNATED AUTHORITIES

A listing of the addresses of the designated authorities concerned with the facilitation of international air navigation. The addresses of the following authorities should be included:

- 1) Civil aviation
- 2) Meteorology
- 3) Customs
- 4) Immigration

- 5) Health
- 6) En-route and aerodrome/heliport charges
- 7) Agricultural quarantine
- 8) Aircraft accident investigation.

For each authority the address should include:

- 1) Designated authority
- 2) Name of the authority
- 3) Postal address
- 4) Telephone number
- 5) Telefax number
- 6) Telex number
- 7) Aeronautical fixed service (AFS) address.

GEN 1.2 ENTRY, TRANSIT AND DEPARTURE OF AIRCRAFT

Regulations and requirements for advance notification and applications for permission concerning entry, transit and departure of aircraft on international flights. (See also Annex 9.)

- 1) General

Information on regulations applicable to all types of operations along the lines shown in the example is often helpful and should, where applicable, be included hereunder.

- 2) Scheduled flights

General. Provide the information that will enable any operator to determine the conditions under which a scheduled service may be undertaken into or through the territory of the State. Indicate whether the State is a party to the International Air Services Transit Agreement or the International Air Transport Agreement.

Documentary requirements for clearance of aircraft. List all documents required in connection with the clearance of aircraft, grouped under “arrival”, “transit”¹ and “departure”. Indicate the number of copies required with respect to each document and the governmental agencies to which they are to be submitted. If your government should require information in addition to or different from that provided in the relevant Annex 9 standard document or should require additional or different clearance documents, specify the information required thereon. Mention briefly the regulations pertaining to the completion of aircraft clearance documents. So far as the clearance of the aircraft’s load is concerned, governmental requirements should be listed under the respective headings for items 3) and 4) (below).

3) Non-scheduled (commercial) flights

Procedures. Specify the procedures to be followed by an operator of non-scheduled (commercial) flights. Where prior permission² for taking on or discharging passengers, cargo or mail is required, state name and address of the governmental department to which the application must be submitted, the deadline by which the application must be received prior to the aircraft’s arrival, information required on application, etc.

Documentary requirements for clearance of aircraft. Unless these requirements differ from those applied to scheduled flights, a reference to the information supplied under GEN 1.2 above will suffice.

4) Private flights

Advance notification of arrival. Provide information concerning advance notification of arrival, in

particular whether the information contained in a flight plan is accepted by the authorities as adequate advance notification of arrival, and specify the maximum time required by the respective authorities for receiving the advance notification. If, for reasons of safety of flight, special permission in addition to filing of a flight plan is required, state minimum time required for filing the application in advance and the name and address of authorizing agency.

Documentary requirements for clearance of aircraft. Take the action as suggested under the same heading under 3) above. In addition, state whether foreign aircraft are admitted without security for customs duty or, alternatively, the form of guarantee required (carnet de passages en douane), the length of stay permitted, etc.).

5) Public health measures applied to aircraft

Provide an outline of public health measures, if any, applied to aircraft. In particular, mention should be made of whether disinsecting, if required, is recognized when carried out before arrival; in case of spraying upon arrival, state whether passengers and crews are allowed to disembark from the aircraft before disinsecting is performed.

GEN. 1.3 ENTRY, TRANSIT AND DEPARTURE OF PASSENGERS AND CREW

Regulations (including customs, immigration and quarantine, and requirements for advance notification and applications for permission) concerning entry, transit and departure of non-immigrant passengers and crew. (See also Annex 9.)

1) Customs requirements

Supply information on customs requirements (grouped separately, where practicable, under arrival, transit and departure) concerning, *inter alia*, acceptance of oral declarations or formalities required in connection with passengers’ and crews’ accompanied baggage, tax clearance where still required, etc.

2) Immigration requirements

Give a summary of the clearance documents and formalities required (grouped separately, where practicable, under arrival, transit and departure)

-
1. The requirements to be shown under this heading should be limited to those instances where no passengers are embarking or disembarking and no articles are laden or unladen; in all other cases the requirements should be listed under “arrival” or “departure” respectively.
 2. Article 5 of the Convention on International Civil Aviation provides in paragraph 1 that aircraft of Contracting States have the right to operate non-scheduled commercial flights in transit over, or to make technical stops in, the territory of another Contracting State without the necessity of obtaining prior permission.

including items such as visas (entry/exit), where required, embarkation/disembarkation cards, passports, acceptance of existing identity documents in lieu of valid passports and, as regards crew members, licences and certificates in lieu of passports and visas. State specifically if clearance forms different from or in addition to those mentioned in Annex 9 are required or if information different from or in addition to that shown on the specimen forms in the relevant appendices of Annex 9 is required.

3) Public health requirements

Information as regards public health requirements concerning passengers and crew should be provided, including the requirement for vaccination or revaccination certificates, etc.

**GEN 1.4 ENTRY, TRANSIT AND DEPARTURE
OF CARGO**

Regulations (including customs, and requirements for advance notification and applications for permission) concerning entry, transit and departure of cargo. (See also Annex 9.)

1) Customs requirements concerning cargo and other articles (including stores, mail, unaccompanied baggage, etc.)

Include information concerning the formalities (invoices, certificates, import/export licences, consular formalities, if applicable) required for the clearance of air cargo (grouped separately under import, export and transshipment requirements). If arrangements for simplified clearance of shipments not exceeding a certain value or weight are in effect, indicate such value or weight limitation. Also include documentary requirements for the clearance of other articles (stores, mail, etc.).

2) Agricultural quarantine requirements

Specify any sanitary certificates or related documents which may be required in connection with the clearance of particular animal and plant shipments as well as any other sanitary requirements related to those shipments.

Note.— Provisions for facilitating entry and departure for search, rescue, salvage, investigation, repair or salvage

in connection with lost or damaged aircraft are detailed in Section GEN 3.6, Search and rescue.

**GEN 1.5 AIRCRAFT INSTRUMENTS, EQUIPMENT
AND FLIGHT DOCUMENTS**

Brief description of aircraft instruments, equipment and flight documents, including:

- 1) Instruments, equipment (including aircraft communication and navigation equipment) and flight documents to be carried on aircraft, including any special requirement in addition to the provisions specified in Annex 6, Part I, Chapters 6 and 7.
- 2) Emergency locator transmitter (ELT), signalling devices and life-saving equipment as presented in Annex 6, Part I, 6.6 and Part II, 6.4 where so determined by regional air navigation meetings, for flights over designated land areas.

**GEN 1.6 SUMMARY OF
NATIONAL REGULATIONS AND
INTERNATIONAL AGREEMENTS/CONVENTIONS**

A list of titles and references and, where applicable, summaries of national regulations affecting air navigation, together with a list of international agreements/conventions ratified by the State.

**GEN 1.7 DIFFERENCES FROM ICAO
STANDARDS, RECOMMENDED PRACTICES
AND PROCEDURES**

A list of significant differences between national regulations and practices of the State and related ICAO provisions, including:

- 1) Provision concerned (Annex number, title, edition number and paragraph)
- 2) The complete text of the difference.

All significant differences must be listed under this subsection. All the Annexes must be listed, in numerical order, even if there are no differences to a particular Annex, in which case the word “NIL” must be inserted following the Annex number, title and edition number. National differences from, or the degree of non-application of, the Procedures for Air Navigation Services (PANS) and the

Regional Supplementary Procedures (SUPPS) must be listed immediately following the Annex to which the PANS or SUPPS relate.

Each difference should be notified in the following form:

- a) *Reference*: Cite the paragraph or subparagraph of the Annex, PANS or SUPPS in respect of which the difference exists.
- b) *Description of the difference*: Describe the difference precisely and include any additional information necessary to make its effect clear.
- c) *Remarks*: Indicate the reason for the difference or, if the difference is likely to be eliminated in the future, indicate the date by which conformity with the ICAO provision may be expected.

Note.— For an explanation/clarification of what a significant difference is, see Chapter 5, section 5.8.

GEN 2. TABLES AND CODES

GEN 2.1 MEASURING SYSTEM, AIRCRAFT MARKINGS, HOLIDAYS

1) Units of measurement

Description of units of measurement used including table of units of measurement. A statement may be made to the effect that the units of measurement used in all air and ground operations are in accordance with Annex 5, including a list of quantities in common use and the units used for their respective measurement.

2) Temporal reference system

Description of the temporal reference system employed, together with an indication of whether or not daylight saving hours are employed and how the temporal reference system is presented throughout the AIP.

3) Horizontal reference system

Brief description of the horizontal (geodetic) reference system used, including:

- a) name/designation of the reference system;
- b) identification of the projection;

- c) identification of the ellipsoid used;
- d) identification of the datum used;
- e) area(s) of application; and
- f) an explanation, if applicable, of the asterisk used to identify those coordinates that do not meet Annex 11 and 14 accuracy requirements.

4) Vertical reference system

Brief description of the vertical reference system used, including:

- a) name/designation of the reference system;
- b) description of the geoid model used including the parameters required for height transformation between the model used and EGM-96; and
- c) an explanation, if applicable, of the asterisk used to identify those elevations/geoid undulations that do not meet Annex 14 accuracy requirements.

5) Aircraft nationality and registration marks

An indication of the aircraft nationality and registration marks adopted by the State.

6) Public holidays

A list of public holidays with an indication of the services affected.

GEN 2.2 ABBREVIATIONS USED IN AIS PUBLICATIONS

A list of alphabetically arranged abbreviations and their respective significations used by the State in its AIP and in the distribution of aeronautical information with appropriate annotation for those national abbreviations that are different from those contained in the *Procedures for Air Navigation Services — ICAO Abbreviations and Codes* (PANS-ABC, Doc 8400).

Note.— A list of alphabetically arranged definitions/glossary of terms may also be added.

GEN 2.3 CHART SYMBOLS

A list of chart symbols arranged according to the chart series where symbols are applied.

The symbol sheet must portray those symbols used on all chart series published, with the exception of those included in the legend of a chart.

Note.— The symbol sheet may be printed in a single colour.

GEN 2.4 LOCATION INDICATORS

A list of alphabetically arranged location indicators assigned to the locations of the aeronautical fixed stations to be used for encoding and decoding purposes. An annotation to locations not connected to the AFS must be provided.

Location Indicators assigned to locations in the AFS, or to other locations of international significance, under the rules prescribed by ICAO, should be listed in both encode and decode form. Those indicators which are not to be used in the address of a message transmitted over the AFS should be so annotated.

GEN 2.5 LIST OF RADIO NAVIGATION AIDS

A list of radio navigation aids arranged alphabetically, containing:

- 1) Identifier
- 2) Name of the station
- 3) Type of facility/aid
- 4) Indication whether aid serves en-route (E), aerodrome (A) or dual (AE) purposes.

This list consists of two tabulations, each containing four columns. Both tables are in alphabetical order, with one table listing the aids by “identification (ID)” and the other by “station name”.

GEN 2.6 CONVERSION TABLES

Include tables for conversion between:

- 1) Nautical miles and kilometres and vice versa
- 2) Feet and metres and vice versa
- 3) Decimal minutes of arc and seconds of arc and vice versa
- 4) Other conversion tables, as appropriate.

GEN 2.7 SUNRISE/SUNSET TABLES

In this subsection, the following is to be included:

- a brief description of criteria used for determination of the times given in the sunrise/sunset tables;
- an alphabetical list of locations for which the times are given with a reference to the related pages in the sunrise/sunset table; and
- the sunrise/sunset tables for the selected stations/locations.

The sunrise/sunset tables should include:

- 1) Station name
- 2) ICAO location indicator
- 3) Geographical coordinates in degrees and minutes
- 4) Date(s) for which the times are given
- 5) Time of the beginning of morning civil twilight
- 6) Time of sunrise
- 7) Time of sunset
- 8) Time of the end of evening civil twilight.

GEN 3. SERVICES

GEN 3.1 AERONAUTICAL INFORMATION SERVICES

- 1) Responsible service

Description of the Aeronautical Information Service (AIS) and its major components, including for each component:

- a) service/unit name;
- b) postal address;
- c) telephone number;
- d) telefax number;
- e) telex number; and
- f) AFS address.

In addition, a statement should be made concerning the ICAO documents on which the services are based, including a reference to the location in the AIP where the differences, if any, are listed. Furthermore, if AIS service is not provided H24, indication thereof should be provided here.

2) Area of responsibility

Give a description of the area of responsibility of the Aeronautical Information Service.

3) Aeronautical publications

Give a description of the elements of the Integrated Aeronautical Information Package, including:

- a) AIP and related amendment service;
- b) AIP Supplements;
- c) AIC;
- d) NOTAM and Pre-flight Information Bulletins (PIB);
- e) checklists and lists of valid NOTAM; and
- f) how they may be obtained.

An indication of the types of aeronautical information published must be given, with a brief description of its nature and some details as to the manner in which the distribution of the documents is made, including the address(es) of distribution agency(ies), cost of paid subscriptions and the availability of the amendment service.

The description of the NOTAM service provided should include, where applicable, its series classifications and the arrangements for use of the predetermined distribution system. A tabulation showing the international exchange of NOTAM may be included.

When an AIC is used to promulgate publication prices (subscription), it must be indicated in this section of the AIP.

4) AIRAC system

Give a brief description of the AIRAC System provided and include a schedule of AIRAC effective dates for the present and for several years into the future.

5) Pre-flight information service at aerodromes/heliports

A list of aerodromes/heliports at which pre-flight information service is available, including for each airport/heliport an indication of the:

- a) elements of the Integrated Aeronautical Information Packages held/available;
- b) maps and charts held/available; and
- c) general area of coverage of the pre-flight information.

6) Electronic terrain and obstacle data

Details of how electronic terrain and obstacle data may be obtained, containing:

- a) name of the individual, service or organization responsible;
- b) street address and e-mail address of the individual, service or organization responsible;
- c) telefax number of the individual, service or organization responsible;
- d) contact telephone number of the individual, service or organization responsible;
- e) hours of service (time period including time zone when contact can be made);
- f) online information that can be used to contact the individual, service or organization; and
- g) supplemental information, if necessary, on how and when to contact the individual, service or organization.

GEN 3.2 AERONAUTICAL CHARTS

1) Responsible service(s)

Description of the service(s) responsible for the production of aeronautical charts, including:

- a) service name;
- b) postal address;
- c) telephone number;
- d) telefax number;

- e) telex number; and
- f) AFS address.

In addition, a statement should be made concerning the ICAO documents on which the service is based, including a reference to the location in the AIP where the differences, if any, are listed. Furthermore, if a charting service is not provided H24, indication thereof should be provided here.

2) Maintenance of charts

Brief description of how aeronautical charts are revised and amended.

This should include an explanation of the system used by the State publishing authority on how amendments or revisions to aeronautical charts are handled, including details as appropriate on the use of AIC or AIP Supplements for disseminating corrective data or information concerning the availability of new maps and charts.

3) Purchase arrangements

Details of how aeronautical charts may be obtained, containing:

- a) service/sales agency(ies);
- b) postal address;
- c) telephone number;
- d) telefax number;
- e) telex number; and
- f) AFS address.

This should include essential information on how and where charts may be obtained, with a list of both domestic and foreign sales agents, where applicable.

4) Aeronautical chart series available

A list of aeronautical chart series available, followed by a general description of each series and an indication of the intended use.

5) List of aeronautical charts available

A list of aeronautical charts available, including:

- a) title of series;

- b) scale of series;
- c) name and/or number of each chart or each sheet in a series;
- d) price per sheet; and
- e) date of latest revision.

The following abbreviations should be used to indicate the chart series:

ADC	Aerodrome Chart — ICAO
* ANC/250	Aeronautical Chart 1:250 000
ANC	Aeronautical Chart — ICAO 1:500 000
ANCS	Aeronautical Navigation Chart — ICAO, Small Scale
AOC	Aerodrome Obstacle Chart — ICAO Types A, B and C
* APC	Aeronautical Planning Chart
APDC	Aircraft Parking/Docking Chart — ICAO
ARC	Area Chart
ENRC	En-route Chart — ICAO
GMC	Aerodrome Ground Movement Chart — ICAO
IAC	Instrument Approach Chart — ICAO
PATC	Precision Approach Terrain Chart — ICAO
* PC	Plotting Chart — ICAO
RMAC	Radar Minimum Altitude Chart — ICAO
SID	Standard Departure Chart — Instrument (SID) — ICAO
STAR	Standard Arrival Chart — Instrument (STAR) — ICAO
VAC	Visual Approach Chart — ICAO
WAC	World Aeronautical Chart — ICAO 1:1 000 000

* Abbreviations which are different from or not contained in PANS-ABC (Doc 8400).

6) Index to the world aeronautical chart (WAC) — ICAO 1:1 000 000

An index chart showing coverage and sheet layout for the WAC — ICAO 1:1 000 000 produced by a State. If the Aeronautical Chart — ICAO 1:500 000 is produced instead of WAC — ICAO 1:1 000 000, an index chart must be used to indicate the coverage and sheet layout for the Aeronautical Chart — ICAO 1:500 000.

A chart index consisting of a simple outline drawing, portraying the sheet lines and coverage of chart series, must be included. Such an index, used in conjunction

with the list of aeronautical charts available, will enable the user to select the specific chart series or sheets in a series that are required.

7) Topographical charts

Details of how topographical charts may be obtained, containing:

- a) name of service/agency(ies);
- b) postal address;
- c) telephone number;
- d) telefax number;
- e) telex number; and
- f) AFS address.

8) Corrections to charts not contained in the AIP

A list of corrections to aeronautical charts not contained in the AIP, or an indication where such information can be obtained.

If a list is published in the AIP, this should be done in table form, consisting of three columns:

- Column 1 should show the identification of the chart.
- Column 2 indicates the location on the chart where the correction has to be made.
- Column 3 contains the precise details of the correction to be made.

GEN 3.3 AIR TRAFFIC SERVICES

1) Responsible service

Description of the air traffic service and its major components, including:

- a) service name;
- b) postal address;
- c) telephone number;
- d) telefax number;
- e) telex number; and

f) AFS address.

In addition, a statement should be made concerning the ICAO documents on which the service is based, including a reference to the location in the AIP where the differences, if any, are listed. Furthermore, if ATS service is not provided H24, indication thereof should be provided here.

2) Area of responsibility

Brief description of the area of responsibility for which air traffic services are provided.

3) Types of services

Brief description of the main types of air traffic services provided. The description should include radar service, when available. Where applicable, reference should be made to:

- the existence of designated areas or routes where special procedures are required in order to eliminate or reduce the need for interception; and
- the establishment of prohibited, restricted and danger areas.

4) Co-ordination between the operator and ATS

The general conditions under which co-ordination between the operator and air traffic services is effected.

5) Minimum flight altitude

Include a statement of the criteria used to determine minimum flight altitudes.

6) ATS units address list

A list of ATS units and their addresses arranged alphabetically, in table format, containing:

- a) unit name;
- b) postal address;
- c) telephone number;
- d) telefax number;
- e) telex number; and
- f) AFS address.

GEN 3.4 COMMUNICATION SERVICES

1) Responsible service

Description of the service responsible for the provision of telecommunication and navigation facilities, including:

- a) service name;
- b) postal address;
- c) telephone number;
- d) telefax number;
- e) telex number; and
- f) AFS address.

In addition, a statement should be made concerning the ICAO documents on which the service is based, including a reference to the location in the AIP where the differences, if any, are listed. Furthermore, if the service is not provided H24, indication thereof should be provided here.

2) Area of responsibility

Brief description of the area of responsibility for which telecommunication service is provided. This may include an indication of the authority responsible for day-to-day operations.

3) Types of service

Brief description of the main types of service and facilities provided, including:

- a) radio navigation services;
- b) mobile fixed service;
- c) broadcasting service;
- d) language(s) used; and
- e) an indication of where detailed information can be obtained.

4) Requirements and conditions

Brief description concerning the requirements and conditions under which the communication service is available.

GEN 3.5 METEOROLOGICAL SERVICES

1) Responsible service

Brief description of the meteorological service responsible for the provision of meteorological information, including:

- a) service name;

Indicate the designated meteorological authority and, if appropriate, the service provider(s) to whom provision of the service has been delegated by the meteorological authority.

- b) postal address;
- c) telephone number;
- d) telefax number;
- e) telex number; and
- f) AFS address.

In addition, a statement should be made concerning the ICAO documents on which the service is based, including a reference to the location in the AIP where the differences, if any, are listed. Furthermore, if the service is not provided H24, indication thereof should be provided here.

2) Area of responsibility

Brief description of the area and/or air routes for which meteorological service is provided.

3) Meteorological observations and reports

Detailed description of the meteorological observations and reports provided for international air navigation, including:

- a) Name(s) of the station(s) in alphabetical order and the ICAO location indicator

The name (in capitals) of the city or town which the aerodrome serves should be given, followed by an oblique stroke and the name of the aerodrome. The ICAO location indicator should also be shown.

- b) Type and frequency of observation including an indication of automatic observing equipment

Indicate the type of observations made and the frequency with which they are made, e.g. routine hourly or half-hourly, and special observations. If available, the automatic observing equipment used should be included.

- c) Types of meteorological reports (e.g. METAR) and availability of a trend forecast

Indicate the types of meteorological reports (e.g. MET REPORT, SPECIAL, METAR, SPECI) and availability of trend forecast.

- d) Specific type of observation system and number of observation sites used to observe and report surface wind, visibility, runway visual range, cloud base, temperature and, where applicable, wind shear (anemometer at intersection of runways, transmissometer next to touchdown zone, etc.).
- e) Hours of operation.
- f) Indication of aeronautical climatological information available

The availability of climatological information should be shown in the manner indicated in Table GEN 3.5.3 of the Specimen AIP.

4) Types of services

Brief description of the main types of service provided, including details of briefing, consultation, display of meteorological information, flight documentation available for operators and flight crew members, and of the methods and means used for supplying the meteorological information.

Indicate the availability of WAFS products, VAACs and TCACs advisories and the methods and means used for supplying the meteorological information. Details concerning the issuance of local forecasts (e.g. TAFs and GAMET forecasts (if applicable)) and aerodrome and wind shear warnings. The availability of information from meteorological weather radar and satellites.

5) Notification required from operators

Minimum amount of advance notice required by the meteorological authority from operators in respect of briefing, consultation and flight documentation and other meteorological information they require.

6) Aircraft reports

As necessary, requirements of the meteorological authority for the making and transmission of aircraft reports. This may include cross-references to the listing of ATS/MET reporting points on routes crossing FIR/UIR for which the State is responsible (see Section ENR 3).

7) VOLMET service

Description of VOLMET service including:

- a) Name of transmitting station

List in alphabetical order the names of the stations broadcasting meteorological information for aircraft in flight by any means including VOR and TVOR if applicable.

- b) Call sign or identification and abbreviation for the radiocommunication emission

Include the radio call sign or identification assigned to the broadcasting station and the abbreviation for the type of emission, indicated by the appropriate ICAO designation (see "Designation of typical radiocommunication emissions" in Doc 8400).

- c) Frequency or frequencies used for broadcast

Frequencies in kilohertz (KHZ) and/or megahertz (MHZ).

- d) Broadcasting period

For each broadcast either use CNS to indicate continuous broadcasts (as for VHF VOLMET broadcasts and VOR broadcasts) or give the minutes past the hour of the commencement and termination of each broadcast (as for HF VOLMET broadcasts), e.g. "H + 20 to H + 25".

- e) Hours of service

When the broadcasts do not continue throughout the twenty-four hours (H24), the times given should clearly indicate for each broadcast the time of the first and last broadcasts in UTC, e.g. "0220-2255".

- f) List of aerodromes/heliports for which reports and/or forecasts are included

The aerodromes/heliports and FIRs (where applicable) by location indicator, for which reports and/or forecasts are included, listed in the order in which they occur in the broadcast.

- g) Contents and format of the reports and forecasts included and remarks

List of the reports and/or forecasts and/or SIGMET information included, using appropriate terms, e.g. METAR + TREND, to indicate a routine report in the METAR code form with trend forecast.

Remarks, if any, concerning the information included.

8) SIGMET service

Note.— The provision of AIRMET service (if applicable) should be included.

Description of the meteorological watch provided within flight information regions or control areas for which air traffic services are provided, including a list of the meteorological watch offices with:

- a) Name of the meteorological watch office, ICAO location indicator

List in alphabetical order the names of the meteorological watch offices (MWO).

The ICAO location indicator should also be shown.

- b) Hours of service

The hours of meteorological service given in UTC and, where applicable, the meteorological watch office responsible outside these hours.

- c) Flight information region(s) or control area(s) served

Indicate the flight information region(s) (FIR) or control area(s) for which SIGMET are issued.

- d) Types of SIGMET information issued (SIGMET, SST SIGMET) and validity periods

Indicate the type(s) of SIGMET issued, i.e. for subsonic (SIGMET) or transonic/supersonic (SIGMET SST) cruising levels, and add the periods of validity (e.g. four to six hours).

- e) Specific procedures applied to SIGMET information (e.g. for volcanic ash and tropical cyclones)

The specific procedures for SIGMET information apply to volcanic ash and tropical cyclones and should include an indication of the period of validity and the outlook period for SIGMET messages for volcanic ash clouds and tropical cyclones.

Details of procedures applied to AIRMET information (in accordance with relevant regional air navigation agreements) concerning e.g. FL and FIR or portion(s) thereof covered, time periods for the issuance, validity period and exchanges of information should be included.

- f) procedures applied to AIRMET information (in accordance with relevant regional air navigation agreements)

- g) The air traffic services unit(s) provided with SIGMET and AIRMET information

The name of the FIC, ACC and/or RCC provided with SIGMET and AIRMET information by the meteorological watch office (MWO).

- h) Additional information (e.g. concerning any limitation of service)

This may include telephone numbers of the meteorological watch office normally providing the service and of any other meteorological offices providing service during periods when that office is closed. Indicate any limitations of service and any service not already listed.

9) Other automated meteorological services

Description of available automated services for the provision of meteorological information (e.g. automated pre-flight information service accessible by telephone and/or computer modem) including:

- a) service name;
- b) information available;
- c) areas, routes and aerodromes covered; and
- d) telephone, telex and telefax number(s).

If such services are not available, include NIL under this heading.

GEN 3.6 SEARCH AND RESCUE**1) Responsible service(s)**

Brief description of service(s) responsible for the provision of search and rescue (SAR), including:

- a) service/unit name;
- b) postal address;
- c) telephone number;
- d) telefax number;
- e) telex number; and
- f) AFS address.

In addition, a statement should be made concerning the ICAO documents on which the service is based, including a reference to the location in the AIP where the differences, if any, are listed. Furthermore, if the service is not provided H24, indication thereof should be provided here.

2) Area of responsibility

Brief description of the area of responsibility within which search and rescue services are provided.

3) Types of service

Brief description and geographical portrayal, where appropriate, of the type of service and facilities provided including indications where SAR aerial coverage is dependent upon significant deployment of aircraft.

This should include:

- a) whether SAR aircraft are amphibious, land or equipped with floats;
- b) the survival aids available, and if they can be dropped;
- c) the frequencies on which SAR aircraft, marine craft or ground rescue teams can communicate; and
- d) the homing capabilities of SAR aircraft and marine craft.

4) SAR agreements

Brief description of SAR agreements in force, including provisions for facilitating entry and departure of other States' aircraft for search, rescue, salvage and repair or salvage in connection with lost or damaged aircraft, either with airborne notification only or after flight plan notification.

A brief summary of the terms of any SAR agreements in force with particular reference to those permitting overflight by or entry of aircraft of other States, either with airborne notification only or after flight plan notification. An indication of the policy towards requests for entry, for search and rescue purposes, of aircraft, equipment and personnel from other States, as well as of the authority who would issue instructions as to the control of such entry, should be given.

5) Conditions of availability

Brief description of provisions for search and rescue, including the general conditions under which the service and facilities are available for international use, including an indication of whether a facility available for search and rescue is specialized in SAR techniques and functions, or is specially used for other purposes but adapted for SAR purposes by training and equipment, or is only occasionally available and has no particular training or preparation for SAR work.

6) Procedures and signals used

Brief description of the procedures and signals employed by rescue aircraft and a table showing the signals to be used by survivors.

It is intended that this include any procedures, signals or other provisions enacted in fulfilment of the objectives of Annex 12, which need to be known and understood by:

- a) personnel of aircraft in distress and survivors of aircraft accidents;
- b) search and rescue personnel of neighbouring States who might be involved in a SAR incident within the territory of the State concerned;
- c) pilots-in-command observing an accident (see Annex 12, 5.8; Annex 6, Part I, 11.1 c); and
- d) pilots-in-command intercepting a distress call and/or message (see Annex 12, 5.9).

GEN 4. CHARGES FOR AERODROMES/HELIPORTS AND AIR NAVIGATION SERVICES

Reference may be made to where details of actual charges may be found, if not itemized in this chapter. The charges imposed for the various facilities and services associated with the use of aerodromes/heliports should be categorized and full information given as detailed below:

GEN 4.1 AERODROME/HELIPORT CHARGES

Brief description of type of charges which may be applicable at aerodromes/heliports available for international use, including:

1) Landing of aircraft

Indicate the basis of assessment of charges: for example, maximum certificated gross weight (landing weight, etc.) of aircraft; traffic category (e.g. commercial, non-commercial, scheduled, non-scheduled, private flying); aircraft type; airport classification.

Provide a schedule of basic charges and of any additional surcharges such as may be payable for movements at night or outside of normal operational hours, or for use of approach, runway or taxiway lighting.

Detail the rules governing the payment of all such charges.

2) Parking, hangarage and long-term storage of aircraft

Parking. Provide a schedule of charges for parking aircraft in open spaces and detail the associated rules.

Hangar accommodation. Provide a schedule of charges for housing aircraft in hangars, indicating any additional charges for heating, etc., and detail the associated rules.

Storage charges. Indicate the basis of assessment of charges for parking and for hangar accommodations: for example, maximum certificated gross weight (landing weight, etc.); space occupied by the aircraft (e.g. length × wingspan).

3) Passenger service

Provide a schedule of any charges and detail the associated rules.

4) Security.

5) Noise-related items.

6) Other (customs, health, immigration, etc.)

In addition to charges, if any, for customs and immigration health services, indicate any other charges for the use of airport facilities and services not indicated above; for example, terminal charges, ramp charges, incinerator service charges, baggage facility charges, porter service charges, charges on uplift of fuel and oil.

7) Exemptions/reductions

Wherever appropriate, any exemptions, reductions, rebates, contract arrangements or other preferential terms applying to certain types of operations should be specifically enumerated.

8) Methods of payment

Detail the rules associated with the method of payment.

GEN 4.2 AIR NAVIGATION SERVICES CHARGES

Brief description of charges which may be applicable to air navigation services provided for international use, including:

1) Approach control

2) Route air navigation services

3) Cost basis for air navigation services and exemptions/reductions

4) Methods of payment.

Indicate the basis and scale of any charges for the use of air route navigation facilities and services, such as communication facilities navigation aids, air traffic services and meteorological services.

PART 2 — EN-ROUTE (ENR)

If an AIP is produced and made available in more than one volume, with each volume having a separate amendment and supplement service, a separate preface, record of AIP Amendments, record of AIP Supplements, checklist of AIP pages and list of current hand-amendments must be included in each volume. In the case of AIP being published as one volume, the annotation “not applicable” must be entered against each of the above subsections. (See also Specimen AIP, Part 2, Section ENR 0.)

Reference must be made in the appropriate subsection to indicate that differences between national regulations and ICAO SARPs and procedures exist and that they are detailed in GEN 1.7.

ENR 0.6 TABLE OF CONTENTS TO PART 2

A list of sections and subsections contained in Part 2 — En-route (ENR).

Note.— Subsections may be listed alphabetically.

ENR 1. GENERAL RULES AND PROCEDURES

ENR 1.1 GENERAL RULES

The requirement is for publication of the general rules as applied within the State.

Reference may be made to the applicable ICAO documents or the general rules as applied within the State may be published in full.

ENR 1.2 VISUAL FLIGHT RULES

The requirement is for publication of the visual flight rules as applied within the State.

A complete statement of the applicable visual flight rules should be made.

ENR 1.3 INSTRUMENT FLIGHT RULES

The requirement is for publication of the instrument flight rules as applied within the State.

A complete statement of the applicable instrument flight rules should be made.

ENR 1.4 ATS AIRSPACE CLASSIFICATION

A description of ATS airspace classes in the form of the ATS airspace classification table in Annex 11, Appendix 4, appropriately annotated to indicate those airspace classes not used by the State.

ENR 1.5 HOLDING, APPROACH AND DEPARTURE PROCEDURES

1) General

The requirement is for a statement concerning the criteria on which holding, approach and departure procedures are established. If different from ICAO provisions, the requirement is for presentation, in a tabular form, of the criteria used.

2) Arriving flights

The requirement is to present procedures (conventional or area navigation or both) for arriving flights which are common to flights into or within the same type of airspace. If different procedures apply within a terminal airspace, a note to this effect must be given together with a reference to where the specific procedures can be found.

3) Departing flights

The requirement is to present procedures (conventional or area navigation or both) for departing flights which are common to flights departing from any aerodrome/heliport.

Graphic portrayal or description (or combination thereof), where appropriate, of holding, approach and departure

procedures and preferred or compulsory routings in terminal areas.

Note 1.— An area chart may be used to fulfil this requirement.

Note 2.— Specific procedures to be used in communication failure situations in terminal areas are to be included under this subject.

Note 3.— Obstacle clearance criteria related to holding, approach and departure procedures are contained in PANS-OPS (Doc 8168), Volumes I and II.

Note 4.— Provisions governing the identification of standard departure and arrival routes and associated procedures are in Annex 11, Appendix 3; guidance material relating to the establishment of such routes is contained in the Air Traffic Services Planning Manual (Doc 9426).

Where necessary, the diagram or chart should be supplemented by adequate descriptive text and procedures when it differs from those prescribed in PANS-OPS (Doc 8168). Separate diagrams or charts may be used to show inbound, outbound and transit routings in congested areas. A Terminal Area Chart — ICAO is that specified in Chapter 8 of Annex 4.

ENR 1.6 RADAR SERVICES AND PROCEDURES

1) Primary radar

Description of primary radar services and procedures, including:

- a) supplementary services;
- b) the application of radar control service;
- c) radar and radio failure procedures; and
- d) graphic portrayal of area of radar coverage.

2) Secondary surveillance radar (SSR)

Description of secondary surveillance radar (SSR) operating procedures, including:

- a) emergency procedures;
- b) radio communication failure and unlawful interference procedures;
- c) the system of SSR code assignment; and

- d) graphic portrayal of area of SSR coverage.

Note.— The SSR description is of particular importance in areas or on routes where the possibility of interception exists.

ENR 1.7 ALTIMETER SETTING PROCEDURES

The requirement is for a statement of altimeter setting procedures in use, containing:

- 1) A brief introduction with a statement concerning the ICAO documents on which the procedures are based, together with differences to ICAO provisions, if any.
- 2) Basic altimeter setting procedures.
- 3) A description of altimeter setting region(s).
- 4) Procedures applicable to operators (including pilots).
- 5) A table of cruising levels.

ENR 1.8 REGIONAL SUPPLEMENTARY PROCEDURES

The requirement is for presentation of regional supplementary procedures (SUPPS) affecting the entire area of responsibility, with properly annotated national differences, if any.

Alternative methods which may be employed are:

- 1) A repetition of all relevant ICAO material with those portions which constitute a difference or an addition to the ICAO material differentiated, e.g., by underlining or use of a different typeface.
- 2) A listing of any differences from or supplements to the relevant ICAO documents in sufficient detail or together with explanatory information so that reference to the ICAO documents would not be necessary for complete understanding of the regulation or procedure.

ENR 1.9 AIR TRAFFIC FLOW MANAGEMENT

Brief description of the air traffic flow management (ATFM) system, including:

- 1) ATFM structure, service area, service provided, location of unit(s) and hours of operation.
- 2) Types of flow messages and descriptions of the formats.
- 3) Procedures applicable for departing flights, containing:
 - a) service responsible for provision of information on applied ATFM measures;
 - b) flight plan requirements; and
 - c) slot allocations.

ENR 1.10 FLIGHT PLANNING

The requirement is to indicate any restriction, limitation or advisory information related to the flight planning stage which may assist the user in the presentation of the intended flight operation, including:

- 1) Procedures for the submission of a flight plan
- 2) Repetitive flight plan system
- 3) Changes to the submitted flight plan.

ENR 1.11 ADDRESSING OF FLIGHT PLAN MESSAGES

The requirement is for an indication, in tabular form, of the addresses allocated to flight plans, showing:

- 1) Category of flight (IFR, VFR or both)
- 2) Route (into or via FIR and/or TMA)
- 3) Message address.

ENR 1.12 INTERCEPTION OF CIVIL AIRCRAFT

The requirement is for a complete statement of interception procedures and visual signals to be used, with a clear indication of whether ICAO provisions are applied and if not, a complete presentation of differences.

ENR 1.13 UNLAWFUL INTERFERENCE

The requirement is for presentation of appropriate procedures to be applied in case of unlawful interference.

ENR 1.14 AIR TRAFFIC INCIDENTS

Description of the air traffic incidents reporting system, including:

- 1) Definition of air traffic incidents
- 2) Use of the “Air Traffic Incident Reporting Form”
- 3) Reporting procedures (including in-flight procedures)
- 4) Purpose of reporting and handling of the form.

ENR 2. AIR TRAFFIC SERVICES AIRSPACE

ENR 2.1 FIR, UIR, TMA

Detailed description of flight information regions (FIR), upper flight information regions (UIR) and terminal control areas (TMA), including:

- 1) Name, geographical coordinates (lateral limits of the FIR/UIR in degrees and minutes and of the TMA in degrees, minutes and seconds and vertical limits) and class of airspace

Name and lateral limits. The name of each flight information region, together with a description of its lateral limits (using the coordinates defining the area), followed by similar data for associated control areas and/or advisory airspaces within the FIR. Information concerning the upper airspace (upper flight information regions and upper control areas) should precede the entries for the lower airspace. The UIR and FIR should be listed in alphabetical order, as should any control areas or advisory airspaces therein.

Vertical limits. The upper and lower limits of flight information regions and of the control areas as indicated in the Specimen AIP. The upper limit is placed above the line and the lower limit below the line, using the abbreviation designating the reference datum, i.e. flight level (FL), ground (GND),

above ground level (AGL) and/or sea level (MSL). Where there is no upper limit, the abbreviation UNL should be inserted above the line. Designate the class of controlled and advisory airspace in accordance with ATS Airspace Classifications (Annex 11, Appendix 4).

2) Identification of unit providing the service

The name(s) of the unit(s) providing the service for the airspace indicated in column 1.

3) Call sign of the aeronautical station serving the unit and language(s) used, the area and conditions of use, specifying when (OPR HR) and where to be used, if applicable

The radiotelephone (RTF) and/or radiotelegraph (RTG) call sign of each unit given in column 2, followed by an indication of the languages used, in brackets.

4) Frequencies supplemented by indications for specific purposes

Indications for specific purposes may be referred to in the remarks column.

5) Remarks.

Control zones around military air bases not otherwise described in the AIP must be included in this subsection. Where the requirements of Annex 2 concerning flight plans, two-way communications and position reporting apply to all flights in order to eliminate or reduce the need for interceptions and/or where the possibility of interception exists and the maintenance of guard on the VHF emergency channel 121.5 MHz is required, a statement to this effect must be included for the relevant area(s) or portion(s) thereof.

A description of designated areas over which the carriage of an emergency locator transmitter (ELT) is required and where aircraft shall continuously guard the VHF emergency frequency 121.5 MHz, except for those periods when aircraft are carrying out communications on other VHF channels or when airborne equipment limitations or cockpit duties do not permit simultaneous guarding of two channels.

This required information may be provided by using one or more of the following methods:

- a) by the graphic portrayal of much, if not all, of the required information;

- b) by use of a tabular form (see Specimen AIP); and
- c) by a combination of the methods described in a) and b).

Where the information is given either in textual form or in tabular form, and the lateral limits of an FIR and UIR are the same, the coordinates need not be duplicated for the UIR; a note to the effect that the lateral limits are the same as for the FIR is sufficient.

Note.— Other types of airspace around civil aerodromes/heliports such as control zones and aerodrome traffic zones are described in the relevant aerodrome or heliport section.

ENR 2.2 OTHER REGULATED AIRSPACE

Where established, a detailed description of other types of the regulated airspace and airspace classification.

ENR 3. ATS ROUTES

This is to include a detailed listing of all ATS routes established within the territory covered by the AIP whether they form part of ICAO regional air navigation agreements or are used by domestic traffic only. Where applicable, a description should be included of the route(s), or portion(s) thereof, where special procedures are required in order to eliminate or reduce the need for interception. Also, an indication of the special procedures concerned should be given. A chart should be used to portray the ATS route scheme. In preparing the tabular material (reference form ENR 3.1), a horizontal line should be drawn across the relevant columns where necessary to indicate the application of the data to one or more segments of the ATS route. Information relating to upper ATS routes is listed separately. However, where both the upper and lower ATS routes follow a similar pattern, it may be practicable to use a combined table.

As specified in the PANS-ATM, 9.1.4.1.2 (Doc 4444), when air traffic advisory service is implemented, this should normally be considered as a temporary measure only until such time as it can be replaced by air traffic control service. Thus, the normal purpose of an ATS route is to specify a route along which air traffic control service is provided. When this is not the case, this shall be indicated in column 6, using the appropriate letter (see Annex 11, Appendix 1) to indicate service provided along all or part of the route.

Note 1.— Bearings, tracks and radials are normally magnetic. In areas of high latitude, where it is determined by the appropriate authority that reference to Magnetic North is impractical, another suitable reference, i.e. True North or Grid North, may be used.

Note 2.— Change-over points established at the midpoint between two radio navigation aids, or at the intersection of the two radials in the case of a route which changes direction between the navigation aids, need not be shown for each route segment if a general statement regarding their existence is made.

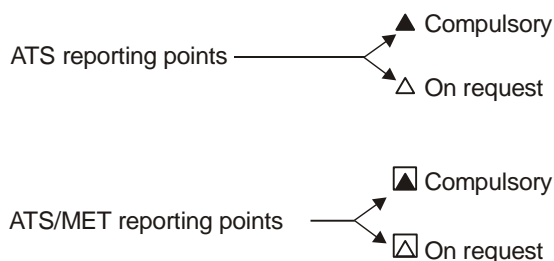
ENR 3.1 LOWER ATS ROUTES

Detailed description of lower ATS routes, including:

- 1) Route designator, required navigation performance (RNP) type(s) applicable to a specified segment(s), names, coded designators or name-codes and the geographical coordinates in degrees, minutes and seconds of all significant points defining the route including “compulsory” or “on-request” reporting points.

The identification of each route, e.g. A6. Designators selected in accordance with the principles set forth in Appendix 1 of Annex 11 should be used and the routes should be listed in alphabetical, numerical order, A3, G7, G9, etc. In this same column, indicate the FIR traversed by the route. Where more than one FIR is involved, the common boundary should be shown at the appropriate location along the track in the manner indicated in the Specimen AIP.

Indicate the name, coded designator and geographical coordinates of significant points listed in their correct sequence in relation to the track. Significant points comprise compulsory and on-request reporting points, points at which a change in track occurs, and points defining changes in upper or lower limits and minimum flight altitudes. Reporting points should be identified by use of the standard aeronautical chart symbol, i.e.:



- 2) Tracks or VOR radials to the nearest degree, geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between each successive designated significant point and, in the case of VOR radials, change-over points.

Magnetic track. The magnetic track to the nearest degree for both directions for each segment shown in column 1.

VOR radials for VOR route segments.

Tracks and bearings are normally indicated with reference to Magnetic North, except that where this is impractical, e.g. in areas of high latitude, and another reference such as True North or Grid North is used, this reference datum should be clearly indicated.

Distance. The geodesic distance between each pair of significant points given to the nearest tenth of a nautical mile or nearest tenth of a kilometre.

Change-over points. Change-over points on segments defined by reference to VOR, and their geodesic distances to the VOR. If a general statement regarding their existence is made, change-over points established at the mid-point between two facilities or (in the case of a route which changes direction between two facilities) at the intersection of two radials need not be given for each route segment.

- 3) Upper and lower limits or minimum flight altitudes to the nearest higher 50 m or 100 ft and airspace classification.

The upper and lower limits of the airspace for each route or segment thereof. (The upper limit above a horizontal line, the lower limit below.) Where no upper limit has been established, UNL should be entered above the line. Since en-route flights at or above the lowest usable flight level are flown at flight levels, it is suggested that these limits be expressed in flight levels (FL) whenever such flight levels are not likely to fall below the lowest safe altitude; otherwise, they should be expressed in altitude (ALT). When an altitude is used, indicate the unit used (feet or metres) by placing the appropriate abbreviation after the number and then the abbreviation “ALT”. When appropriate, however, the unit used (feet or metres) may be given in the heading of the column. When the lower limit is the ground, this should be indicated by the abbreviation “GND”.

Minimum flight altitudes to the nearest higher 50 m or 100 feet for each route or segment thereof must be shown.

Indicate the airspace classification.

4) Lateral limits

The width of each ATS route in kilometres or nautical miles.

5) Direction of cruising levels.

6) Remarks, including an indication of the controlling unit and its operating frequency.

Note.— In relation to Annex 11, Appendix 1, and for flight planning purposes, the specified RNP type is not considered to be an integral part of the route designator.

ENR 3.2 UPPER ATS ROUTES

Detailed description of upper ATS routes, including:

- 1) Route designator, required navigation performance (RNP) type(s) applicable to a specified segment(s), names, coded designators or name-codes and the geographical coordinates in degrees, minutes and seconds of all significant points defining the route including “compulsory” or “on-request” reporting points.
- 2) Tracks or VOR radials to the nearest degree, geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between each successive designated significant point and, in the case of VOR radials, change-over points.
- 3) Upper and lower limits (usually in flight levels “FL”) and airspace classification.
- 4) Lateral limits.
- 5) Direction of cruising levels.
- 6) Remarks, including an indication of the controlling unit and its operating frequency.

Note.— In relation to Annex 11, Appendix 1, and for flight planning purposes, the specified RNP type is not considered to be an integral part of the route designator.

ENR 3.3 AREA NAVIGATION ROUTES

Detailed description of area navigation (RNAV) routes, including:

- 1) Route designator, required navigation performance (RNP) type(s) applicable to a specified segment(s), names, coded designators or name-codes and the geographical coordinates in degrees, minutes and seconds of all significant points defining the route including “compulsory” or “on-request” reporting points.
- 2) In respect of way-points defining a VOR/DME area navigation route, additionally:
 - a) station identification of the reference VOR/DME;
 - b) bearing to the nearest degree and the distance to the nearest tenth of a kilometre or tenth of a nautical mile from the reference VOR/DME, if the way-point is not collocated with it; and
 - c) elevation of the transmitting antenna of DME to the nearest 30 m (100 ft).
- 3) Geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between defined end points and distance between each successive designated significant point.
- 4) Upper and lower limits (in FL) and airspace classification.
- 5) Direction of cruising levels.
- 6) Remarks, including an indication of the controlling unit and its operating frequency.

Note.— In relation to Annex 11, Appendix 1, and for flight planning purposes, the specified RNP type is not considered to be an integral part of the route designator.

ENR 3.4 HELICOPTER ROUTES

Detailed description of helicopter routes, including:

- 1) Route designator, required navigation performance (RNP) type(s) applicable to a specified segment(s), names, coded designators or name-codes and the geographical coordinates in degrees, minutes and

seconds of all significant points defining the route including “compulsory” or “on-request” reporting points.

- 2) Tracks or VOR radials to the nearest degree, geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between each successive designated significant point and, in the case of VOR radials, change-over points.
- 3) Upper and lower limits and airspace classification.
- 4) Minimum flight altitudes to the nearest higher 50 m or 100 ft.
- 5) Remarks, including an indication of the controlling unit and its operating frequency.

Note.— In relation to Annex II, Appendix I, and for flight planning purposes, the specified RNP type is not considered to be an integral part of the route designator.

ENR 3.5 OTHER ROUTES

The requirement is to describe other specifically designated routes which are compulsory within specified area(s).

Note.— Other routes could include exclusive domestic ATS routes. Arrival, transit and departure routes which are specified in connection with procedures for traffic to and from aerodromes/heliports need not be described since they are described in the relevant section of Part 3 — Aerodromes.

ENR 3.6 EN-ROUTE HOLDING

The requirement is for a detailed description of en-route holding procedures, containing:

- 1) Holding identification (if any) and holding fix (navigation aid) or way-point with geographical coordinates in degrees, minutes and seconds
- 2) Inbound track
- 3) Direction of the procedure turn
- 4) Maximum indicated air speed
- 5) Minimum and maximum holding level
- 6) Time/distance outbound

- 7) Indication of the controlling unit and its operating frequency.

Note.— Obstacle clearance criteria related to holding procedures are contained in Procedures for Air Navigation Services — Aircraft Operations (PANS-OPS, Doc 8168), Volumes I and II.

ENR 4. RADIO NAVIGATION AIDS/SYSTEMS

ENR 4.1 RADIO NAVIGATION AIDS — EN-ROUTE

A list of stations providing radio navigation services established for en-route purposes and arranged alphabetically by name of the station, including:

- 1) Name of the station and magnetic variation to the nearest degree and for VOR, station declination to the nearest degree used for technical line-up of the aid
- 2) Identification
- 3) Frequency/channel for each element
- 4) Hours of operation
- 5) Geographical coordinates in degrees, minutes and seconds of the position of the transmitting antenna
- 6) Elevation of the transmitting antenna of DME to the nearest 30 m (100 ft)
- 7) Remarks.

If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority must be indicated in the remarks column. Facility coverage must be indicated in the remarks column.

ENR 4.2 SPECIAL NAVIGATION SYSTEMS

Description of stations associated with special navigation systems (DECCA, LORAN, etc.), including:

- 1) Name of station or chain

When appropriate the title of the system should be given first, followed by the name of the master station, under which should be listed the name(s) of the related slave or chain station(s).

2) Type of service available (master, slave, colour)

The type of service provided, e.g. whether position line or fixing opposite the station in column 1, whether CONSO or LORAN, and the identification of subsidiary units such as master station, red slave or green slave.

3) Frequency (channel number, basic pulse rate, recurrence rate, as applicable).

4) Hours of operation.

5) Geographical coordinates in degrees, minutes and seconds of the position of the transmitting station.

6) Remarks.

If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority must be indicated in the remarks column. Facility coverage must be indicated in the remarks column.

**ENR 4.3 GLOBAL NAVIGATION
SATELLITE SYSTEM (GNSS)**

A list and description of elements of the global navigation satellite system (GNSS) providing the navigation service established for en-route purposes and arranged alphabetically by name of the element, including:

- 1) the name of the GNSS element (GPS, GLONASS, EGNOS, MSAS, WAAS, etc.)
- 2) frequency(ies), as appropriate;
- 3) geographical coordinates in degrees, minutes and seconds of the nominal service area and coverage area; and
- 4) remarks.

If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority must be indicated in the remarks column.

**ENR 4.4 NAME-CODE DESIGNATORS FOR
SIGNIFICANT POINTS**

An alphabetically arranged list of name-code designators (five-letter pronounceable “name-code”) established for significant points at positions not marked by the site of radio navigation aids, including:

- 1) Name-code designator

2) Geographical coordinates in degrees, minutes and seconds of the position

3) Reference to ATS or other routes where the point is located.

**ENR 4.5 AERONAUTICAL GROUND LIGHTS —
EN-ROUTE**

Aeronautical ground lights are lights provided as an aid to navigation and the list should include those on and in the vicinity of an aerodrome (such as aerodrome beacons and identification beacons) and those which may be useful en-route (such as hazard beacons). The list may also include any marine lights which the State has decided are likely to be useful to air navigation.

A list of aeronautical ground lights and other light beacons designating geographical positions which are selected by the State as being significant, including:

- 1) Name of the city or town or other identification of the beacon

When the number of lights to be listed is few, it is preferable for the listing to be in alphabetical order. If the lights are numerous and a chart or diagram is included with each light identified by a number, the listing should be in numerical order.

- 2) Type of beacon and intensity of the light in thousands of candelas

The type of light, marine lights being identified by “marine”. If the number of marine lights is large, they should be listed separately under the title of marine lights; in this event, the type of marine light should be given (lighthouse, lightship, etc.).

- 3) Characteristics of the signal

“Characteristics” should include the type of emission, i.e. alternating, flashing, fixed, group or occulting, the colour, the time period, and, where applicable, the identification characters transmitted in international Morse Code.

The following abbreviations are generally used in column 3 to indicate the characteristics of the light:

Altn = Alternating (light alternates in colour)
F = Fixed
Flg = Flashing

Gp. Flg = Group flashing
 Occ = Occulting
 G = Green
 R = Red
 W = White
 Y = Yellow
 ev = every
 sec = seconds

Example. F Flg G “AM” ev 12 sec = Fixed and flashing green, code “AM” every 12 seconds.

4) Operational hours.

5) Remarks

Include the coordinates of each light to the nearest minute. The location given in terms of bearing and distance from an aerodrome may also be included in this column, where appropriate.

ENR 5. NAVIGATION WARNINGS

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS

All areas through which the flight of aircraft is prohibited, restricted or subject to certain specified conditions and which have some permanency should be listed, including those which are activated from time to time. Any such area should be designated a prohibited area, a restricted area or a danger area. Attention is called to 3.4.7 of Annex 15 relative to the assignment of an identification to any area. Where a risk of interception exists for aircraft penetrating specific areas, this should be indicated.

Description, supplemented by graphic portrayal where appropriate, of prohibited, restricted and danger areas together with information regarding their establishment and activation, including:

- 1) Identification, name and geographical coordinates of the lateral limits in degrees, minutes and seconds if inside and in degrees and minutes if outside control area/control zone boundaries.

Indicate the reference identification and the name (if any) of the area involved. Following the identification and name, describe the lateral limits. No sign (e.g. a dash or an oblique stroke) should be used to separate the elements comprising this identification.

- 2) Upper and lower limits

Indicate the upper and lower limits of each area, the upper limit being placed above a horizontal line and the lower limit below the line. Use the abbreviation GND, UNL, ALT, FL to indicate the reference datum, as appropriate. Indicate the units used (metres or feet) by placing the appropriate abbreviation after the figure; the units of measurement used should be consistent with the decision taken in respect of the use of the tables in Annex 5.

- 3) Remarks, including time of activity

Type of restriction or nature of hazard and risk of interception in the event of penetration must be indicated in the remarks column.

If the area is only “active” during certain periods, the periods of activity should be noted.

The remarks column should include any additional information, exception or references relating to the information contained in the previous columns.

ENR 5.2 MILITARY EXERCISE AND TRAINING AREAS AND AIR DEFENCE IDENTIFICATION ZONE (ADIZ)

Description, supplemented by graphic portrayal where appropriate, of established military training areas and military exercises taking place at regular intervals and established air defence identification zone (ADIZ) including:

- 1) geographical coordinates of the lateral limits in degrees, minutes and seconds if inside and in degrees and minutes if outside control area/control zone boundaries.
- 2) Upper and lower limits and system and means of activation announcements together with information pertinent to civil flights and applicable ADIZ procedures.
- 3) Remarks, including time of activity and risk of interception in the event of penetration of ADIZ.

ENR 5.3 OTHER ACTIVITIES OF A DANGEROUS NATURE AND OTHER POTENTIAL HAZARDS

ENR 5.3.1 Other activities of a dangerous nature

Description, supplemented by charts where appropriate, of activities that could affect flights, including:

- 1) Geographical coordinates in degrees and minutes of centre of area and range of influence
- 2) Vertical limits
- 3) Advisory measures
- 4) Authority responsible for the provision of information
- 5) Remarks, including time of activity.

ENR 5.3.2 Other potential hazards

Description, supplemented by charts, where appropriate, of other potential hazards that could affect flights (e.g. active volcanoes or nuclear power stations) including:

- 1) Geographical coordinates in degrees and minutes of location of potential hazard
- 2) Vertical limits
- 3) Advisory measures
- 4) Authority responsible for the provision of information
- 5) Remarks.

ENR 5.4 AIR NAVIGATION OBSTACLES

A list of obstacles affecting air navigation in Area 1 (the entire State territory), including:

- 1) Obstacle identification or designation
- 2) Type of obstacle
- 3) Obstacle position identified by geographical coordinates in degrees, minutes and seconds
- 4) Obstacle elevation and height to the nearest metre or foot
- 5) Type and colour of obstacle lighting (if any).
- 6) if appropriate, an indication that the list of obstacles is available in electronic form, and a reference to GEN 3.1.6.

Note 1.— An obstacle whose height above the ground is 100 m and higher is considered an obstacle for Area 1.

Note 2.— Specifications governing the determination and reporting (accuracy of field work and data integrity) of positions (latitude and longitude) and elevations/heights for obstacles in Area 1 are given in Annex 11, Appendix 5, Tables 1 and 2, respectively.

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES

Brief description, supplemented by graphic portrayal where appropriate, of intensive aerial sporting and recreational activities together with conditions under which they are carried out, including:

- 1) Designation and geographical coordinates of the lateral limits in degrees, minutes and seconds if inside and in degrees and minutes if outside control area/control zone boundaries
- 2) Vertical limits
- 3) Operator/user telephone number
- 4) Remarks, including time of activity.

Note.— This paragraph may be subdivided into different sections for each different category of activity, giving the indicated details in each case.

ENR 5.6 BIRD MIGRATION AND AREAS WITH SENSITIVE FAUNA

Description, supplemented by charts where practicable, of movements of birds associated with migration, including migration routes and permanent resting areas and areas with sensitive fauna.

Note on graphic portrayal of the areas listed in ENR 5.

All areas should also be shown on index charts and in some instances a large-scale diagram of each area may be appropriate. (The need for charts depends upon the size of the total territory involved, the number of areas to be shown and whether or not en-route charts or the equivalent, showing such information, are available.)

ENR 6. EN-ROUTE CHARTS

The requirement is for the En-route Chart — ICAO and index charts to be included in this section.

PART 3 — AERODROMES (AD)

If an AIP is produced and made available in more than one volume, with each volume having a separate amendment and supplement service, a separate preface, record of AIP Amendments, record of AIP Supplements, checklist of AIP pages and list of current hand-amendments must be included in each volume. In the case of AIP being published as one volume, the annotation “not applicable” must be entered against each of the above subsections. (See also Specimen AIP, Part 3, Section AD 0.)

AD 0.6 TABLE OF CONTENTS TO PART 3

A list of sections and subsections contained in Part 3 — Aerodromes (AD).

Note.— Subsections may be listed alphabetically.

AD 1. AERODROMES/HELIPORTS — INTRODUCTION

AD 1.1 AERODROME/HELIPORT AVAILABILITY

Brief description of the State’s designated authority responsible for aerodromes and heliports, including:

(If the authority is listed in GEN 1.1, reference to that subsection will suffice. If not, list name of the authority, postal address, telephone number, telefax number, telex number and AFS address.)

- 1) The general conditions under which aerodromes/heliports and associated facilities are available for use

This should exclude the information contained in Part 1, GEN 1.

- 2) A statement concerning the ICAO documents on which the services are based and a reference to the AIP location where differences, if any, are listed

A list of ICAO documents on which the aerodrome services are based, and a reference to subsection GEN 1-7 if any differences to these ICAO documents exist.

- 3) Regulations, if any, concerning civil use of military air bases.

- 4) The general conditions under which the low visibility procedures applicable to CAT II/III operations at aerodromes, if any, are applied

See example in Specimen AIP (AD 1.1.4 on page AD 1.1-3).

- 5) Friction measuring device used and the runway friction level below which the State will declare the runway to be slippery when wet

Describe the friction measuring device(s) used to determine the runway friction level of the runway affected by standing water not associated with snow, slush or ice.

Indicate the runway friction level below which the runway will be declared slippery when wet.

- 6) Other information of a similar nature

Include any other information of a similar nature, if any, which is considered of importance. If no such information is available, insert “NIL”.

AD 1.2 RESCUE AND FIRE FIGHTING SERVICES AND SNOW PLAN

AD 1.2.1 Rescue and fire fighting services

Brief description of rules governing the establishment of rescue and fire fighting services at aerodromes and heliports available for public use together with an indication of rescue and fire fighting categories established by a State.

Provide information on the general policy concerning the provision of rescue and fire fighting services at each aerodrome/heliport (regular and alternate) available for public use, determination of the scale of protection, hours of service, authority responsible for the service, and the availability of facilities for foaming of runways. If applicable, list the aerodromes where such facilities are available.

AD 1.2.2 Snow plan

Brief description of general snow plan considerations for aerodromes/heliports available for public use at which snow conditions are normally liable to occur, including:

1) Organization of the winter service

An indication of the authority responsible for snow clearance and for measuring, improving and reporting pavement conditions.

An indication of the general policy concerning operational priorities established for the clearance of movement areas.

2) Surveillance of movement areas

Indicate how surveillance of the movement areas is organized.

3) Measuring methods and measurements taken

A description of the methods used for measuring the depth and determining the characteristics of precipitants on movement areas.

A description of the methods used (e.g. equipment and pattern) for surface friction measurements.

Principles used for the determination of value of surface friction.

A table of friction coefficients.

4) Actions taken to maintain the usability of movement areas

A description of the methods used for clearing snow, slush, ice and standing water, e.g. plowing, sweeping or blowing, and details of any chemical methods employed for clearing movement areas.

Information concerning when and how surface friction will be improved.

General policy concerning coordination between operators, ATC and the aerodrome authorities to ensure compatibility between efficient snow clearance procedures and maximum utilization of the aerodrome.

5) System and means of reporting

Indicate how snow conditions are reported to the responsible authority.

6) The cases of runway closure

Indicate the general policy on closure of a runway.

7) Distribution of information about snow conditions

A short description of the system for distribution of information about snow conditions (NOTAM, SNOWTAM, updating).

Note.— Where different snow plan considerations apply at aerodromes/heliports, this subparagraph may be sub-divided accordingly.

AD 1.3 INDEX TO AERODROMES AND HELIPORTS

A list of aerodromes and heliports within a State, including their ICAO location indicators and an indication of the types of traffic permitted:

1) Aerodrome/heliport name and ICAO location indicator

The name, in capitals, of the city or town which the aerodrome serves, followed by an oblique stroke and the name given to the aerodrome by the State concerned, e.g. GUAYAQUIL/Simón Bolívar, BOSTON/Logan International, DHAHRAN/Intl, without repeating the name of the city or town. When the aerodrome is located on an island in a group of islands with a group name (e.g. French Antilles), the name of that island should be added in brackets, e.g. FORT-DE-FRANCE/Le Lamentin (Martinique). When the aerodrome is located on an island but serves no particular city or town, the name of the island should appear in place of a city name, e.g. SAN ANDRES I./San Andrés.

Add the ICAO location indicator following the aerodrome/heliport name.

2) Type of traffic permitted to use the aerodrome/heliport (international/national, IFR/VFR, scheduled/non-scheduled, private)

Indicate the availability of the aerodrome/heliport for the specific types of traffic.

- 3) Reference to AIP, Part 3, subsection AD 2 or AD 3 in which aerodrome/heliport details, supplemented by graphic portrayal, are presented.

AD 1.4 GROUPING OF AERODROMES/HELIPORTS

Brief description of the criteria applied by the State in grouping aerodromes/heliports for the production/distribution/provision of information purposes (international/national; primary/secondary; major/other; civil/military; etc.).

AD 2. AERODROMES

Table AD 2 comprises a detailed description of aerodromes for use by scheduled or non-scheduled, commercial or non-commercial (private) air services for traffic, technical or divisionary purposes.

Note.— The aerodrome/heliport information is provided in accordance with the grouping of aerodromes/heliports as indicated under AD 1.4.

The relevant information must be listed and numbered in the following sections, subsections and their subdivision.

****** AD 2.1 AERODROME LOCATION INDICATOR AND NAME**

The requirement is for the ICAO location indicator allocated to the aerodrome and the name of the aerodrome. An ICAO location indicator must be an integral part of the referencing system applicable to all subsections in section AD 2.

*Note.— In the table, **** is to be replaced by the relevant ICAO location indicator.*

****** AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA**

The requirement is for aerodrome geographical and administrative data, including:

- 1) Aerodrome reference point (geographical coordinates in degrees, minutes and seconds) and its site (distance and direction from a prominent point at the aerodrome such as the aerodrome control tower).

- 2) Direction and distance of aerodrome reference point from centre of the city or town which the aerodrome serves

The distance (km) and direction (true bearing) of the aerodrome (reference point) from some prominent place within the city or town.

- 3) Aerodrome elevation to the nearest metre or foot and reference temperature.

The official aerodrome elevation to the nearest metre or foot (defined as the highest point of the landing area — see Annex 14, Volume I, Chapter 1 and Chapter 2, 2.3).

The aerodrome reference temperature determined as specified in Annex 14, Volume I, Chapter 2, 2.4, given in degrees Celsius (C), to the nearest degree.

- 4) Geoid undulation at the aerodrome elevation position to the nearest metre or foot
- 5) Magnetic variation to the nearest degree, date of information and annual change
- 6) Name of aerodrome administration, address, telephone, telefax and telex numbers and AFS address.
- 7) Types of traffic permitted to use the aerodrome (IFR/VFR).
- 8) Remarks.

****** AD 2.3 OPERATIONAL HOURS**

Detailed description of the hours of operation of services at the aerodrome, including:

- 1) Aerodrome administration
- 2) Customs and immigration
- 3) Health and sanitation
- 4) AIS briefing office
- 5) ATS reporting office (ARO)
- 6) MET briefing office
- 7) Air traffic service

- 8) Fuelling
- 9) Handling
- 10) Security
- 11) De-icing
- 12) Remarks.

which can be handled; the availability of spare parts and the existence of facilities for changing engines.

7) Remarks

Any other relevant information not covered under this subsection.

****** AD 2.5 PASSENGER FACILITIES**

****** AD 2.4 HANDLING SERVICES
AND FACILITIES**

Detailed description of the handling services and facilities available at the aerodrome, including:

1) Cargo-handling facilities

When cargo-handling facilities are limited, the number and types of equipment and the weight-lifting capacity should be indicated (cranes, fork lifts, conveyor belts, etc.). When the facilities are adequate to meet anticipated requirements, this may be indicated by a simple statement such as “All modern facilities handling weights up to ...” (specify).

2) Fuel and oil types

The grades of fuel and oil available.

3) Fuelling facilities and capacity

The types of fuelling equipment and services available and the discharge capacity of the equipment (litres per second). Where no limitations exist, state “No limitations”.

4) De-icing facilities.

5) Hangar space for visiting aircraft

The hangar space available stated either in terms of the numbers of certain types of aircraft which can be accommodated, or by a listing of the hangars available and the dimensions of each. Indicate whether the space is heated or unheated and any other significant information.

6) Repair facilities for visiting aircraft

The type of repairs that can be carried out, i.e. major or minor repairs, and the type of aircraft

Brief description of passenger facilities available at the aerodrome, including:

1) Hotel(s) at or in the vicinity of aerodrome

The type and extent of overnight accommodation available at the aerodrome or in the vicinity of the aerodrome. When limited, the available capacity should be given.

2) Restaurant(s) at or in the vicinity of aerodrome

Indicate whether a restaurant is available at the aerodrome or in the vicinity of the aerodrome, and whether the number of meals which can be served is limited or unlimited.

3) Transportation possibilities

Indicate transportation facilities available such as buses, taxis, railway, helicopter or any other services available at the aerodrome for the transportation of passengers to and from the city.

4) Medical facilities

Indicate medical facilities and services available at the aerodrome including first aid treatment, hospital or rest rooms, and ambulance(s). When significant additional services are available off the aerodrome, they should also be listed with an indication of the location and distance from the aerodrome.

5) Bank and post office at or in the vicinity of aerodrome.

6) Tourist office.

7) Remarks

Any other relevant information not covered under this subsection.

****** AD 2.6 RESCUE AND FIRE FIGHTING SERVICES**

Detailed description of the rescue and fire fighting services and equipment available at the aerodrome, including:

1) Aerodrome category for fire fighting

Indicate the scale of protection available for the aerodrome in terms of aerodrome category as described in Annex 14, Volume I, Chapter 9, 9.2.

2) Rescue equipment

Indicate rescue equipment available on the rescue and fire fighting vehicles and whether it is in accordance with the aerodrome category for rescue and fire fighting mentioned under 1).

3) Capability for removal of disabled aircraft

The requirement is for an indication of the capability for removal of aircraft disabled on or adjacent to the movement area. This may be expressed in terms of the largest type of aircraft which the aerodrome is equipped to remove (see Annex 14, Volume I, Chapter 2, 2.9 and Chapter 9, 9.3).

4) Remarks

Any other relevant information not covered under this subsection.

****** AD 2.7 SEASONAL AVAILABILITY —
CLEARING**

Detailed description of the equipment and operational priorities established for the clearance of aerodrome movement areas, including:

1) Type(s) of clearing equipment

Indicate whether the aerodrome is serviceable during all seasons of the year and, if not, the periods (months of the year) during which it may be unserviceable or must be used with caution, indicating the likely cause of unserviceability and the precautions to be taken. Information relating to snow removal should include:

- a) where no snow removal equipment is required, indicate “Not applicable”;

- b) when snow conditions exist but no removal equipment is available, indicate “None available”; and

- c) where snow removal equipment is available, indicate the types of equipment used.

2) Clearance priorities

If clearance of aerodrome movement areas is required, indicate the priorities with regard to clearing of RWY, TWY and aprons.

3) Remarks

Any other relevant information not covered under this subsection.

****** AD 2.8 APRONS, TAXIWAYS AND
CHECK LOCATIONS/POSITIONS DATA**

Details related to the physical characteristics of aprons, taxiways and locations/positions of designated checkpoints, including:

1) Surface and strength of aprons

Indicate type of surface; and the strength of the apron using the aircraft classification number — pavement classification number (ACN-PCN) method (see Annex 14, Volume I, Chapter 2, 2.5).

2) Width, surface and strength of taxiways

In addition to the width (in metres) and the type of surface of the taxiways, indicate its strength by using the ACN-PCN method.

3) Location and elevation to the nearest metre or foot of altimeter check points.

4) Location of VOR checkpoints

5) Position of INS checkpoints in degrees, minutes, seconds and hundredths of seconds;

In many instances the geographical coordinates of aircraft stands at which aircraft equipped with INS could align and programme their equipment before departure could be given to the accuracy mentioned above. These stands could be listed together with their coordinates, e.g. Stand 1 N522224.62 W0315654.18; Stand 2 N522218.35 W0315654.94.

6) Remarks

If check locations/positions are presented on an aerodrome chart, a note to that effect must be provided under this subsection.

****** AD 2.9 SURFACE MOVEMENT GUIDANCE
AND CONTROL SYSTEM AND MARKINGS**

Brief description of the surface movement guidance and control system and runway and taxiway markings, including:

- 1) Use of aircraft stand identification signs, taxiway guide lines and visual docking/parking guidance system at aircraft stands.
- 2) Runway and taxiway markings and lights.
- 3) Stop bars (if any).
- 4) Remarks.

See sample in Specimen AIP (see also *Aerodrome Design Manual* (Doc 9157), Part 4).

****** AD 2.10 AERODROME OBSTACLES**

Detailed description of obstacles, including:

- 1) for obstacles in Area 2
 - a) obstacle identification or designation;
 - b) type of obstacle;
 - c) obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;
 - d) obstacle elevation and height to the nearest metre or foot;
 - e) obstacle marking, and type and colour of obstacle lighting (if any);
 - f) if appropriate, an indication that the list of obstacles is available in electronic form, and a reference to GEN 3.1.6; and
 - g) NIL indication if appropriate.

Where no obstacles exist in the approach and take-off areas, "NIL" must be indicated.

Note 1.— Chapter 10, 10.2.2 provides a description of Area 2 while Appendix 8, Figure A8-2, contains graphical illustrations of obstacle data collection surfaces and criteria used to identify obstacles in Area 2.

Note 2.— Specifications governing the determination and reporting (accuracy of field work and data integrity) of positions (latitude and longitude) and elevations for obstacles in Area 2 are given in Annex 11, Appendix 5, Tables 1 and 2, and in Annex 14, Volume 1, Appendix 5, Tables 1 and 2, respectively

2) for obstacles in Area 3

- a) obstacle identification or designation;
- b) type of obstacle;
- c) obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;
- d) obstacle elevation and height to the nearest metre or foot;
- e) obstacle marking, and type and colour of obstacle lighting (if any);
- f) if appropriate, an indication that the list of obstacles is available in electronic form, and a reference to GEN 3.1.6; and
- g) NIL indication if appropriate.

Where no obstacles exist in the circling area and at the aerodrome, "NIL" must be indicated.

Note 1.— Chapter 10, 10.2.3 provides a description of Area 3 while Appendix 8, Figure A8-2, contains graphical illustrations of obstacle data collection surfaces and criteria used to identify obstacles in Area 3.

Note 2.— Specifications governing the determination and reporting (accuracy of field work and data integrity) of positions (latitude and longitude) and elevations for obstacles in Area 3 are given in Annex 14, Volume 1, Appendix 5, Tables 1 and 2, respectively.

Note 3.— An Aerodrome Obstacle Chart ICAO — Type A may be used to provide this information (see Annex 4, Chapter 3). If so, appropriate reference to the chart should be made in the remarks column.

****** AD 2.11 METEOROLOGICAL INFORMATION PROVIDED**

Detailed description of meteorological information provided at the aerodrome and an indication of which meteorological office is responsible for the service enumerated, including:

- 1) Name of the associated meteorological office.
- 2) Hours of service and, where applicable, the designation of the responsible meteorological office outside these hours.
- 3) Office responsible for preparation of TAFs and periods of validity and interval of issuance of the forecasts.
- 4) Availability of the trend forecasts for the aerodrome and interval of issuance.

The availability of the trend forecast for the aerodrome/heliport and the interval of issuance must be listed.

- 5) Information on how briefing and/or consultation is provided, using:

P = personal consultation
T = telephone
TV = closed circuit television
D = self-briefing display.

- 6) Types of flight documentation supplied and language(s) used in flight documentation, e.g.

C = charts
CR = cross-sections
PL = abbreviated plain language texts
TB = tabular forms.

Indicate languages used in plain language.

- 7) Charts and other information displayed or available for briefing or consultation, using the following abbreviations:

S = surface analysis (current chart)
U = upper air analysis (current chart)
P = prognostic upper air chart
W = significant weather chart
T = tropopause chart.
SWH = significant weather high (chart)
SWM = significant weather medium (chart)
SWL = significant weather low (chart)

- 8) Supplementary equipment available for providing information on meteorological conditions, e.g. weather radar and receiver for satellite images.
- 9) The air traffic services unit(s) provided with meteorological information, e.g. FIC, ACC and/or RCC.
- 10) Additional information (e.g. concerning any limitation of service)

Indicate any limitations of service and any service not already listed.

As necessary, indicate telephone numbers of the meteorological office normally providing service for the aerodrome and any other meteorological offices providing service during periods when that office is closed or at night.

****** AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS**

Detailed description of runway physical characteristics, for each runway, including:

- 1) Designations
- 2) True bearings to one hundredth of a degree
- 3) Dimensions of runways to the nearest metre or foot
- 4) Strength of pavement (PCN and associated data) and surface of each runway and associated stopways

Annex 14, Volume I, Chapter 2, 2.6, contains detailed information on the method of reporting the bearing strength of a pavement.

Reporting method. The bearing strength of a pavement intended for aircraft of apron (ramp) mass greater than 5 700 kg (12 500 lb) shall be made available using the aircraft classification number — pavement classification number (ACN-PCN) method by reporting all of the following information:

- a) the pavement classification number (PCN);
- b) pavement type for ACN-PCN determination;
- c) subgrade strength category;

- d) maximum allowable tire pressure category or maximum allowable tire pressure value; and
- e) evaluation method.

Note.— The meaning of the code letters used for reporting b), c), d) and e) above are contained in Annex 14, Volume I, Chapter 2, 2.6.6.

The PCN reported shall indicate that an aircraft with an ACN equal to or less than the reported PCN can operate on the pavement subject to any limitation on the tire pressure, or aircraft all-up mass for specified aircraft types. The standard procedures for determining the ACN of an aircraft are given in the *Aerodrome Design Manual* (Doc 9157), Part 3.

The following examples illustrate how pavement strength data are reported under the ACN-PCN method.

Example 1: If the bearing strength of a rigid pavement resting on a medium strength subgrade has been assessed by technical evaluation to be PCN 80 and there is no tire pressure limitation, then the reported information would be:

PCN 80 / R / B / W / T

Example 2: If the bearing strength of a composite pavement, behaving like a flexible pavement and resting on a high strength subgrade, has been assessed by using aircraft experience to be PCN 50 and the maximum tire pressure allowable is 1.00 MPa (145 psi), then the reported information would be:

PCN 50 / F / A / Y / U

Note.— Composite construction.

The bearing strength of a pavement intended for aircraft of apron (ramp) mass equal to or less than 5 700 kg (12 500 lb) shall be made available by reporting the following information:

- a) maximum allowable aircraft mass; and
- b) maximum allowable tire pressure.

Example: 4 000 kg/0.50 MPa.

- 5) Geographical coordinates in degrees, minutes, seconds and hundredths of seconds for each

threshold and runway end, and geoid undulation to the nearest one-half metre or foot for each threshold

- 6) Elevations of:

- thresholds of a non-precision approach runway to the nearest metre or foot; and
- thresholds and the highest elevation of the touchdown zone of a precision approach runway to the nearest one-half metre or foot

- 7) Slope of each runway and associated stopways
- 8) Dimensions of stopway (if any) to the nearest metre or foot
- 9) Dimensions of clearway (if any) to the nearest metre or foot
- 10) Dimensions of strips
- 11) The existence of an obstacle-free zone
- 12) Remarks

This could include information related to the physical characteristics of the runway such as grooving and arresting devices.

**** AD 2.13 DECLARED DISTANCES

Detailed description of declared distances to the nearest metre or foot for each direction of each runway, including:

- 1) Runway designator
- 2) Take-off run available
- 3) Take-off distance available
- 4) Accelerate-stop distance available
- 5) Landing distance available
- 6) Remarks.

If a runway direction cannot be used for take-off or landing, or both, because it is operationally forbidden, then this must be declared and the words “not usable” or the abbreviation “NU” entered. (Annex 14, Volume I, Attachment A, Section 3).

****** AD 2.14 APPROACH AND RUNWAY LIGHTING**

Detailed description of approach and runway lighting, including:

- 1) Runway designator
- 2) Type, length and intensity of approach lighting system
- 3) Runway threshold lights, colour and wing bars
- 4) Type of visual approach slope indicator system
- 5) Length of runway touchdown zone lights
- 6) Length, spacing, colour and intensity of runway centre line lights
- 7) Length, spacing, colour and intensity of runway edge lights
- 8) Colour of runway end lights and wing bars
- 9) Length and colour of stopway lights
- 10) Remarks.

This includes the following types of lighting. (See also Annex 14, Volume I, Chapter 5.)

Approach lighting

Simple approach lighting
 Precision approach lighting including category
 Visual approach slope indicator system
 Circling guidance lights
 Runway lead-in lighting systems
 Runway threshold identification lights

Runway lighting

Runway edge lights
 Runway end lights
 Runway threshold lights
 Runway centre line lights
 Runway touchdown zone lights
 Fixed distance lights

****** AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY**

Description of other lighting and secondary power supply, including:

- 1) Location, characteristics and hours of operation of aerodrome beacon/identification beacon (if any).
- 2) Location and lighting (if any) of anemometer/landing direction indicator.
- 3) Taxiway edge and taxiway centre line lights.
- 4) Secondary power supply including switch-over time
- 5) Remarks

Indicate whether or not secondary power supply is available (see Annex 14, Volume I, Chapter 8, 8.1) and give maximum switch-over times.

This may include information on the availability of stopway lights, stop bars and clearance bars.

Note 1.— Information relating to stopways is referred to by the designation of the extremity of the runway from which the take-off run is started.

Note 2.— Information relating to a visual approach slope indicator system (VASIS) should include type of system, nominal approach slope angle(s) as specified in Annex 14, Volume I, 2.12 and minimum pilot eye-height(s) over the threshold of the on-slope signal(s) (MEHT). Where an AVASIS or 3-BAR AVASIS is installed, details of the number and position of the light units should also be published. Where an AT-VASIS or PAPI is installed, the side of the runway on which the lights are installed, i.e. left or right, should be published.

****** AD 2.16 HELICOPTER LANDING AREA**

Detailed description of helicopter landing area provided at aerodrome, including:

- 1) Geographical coordinates in degrees, minutes, seconds and hundredths of seconds and geoid undulation to the nearest one half metre or foot of the geometric centre of touchdown and lift-off (TLOF) or of each threshold of final approach and take-off (FATO) area (where appropriate).
- 2) TLOF and/or FATO area elevation:
 - a) for non-precision approaches to the nearest metre or foot; and
 - b) for precision approaches to the nearest one-half metre or foot

- 3) TLOF and FATO area dimensions to the nearest metre or foot, surface type, bearing strength and marking

Indicate the load-bearing area designated for touchdown or lift-off along with the dimensions, slope (sufficient to prevent water accumulation but not to exceed 2 per cent in any direction), the surface type (e.g. pavement, concrete, grass) and associated bearing strength expressed in kilograms (Annex 14, Volume II, Chapter 3).

Indicate the performance class of helicopter the FATO is intended to serve, its type (surface-level, elevated or helideck), its length, width, slope and surface type (Annex 14, Volume II, Chapter 3 and Chapter 5).

- 4) True bearings to one-hundredth of a degree of FATO

Where appropriate, the FATO designation number may be added.

- 5) Declared distances available to the nearest metre or foot

An indication of the declared distances, where established, available for helicopter operations. These should include:

- a) take-off distance available (TODAH);
- b) rejected take-off distance available (RTODAH); and
- c) landing distance available (LDAH).

(See Annex 14, Volume II, Chapter 2.)

- 6) Approach and FATO lighting

This should include:

- Aiming point
- Approach lighting system
- Final approach and take-off area (FATO)
- Obstacles
- Taxiway
- Touchdown and lift-off area (TLOF)
- Visual approach slope indicator system (e.g. PAPI, APAPI, HAPI)

— Winching area.

(See Annex 14, Volume II, Chapter 5)

- 7) Remarks.

**** AD 2.17 AIR TRAFFIC SERVICES AIRSPACE

Detailed description of air traffic services (ATS) airspace organized at the aerodrome, including:

- 1) Airspace designation and geographical coordinates in degrees, minutes and seconds of the lateral limits
- 2) Vertical limits
- 3) Airspace classification
- 4) Call sign and language(s) of the ATS unit providing service
- 5) Transition altitude
- 6) Remarks.

**** AD 2.18 AIR TRAFFIC SERVICES COMMUNICATION FACILITIES

Detailed description of air traffic services communication facilities established at the aerodrome (APP, TWR), including:

- 1) Service designation
- 2) Call sign
- 3) Frequency(ies)
- 4) Hours of operation
- 5) Remarks.

**** AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Detailed description of radio navigation and landing aids associated with the instrument approach and the terminal area procedures at the aerodrome, including:

- 1) Type of aids, as appropriate, magnetic variation to the nearest degree, as appropriate, and category of supported operation for ILS/MLS, Basic GNSS, SBAS and GBAS and for VOR/ILS/MLS also

station declination to the nearest degree used for technical line-up of the aid

- 2) Identification, if required
- 3) Frequency(ies), as appropriate
- 4) Hours of operation, as appropriate
- 5) Geographical coordinates in degrees, minutes, seconds and tenths of seconds of the position of the transmitting antenna, as appropriate
- 6) Elevation of the transmitting antenna of DME to the nearest 30 m (100 ft) and of DME/P to the nearest 3 m (10 ft)
- 7) Remarks.

When the same aid is used for both en-route and aerodrome purposes, description must also be given in section ENR 4. If the ground-based augmentation system (GBAS) serves more than one aerodrome, description of the aid must be provided under each aerodrome. If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority must be indicated in the remarks column. Facility coverage must be indicated in the remarks column.

**** AD 2.20 LOCAL TRAFFIC REGULATIONS

Detailed description of regulations applicable to the traffic at the aerodrome including standard routes for taxiing aircraft, parking regulations, school and training flights and similar but excluding flight procedures.

**** AD 2.21 NOISE ABATEMENT PROCEDURES

Detailed description of noise abatement procedures established at the aerodrome.

**** AD 2.22 FLIGHT PROCEDURES

Detailed description of the conditions and flight procedures, including radar procedures, established on the basis of airspace organization at the aerodrome.

**** AD 2.23 ADDITIONAL INFORMATION

Additional information at the aerodrome, such as an indication of bird concentrations at the aerodrome, together

with an indication of significant daily movement between resting and feeding areas, to the extent practicable.

**** AD 2.24 CHARTS RELATED TO AN AERODROME

The requirement is for charts related to an aerodrome to be included in the following order:

- 1) Aerodrome/Heliport Chart — ICAO
- 2) Aircraft Parking/Docking Chart — ICAO
- 3) Aerodrome Ground Movement Chart — ICAO
- 4) Aerodrome Obstacle Chart — ICAO Type A (for each runway)
- 5) Precision Approach Terrain Chart — ICAO (precision approach Cat II and III runways)
- 6) Area Chart — ICAO (departure and transit routes)
- 7) Standard Departure Chart — Instrument — ICAO
- 8) Area Chart — ICAO (arrival and transit routes)
- 9) Standard Arrival Chart — Instrument — ICAO
- 10) Radar Minimum Altitude Chart — ICAO
- 11) Instrument Approach Chart — ICAO (for each runway and procedure type)
- 12) Visual Approach Chart — ICAO
- 13) Bird concentrations in the vicinity of aerodrome.

If some of the charts are not produced, a statement to this effect must be given in section GEN 3.2, Aeronautical charts.

AD 3. HELIPORTS

When a helicopter landing area is provided at the aerodrome, associated data must be listed only under **** AD 2.16.

AD 3 comprises a detailed description of heliports designated for use by helicopters engaged in international civil aviation operations. Normally, heliports are designated

as such by the controlling State under Article 68 of the Convention. The lack of any formal designation of a heliport should not, however, preclude the entry of required information. In this context, entries are left to the discretion of the authorities concerned.

For the format, please see the Specimen AIP in Part 3, Section AD 3.

The relevant information must be listed and numbered in the following sections, subsections and their subdivisions.

Note.— The aerodrome/heliport information is provided in accordance with the grouping of aerodromes/heliports as indicated under AD 1.4.

****** AD 3.1 HELIPORT LOCATION INDICATOR
AND NAME**

The requirement is for the ICAO location indicator assigned to the heliport and the name of the heliport. An ICAO location indicator must be an integral part of the referencing system applicable to all subsections in section AD 3.

*Note.— In the table, **** is to be replaced by the relevant ICAO location indicator.*

****** AD 3.2 HELIPORT GEOGRAPHICAL AND
ADMINISTRATIVE DATA**

The requirement is for heliport geographical and administrative data, including:

- 1) Heliport reference point (geographical coordinates in degrees, minutes and seconds) and its site

The position of the heliport reference point given in terms of the nearest second of latitude and longitude (see Annex 14, Volume II, Chapter 2, 2.2).

- 2) Direction and distance of heliport reference point from centre of the city or town which the heliport serves

The distance (km) and direction (true bearing) of the aerodrome (reference point) from some prominent place within the city or town.

- 3) Heliport elevation to the nearest metre or foot and reference temperature

The official heliport elevation to the nearest metre or foot (defined as the highest point of the landing area — see Annex 14, Volume I, Chapter 1 and Chapter 2, 2.3.1 and Volume II, Chapter 2, 2.3).

The heliport reference temperature determined as specified in Annex 14, Volume I, Chapter 2, 2.4, given in degrees Celsius (C), to the nearest degree.

- 4) geoid undulation at the heliport elevation position to the nearest half-metre or foot
- 5) Magnetic variation to the nearest degree, date of information and annual change.
- 6) Name of heliport administration, address, telephone, telefax and telex numbers and AFS address.
- 7) Types of traffic permitted to use the heliport (IFR/VFR).
- 8) Remarks.

****** AD 3.3 OPERATIONAL HOURS**

Detailed description of the hours of operation of services at the heliport, including:

- 1) Heliport administration
- 2) Customs and immigration
- 3) Health and sanitation
- 4) AIS briefing office
- 5) ATS reporting office (ARO)
- 6) MET briefing office
- 7) Air traffic service
- 8) Fuelling
- 9) Handling
- 10) Security
- 11) De-icing
- 12) Remarks.

****** AD 3.4 HANDLING SERVICES
AND FACILITIES**

Detailed description of the handling services and facilities available at the heliport, including:

1) Cargo-handling facilities

When cargo-handling facilities are limited, the number and types of equipment and the weight-lifting capacity should be indicated (cranes, fork lifts, conveyor belts, etc.). When the facilities are adequate to meet anticipated requirements, this may be indicated by a simple statement such as "All modern facilities handling weights up to ..." (specify). Indicate the distance (km) and location of the nearest railway siding, if appropriate.

2) Fuel and oil types

The grades of fuel which are available to visiting helicopters, with piston-engine grades shown first, followed by turbine-engine fuels, when applicable.

The grades of oil available to visiting helicopters.

3) Fuelling facilities and capacity

The types of fuelling equipment available and the discharge capacity of each (litres per second).

Any prior notification required (PN), if applicable.

Where no limitations exist, state "No limitations".

4) De-icing facilities.

5) Hangar space for visiting helicopter

The hangar space available stated either in terms of the numbers of certain types of aircraft which can be accommodated, or by a listing of the hangars available and the dimensions of each. The door opening of each should also be given. Indicate whether the space is heated or unheated and any other significant information.

6) Repair facilities for visiting helicopter

The type of repairs that can be carried out, i.e. major or minor repairs, and the type of aircraft which can be handled; the availability of spare parts and the existence of facilities for changing engines.

7) Remarks.

****** AD 3.5 PASSENGER FACILITIES**

Brief description of passenger facilities available at the heliport, including:

1) Hotel(s) at or in the vicinity of the heliport

The type and extent of overnight accommodation available at the heliport or in the vicinity of the heliport. When limited, the available capacity should be given.

2) Restaurant(s) at or in the vicinity of the heliport

Indicate whether a restaurant is available at the heliport or in the vicinity of the heliport, and whether the number of meals which can be served is limited.

3) Transportation possibilities

Indicate transportation facilities available such as buses, taxis, railway, or any other services available at the heliport for the transportation of passengers to and from the city.

4) Medical facilities

Indicate medical facilities and services available at the heliport including first aid treatment, hospital or rest rooms, and ambulance(s). When significant additional services are available off the heliport, they should also be listed with an indication of the location and distance from the heliport.

5) Bank and post office at or in the vicinity of the heliport

6) Tourist office

7) Remarks.

Any other relevant information not covered under this subsection.

****** AD 3.6 RESCUE AND FIRE FIGHTING SERVICES**

Detailed description of the rescue and fire fighting services and equipment available at the heliport, including:

1) Heliport category for fire fighting

Indicate the scale of protection available for the heliport in terms of heliport category as described in Annex 14, Volume II, Chapter 6.

2) Rescue equipment

Indicate the rescue equipment available and whether it is in accordance with the aerodrome category for rescue and fire fighting mentioned under 1).

3) Capability for removal of disabled helicopter

The requirement is for an indication of the capability for removal of helicopters disabled on or adjacent to the movement area. This may be expressed in terms of the largest type of helicopter which the aerodrome is equipped to remove.

4) Remarks

Any other relevant information not covered under this subsection.

****** AD 3.7 SEASONAL AVAILABILITY — CLEARING**

Detailed description of the equipment and operational priorities established for the clearance of heliport movement areas, including:

1) Type(s) of clearing equipment

Indicate whether the heliport is serviceable during all seasons of the year and, if not, the periods (months of the year) during which it may be unserviceable or must be used with caution, indicating the likely cause of unserviceability and the precautions to be taken. If a special service providing information relating to the condition and serviceability of the heliport alighting area exists, the type of service should be indicated. Information relating to snow removal should include:

- a) where no snow removal equipment is required, indicate “Not applicable”;
- b) when snow conditions exist but no removal equipment is available, indicate “None available”; and
- c) where snow removal equipment is available, indicate the types of equipment used.

2) Clearance priorities

If clearance of heliport alighting area is required, indicate the priorities with regard to clearing the alighting area, taxiways and aprons.

3) Remarks

Any other relevant information not covered under this subsection.

****** AD 3.8 APRONS, TAXIWAYS AND
CHECK LOCATIONS/POSITIONS DATA**

Details related to the physical characteristics of aprons, taxiways and locations/positions of designated checkpoints, including:

1) Surface and strength of aprons, helicopter stands

Where available, indicate the general dimensions of the apron, its surface type, strength and any associated helicopter stands (Annex 14, Volume II, Chapter 3).

2) Width, surface type and designation of helicopter ground taxiways

The availability of ground taxiways or defined paths on the surface for the air taxiing or air transiting of helicopters should be indicated along with the width and surface type, as appropriate (Annex 14, Volume II, Chapter 3).

3) Width and designation of helicopter air taxiway and air transit route

(See para. 2) above).

4) Location and elevation to the nearest metre or foot of altimeter checkpoints.

5) Location of VOR checkpoints

6) Position of INS checkpoints in degrees, minutes, seconds and hundredths of a second

The geographical coordinates of aircraft stands at which aircraft equipped with INS could align and programme their equipment before departure must be given to an accuracy of at least one-hundredth of a second. These stands should be listed together with their coordinates, e.g. Stand 1 N522224.42 W0315654.19; Stand 2 N522218.53 W0315654.49.

7) Remarks

If check locations/positions are presented on a heliport chart, a note to that effect must be provided under this subsection.

****** AD 3.9 MARKINGS AND MARKERS**

Brief description of final approach and take-off area and taxiway markings and markers, including:

- 1) Final approach and take-off markings.
- 2) Taxiways markings, air taxiway markers and air transit route markers

Indicate the availability of the following visual aids and marking, where provided and/or applicable (Annex 14, Volume II, Chapter 5).

- a) Visual aids to location and indicators:
 - Heliport beacon
 - Heliport identification
 - Heliport name — Specify if lighted (LGTD)
 - Wind direction indicator
- b) Marking aids:
 - Aiming point
 - Air taxiway
 - Final approach and take-off area (FATO)
 - Final approach and take-off area designation
 - Helideck obstacle-free sector
 - Maximum allowable mass (elevated heliport or helideck only)
 - Obstacles
 - Touchdown
 - Touchdown and lift-off area (TLOF)
 - Winching area.
- 3) Remarks.

****** AD 3.10 HELIPORT OBSTACLES**

Detailed description of obstacles, including:

- 1) for obstacles in Area 2:
 - a) obstacle identification or designation;
 - b) type of obstacle;
 - c) obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;

- d) obstacle elevation and height to the nearest metre or foot;
- e) obstacle marking, and type and colour of obstacle lighting (if any);
- f) if appropriate, an indication that the list of obstacles is available in electronic form, and a reference to GEN 3.1.6; and
- g) NIL indication, if appropriate.

Note 1.— Chapter 10, 10.2.2 provides a description of Area 2 while Appendix 8, Figure A8-2, contains graphical illustrations of obstacle data collection surfaces and criteria used to identify obstacles in Area 2.

Note 2.— Specifications governing the determination and reporting (accuracy of field work and data integrity) of positions (latitude and longitude) and elevations for obstacles in Area 2 are given in Annex 11, Appendix 5, Tables 1 and 2, and in Annex 14, Volume II, Appendix 1, Tables 1 and 2, respectively.

- 2) for obstacles in Area 3:

- a) obstacle identification or designation;
- b) type of obstacle:
- c) obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;
- d) obstacle elevation and height to the nearest metre or foot;
- e) obstacle marking, and type and colour of obstacle lighting (if any);
- f) if appropriate, an indication that the list of obstacles is available in electronic form, and a reference to GEN 3.1.6; and
- g) NIL indication, if appropriate.

Note 1.— Chapter 10, 10.2.3 provides a description of Area 3 while Appendix 8, Figure A8-3, contains graphical illustrations of obstacle data collection surfaces and criteria used to identify obstacles in Area 3.

Note 2.— Specifications governing the determination and reporting (accuracy of field work and data integrity) of

positions (latitude and longitude) and elevations for obstacles in Area 3 are given in Annex 14, Volume II, Appendix 1, Tables 1 and 2, respectively.

****** AD 3.11 METEOROLOGICAL
INFORMATION PROVIDED**

Detailed description of meteorological information provided at the heliport and an indication of which meteorological office is responsible for the service enumerated, including:

- 1) Name of the associated meteorological office.
- 2) Hours of service and, where applicable, the designation of the responsible meteorological office outside these hours.
- 3) Office responsible for preparation of TAFs and periods of validity of the forecasts.

- 4) Availability of the trend forecasts for the heliport and interval of issuance.
- 5) Information on how briefing and/or consultation is provided, using:

P = personal consultation
T = telephone
TV = closed circuit television
D = self-briefing display.

- 6) Type of flight documentation supplied and language(s) used in flight documentation, e.g.

C = charts
CR = cross-sections
PL = abbreviated plain language texts
TB = tabular forms.

Indicate languages used in plain language.

- 7) Charts and other information displayed or available for briefing or consultation, using the following abbreviations:

S = surface analysis (current chart)
U = upper air analysis (current chart)
P = prognostic upper air chart
W = significant weather chart
T = tropopause chart.

- 8) Supplementary equipment available for providing information on meteorological conditions, e.g. weather radar and receiver for satellite images.
- 9) The air traffic services unit(s) provided with meteorological information, e.g. FIC, ACC and/or RCC.
- 10) Additional information (e.g. concerning any limitation of service)

Indicate any limitations of service and any service not already listed.

As necessary, indicate telephone numbers of the meteorological office normally providing service for the aerodrome and any other meteorological offices providing service during periods when that office is closed or at night.

****** AD 3.12 HELIPORT DATA**

Detailed description of heliport dimensions and related information, including:

- 1) Heliport type — surface-level, elevated or helideck

Indicate whether the heliport is located at ground or water level, or on a raised structure on land, or on a floating or fixed off-shore structure (Annex 14, Volume II, Chapter 3).

- 2) Touchdown and lift-off (TLOF) area dimensions to the nearest metre or foot

Indicate the dimensions to the nearest metre or foot of the load-bearing area designated for touchdown or lift-off.

- 3) True bearings to one hundredth of a degree of final approach and take-off area (FATO)

Add the FATO designation number (where appropriate).

- 4) Dimensions to the nearest metre or foot of FATO and surface type

Indicate the performance class of helicopter the FATO is intended to serve, its type (surface-level, elevated or helideck), its length, width, slope and surface type (Annex 14, Volume II, Chapter 3).

- 5) Surface and bearing strength in tonnes (1 000 kg) of TLOF

Indicate the surface type (e.g. pavement, concrete, grass) and associated bearing strength expressed in 1 000 kilograms (Annex 14, Volume II, Chapter 3).

- 6) Geographical coordinates in degrees, minutes, seconds and hundredths of seconds and geoid undulation to the nearest one-half metre or foot of the geometric centre of TLOF or of each threshold of FATO (where appropriate).

- 7) TLOF and/or FATO slope and elevation:

— for non-precision approaches to the nearest metre or foot; and

— for precision approaches to the nearest one half metre or foot.

The slope should be sufficient to prevent water accumulation but not exceed 2 per cent in any direction.

- 8) Dimensions of safety area

Indicate the safety area surrounding the FATO which is free of obstacles, except for those required for air navigation purposes, including the dimensions and surface type (Annex 14, Volume II, Chapter 3).

- 9) Dimensions to the nearest metre or foot of the helicopter clearway

The requirement is only relevant to surface-level heliports. Where provided, the dimensions and ground profile should be indicated (Annex 14, Volume II, Chapter 3).

- 10) The existence of an obstacle-free sector.

- 11) Remarks.

**** AD 3.13 DECLARED DISTANCES

Detailed description of declared distances to the nearest metre or foot, where relevant for a heliport, including:

- 1) Take-off distance available (TODAH)
- 2) Rejected take-off distance available (RTODAH)

- 3) Landing distance available (LDAH)

- 4) Remarks.

See also Annex 14, Volume II, Chapter 2.

**** AD 3.14 APPROACH AND FATO LIGHTING

Detailed description of approach and FATO lighting, including:

- 1) Type, length and intensity of approach lighting system
- 2) Type of visual approach slope indicator system (e.g. PAPI, APAPI, HAPI)
- 3) Characteristics and location of FATO area lights
- 4) Characteristics and location of aiming point lights
- 5) Characteristics and location of TLOF lighting system
- 6) Remarks.

**** AD 3.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

Description of other lighting and secondary power supply, including:

- 1) Location, characteristics and hours of operation of heliport beacon
- 2) Location and lighting of wind direction indicator (WDI)
- 3) Taxiway edge and taxiway centre line lights
- 4) Secondary power supply including switch-over time
- 5) Remarks.

**** AD 3.16 AIR TRAFFIC SERVICES AIRSPACE

Detailed description of air traffic services (ATS) airspace organized at the heliport, including:

- 1) Airspace designation and geographical coordinates in degrees, minutes and seconds of the lateral limits
- 2) Vertical limits
- 3) Airspace classification
- 4) Call sign and language(s) of ATS unit providing service
- 5) Transition altitude
- 6) Remarks.

****** AD 3.17 AIR TRAFFIC SERVICES
COMMUNICATION FACILITIES**

Detailed description of air traffic services communication facilities established at the heliport, including:

- 1) Service designation
- 2) Call sign
- 3) Frequency(ies)
- 4) Hours of operation
- 5) Remarks.

****** AD 3.18 RADIO NAVIGATION AND
LANDING AIDS**

Detailed description of radio navigation and landing aids associated with the instrument approach and the terminal area procedures at the heliport, including:

- 1) Type of aid, magnetic variation (for VOR station declination used for technical line-up of the aid) to the nearest degree and type of operation for ILS, MLS, Basic GNSS, SBAS and GBAS
- 2) Identification, if required
- 3) Frequency(ies), as appropriate
- 4) Hours of operation, as appropriate
- 5) Geographical coordinates in degrees, minutes, seconds and tenths of seconds of the position of transmitting antenna

- 6) Elevation of the transmitting antenna of DME to the nearest 30 m (100 ft) and of DME/P to the nearest 3 m (10 ft)

- 7) Remarks.

When the same aid is used for both en-route and heliport purposes, a description must also be given in section ENR 4. If the ground-based augmentation system (GBAS) serves more than one heliport, description of the aid must be provided under each heliport. If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority must be indicated in the remarks column. Facility coverage must be indicated in the remarks column.

****** AD 3.19 LOCAL TRAFFIC REGULATIONS**

Detailed description of regulations applicable to traffic at the heliport, including standard routes for taxiing helicopters, parking regulations, school and training flights and similar but excluding flight procedures.

****** AD 3.20 NOISE ABATEMENT
PROCEDURES**

Detailed description of noise abatement procedures established at the heliport.

****** AD 3.21 FLIGHT PROCEDURES**

Detailed description of the conditions and flight procedures, including radar procedures, established on the basis of airspace organization established at the heliport.

****** AD 3.22 ADDITIONAL INFORMATION**

Additional information about the heliport, such as an indication of bird concentrations at the heliport together with an indication of significant daily movement between resting and feeding areas, to the extent practicable.

****** AD 3.23 CHARTS RELATED TO
A HELIPORT**

The requirement is for charts related to a heliport to be included in the following order:

- 1) Aerodrome/Heliport Chart — ICAO

- | | |
|---|---|
| 2) Area Chart — ICAO (departure and transit routes) | 7) Instrument Approach Chart — ICAO (for each procedure type) |
| 3) Standard Departure Chart — Instrument — ICAO | 8) Visual Approach Chart — ICAO |
| 4) Area Chart — ICAO (arrival and transit routes) | 9) Bird concentrations in the vicinity of heliport. |
| 5) Standard Arrival Chart — Instrument — ICAO | |
| 6) Radar Minimum Altitude Chart — ICAO | |
- If some of the charts are not produced, a statement to this effect must be given in section GEN 3.2, Aeronautical charts.
-

Chapter 6

NOTAM

6.1 ORIGINATION

Main objectives

[4.4.1, 5.1.1]

6.1.1 The main principles relating to the origination of NOTAM are clearly set out in 5.1.1 of Annex 15 which states:

“A NOTAM shall be originated and issued promptly whenever the information to be distributed is of a temporary nature and of short duration or when operationally significant permanent changes, or temporary changes of long duration are made at short notice, except for extensive text and/or graphics.”

NOTAM are therefore intended to supplement AIP and serve as a fast medium for distributing information whenever it is necessary to give due warning of any change or occurrence, at short notice. Information of short duration containing extensive text and/or graphics must be published as an AIP Supplement.

Value of a NOTAM

6.1.2 The basic purpose of NOTAM is the distribution of information in advance of the event to which it relates, except in the case of unserviceabilities that cannot be foreseen. Thus, to realize its purpose a NOTAM must be received by the addressee in sufficient time for any required action to be taken. (The value of a NOTAM lies in its “news content” and its residual historical value is therefore minimal.)

Duration of NOTAM

[4.4.1]

6.1.3 Although not directly specified in Annex 15, NOTAM should not remain in force for more than three

months. If the circumstances to be notified are expected to exceed three months, an AIP Supplement must be published. When a temporary change in AIP information issued by NOTAM unexpectedly exceeds the three-month period, a new or replacement NOTAM may be issued, but only in those cases where a condition is expected to last for a further period of a maximum of one to two months. If it is expected that the condition will last for a longer period of time, an AIP Supplement must be issued. This procedure is covered in greater detail in 5.10.3.

Information to be promulgated by NOTAM

[5.1.1.1, 5.1.1.2]

6.1.4 NOTAM are issued when it is necessary to distribute information of direct operational significance which is:

- a) of short duration; or
- b) appropriate for inclusion in the AIP but needs immediate distribution.

6.1.5 The circumstances which make it necessary to issue NOTAM are set out in 5.1.1.1 of Annex 15. Because of their importance, these circumstances are repeated here for ease of reference.

“A NOTAM shall be originated and issued concerning the following information:

- a) establishment, closure or significant changes in operation of aerodrome(s)/heliport(s) or runways;
- b) establishment, withdrawal and significant changes in operation of aeronautical services (AGA, AIS, ATS, COM, MET, SAR, etc.);
- c) establishment, withdrawal and significant changes in operational capability of radio navigation and

- air-ground communication services. This includes: interruption or return to operation, change of frequencies, change in notified hours of service, change of identification, change of orientation (directional aids), change of location, power increase or decrease amounting to 50 per cent or more, change in broadcast schedules or contents, or irregularity or unreliability of operation of any radio navigation and air-ground communication services;
- d) establishment, withdrawal or significant changes made to visual aids;
 - e) interruption of or return to operation of major components of aerodrome lighting systems;
 - f) establishment, withdrawal or significant changes made to procedures for air navigation services;
 - g) occurrence or correction of major defects or impediments in the manoeuvring area;
 - h) changes to and limitations on availability of fuel, oil and oxygen;
 - i) major changes to search and rescue facilities and services available;
 - j) establishment, withdrawal or return to operation of hazard beacons marking obstacles to air navigation;
 - k) changes in regulations requiring immediate action, e.g. prohibited areas for SAR action;
 - l) presence of hazards which affect air navigation (including obstacles, military exercises, displays, races and major parachuting events outside promulgated sites);
 - m) erecting, or removal of, or changes to, obstacles to air navigation in the take-off/climb, missed approach, approach areas and runway strip;
 - n) establishment or discontinuance (including activation or deactivation) as applicable, or changes in the status of prohibited, restricted or danger areas;
 - o) establishment or discontinuance of areas or routes or portions thereof where the possibility of interception exists and where the maintenance of guard on the VHF emergency frequency 121.500 MHz is required;
 - p) allocation, cancellation or change of location indicators;
 - q) significant changes in the level of protection normally available at an aerodrome for rescue and fire fighting purposes. NOTAM shall be originated only when a change of category is involved and such change of category shall be clearly stated (see Annex 14, Volume I, Chapter 9, and Attachment A, Section 17);
 - r) presence or removal of, or significant changes in, hazardous conditions due to snow, slush, ice or water on the movement area;
 - s) outbreaks of epidemics necessitating changes in notified requirements for inoculations and quarantine measures;
 - t) forecasts of solar cosmic radiation, where provided;
 - u) an operationally significant change in volcanic activity, the location, date and time of volcanic eruptions and/or horizontal and vertical extent of volcanic ash cloud, including direction of movement, flight levels and routes or portions of routes which could be affected;
 - v) release into the atmosphere of radioactive materials or toxic chemicals following a nuclear or chemical incident, the location, date and time of the incident, the flight levels and routes or portions thereof which could be affected and the direction of movement;
 - w) establishment of operations of humanitarian relief missions, such as those undertaken under the auspices of United Nations, together with procedures and/or limitations which affect air navigation; and
 - x) implementation of short-term contingency measures in cases of disruption, or partial disruption, of air traffic services and related supporting services.
- Note.— See Annex 11, 2.28 and Attachment D to that Annex.”*

6.1.6 Annex 15 also states: “The need for origination of a NOTAM should be considered in any other circumstances which may affect the operation of aircraft.”

Origination and use of “trigger” NOTAM

[5.1.1.6]

6.1.7 Information concerning any circumstances listed in Annex 15, Appendix 4, must be distributed using AIRAC procedures either as an AIRAC AIP Amendment or an AIRAC AIP Supplement.

6.1.8 When an AIP Amendment or an AIP Supplement is published in accordance with AIRAC procedures, “trigger” NOTAM must be originated and promulgated. The intent of this NOTAM is to serve as a reminder in the pre-flight information bulletin (PIB) by signalling the coming into effect of operationally significant permanent or temporary changes to the AIP, thus ensuring that users are aware of changes that may affect their flights. It also serves as a reminder to AIS officers responsible for updating AIP to insert a new AIP Amendment or AIP Supplement in the affected AIP on the amendment or supplement effective date. Trigger NOTAM must contain a brief description of the contents of the amendment or supplement, the effective date-time and the reference number of the amendment or supplement. This trigger NOTAM must come into force on the same effective date as the amendment or supplement. Trigger NOTAM must remain valid, as a reminder in the PIB, for a period of 14 days. For examples and further guidance on the use of trigger NOTAM, see Appendix A to this chapter.

6.1.9 A trigger NOTAM is issued:

- a) in the appropriate NOTAM series, according to the information it contains;

Note.— Trigger NOTAM are never published in Series T which is reserved for NOTAM processing units in cases when basic operational information was not “triggered” by the issuing NOF.

- b) for a single location (FIR or aerodrome) only, but may include information on different subjects related to the location in order to reduce the number of NOTAM to be published.

Postponement of changes to aeronautical information

6.1.10 Postponement of changes to circumstances listed in Annex 15, Appendix 4, has the effect of cancelling information notified by AIRAC and reinstating previously valid information. Doing so by NOTAM less than 28 days before the effective date for changes to circumstances listed in Appendix 4, Parts 1 and 3, does not generally allow sufficient time for previously valid information to be reinstated in airborne navigation databases, with the result that erroneous information would be presented to flight crews. Furthermore, since charts used by flight crews and ATC are updated on a different schedule than airborne navigation databases, it is possible that valid information which is not reflected in the airborne database may nevertheless appear on charts. The resulting mismatch of information would give rise to considerable operational difficulties and potential safety hazards. In the worst case, RNAV procedures that require a navigation database may not be flown (operated).

6.1.11 In order to avoid negative consequences to the safety and efficiency of flights, all possible measures should be taken to ensure that changes to circumstances listed in Annex 15, Appendix 4, Parts 1 and 3, take place as notified on the AIRAC date. This will require thorough planning of aeronautical information changes and the cooperation of all parties involved, including AIS.

6.1.12 It is important to recognize that a change to the effective date (or postponement) is information to be notified by AIRAC and therefore constitutes “withdrawal” as stated in Annex 15, Appendix 4. Postponement by NOTAM should be issued more than 28 days in advance of the previously indicated effective date unless the circumstances are of a temporary nature and would not persist for the full period.

Information not to be promulgated by NOTAM

[5.1.1.3]

6.1.13 The following information, which relates to an aerodrome and its vicinity and does not affect its operational status, does not require promulgation by NOTAM. Such information should be given local distribution during pre-flight or in-flight briefing or other local contact with operators or pilots. Since such information is not of direct operational significance, it

does not preclude safe operation of aircraft and is not likely to influence a pilot's or operator's decision to divert a flight. The circumstances shown hereunder as stated in Annex 15, 5.1.1.3, should therefore not be notified by NOTAM:

- “a) routine maintenance work on aprons and taxiways which does not affect the safe movement of aircraft;
- b) runway marking work, when aircraft operations can safely be conducted on other available runways, or the equipment used can be removed when necessary;
- c) temporary obstacles in the vicinity of aerodromes/heliports that do not affect the safe operation of aircraft;
- d) partial failure of aerodrome/heliport lighting facilities where such failure does not directly affect aircraft operations;
- e) partial temporary failure of air-ground communications when suitable alternative frequencies are known to be available and are operative;
- f) the lack of apron marshalling services and road traffic control;
- g) the unserviceability of location, destination or other instruction signs on the aerodrome movement area;
- h) parachuting when in uncontrolled airspace under VFR (see Annex 15, 5.1.1.1 I)), when controlled, at promulgated sites or within danger or prohibited areas; and
- i) other information of a similar temporary nature.”

Checklists and lists of valid NOTAM

[5.2.13]

6.1.14 A checklist indicating all NOTAM that are valid must be issued periodically in a set format. The checklist assists recipients in verifying that the right cancellations of NOTAM have been made. In addition, the checklist must refer to the latest AIP Amendments, AIP Supplements and at least the internationally distributed AIC. Cancelling by sole means of a checklist (i.e. by

omitting NOTAM to be cancelled) is not allowed. This checklist must be issued over the aeronautical fixed service (AFS) not less than once a month, and preferably to a fixed schedule so that recipients know when to expect it. Normally it would be adequate to issue the checklist for each month on the first day of the following month. A checklist is issued as a NOTAM in the series to which it refers. A separate checklist must be issued for each NOTAM series to the same distribution as the actual message series to which they refer. Checklists must be clearly identified as such. Further guidance on checklists is given in Appendix A to this chapter.

6.1.15 In addition, a monthly printed plain-language list of valid NOTAM, including references to the latest AIP Amendments, AIC issued, and checklist of AIP Supplements must be prepared with a minimum of delay and forwarded by the most expeditious means to all recipients of the Integrated Aeronautical Information Package. Figure 6-1 contains a specimen format for the monthly plain-language list of valid NOTAM.

6.2 DISTRIBUTION

[5.2.10, 5.3.1, 5.3.2]

6.2.1 A NOTAM must be distributed on the basis of a request. To the extent practicable, NOTAM must be distributed via the AFS. Each NOTAM must be transmitted as a single telecommunication message.

Priorities

6.2.2 The priority normally accorded to messages sent over the AFS is GG. Under exceptional circumstances and when justified by a requirement or special handling, a NOTAM may be given the higher DD priority.

Promulgation of transitory information

6.2.3 For information provided by NOTAM, it may be advantageous to exercise selectivity on a time basis to reduce NOTAM traffic on the AFS and wasted effort in the handling of data that could become redundant in transit. Where the information may be valid for only a few hours or subject to rapid change, and no other channel can ensure timely distribution, arrangements should be made for the information to be provided

directly to the relevant air traffic services units using, where practicable, communication channels established for inter-ATS communications.

International distribution

[5.3.2, 5.3.3]

6.2.4 Originating States are responsible for selecting the NOTAM to be given international distribution, but due consideration must be given to any stated operational requirements of other States for both flight planning and pre-flight information purposes. (These requirements are discussed more fully in Chapter 3.)

6.2.5 NOTAM given international distribution must conform, where necessary, with the relevant provisions of the ICAO communication procedures (Annex 10, Volume II), the ICAO NOTAM Code and abbreviations (see *Procedures for Air Navigation Services — ICAO Abbreviations and Codes* (PANS-ABC, Doc 8400)), indicators, identifiers, etc., and plain language where required for clear understanding. When a NOTAM is distributed by means other than the AFS, a six-digit date-time group indicating the date and time of filing the NOTAM and the identification of the originator must be given preceding the text.

6.2.6 ASHTAM or NOTAM concerning volcanic activity must include in the address list the MWO associated with the origin as listed in Part 2 of the *International Airways Volcano Watch (IAVW)* (Doc 9766), all VAACS and the SADIS/ISCS Gateway at EGZZVANW.

Measures to reduce use of the AFS

[5.3.4]

6.2.7 In order to avoid excessive traffic on the AFS, NOTAM must be addressed only to NOF and further distribution within the State made by or through delegation from the NOF concerned. NOTAM used for notifying volcanic activity and ASHTAM must also be sent to volcanic ash advisory centres and must take into consideration the requirements for long-range operations. Furthermore, in exceptional cases, the direct exchange of SNOWTAM between adjacent aerodromes is permitted, should this be operationally necessary and if direct AFS circuits are available. The exchanges between NOF should, as far as practicable, be limited to

the pre-ascertained requirements of the receiving States concerned by means of separate series for at least international and domestic flights.

6.2.8 Consideration might also be given to the use of automation in an effort to improve distribution of NOTAM. With the computer technology now available it should be possible to store all NOTAM information (and all basic information) in a jointly-administered information facility in each major operating area. This facility could be interrogated for pre-flight information, or route manual or aeronautical charting purposes, by the State AIS, individual pre-flight information units or operating agencies, and could be programmed to print up-to-date information on an area, route or terminal basis as required. Each State participating in such a facility would feed information into the centre as the occasion demanded and distribution to other States would be at the option of the ultimate recipient. In this way, only information required by the user would be distributed and much unnecessary information that now floods the AFS would cease to burden the AIS and COM services.

Predetermined distribution system for NOTAM

[5.3.4.2 and Appendix 5]

Description of the system

6.2.9 When it is agreed between NOF that incoming NOTAM (including SNOWTAM and ASHTAM) must be channelled through the AFS directly to designated addresses predetermined by the receiving State concerned, while concurrently being routed to its NOF for checking and control purposes, an eight-letter addressee indicator constituted as follows must be used:

First and second letters: The first two letters of the location indicator for the AFS communication centre associated with the relevant NOF of the receiving State.

Third and fourth letters: The letters “ZZ”, indicating a requirement for special distribution.

Fifth letter: The letter “N” for NOTAM, the letter “S” for SNOWTAM and the letter “V” for ASHTAM.

Sixth and seventh letters: Letters each taken from the series A to Z, denoting the national and/or international distribution list(s) to be used by the receiving AFS centre.

Eighth letter: The letter “X”, to complete the eight-letter addressee indicator.

6.2.10 The main objective of the system is to expedite all NOTAM received by eliminating the delay that occurs when the receiving COM centre routes incoming NOTAM to its NOF for checking and control purposes and then waits to receive them from the NOF for transmission to other internal addresses. To achieve this objective as well as to ensure proper routing, it is essential that States and territories from which NOTAM are required are advised of the sixth and seventh letters to be used by them in the addressee indicator. Each national distribution list, whether for NOTAM, SNOWTAM or ASHTAM, denotes a group of addressees predetermined by the receiving State on the basis of its requirements for information promulgated by NOTAM. The sixth and seventh letters signify not only the group of addressees but also the automatic relay responsibility of the receiving AFS centre.

Checking and control

6.2.11 Whereas the NOF is normally the focal point in a State for the receipt and dispatch of NOTAM, under the predetermined distribution system it shares the responsibility for checking incoming NOTAM with the aerodrome AIS units to which NOTAM are destined. Its responsibility here is mainly one of liaison. It does not relieve the ultimate addressee, to whom the NOTAM has been channelled and who is most affected by any lack of timeliness, accuracy or completeness in the information it contains, from also checking for obvious errors. While the standard format used for NOTAM, SNOWTAM and ASHTAM tends to minimize the possibility of error, the addressee nevertheless has special responsibility under this system to query any errors or omissions through the receiving NOF.

Selectivity in the distribution of information

6.2.12 The success of the predetermined distribution system presupposes competent selection, by the originating State, of NOTAM to be given international

distribution and the use of selective distribution lists where practicable to prevent superfluous distribution of information. The selectivity exercised by an originating State in the distribution process should be related to the needs of the receiving States. Selectivity in the locations that require the information is controlled through precisely predetermined arrangements made by the receiving States, indicated in terms of the sixth and seventh letters to be used in the addressee indicator, and taking into consideration the workload placed on the originating State and on the telecommunication services. Where NOTAM are issued in more than one series, selectivity is already implicit in the division into series but the receiving State should establish routings that will ensure that the aerodrome AIS units receive only the series they require by rationalizing distribution arrangements within the State and preparing a routing guide for each communication centre to cover the distribution of incoming NOTAM received under the system.

6.3 SPECIFICATIONS FOR NOTAM

Message series, number and identifier

[5.2.5]

6.3.1 Each NOTAM must be allocated a series identified by a letter and a four-digit number, followed by a stroke and a two-digit number for the year so that addressees may check continuity. The number must be consecutive and based on the calendar year. If more than one series of NOTAM is issued, each series must be separately identified by a letter. Letters A to Z, with the exception of S and T, may be used to identify a NOTAM series. Renumbering of existing NOTAM (i.e. containing identical information, but with a new number) is not allowed, nor are NOTAM to be renumbered at the beginning of each year.

6.3.2 One of the following message identifiers is to be inserted as appropriate:

- a) NOTAMN if it concerns a NOTAM containing new information.
- b) NOTAMR if it concerns a NOTAM replacing a previous NOTAM, followed by the series and number/year of the NOTAM replaced (e.g. A0125/03 NOTAMR A0123/03).

- c) NOTAMC if it concerns a NOTAM cancelling a previous NOTAM, followed by the series and number/year of the cancelled NOTAM (e.g. A0460/03 NOTAMC A0456/03).

6.3.3 Corrected versions of NOTAM must not be issued. Erroneous NOTAM must either be replaced or cancelled and a new NOTAM issued.

6.3.4 A NOTAMR must replace only one NOTAM. Both must belong to the same NOTAM series. A NOTAMC must cancel only one NOTAM. Both must belong to the same NOTAM series.

Promulgation in series

6.3.5 When considering the needs of States it may be found that an adjacent State may want full information from the originating State while a more distant State may only require a subset of this information or may not be interested in temporary information of short duration. In order to reduce distribution to meet such variable requirements it may be found useful to arrange for NOTAM to be promulgated in two or more series to allow for selective distribution. For example, NOTAM may be classified as follows:

- A — NOTAM containing information of concern to long- or medium-range flights and given selected international distribution.
- B — NOTAM containing full information on all aerodromes, facilities and procedures available for use in international civil aviation and given international distribution to adjacent States and other States on request.
- C — NOTAM containing information of concern to aircraft other than those engaged in international civil aviation and given national distribution only.
- S — NOTAM published in the SNOWTAM format concerning the presence or removal of hazardous conditions due to snow, slush or ice on aerodrome pavements or standing water associated with these conditions.
- V — NOTAM published in the ASHTAM format concerning the occurrence of pre-eruption volcanic activity, or an operationally significant

change in volcanic activity, the location, date and time of volcanic eruptions and horizontal and vertical extent of volcanic ash cloud, including direction of movement, flight levels and routes or portions of routes which could be affected.

Z — NOTAM concerning the status of elements of the global navigation satellite system (GNSS).

Example:

State 2 may require information from the originating State (State 1) on all aerodromes, facilities and procedures available for use by civil aircraft.

State 3 may require information from State 1 for a route stage originating at an aerodrome in its territory and terminating at an aerodrome in State 1, or transit territory for which State 1 is responsible, concerning significant aerodrome facilities, procedures, en-route navigation aids (including air-ground communications) available to international civil aviation; and occurrences of significance to overflying aircraft along the portion of the route which traverses territory for which State 1 is responsible.

State 1 would then send to State 2 series B, S and V NOTAM while State 3 would be sent series A and V NOTAM and, if a requirement for them has been previously indicated, series S and series Z NOTAM.

Period of validity

6.3.6 Information must be provided on the duration of the hazard, change in the normal status of operation, or condition of the facilities being reported on. If, during that time, the condition or activity is active within specified time periods, this must also be given. NOTAM notifying unserviceability of aids to air navigation, facilities or communication services must give the time at which restoration of service is expected or an estimate of the period of unserviceability.

6.3.7 Care should be taken to express the duration of a circumstance notified in the NOTAM in such a way that there will be no misunderstanding. Both the NOTAM Format and the relevant options of the NOTAM Code require an indication of the applicable date(s) and time(s)

expressed as a ten-figure group giving year, month, day and hour in UTC.

Example:

Q) RJCG/QLBAS/IV/M/A/000/999/
4248N14140E025
A) RJCC B) 0304200921 C) 0304211800
E) ABN U/S

Meaning:

The aerodrome beacon at Sapporo/Chitose aerodrome became unserviceable at 0921 on 20 April 2003 and will remain out of service until 1800 hours UTC on 21 April 2003.

Text

[5.2.1, 5.2.2 and Appendix 6]

6.3.8 The text of the NOTAM must contain the information on the hazard, status of operation or condition of the facilities reported on. It must be composed of the significations/uniform abbreviated phraseology assigned to the ICAO NOTAM Code complemented by ICAO abbreviations (Doc 8400), and indicators, identifiers, designators, call signs, frequencies, figures and plain language. Except as otherwise provided for SNOWTAM and ASHTAM, the text of each NOTAM must contain the information in the order shown in the NOTAM Format. (See Appendix A to this chapter.)

6.3.9 Each NOTAM must be as brief as possible and so compiled that its meaning is clear without the need to refer to another document. Each NOTAM must deal with only one subject and one condition concerning the subject. The text should be composed by the NOF in such a way that it will serve for PIB entry without requiring additional processing by the receiving unit.

Cross-reference to AIP/AIP Supplement

[5.2.11]

6.3.10 When a NOTAM contains information that renders necessary an AIP Amendment or AIP Supplement the text must include an appropriate cross-reference to the affected AIP or AIP Supplement and an annotation must be made accordingly, even when the information is of a temporary nature. This informs the user of the AIP or AIP Supplement that there is information outstanding against a particular entry.

6.3.11 When a NOTAM contains temporary information of short duration that does not render necessary the consultation of an AIP Amendment or AIP Supplement to have the full information, AIP references must not be annotated in the NOTAM. This informs the user of the NOTAM that the text of the NOTAM is conveying the totality of the information.

Naming of locations

[3.6.2, 5.2.12]

6.3.12 Location indicators included in the text of NOTAM must be those contained in *Location Indicators* (Doc 7910), and curtailed forms of these indicators must not be used. In NOTAM containing information concerning a location that has not been assigned an ICAO location indicator, the name of the location must be given in plain language, spelled in conformity with local usage and transliterated when necessary into the Latin alphabet.

Languages

[3.6.1]

6.3.13 NOTAM, as well as other elements of the Integrated Aeronautical Information Package given international distribution, must include an English text for those parts expressed in plain language. This requirement is intended to assist the majority of those engaged in civil aviation.

6.4 NOTAM FORMAT

[Appendix 6]

6.4.1 The NOTAM Format aims at standardizing the presentation of the different types of information promulgated by NOTAM in order to facilitate understanding of the message by the addressee. In developing this format, the need for transcription of the information in the form of AFS messages has been taken into account. The Format therefore includes the special symbols that are mandatory for the teleprinter operator to use in composing the message (i.e. carriage return, line change, space, opening parentheses before message identification and closing parentheses). The NOTAM Format and instructions for its completion, which are contained in Annex 15, are reproduced in Appendix A to this chapter.

6.4.2 The NOTAM Format essentially consists of two parts:

- a) the part of interest to the communication service handling the AFS message, i.e. the part containing the priority indicator, addresses, date and time of filing and the originator's indicator;
- b) the part containing the NOTAM information.

6.4.3 Instructions for the completion of the NOTAM format which relates to the part containing the NOTAM information are provided in Appendix 6 of Annex 15. These instructions are repeated in Appendix A to this chapter for ease of reference, and Appendix A provides additional guidance and examples of NOTAM.

6.5 USE OF THE NOTAM CODE AND ABBREVIATIONS

Purpose

6.5.1 The ICAO NOTAM Code contained in Doc 8400 is a comprehensive description of information contained in NOTAM. It serves as one of the most important criteria for storage and retrieval of information, as well as for deciding whether or not an item is of operational significance. It also establishes the relevance of the NOTAM to the various types of flight operations and whether it must therefore be part of a PIB. In addition, it assists in specifying items that are to be subject to immediate notification processes. The NOTAM Code forms the basis upon which NOTAM qualifiers are determined for inclusion in Item Q) of the NOTAM Format, in addition to defining the abbreviated plain-language text which appears in Item E).

Composition

6.5.2 All NOTAM Code groups contain five letters. The first letter, Q, indicates that it is a code abbreviation for use when composing NOTAM. The second and third letters indicate the type of facility or condition being reported and the fourth and fifth letters, the hazard or status of operation being reported. The encode portion of the NOTAM Code has been provided to facilitate the choice of the appropriate code groups, but some imagination and a full appreciation of the Code's potentialities are necessary to make the most effective use of it. It therefore requires considerable

study by those responsible for NOTAM composition. In fact, when composing NOTAM in plain language, cognizance should be given to the possible coding of the NOTAM and care taken to frame the NOTAM in a manner which will facilitate later transcription into the NOTAM Code.

Use of NOTAM Code groups

6.5.3 The most commonly used NOTAM Code groups and their respective relation with the qualifiers Traffic, Purpose and Scope are presented in the NOTAM Selection Criteria tables in Appendix B to this chapter.

Use of abbreviations

6.5.4 In many instances, NOTAM Code groups need to be amplified, supplemented or completed by significations/uniform abbreviated phraseology assigned to the NOTAM Code and abbreviations, frequencies, call signs, identifications, time groups, etc., in order to convey the essential information. This is a recognized procedure in keeping with the concept of the NOTAM Code and aeronautical telecommunication procedures and should always be used in preference to plain language. Abbreviations specified for use by States for operational purposes are contained in Doc 8400. As the need for additional abbreviations becomes evident, steps will be taken to add abbreviations to Doc 8400. Abbreviations which are not in Doc 8400 should not be used.

Note.— Since the Q code (QDM, QFE, etc.) is primarily designed for air/ground request/reply communications, it should be used with caution and only when there is no chance that the message might be misunderstood.

6.6 SNOWTAM

[5.1.1.1 r), 5.2.3 and Appendix 2]

A special series NOTAM, named SNOWTAM, is used to notify the presence or removal of hazardous conditions on the movement area due to snow, slush, ice or water associated with these conditions. A specific format (see Appendix A, Figure 6-A-4) is prescribed for this purpose. Use of the NOTAM Code and plain language is also permissible. When the SNOWTAM Format is used, the information must be given in the order shown in the Format. During periods when deposits of snow, slush,

ice or water associated with these conditions remain on aerodrome pavements, information on such conditions should be distributed to all to whom the information is of direct operational significance. Appraisal of the situation should be made at least once every 24 hours, preferably before the commencement of a major traffic movement. A new SNOWTAM is required whenever there is a significant change in conditions. Instructions for the completion of the SNOWTAM Format are reproduced in Appendix A to this chapter.

6.7 ASHTAM

[5.1.1.1 u), 5.2.4 and Appendix 3]

6.7.1 A special series NOTAM, called ASHTAM, is used to notify an operationally significant change in volcanic activity, the location, date and time of volcanic eruptions and/or horizontal and vertical extent of volcanic

ash cloud, including direction of movement, flight levels and routes or portions of routes which could be affected. A specific format (see Appendix A, Figure 6-A-5) is prescribed for this purpose. Use of the NOTAM Code and plain language is also permissible. When the ASHTAM Format is used, the information must be given in the order shown in that Format. The maximum period of validity of the ASHTAM is 24 hours. A new ASHTAM must be issued whenever there is a change in the level of alert. Instructions for the completion of the ASHTAM Format are reproduced in Appendix A to this chapter.

6.7.2 Information about volcanic activity or the presence of volcanic ash plumes may also be reported by NOTAM. To ensure speedy transmission of initial information to aircraft, the first ASHTAM or NOTAM issued may not contain more information than the fact that an eruption and/or ash cloud is reported at a given location at a given date and time.

TEL: 0123 697 3464 FAX: 0123 697 3474 Telex: 99 1236 AFS: EADDYAYX E-mail: AIS@donc.xx	REPUBLIC OF DONLON DEPARTMENT OF CIVIL AVIATION AERONAUTICAL INFORMATION SERVICE P.O. BOX 744 DONLON CITY	NOTAM LIST Series A												
		<div style="border: 1px solid black; display: inline-block; padding: 2px 10px;">04 SEP 2003</div>												
<p>THE FOLLOWING NOTAM SERIES A WERE STILL VALID ON 4 SEP 2003. NOTAM NOT INCLUDED HAVE BEEN CANCELLED, TIME EXPIRED, SUPERSEDED BY AIP SUPPLEMENT OR INCORPORATED IN THE AIP.</p> <p>SERIES A</p> <p>FIR DONLON FIR</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 15%; vertical-align: top;">A0463/03</td> <td style="width: 65%;">From 0307241200 to 0310312359 EST, Trigger NOTAM AIP — SUP 7/03, exercise area Blue Angel active, SFC to 1525 M, contact authority: Donlon RCC.</td> <td style="width: 20%; text-align: right; vertical-align: top;">Exercise</td> </tr> <tr> <td style="vertical-align: top;">A0562/03</td> <td>From 0309090630 to 0310011800; period SEP 09–17, 29–30 and OCT 01, Daily 0630–1800, PJE in area circle with radius of 10 KM centred on N E, from SFC to 5000 M.</td> <td style="text-align: right; vertical-align: top;">PJE</td> </tr> </table> <p>AD</p> <p>DONLON/International</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;"></td> <td style="width: 65%;">From 0308020615 to 0309102359 EST, Locator Ident KL 411 KHZ U/S</td> <td style="width: 20%; text-align: right; vertical-align: top;">Locator</td> </tr> <tr> <td></td> <td>From 0308070815 to 0209312000, ILS GP RWY 27 331.400 MHZ CAT I only</td> <td style="text-align: right; vertical-align: top;">ILS</td> </tr> </table> <p>HOLMSTOCK/Landa</p> <p>..... etc.</p> <p>Latest AIP Amendments:</p> <p>AIRAC AIP Amendment: 042 dated 13 JUL 2003 AIP Amendment: 052 dated 1 SEP 2003</p> <p>AIP Supplements in force: 04/02; 07/02; 16/02; 01/03; 03/03; 04/03.</p> <p>AIC Series A in force:</p> <p>NR 3; 6; 9 of 2000 NR 2; 5; 7 of 2001 NR 3; 6; 9; 13 of 2002 NR 2; 3; 5; 7 of 2003</p>			A0463/03	From 0307241200 to 0310312359 EST, Trigger NOTAM AIP — SUP 7/03, exercise area Blue Angel active, SFC to 1525 M, contact authority: Donlon RCC.	Exercise	A0562/03	From 0309090630 to 0310011800; period SEP 09–17, 29–30 and OCT 01, Daily 0630–1800, PJE in area circle with radius of 10 KM centred on N E, from SFC to 5000 M.	PJE		From 0308020615 to 0309102359 EST, Locator Ident KL 411 KHZ U/S	Locator		From 0308070815 to 0209312000, ILS GP RWY 27 331.400 MHZ CAT I only	ILS
A0463/03	From 0307241200 to 0310312359 EST, Trigger NOTAM AIP — SUP 7/03, exercise area Blue Angel active, SFC to 1525 M, contact authority: Donlon RCC.	Exercise												
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	From 0308020615 to 0309102359 EST, Locator Ident KL 411 KHZ U/S	Locator												
	From 0308070815 to 0209312000, ILS GP RWY 27 331.400 MHZ CAT I only	ILS												

Figure 6-1. Example of monthly printed plain-language list of valid NOTAM

Appendix A to Chapter 6

NOTAM, SNOWTAM AND ASHTAM

1. INTRODUCTION

1.1 This appendix contains explanations relating to the issuing of NOTAM, which expands upon the basic guidance provided in Chapter 6.

1.2 The NOTAM Format and the corresponding instructions for its completion, contained in Appendix 6 to Annex 15, are reproduced in this appendix for ease of reference. Examples of NOTAM are also included. Two of these examples are supplemented by the associated AFS messages and by completed NOTAM Formats.

1.3 Guidance has been included on the issuing of trigger NOTAM as well as on the production of checklists to be issued as NOTAM.

1.4 The SNOWTAM and ASHTAM Formats and instructions for completion of these Formats, as contained in Annex 15, Appendices 2 and 3 respectively, are also reproduced in this appendix.

NOTAM FORMAT

Priority Indicator																									→			
Address																												
																									<<≡			
Date and time of filing																									→			
Originator's Indicator																									<<≡ (
Message Series, Number and Identifier																												
NOTAM containing new information	 NOTAMN (series and number/year)																										
NOTAM replacing a previous NOTAM	 NOTAMR (series and number/year) (series and number/year of NOTAM to be replaced)																										
NOTAM cancelling a previous NOTAM	 NOTAMC (series and number/year) (series and number/year of NOTAM to be cancelled)																								<<≡		
Qualifiers																												
	FIR	NOTAM Code	Traffic	Purpose	Scope	Lower Limit	Upper Limit	Coordinates, Radius																				
Q)																												<<≡
Identification of ICAO location indicator in which the facility, airspace or condition reported on is located																A)										→		
Period of Validity																												
From (date-time group)		B)																										→
To (PERM or date-time group)		C)																								EST* PERM*	<<≡	
Time Schedule (if applicable)		D)																				→						
																						<<≡						
Text of NOTAM; Plain-Language Entry (using ICAO Abbreviations)																												
E)																												
<<≡																												
Lower Limit		F)																								→		
Upper Limit		G)) <<≡		
Signature																												

*Delete as appropriate

Figure 6-A-1. NOTAM Format

INSTRUCTIONS AND GUIDANCE FOR THE COMPLETION OF THE NOTAM FORMAT

1. General

The qualifier line (Item Q) and all identifiers (Items A) to G) inclusive) each followed by a closing parenthesis, as shown in the format, shall be transmitted unless there is no entry to be made against a particular identifier.

2. NOTAM numbering

Each NOTAM shall be allocated a series identified by a letter and a four-digit number followed by a stroke and a two-digit number for the year (e.g. A0023/03). Each series must start on 1 January with number 0001.

3. Qualifiers (Item Q)

Item Q) is divided into eight fields, each separated by a stroke. For an easier automatic production of the PIB, all fields of Item Q) must be given a value; default values will be used where appropriate. The definition of each field is as follows:

1) FIR

- a) If the subject of the information is located geographically within one FIR, the ICAO location indicator shall be that of the FIR concerned. When an aerodrome is situated within the overlying FIR of another State, the first field of Item Q) must contain the code for that overlying FIR (e.g. Q) LFRR/ ...A) EGJJ);

or

If the subject of the information is located geographically within more than one FIR, the FIR field shall be composed of the ICAO nationality letters of the State originating the NOTAM, followed by "XX". (The location indicator of the overlying UIR must not be used.) The ICAO location indicators of the FIRs concerned must then be listed in Item A) or indicator of State or non-governmental agency which is responsible for provision of a navigation service in more than one State;

- b) If one State issues a NOTAM affecting FIRs in a group of States, the first two letters of the ICAO location indicator of the issuing State plus "XX" shall be included. The location indicators of the FIRs concerned shall then be listed in Item A) or indicator of State or non-governmental agency which is responsible for provision of a navigation service in more than one State.

2) NOTAM CODE

All NOTAM Code groups contain a total of five letters, and the first letter is always the letter Q. The second and third letters identify the subject, and the fourth and fifth letters denote the status or condition of the subject reported upon.

A NOTAM must deal with only one subject and one condition of that subject.

The two-letter codes for subjects and conditions are those contained in the PANS-ABC (Doc 8400). For combinations of second and third and fourth and fifth letters, refer to the NOTAM Selection Criteria contained in Appendix B or insert one of the following combinations, as appropriate:

- a) If the subject is not listed in the NOTAM Code (Doc 8400), insert "XX" as the second and third letters (e.g. QXXAK);
- b) If the subject is not listed in Appendix B, the allocation of qualifiers "Traffic", "Purpose" and "Scope" must be based on operational experience and orientated to similar subjects contained in the NSC;
- c) If the condition of the subject is not listed in the NOTAM Code (Doc 8400) or in the NOTAM Selection Criteria (Doc 8126), insert "XX" as the fourth and fifth letters (e.g. QFAXX);
- d) When a NOTAM containing operationally significant information is issued in accordance with Appendix 4 and Chapter 6 and when it is used to announce the existence of AIRAC AIP Amendments or Supplements, insert "TT" as the fourth and fifth letters of the NOTAM Code;

- e) When a NOTAM is issued containing a checklist of valid NOTAM, insert “KKKK” as the second, third, fourth and fifth letters; and

E = En-route
W = Nav warning
K = NOTAM is a checklist

- f) One of the following fourth and fifth letters of the NOTAM Code must be used in NOTAM cancellations:

AK : RESUMED NORMAL OPERATION
AL : OPERATIVE (OR RE-OPERATIVE)
SUBJECT TO PREVIOUSLY
PUBLISHED LIMITATIONS/
CONDITIONS
AO : OPERATIONAL
CC : COMPLETED
CN : CANCELLED
HV : WORK COMPLETED
XX : PLAIN LANGUAGE

3) TRAFFIC

I = IFR
V = VFR
K = NOTAM is a checklist

Note.— Depending on the NOTAM subject and content, the qualifier field TRAFFIC may contain combined qualifiers. Guidance concerning the combination of TRAFFIC qualifiers with subject and conditions in accordance with the NOTAM Selection Criteria is contained in Appendix B.

4) PURPOSE

N = NOTAM selected for the immediate attention of aircraft operators
B = NOTAM selected for PIB entry
O = NOTAM concerning flight operations
M = Miscellaneous NOTAM; not subject for a briefing, but it is available on request
K = NOTAM is a checklist.

Note.— Depending on the NOTAM subject and content, the qualifier field PURPOSE may contain the following qualifiers: K, B, BO, NBO or M. Guidance concerning the combination of PURPOSE qualifiers with subject and conditions in accordance with the NOTAM Selection Criteria is contained in Appendix B.

5) SCOPE

A = Aerodrome

Note.— Depending on the NOTAM subject and content, the qualifier field SCOPE may contain combined qualifiers. Guidance concerning the combination of SCOPE qualifiers with subject and conditions in accordance with the NOTAM Selection Criteria is contained in Appendix B. If the subject is qualified AE, the aerodrome location indicator must be reported in Item A).

6) and 7) LOWER/UPPER

LOWER and UPPER limits shall only be expressed in flight levels (FL) and shall express the actual vertical limits of the area of influence without the addition of buffers. In the case of navigation warnings and airspace restrictions, values entered shall be consistent with those provided under Items F) and G). If the subject does not contain specific height information, insert “000” for LOWER and “999” for UPPER as default values.

8) COORDINATES, RADIUS

The latitude and longitude accurate to one minute, as well as a three-digit distance figure giving the radius of influence in NM (e.g. 4700N01140E043). Coordinates present approximate centre of circle whose radius encompasses the whole area of influence (e.g. Coordinates of the aerodrome reference point for NOTAM with Scope A). If the NOTAM affects the entire FIR/UIR or more than one FIR/UIR, the default value “999” is used for radius.

4. Item A)

Insert the location indicator as contained in Doc 7910 — *Location Indicators* of the aerodrome or FIR in which the facility, airspace, or condition being reported on is located.

Only one aerodrome may be indicated. If more than one aerodrome is involved, separate NOTAM must be issued. More than one FIR/UIR may be indicated when appropriate. The location indicator of the FIR or UIR to be included is that of the area control centre (ACC) or flight information centre (FIC) providing air traffic services within the FIR or UIR.

Example:

“A) LOWW” identifies the aerodrome Wien/Schwechat, whereas “A) LOVV” identifies Wien FIR (LOVV is the location indicator of Wien ACC/FIC).

The number of FIR in Item A) is restricted to 7 by the length of an AFTN line. If more than 7 FIR are affected, the Publishing NOF or responsible non-governmental agency may use a unique and unambiguous location indicator that serves the purpose of publication of NOTAM information related to more than 7 FIRs (e.g. UUUU). If no such unique location indicator exists, additional NOTAM must be published as required.

If information concerns GNSS, insert the appropriate ICAO location indicator allocated for a GNSS element or the common location indicator allocated for all elements of GNSS (except GBAS).

Note.— In the case of GNSS, the location indicator may be used when identifying a GNSS element outage (e.g. KNMH for a GPS satellite outage).

If there is no available ICAO location indicator, use the ICAO nationality letter as given in Doc 7910, Part 2, plus XX and followed up in Item E) by the name, in plain language. When an ICAO location indicator is not available, it is imperative that Item E) be completed in order to identify the location/facility/service concerned since some indicators already exist where extensive use is made of the letter “X” (e.g. “DXXX” for Lomé/Tokoin). Failure to complete Item E) could therefore result in unnecessary queries. By the same token, lack of an entry in Item E) would confirm the validity of the location indicator used.

5. Item B)

Item B) must contain the beginning of the occurrence or activity or, in the case of a facility/service which becomes unusable, the date-time at which the NOTAM is filed.

For date-time group use a ten-figure group, giving year, month, day, hours and minutes in UTC (e.g. B) 0310241230, meaning 24 October 2003 at 1230 UTC). Abbreviations such as “WIE” or “WEF” must not be used. The start of a day shall be indicated by “0000”.

This entry is the date-time at which the NOTAMN comes into force. In the cases of NOTAMR and NOTAMC, the date-time group is the actual date and time of the NOTAM origination. In order to avoid possible misinterpretation about further changes or existence of multiple NOTAM with the same subject at the same time, no future cancellation or replacement is issued. The start of a day shall be indicated by “0000”.

6. Item C)

Item C) must contain the end of the occurrence or activity.

With the exception of NOTAMC, a date-time group (a ten-figure group giving year, month, day, hours and minutes in UTC) indicating duration of information shall be used unless the information is of a permanent nature in which case the abbreviation “PERM” is inserted instead.

If the information on timing is uncertain, the approximate duration shall be indicated using a date-time group followed by the abbreviation “EST” (e.g. C) 0310250600 EST). Any NOTAM which includes an “EST” must be cancelled or replaced before the date-time specified in Item C).

Abbreviations such as “UFN” must not be used. The end of a day shall be indicated by “2359” (i.e. do not use “2400”).

Item C) must contain “PERM” solely for NOTAM information that will be incorporated in the AIP. These NOTAM are cancelled.

7. Item D)

Item D) must contain the specified schedule or period(s) during which an occurrence takes place or a hazard exists. This item is optional and need be completed only as and when required.

If the hazard, status of operation or condition of facilities being reported on will be active in accordance with a specific time and date schedule between the dates-times indicated in Items B) and C), insert such information under Item D). If Item D) exceeds 200 characters, consideration shall be given to providing such information in a separate, consecutive NOTAM.

Example:

When, between 19 April 2003 0730 UTC and 20 April 2003 1500 UTC, a hazard will exist on 19 and 20 April between 0730 and 1500 UTC only, Items B), C) and D) should be completed as follows:

B) 0304190730 C) 0304201500
D) APR 19 AND 20 0730-1500

8. Item E)

Item E), also called NOTAM text, must contain the information on the hazard, status of operation or condition of the facilities reported on.

When NOTAM is selected for international distribution, English text shall be included for those parts expressed in plain language.

The text in Item E) should be kept as short as possible, containing all the essential information needed for the safe conduct of the flight, and should be ready for inclusion in PIB. In this connection, it should be pointed out that it is the responsibility of the AIS to issue the NOTAM from information it receives from the relevant “sources” (other technical departments, etc.). Changing the text (not the substance) of the message to fit in the NOTAM Format is the responsibility of AIS and is usually done in coordination with the relevant source. Furthermore, the sources providing AIS/NOF with the information should be instructed to keep the message as short as possible and to restrict the information to be included in the NOTAM to the bare essentials.

The lateral limits of an area published in AIP or AIP SUP are not to be repeated in Item E); the name of that area is referred to instead.

If lateral limits of an area are not published in AIP or AIP SUP, the coordinates must be expressed in accordance with the following to ensure readability:

- a) The points defining lateral limits of an irregular shape area must be enumerated in clockwise order separated by a hyphen “-”. The last point on the list must be the same as the first point.
- b) A circular shape area is defined by the word “RADIUS” followed by the value of the radius and its abbreviated unit of measurement

followed by the words “CENTRE” followed by coordinates of the centre of the circle.

- c) In Item E) latitude is presented as DDMM[SS.s]H where DD denotes degrees; MM denotes minutes; SS denotes seconds; s denotes tenths of seconds; and H denotes hemisphere, N for North or S for South.
- d) In Item E) longitude is presented as DDDMM[SS.s]H where DDD denotes degrees; MM denotes minutes; SS denotes seconds; s denotes tenths of seconds; and H denotes hemisphere, W for West or E for East.
- e) The resolution used for coordinates must conform with the aeronautical data quality requirements listed in Appendix 7 of Annex 15, e.g. tenth of a minute must not be used.

An e-mail address is inserted in Item E) with the @ symbol replaced by the string “(A)”.

For NOTAMC, a subject reference and status message should be included to enable accurate plausibility checks.

Example:

E) RWY 25R LLZ U/S

9. Items F) and G)

These items are normally applicable to navigation warnings or airspace restrictions, but can be used for any other applicable subjects, and are usually part of the PIB entry. Insert both lower and upper limits of activities or restrictions, clearly indicating the same reference datum and unit of measurement in both fields. The use of both metres and feet is discouraged as this may lead to confusion. The value and the unit of measurement (M or FT) must be consecutive without a blank. The reference indication (AGL, AMSL) must follow the unit of measurement and be separated by a blank character only. The abbreviation GND or SFC must be used in Item F) to designate ground and surface respectively. The abbreviation UNL must be used in Item G) to designate unlimited.

In the case of Airspace Organization (NOTAM related to structure of ATS Routes, TMA, CTR, ATZ, etc.), the specified “Lower/Upper” values must correspond to the

vertical limits of the airspace concerned. The use of default values 000/999 must be avoided whenever possible.

Lower limit: Item F) may show the lower limit as SFC (surface), GND (ground level), an altitude in metres or feet above mean sea level (e.g. “2000M AMSL” or “6500FT AMSL”), a height above ground (e.g. “1000M AGL”) or a flight level (e.g. “FL100”). The abbreviation “000” must not be used.

Upper limit: Item G) may show the upper limit as an altitude either in metres or feet above mean sea level (e.g. “5000M AMSL or “16500FT AMSL”), a height

above the ground (e.g. “6000M AGL” or “19700FT AGL), a flight level (e.g. “FL200”) or as “UNL” (unlimited) if applicable. The abbreviation “999” must not be used.

Example:

F) GND G) 30000FT AMSL

Meaning:

From ground level up to an altitude of 30 000 ft above mean sea level.

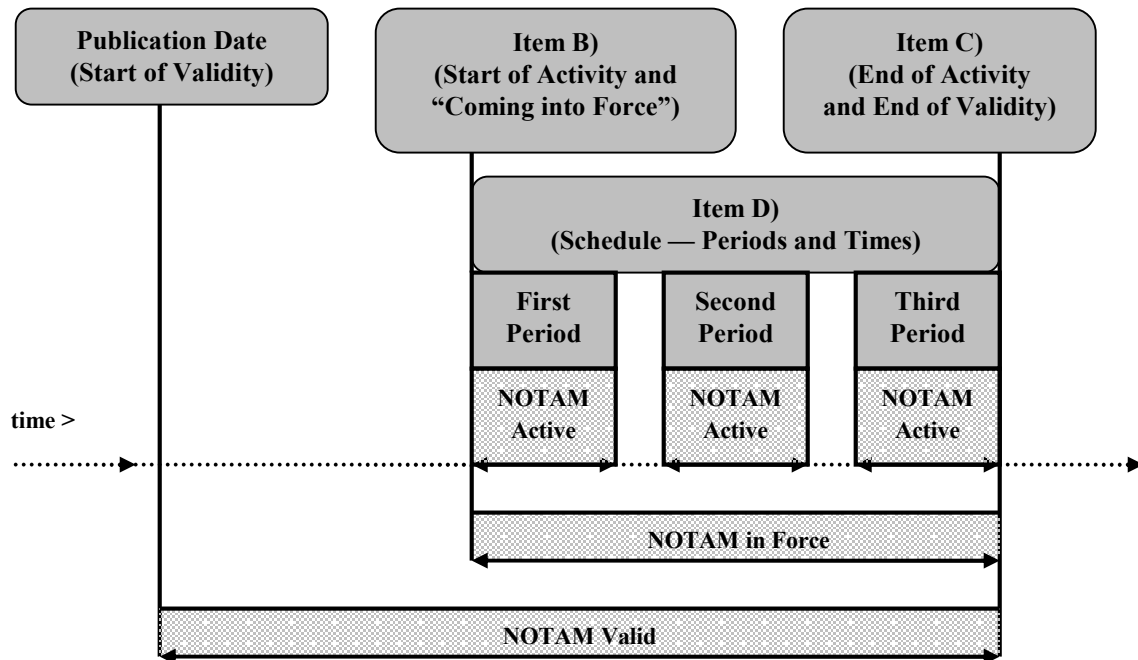


Figure 6-A-2. NOTAM date-times

2. EXAMPLES OF NOTAM USING THE NOTAM FORMAT

2.1 Examples of NOTAM using the NOTAM Format are given below. These are examples only and should not be considered as having any operational value.

- a) At Paris/Orly from the 1st day of April 2003 at 0000 UTC until the 1st day of April 2003 at 0600 UTC, the distance measuring equipment will be unserviceable.

NOTAMN

Q) LFFF/QNDAS/IV/BO/AE/000/999/
4843N00221E250

A) LFPO B) 0304010000 C) 0304010600
E) DME U/S)

- b) At New York/La Guardia the VHF omnidirectional radio range on 116.9 MHz will be out of service until approximately the 13th day of November 2003 at 0900 UTC.

NOTAMN

Q) KZWY/QNVAS/IV/BO/AE/000/999/
4047N07352W250

A) KLGA B) 0311020615 C) 0311130900 EST
E) 116.9 MHZ VOR U/S)

- c) At Beograd/Beograd the non-directional beacon on 243 kHz will be permanently withdrawn from service on 1 May 2003 at 0600 UTC. Add reference to AIP.

NOTAMN

Q) LYBA/QNBAW/IV/BO/AE/000/999/
4449N02019E300

A) LYBE B) 0305010600 C) PERM
E) 243 KHZ NDB WITHDRAWN REF. AIP LYBE
AD 2.19)

- d) In the Montreal FIR gun firing will take place on the 21st day of February 2003 from 0800 hours UTC until 1100 hours UTC within an area of 10 NM around the location 45° 37' North 74° 00' West from the surface up to an altitude of 6 100 metres MSL.

NOTAMN

Q) CZUL/QWMLW/IV/BO/W/000/200/
4537N07400W010

A) CZUL B) 0302210800 C) 0302211100
E) GUN FIRING WILL TAKE PLACE RADIUS
10 NM CENTRE 4537N07400W
F) SFC G) 6100M AMSL)

- e) If a danger area EGDXX located at 5510N00520W with a radius of 50 NM (and affecting two FIR) were to be activated up to 40 000 ft MSL on 3, 7, 12, 21, 24 and 28 April 2003, daily from 0730 to 1500 UTC and up to 30 000 ft MSL on 19 and 20 April 2003 daily from 0730 to 1500 UTC, two NOTAM would be required, as follows:

(A0623/03 NOTAMN

Q) EGXX/QRDCA/IV/NBO/W/000/400/
5510N00520W050

A) EGTG EGPX B) 0304030730 C) 0304281500
D) APR 03 07 12 21 24 AND 28 0730 TO 1500
E) DANGER AREA DXX IS ACTIVE
F) GND G) 40000FT AMSL)

(A0624/03 NOTAMN

Q) EGXX/QRDCA/IV/NBO/W/000/300/
5510N00520W050

A) EGTG EGPX B) 0304190730 C) 0304201500
D) APR 19 AND 20 0730 TO 1500
E) DANGER AREA DXX IS ACTIVE
F) GND G) 30000FT AMSL)

- f) At Frankfurt International on the 27th day of November 2003, basic GNSS is unavailable for NPA from 1723 UTC until 1754 UTC, SBAS is unavailable for APV from 1731 until 1746 UTC and GBAS is unavailable from 1735 until 1746 UTC.

(B0116/03 NOTAMN

Q) EDDF/QGAAU/I/BO/A/000/999/5204N01137E250

A) EDDF B) 0311271723 C) 0311271754
E) BASIC GNSS UNAVBL FOR NPA 0311271723
TIL 0311271754 SBAS UNAVBL FOR APV
0311271731 TIL 0311271748 GBAS UNAVBL
0311271735 TIL 0311271746)

- g) SBAS is unavailable for all APV operations in an area of 250 NM radius around Paris Charles de Gaulle as of December 14th, 2003 at 2135 hours UTC until December 15th, 2003 at 2135 hours UTC (estimated).

(A2500/03 NOTAMN

Q) LFFF/QGWAU/I/BO/A/000/999/4901N00232E250

A) LFPG B) 0312142135 C) 0312152135 EST

E) SBAS UNAVBL FOR APV)

- h) Basic GNSS, SBAS and GBAS will be unavailable for all en-route and aerodrome operations in an area of 460 km (250 NM) radius around Paris Charles de Gaulle as of October 16th, 2003 at 1815 hours UTC until 2315 hours UTC.

(A3546/03 NOTAMN

Q) LFFF/QGWAU/I/BO/AE/000/999/

4901N00232E250

A) LFPG B) 0310161815 C) 0310162315

E) BASIC GNSS UNAVBL SBAS UNAVBL GBAS UNAVBL)

2.2 Examples of completed NOTAM Formats are given in Figures 6-A-3 and 6-A-4, and the meanings of the NOTAM messages are included below together with the associated examples of AFS messages.

Meaning of NOTAM in Figure 6-A-3

NOTAM series A number 0068 replacing NOTAM series A number 0062 of the current year. Vagar, Faroe Islands, aerodrome closed for maintenance on the runway from 2300 hours UTC on the 8th day of May 2003 to approximately 0100 UTC on the 9th day of May 2003.

AFS message

GG EHZZNNLX EBZZNNLX EDZZNINX
EKZZNIDX
021432 BGSFYNYX

(A0068/03 NOTAMR A0062/03

Q) BIRD/QFALC/IV/NBO/A/000/999/

6204N07163W010

A) EKVG B) 0305082300 C) 0305090100 EST

E) AD CLSD FOR MAINT

Meaning of NOTAM in Figure 6-A-4

In the Tokyo FIR, hot air balloon flying will take place in an area bounded by the following points 43 00 N 140 40 E, 42 40 N 140 30 E, 42 36 N 140 30 E and 42 36 N 140 54 E. The flying will be held during VMC only up to an altitude of 2 000 m above mean sea level during the following days and times:

In 2003, May 31 19h30 – June 1 09h30, June 6 19h30 – June 7 09h30, June 7 19h30 – June 8 09h30, June 13 19h30 – June 14 09h30, June 14 19h30 – June 15 09h30, June 20 19h30 – June 21 09h30, June 21 19h30 – June 22 09h30, June 27 19h30 – June 28 09h30, June 28 19h30 – June 29 09h30.

Or in a more concise form:

In 2003, on the following days: May 31, June 6, 7, 13, 14, 20, 21, 27 and 28 at periods starting at 19h30 and ending at 9h30 the next day.

AFS message

GG CYZZNBBX KDZZNOKX LFZZNNMX

NTTYNYX WMKKYNYX

301203 RJAAANYX

(A0703/03 NOTAMN

Q) RJTG/QWLLW/V/M/W/000/065/

4248N14042E100

A) RJTG B) 0305311930 C) 0306290930

D) MAY 31 JUN 06 07 13 14 20 21 27 28 1930-0930

E) HOT AIR BALLOON FLT IN AREA 4300N14040E

– 4240N14030E – 4236N14030E – 4236N14054E –

4300N14040E VMC ONLY

F) SFC G) 2000M AMSL)

Priority Indicator	GG →																																										
Address	EHZZNNLX EBZZNNLX EDZZNINX																																										
EKZZNIDX . . . (etc.)																																											
	<<≡																																										
Date and time of filing	021432 →																																										
Originator's Indicator	BGSFYNYX <<≡ (
Message Series, Number and Identifier																																											
NOTAM containing new information	(series and number/year) NOTAMN A0068/03																																										
NOTAM replacing a previous NOTAM	(series and number/year) NOTAMR A0062/03 (series and number/year of NOTAM to be replaced)																																										
NOTAM cancelling a previous NOTAM	(series and number/year) NOTAMC (series and number/year of NOTAM to be cancelled) <<≡																																										
Qualifiers																																											
	FIR	NOTAM Code	Traffic	Purpose	Scope	Lower Limit	Upper Limit	Coordinates, Radius																																			
Q)	B	I	R	D	/	Q	F	A	L	C	/	I	V	/	N	B	O	/	A	/	0	0	0	/	9	9	9	/	6	2	0	4	N	0	7	1	6	3	W	0	1	0	<<≡
Identification of ICAO location indicator in which the facility, airspace or condition reported on is located															A) EKVG →																												
Period of Validity																																											
From (date-time group)				B)	0	3	0	5	0	8	2	3	0	0	→																												
To (PERM or date-time group)				C)	0	3	0	5	0	9	0	1	0	0	EST* PERM*	<<≡																											
Time Schedule (if applicable)				D)												→																											
																	<<≡																										
Text of NOTAM; Plain-Language Entry (using ICAO Abbreviations)																																											
E) AD CLSD FOR MAINT																																											
<<≡																																											
Lower Limit	F) →																																										
Upper Limit	G)) <<≡																																										
Signature																																											

*Delete as appropriate

Figure 6-A-3. Example 1 of a completed NOTAM Format

Priority Indicator	GG →										
Address	CYZZNBBX KDZZNOKX LFZZNNMX										
NTTOYNYX WMKKYNYX . . . (etc.)											
<<≡											
Date and time of filing	301203 →										
Originator's Indicator	RJAAYNYX <<≡ (
Message Series, Number and Identifier											
NOTAM containing new information	A0703/03 NOTAMN (series and number/year)										
NOTAM replacing a previous NOTAM	NOTAMR (series and number/year) (series and number/year of NOTAM to be replaced)										
NOTAM cancelling a previous NOTAM	NOTAMC (series and number/year) (series and number/year of NOTAM to be cancelled) <<≡										
Qualifiers											
	FIR	NOTAM Code	Traffic	Purpose	Scope	Lower Limit	Upper Limit	Coordinates, Radius			
Q)	RJTG	QWLLW	V	M	W	000	065	4248N	14042E	100	<<≡
Identification of ICAO location indicator in which the facility, airspace or condition reported on is located								A) RJTG →			
Period of Validity											
From (date-time group)	B)	0	3	0	5	3	1	1	9	3	0 →
To (PERM or date-time group)	C)	0	3	0	6	2	9	0	9	3	0 EST* PERM* <<≡
Time Schedule (if applicable)	D)	MAY 31 JUN 06 07 13 14 20 21 27 28 1930-0930									<<≡
Text of NOTAM; Plain-Language Entry (using ICAO Abbreviations)											
E) HOT AIR BALLOON FLT IN AREA 4300N14040E - 4240N14030E - 4236N14030E - 4236N14054E - 4300N14040E VMC ONLY											
<<≡											
Lower Limit	F) SFC →										
Upper Limit	G) 2000M AMSL) <<≡										
Signature											

*Delete as appropriate

Figure 6-A-4. Example 2 of a completed NOTAM Format

3. TRIGGER NOTAM

3.1 Trigger NOTAM are issued in the situations described in Figure 4-2 of Chapter 4 in accordance with the same instructions as for any other NOTAM with the following exceptions:

3.1.1 *Qualifiers (Item Q)*

NOTAM CODE

The second and third letters (subject) must be selected from the PANS-ABC (Doc 8400) and must never be the letters XX. If there is no suitable selection, use FA for aerodromes and AF for FIR. In the case of multiple subjects for the same aerodrome or FIR, the second and third letters must be selected according to the subject of highest operational importance.

The fourth and fifth letters (condition) must always contain the letters TT. This exclusive TT condition must be used in trigger NOTAM regardless of the subject of NOTAM code listed in the PANS-ABC.

Note.— Condition “TT” may be used to retrieve specific trigger NOTAM from any issuing NOF and can also be used to include/exclude trigger NOTAM in/from PIB at a specific time before their effective date.

PURPOSE

As trigger NOTAM are issued relative only to information of operational significance, the qualifier PURPOSE must relate to BO.

SCOPE and TRAFFIC

In the case of multiple subjects for the same aerodrome or FIR, and even though only the subject of highest operational significance is listed in the NOTAM code, the qualifiers SCOPE and TRAFFIC must be selected to cover all subjects.

3.1.2 *Items B) and C)*

Trigger NOTAM must contain in Item B) the AIRAC effective date-time of the AIRAC AIP Amendment or AIRAC AIP Supplement. As trigger NOTAM must

remain valid for a period of 14 days after the effective date of an amendment or supplement, Item C) must contain the AIRAC effective date-time plus 14 days.

Example:

B) 0603161000 (*AIRAC effective date-time*)

C) 0603301000 (*AIRAC effective date-time + 14 days*)

When the information published by an AIRAC AIP Supplement has a duration that is shorter than 14 days, Item C) of a trigger NOTAM must have the date and time when the information published in the AIP Supplement will expire.

A trigger NOTAM is generally self-cancelling at the date-time specified in Item C). In a case where the information contained in an AIRAC AIP Supplement becomes invalid before this date, the trigger NOTAM may be cancelled or replaced if the AIRAC AIP Supplement remains valid for a short period.

3.1.3 *Item E)*

The text in Item E) should not exceed 300 characters and must always start with the words “TRIGGER NOTAM” (followed, only in the case of an AIP Amendment, by the abbreviation PERM), a reference number of the published AIRAC AIP Amendment or AIRAC AIP Supplement concerned, the effective and end date of validity (or the effective date only in the case of PERM) and a brief description of its content.

Note.— PERM or end of validity is inserted in Item E) to stress that the information published by the referenced AIP Amendment or AIP Supplement is of a permanent nature or of planned duration respectively while the trigger NOTAM contains an end date as per Item C).

3.2 Trigger NOTAM relative to AIRAC AIP Amendments

3.2.1 AIRAC AIP Amendments represent permanent operational changes to the AIP on a predefined AIRAC effective date. The text in Item E) must include an indication that permanent changes are taking place.

Example:

Q) LOVV/QARTT/I/BO/E/245/999/4720N01330E999
A) LOVV
B) 0603161000 (*AIRAC effective date-time*)
C) 0603301000 (*AIRAC effective date-time + 14 days*)
E) TRIGGER NOTAM — PERM AIRAC AIP AMDT
3/06 WEF 16MAR2006 IMPLEMENTATION OF
NEW ATS ROUTE UA15

3.3 Trigger NOTAM relative to AIRAC AIP Supplements

3.3.1 AIRAC AIP Supplements represent temporary operational changes of long duration (three months or longer) or operational changes of short duration containing extensive text or graphics.

Example:

A0034/06 NOTAMN
Q) ESMQ/QFATT/IV/BO/A/000/999/
5739N01217E005
A) ESGG B) 0604131000 C) 0604271000
E) TRIGGER NOTAM — AIRAC AIP SUP 14/06 WEF
13APR2006 TIL 25MAY2006 USE OF AERODROME
RESTRICTED DUE TO MAJOR CONSTRUCTION
WORK.

3.3.2 Generally, changes to a given AIRAC AIP Supplement are announced by replacing it by another AIRAC AIP Supplement and the normal rules for trigger NOTAM apply. However changes of short duration, of short notice or of temporary nature, such as short-notice notification of an earlier end of validity or notification of the activation of information described in the AIP SUP, are announced by normal NOTAM referring to the AIP SUP.

Examples:

A0115/08 NOTAMN
Q) ESAA/QMDCH/IV/BO/A/000/999/
5739N01217E005
A) ESGG B) 0804120637 C) 0805112359
E) RWY 03/21 TORA 2800M. REF AIRAC AIP SUP
14/08.

A0127/08 NOTAMN
Q) ESAA/QFALT/IV/BO/A/000/999/5739N01217E005
A) ESGG B) 0804230000 C) 0805112359
E) REF AIRAC AIP SUP 14/08 WORK COMPLETED.
RESTRICTIONS ON THE USE OF AERODROME NO
LONGER IN FORCE.

4. CHECKLIST OF NOTAM

Checklists are issued as NOTAMR and are completed as follows:

Qualifiers in Item Q)

FIR

- the FIR indicator; or
- the State indicator letter(s) followed by XX, or XXX if there is more than one FIR in a State; or
- the State indicator of the issuing NOF followed by XX, or XXX if publishing for FIR in different States.

NOTAM CODE

- the dedicated NOTAM Code QK K K K K.

TRAFFIC, PURPOSE and SCOPE

- K = NOTAM is a checklist.

Note.— The NOTAM code QK K K K K and the qualifier K for TRAFFIC, PURPOSE and SCOPE are used to allow selective retrieval of the checklist. This also prevents the checklist from appearing in the pre-flight information bulletin (PIB).

LOWER/UPPER

- default values 000/999.

COORDINATES, RADIUS

- the geographical coordinates of the centre of the FIR(s) listed in Item A), followed by the default radius 999.

Item A)

Item A) must contain the FIR or a list of all the FIRs to which the checklist relates.

Item B)

The current checklist NOTAMR replaces the previous checklist with immediate effect. Consequently Item B) is the issuing time of the checklist and supersedes the previous one immediately.

Item C)

The checklist is issued with an estimated validity of not more than one month. Item C) is indicated as one month after the date of issue, followed by EST.

Item E)

Item E) is divided into two sections:

First section:

- begins with the keyword “CHECKLIST”;
- contains the list of the valid NOTAM numbers, which have been promulgated in the same series as the checklist, in a format suitable for automatic and manual processing;

Note 1.— The list must not contain the number of the replaced NOTAM checklist or its own NOTAM checklist number.

Note 2.— Each NOTAM number (always four digits) is separated by a blank with no other punctuation mark.

- groups NOTAM by year, using the word “YEAR” and the “=” sign, followed by the four-digit year of publication without blanks (e.g. YEAR=2002).

Note.— Each indicator of a different year must start on a new line.

Second section:

- begins with the words “LATEST PUBLICATIONS”;

- contains the list of the latest publications, in a format suitable for manual processing only.

Note 1.— Whenever the numbering of AIP Amendments takes place on a yearly basis, a reference to the year of publication must be added to the number.

Note 2.— Checklists must contain the numbers of the NOTAM incorporated in a normal AIP Amendment or AIP Supplement until the time that these NOTAM are cancelled by the publication of a NOTAMC.

Example:

```
(A0037/03 NOTAMR A0016/03
Q) LIXX/QK KKK/K/K/K/000/999/4323N01205E999
A) LIBB LIMM LIRR  B) 0303310900
C) 0304300900EST
E) CHECKLIST
YEAR=2001 0101 0232 0244 0288 0345 0511
YEAR=2002 0101 0104 0347 0601 0653 0674 0687
YEAR=2003 0004 0006 0009 0010 0011 0012 0014
0018 0025 0027 0029 0034 0035
LATEST PUBLICATIONS
AIRAC AIP AMDT 004/03 EFFECTIVE 20 APR 00
AIP SUP 001/03
AIP AMDT 413
AIC A001/03
```

Differentiating between IFR or VFR publications (volumes) can be stated, if so required:

```
AIP SUP VFR 001/03
AIP SUP IFR 002/03
AIRAC AIP AMDT IFR 004/03 EFFECTIVE 20 APR 03
```

Erroneous checklists

When the publication of a checklist contains an error, the following procedures will apply:

Error: A valid NOTAM number was not inserted in the checklist.

- a) if the omitted NOTAM is in force, a NOTAMR must be published replacing the omitted NOTAM with a new number;

- b) if the omitted NOTAM is not yet in force, a NOTAMC and NOTAMN shall be issued.

Error: An invalid NOTAM number was erroneously inserted in the checklist.

- A revised checklist (NOTAMR replacing the erroneous checklist) must be published without the invalid NOTAM number (no correct version).

This procedure will allow for consistency of the data in the databases of all recipients, whatever the method used to process checklists.

SNOWTAM FORMAT

(COM heading)	(PRIORITY INDICATOR)		(ADDRESSES)										<<≡	
	(DATE AND TIME OF FILING)					(ORIGINATOR'S INDICATOR)					<<≡			
(Abbreviated heading)	(SWAA* SERIAL NUMBER)					(LOCATION INDICATOR)			DATE-TIME OF OBSERVATION					(OPTIONAL GROUP)
	S	W	*	*										<<≡ (

SNOWTAM	(Serial number)	→
(AERODROME LOCATION INDICATOR)		A) →
(DATE-TIME OF OBSERVATION (<i>Time of completion of measurement in UTC</i>))		B) →
(RUNWAY DESIGNATORS)		C) →
(CLEARED RUNWAY LENGTH, IF LESS THAN PUBLISHED LENGTH (<i>m</i>))		D) →
(CLEARED RUNWAY WIDTH, IF LESS THAN PUBLISHED WIDTH (<i>m</i> ; if offset left or right of centre line add "L" or "R"))		E) →
(DEPOSITS OVER TOTAL RUNWAY LENGTH <i>(Observed on each third of the runway, starting from threshold having the lower runway designation number)</i> NIL — CLEAR AND DRY 1 — DAMP 2 — WET or water patches 3 — RIME OR FROST COVERED (<i>depth normally less than 1 mm</i>) 4 — DRY SNOW 5 — WET SNOW 6 — SLUSH 7 — ICE 8 — COMPACTED OR ROLLED SNOW 9 — FROZEN RUTS OR RIDGES)		F) →
(MEAN DEPTH (<i>mm</i>) FOR EACH THIRD OF TOTAL RUNWAY LENGTH)		G) →
(FRICTION MEASUREMENTS ON EACH THIRD OF RUNWAY AND FRICTION MEASURING DEVICE MEASURED OR CALCULATED COEFFICIENT or ESTIMATED SURFACE FRICTION 0.40 and above GOOD — 5 0.39 to 0.36 MEDIUM/GOOD — 4 0.35 to 0.30 MEDIUM — 3 0.29 to 0.26 MEDIUM/POOR — 2 0.25 and below POOR — 1 9 — unreliable UNRELIABLE — 9 <i>(When quoting a measured coefficient, use the observed two figures, followed by the abbreviation of the friction measuring device used. When quoting an estimate, use single digit)</i>		H) →
(CRITICAL SNOWBANKS (<i>If present, insert height (cm)/distance from the edge of runway (m) followed by "L", "R" or "LR" if applicable</i>))		J) →
(RUNWAY LIGHTS (<i>If obscured, insert "YES" followed by "L", "R" or both "LR" if applicable</i>))		K) →
(FURTHER CLEARANCE (<i>If planned, insert length (m)/width (m) to be cleared or if to full dimensions, insert "TOTAL"</i>))		L) →
(FURTHER CLEARANCE EXPECTED TO BE COMPLETED BY . . . (UTC))		M) →
(TAXIWAY (<i>If no appropriate taxiway is available, insert "NO"</i>))		N) →
(TAXIWAY SNOWBANKS (<i>If more than 60 cm, insert "YES" followed by distance apart, m</i>))		P) →
(APRON (<i>If unusable insert "NO"</i>))		R) →
(NEXT PLANNED OBSERVATION/MEASUREMENT IS FOR) (<i>month/day/hour in UTC</i>)		S) →
(PLAIN-LANGUAGE REMARKS (<i>Including contaminant coverage and other operationally significant information, e.g. sanding, de-icing</i>))		T)) <<≡
NOTES: 1. *Enter ICAO nationality letters as given in ICAO Doc 7910, Part 2. 2. Information on other runways, repeat from C to P. 3. Words in brackets () not to be transmitted.		

SIGNATURE OF ORIGINATOR (*not for transmission*)

Figure 6-A-5 SNOWTAM Format

INSTRUCTIONS FOR THE COMPLETION OF THE SNOWTAM FORMAT

1. General

- a) When reporting on two or three runways, repeat Items C to P inclusive.
- b) Items, together with their indicator, must be dropped completely where no information is to be included.
- c) Metric units must be used and the unit of measurement not reported.
- d) The maximum validity of SNOWTAM is 24 hours. New SNOWTAM must be issued whenever there is a significant change in conditions. The following changes relating to runway conditions are considered as significant:
 - 1) a change in the coefficient of friction of about 0.05;
 - 2) changes in depth of deposit greater than the following: 20 mm for dry snow, 10 mm for wet snow, 3 mm for slush;
 - 3) a change in the available length or width of a runway of 10 per cent or more;
 - 4) any change in the type of deposit or extent of coverage which requires reclassification in Items F or T of the SNOWTAM;
 - 5) when critical snow banks exist on one or both sides of the runway, any change in the height or distance from centre line;
 - 6) any change in the conspicuity of runway lighting caused by obscuring of the lights;
 - 7) any other conditions known to be significant according to experience or local circumstances.
- e) The abbreviated heading “TTAAiiii CCCC MMYYGggg (BBB)” is included to facilitate the automatic processing of SNOWTAM messages in computer data banks. The explanation of these symbols is:

TT = data designator for SNOWTAM = SW;

AA = geographical designator for States, e.g. LF = FRANCE, EG = United Kingdom (see *Location Indicators* (Doc 7910), Part 2, Index to Nationality Letters for Location Indicators);

iiii = SNOWTAM serial number in a four-figure group;

CCCC = four-letter location indicator of the aerodrome to which the SNOWTAM refers (see *Location Indicators* (Doc 7910));

MMYYGGgg = date-time of observation/measurement, whereby:

MM = month, e.g. January = 01,

December = 12

YY = day of the month

GGgg = time in hours (GG) and minutes (gg) UTC;

(BBB) = optional group for:

Correction to SNOWTAM message previously disseminated with the same serial number = COR.

Note.— Brackets in (BBB) are used to indicate that this group is optional.

Example:

Abbreviated heading of SNOWTAM No. 149 from Zurich, measurement/observation of 7 November at 0620 UTC:

SWLS0149 LSZH 11070620

2. Item A

Aerodrome location indicator (four-letter location indicator).

3. Item B

Eight-figure date-time group — giving time of observation as month, day, hour and minute in UTC; this item must always be completed.

4. Item C

Lower runway designator number.

5. Item D

Cleared runway length in metres, if less than published length (see Item T on reporting on part of runway not cleared).

6. Item E

Cleared runway width in metres, if less than published width; if offset left or right of centre line, add “L” or “R”, as viewed from the threshold having the lower runway designation number.

7. Item F

Deposit over total runway length as explained in SNOWTAM Format. Suitable combinations of these numbers may be used to indicate varying conditions over runway segments. If more than one deposit is present on the same portion of the runway, they should be reported in sequence from the top to the bottom. Drifts, depths of deposit appreciably greater than the average values or other significant characteristics of the deposits may be reported under Item T in plain language.

Note.— Definitions for the various types of snow are given at the end of this Appendix.

8. Item G

Mean depth in millimetres deposit for each third of total runway length, or “XX” if not measurable or operationally not significant; the assessment to be made to an accuracy of 20 mm for dry snow, 10 mm for wet snow and 3 mm for slush.

9. Item H

Friction measurements on each third of the runway and friction measuring device. Measured or calculated

coefficient (two digits) or, if not available, estimated surface friction (single digit) in the order from the threshold having the lower runway designation number. Insert a code 9 when surface conditions or available friction measuring device do not permit a reliable surface friction measurement to be made. Use the following abbreviations to indicate the type of friction measuring device used:

BRD	Brakemeter-Dynamometer
GRT	Grip tester
MUM	Mumeter
RFT	Runway friction tester
SFH	Surface friction tester (high-pressure tire)
SFL	Surface friction tester (low-pressure tire)
SKH	Skiddometer (high-pressure tire)
SKL	Skiddometer (low-pressure tire)
TAP	Tapley meter

If other equipment is used, specify in plain language.

10. Item J

Critical snowbanks. If present insert height in centimetres and distance from edge of runway in metres, followed by left (“L”) or right (“R”) side or both sides (“LR”), as viewed from the threshold having the lower runway designation number.

11. Item K

If runway lights are obscured, insert “YES” followed by “L”, “R” or both “LR”, as viewed from the threshold having the lower runway designation number.

12. Item L

When further clearance will be undertaken, enter length and width of runway or “TOTAL” if runway will be cleared to full dimensions.

13. Item M

Enter the anticipated time of completion in UTC.

14. Item N

The code for Item F may be used to describe taxiway conditions; enter “NO” if no taxiways serving the associated runway are available.

15. Item P

If applicable, enter “YES” followed by the lateral distance in metres.

16. Item R

The code for Item F may be used to describe apron conditions; enter “NO” if the apron is unusable.

17. Item S

Enter the anticipated time of next observation/measurement in UTC.

18. Item T

Describe in plain language any operationally significant information but always report on length of uncleared runway (Item D) and extent of runway contamination (Item F) for each third of the runway (if appropriate) in accordance with the following scale:

Runway contamination — 10% — if less than 10% of runway contaminated
Runway contamination — 25% — if 11–25% of runway contaminated
Runway contamination — 50% — if 26–50% of runway contaminated
Runway contamination — 100% — if 51–100% of runway contaminated.

EXAMPLE OF COMPLETED SNOWTAM FORMAT

GG EHAMZQZX EDDFZQZX EKCHZQZX
070645 LSZHYNXX
SWLS0149 LSZH 11070620
(SNOWTAM 0149
A) LSZH B) 11070620 C) 02 D) ... P)
C) 09 D) ... P)
C) 12 D) ... P)
R) NO S) 11070920 T) DEICING)

Definitions of the various types of snow

Slush. Water-saturated snow which with a heel-and-toe slap-down motion against the ground will be displaced with a splatter; specific gravity: 0.5 up to 0.8.

Note.— Combinations of ice, snow and/or standing water may, especially when rain, rain and snow, or snow is falling, produce substances with specific gravities in excess of 0.8. These substances, due to their high water/ice content, will have a transparent rather than a cloudy appearance and, at the higher specific gravities, will be readily distinguishable from slush.

Snow (on the ground)

- a) *Dry snow.* Snow which can be blown if loose or, if compacted by hand, will fall apart again upon release; specific gravity: up to but not including 0.35.
- b) *Wet snow.* Snow which, if compacted by hand, will stick together and tend to or form a snowball; specific gravity: 0.35 up to but not including 0.5.
- c) *Compacted snow.* Snow which has been compressed into a solid mass that resists further compression and will hold together or break up into lumps if picked up; specific gravity: 0.5 and over.

ASHTAM FORMAT

(COM heading)	(PRIORITY INDICATOR)	(ADDRESSEE INDICATOR(S)) ¹																		
	(DATE AND TIME OF FILING)						(ORIGINATOR'S INDICATOR)													
(Abbreviated heading)	(VA* ² SERIAL NUMBER)						(LOCATION INDICATOR)				DATE-TIME OF ISSUANCE						(OPTIONAL GROUP)			
	V	A	* ²	* ²																

ASHTAM	(SERIAL NUMBER)
(FLIGHT INFORMATION REGION AFFECTED)	A)
(DATE-TIME (UTC) OF ERUPTION)	B)
(VOLCANO NAME AND NUMBER)	C)
(VOLCANO LATITUDE/LONGITUDE OR VOLCANO RADIAL AND DISTANCE FROM NAVAID)	D)
(VOLCANO LEVEL OF ALERT COLOUR CODE, INCLUDING ANY PRIOR LEVEL OF ALERT COLOUR CODE) ³	E)
(EXISTENCE AND HORIZONTAL/VERTICAL EXTENT OF VOLCANIC ASH CLOUD) ⁴	F)
(DIRECTION OF MOVEMENT OF ASH CLOUD) ⁴	G)
(AIR ROUTES OR PORTIONS OF AIR ROUTES AND FLIGHT LEVELS AFFECTED)	H)
(CLOSURE OF AIRSPACE AND/OR AIR ROUTES OR PORTIONS OF AIR ROUTES, AND ALTERNATIVE AIR ROUTES AVAILABLE)	I)
(SOURCE OF INFORMATION)	J)
(PLAIN-LANGUAGE REMARKS)	K)
NOTES: 1. See <i>Handbook on the International Airways Volcano Watch (IAVW)</i> (Doc 9766). 2. *Enter ICAO nationality letter as given in ICAO Doc 7910, Part 2. 3. See paragraph 3.5 below. 4. Advice on the existence, extent and movement of volcanic ash cloud G) and H) may be obtained from the Volcanic Ash Advisory Centre(s) responsible for the FIR concerned. 5. Item titles in brackets () not to be transmitted.	

SIGNATURE OF ORIGINATOR (*not for transmission*)**Figure 6-A-6 ASHTAM Format**

INSTRUCTIONS FOR THE COMPLETION OF THE ASHTAM FORMAT

1. General

1.1 The ASHTAM provides information on the status of activity of a volcano when a change in its activity is, or is expected to be, of operational significance. This information is provided using the volcano level of alert colour code given in 3.5 below.

1.2 In the event of a volcanic eruption producing ash cloud of operational significance, the ASHTAM also provides information on the location, extent and movement of the ash cloud and the air routes and flight levels affected.

1.3 Issuance of an ASHTAM giving information on a volcanic eruption, in accordance with section 3 below, should not be delayed until complete information A) to K) is available but should be issued immediately following receipt of notification that an eruption has occurred or is expected to occur, or a change in the status of activity of a volcano of operational significance has occurred or is expected to occur, or an ash cloud is reported. In the case of an expected eruption, and hence no ash cloud evident at that time, items A) to E) should be completed and items F) to I) indicated as “not applicable”. Similarly, if a volcanic ash cloud is reported, e.g. by special air-report, but the source volcano is not known at that time, the ASHTAM should be issued initially with items A) to E) indicated as “unknown” and items F) to K) completed, as necessary, based on the special air-report, pending receipt of further information. In other circumstances, if information for a specific field A) to K) is not available indicate “NIL”.

1.4 The maximum period of validity of ASHTAM is 24 hours. New ASHTAM must be issued whenever there is a change in the level of alert.

2. Abbreviated heading

Following the usual AFTN communications header, the abbreviated heading “TT AAiiii CCCC MMYGGgg (BBB)” is included to facilitate the automatic processing of ASHTAM messages in computer data banks. The explanation of these symbols is:

TT = data designator for ASHTAM = VA;

AA = geographical designator for States, e.g. NZ = New Zealand (see *Location Indicators* (Doc 7910), Part 2, Index to Nationality Letters for Location Indicators);

iiii = ASHTAM serial number in a four-figure group;

CCCC = four-letter location indicator of the flight information region concerned (see *Location Indicators* (Doc 7910), Part 5, Addresses of Centres in Charge of FIR/UIR);

MMYYGGgg = date-time of report, whereby:

MM = month, e.g. January = 01, December = 12

YY = day of the month

GGgg = time in hours (GG) and minutes (gg) UTC;

(BBB) = Optional group for correction to an ASHTAM message previously disseminated with the same serial number = COR.

Note.— Brackets in (BBB) are used to indicate that this group is optional.

Example:

Abbreviated heading of ASHTAM for Auckland Oceanic FIR, report on 7 November at 0620 UTC:

VANZ0001 NZZO 11070620

3. Content of ASHTAM

3.1 *Item A* — Flight information region affected, plain-language equivalent of the location indicator given in the abbreviated heading, in this example “Auckland Oceanic FIR”.

3.2 *Item B* — Date and time (UTC) of first eruption.

3.3 *Item C* — Name of volcano, and number of volcano as listed in the ICAO *Manual on Volcanic Ash, Radioactive Material and Toxic Chemical Clouds* (Doc 9691), Appendix F, and on the World Map of

Volcanoes and Principal Aeronautical Features. If an ASHTAM has to be created for a volcano not listed in ICAO Doc 9691, the “existence” of the volcano must be promulgated by NOTAM with Item C) containing the abbreviation PERM.

3.4 *Item D* — Latitude/Longitude of the volcano in whole degrees or radial and distance of volcano from NAVAID (as listed in the ICAO *Manual on Volcanic Ash, Radioactive Material and Toxic Chemical Clouds* (Doc 9691), Appendix F, and on the World Map of Volcanoes and Principal Aeronautical Features).

3.5 *Item E* — Colour code for level of alert indicating volcanic activity, including any previous level of alert colour code as shown in Figure 6-A-7.

3.6 *Item F* — If volcanic ash cloud of operational significance is reported, indicate the horizontal extent and base/top of the ash cloud using latitude/longitude (in whole degrees) and altitudes in thousands of metres (feet) and/or radial and distance from source volcano. Information initially may be based only on special air-report, but subsequent information may be more detailed

based on advice from the responsible meteorological watch office and/or volcanic ash advisory centre.

3.7 *Item G* — Indicate forecast direction of movement of the ash cloud at selected levels based on advice from the responsible meteorological watch office and/or volcanic ash advisory centre.

3.8 *Item H* — Indicate air routes and portions of air routes and flight levels affected, or expected to become affected.

3.9 *Item I* — Indicate closure of airspace, air routes or portions of air routes, and availability of alternative routes.

3.10 *Item J* — Source of the information, e.g. “special air-report” or “vulcanological agency”, etc. The source of information should always be indicated, whether an eruption has actually occurred or ash cloud reported, or not.

3.11 *Item K* — Include in plain language any operationally significant information additional to the foregoing.

Level of alert colour code	Status of activity of volcano
RED ALERT	Volcanic eruption in progress. Ash plume/cloud reported above FL 250. <i>or</i> Volcano dangerous, eruption likely, with ash plume/cloud expected to rise above FL 250.
ORANGE ALERT	Volcanic eruption in progress but ash plume/cloud not reaching nor expected to reach FL 250. <i>or</i> Volcano dangerous, eruption likely but ash plume/cloud not expected to reach FL 250.
YELLOW ALERT	Volcano known to be active from time to time and volcanic activity has recently increased significantly, volcano not currently considered dangerous but caution should be exercised. <i>or</i> (After an eruption, i.e. change in alert to yellow from red or orange.) Volcanic activity has decreased significantly, volcano not currently considered dangerous but caution should be exercised.
GREEN ALERT	Volcanic activity considered to have ceased and volcano reverted to its normal state.

Note.— The colour code for the level of alert indicating the status of activity of the volcano and any change from a previous status of activity should be provided to the area control centre by the responsible vulcanological agency in the State concerned, e.g. “RED ALERT FOLLOWING YELLOW” OR “GREEN ALERT FOLLOWING ORANGE”.

Figure 6-A-7. Colour code for level of alert

Appendix B to Chapter 6

NOTAM Selection Criteria

1. THE NOTAM CODE

1.1 The NOTAM Code is a comprehensive description of information contained in NOTAM. NOTAM Code groups contain a total of five letters, the first letter of which is always Q. The second and third letters identify the subject, and the fourth and fifth letters denote the status of the subject reported on. These codes and their significations are found in the *Procedures for Air Navigation Services — Abbreviations and Codes* (PANS-ABC, Doc 8400). The most commonly used NOTAM Code groups and their respective relation to the qualifiers Traffic, Purpose and Scope are presented in the NOTAM Selection Criteria tables below.

1.2 The following fourth and fifth letters should not be used and another code should be found instead:

AC, AF, AX, CO, CP, HH, HJ, HK, HQ, HT, HU, LA, LD, LE, LK.

1.3 The following fourth and fifth letters are not listed in the NSC because they correspond to conditions normally communicated by means of SNOWTAM:

HA, HB, HC, HD, HE, HF, HI, HL, HN, HO, HP, HS, HY, HZ.

2. QUALIFIERS TRAFFIC, PURPOSE AND SCOPE

2.1 Traffic

I = IFR
V = VFR
K = NOTAM is a checklist.

Depending on the NOTAM subject and content, the field for the qualifier Traffic may contain the qualifiers K, I,

V or IV. An indication of IV in the NSC means that either I or V or IV may be used depending on NOTAM content.

2.2 Purpose

N = NOTAM selected for immediate attention of aircraft operators
B = NOTAM selected for PIB entry
O = NOTAM concerning flight operations
M = Miscellaneous NOTAM; not subject for a briefing, but available on request
K = NOTAM is a checklist.

Depending on the NOTAM subject and content, the field for the qualifier Purpose may contain the qualifiers K, M, B, BO or NBO.

2.3 Scope

A = Aerodrome
E = En-route
W = Nav Warning
K = NOTAM is a checklist.

Depending on the NOTAM subject and content, the field for the qualifier Scope may contain combined qualifiers. For instance, radio aids may be both “A” and “E”, serving a dual purpose as en-route and aerodrome aids.

3. Trigger NOTAM

The fourth and fifth letters of the NOTAM Code of a trigger NOTAM must always be “TT”. The second and third letters are selected from Doc 8400 and must never be “XX”. The qualifier Purpose is always BO since it relates to AIRAC publication.

INDEX OF CATEGORIES OF THE NOTAM CODE BASED ON THE SECOND LETTER

AGA — LIGHTING FACILITIES (L)	6-B-3
AGA — MOVEMENT AND LANDING AREA (M)	6-B-13
AGA — FACILITIES AND SERVICES (F)	6-B-24
CNS — COMMUNICATIONS AND SURVEILLANCE FACILITIES (C)	6-B-34
CNS — INSTRUMENT AND MICROWAVE LANDING SYSTEMS (I)	6-B-40
CNS — GNSS SERVICES (G)	6-B-47
CNS — TERMINAL AND EN-ROUTE NAVIGATION FACILITIES (N)	6-B-48
ATM — AIRSPACE ORGANIZATION (A)	6-B-56
ATM — AIR TRAFFIC AND VOLMET SERVICES (S)	6-B-64
ATM — AIR TRAFFIC PROCEDURES (P)	6-B-71
NAVIGATION WARNINGS — AIRSPACE RESTRICTIONS (R)	6-B-78
NAVIGATION WARNINGS — WARNINGS (W)	6-B-82
OTHER INFORMATION (O)	6-B-87

CATEGORY: AGA — LIGHTING FACILITIES (L)

SECOND AND THIRD LETTERS — SIGNIFICATION Approach lighting system (specify runway and type)	CODE LA	Scope: A					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x	x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available on request	AR	x	x	x	x	x	
Unserviceable	AS	x	x	x	x	x	
Completely withdrawn	AW	x	x	x	x	x	
Completed	CC						
Cancelled	CN						
Downgraded to . . . (specify)	CG	x	x	x	x	x	
Installed	CS	x	x	x	x	x	
On test, do not use	CT	x	x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION Aerodrome beacon	CODE LB	Scope: A					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS		x				x
Completely withdrawn	AW		x				x
Completed	CC						
Cancelled	CN						
Installed	CS		x				x
Trigger	TT		x		x	x	
Plain language	XX						

CATEGORY: AGA — LIGHTING FACILITIES (L)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Runway centre line lights (specify runway)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x			x	x	
Completely withdrawn	AW	x			x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x			x	x	
Trigger	TT	x			x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Landing direction indicator lights		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS		x		x		
Completely withdrawn	AW		x		x		
Completed	CC						
Cancelled	CN						
Installed	CS		x		x		
Plain language	XX						

CATEGORY: AGA — LIGHTING FACILITIES (L)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: A			
Runway edge lights (specify runway)		LE		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x			x	x	
Completely withdrawn	AW	x			x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x			x	x	
Trigger	TT	x			x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: A			
Sequenced flashing lights (specify runway)		LF		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x			x	x	
Completely withdrawn	AW	x			x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x			x	x	
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: AGA — LIGHTING FACILITIES (L)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Pilot-controlled lighting		CODE	Traffic		Purpose		
		LG	I	V	N	B	O
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE						
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x		x		
Completely withdrawn	AW	x	x		x		
Completed	CC						
Changed	CH	x	x		x		
Cancelled	CN						
Installed	CS	x	x		x		
On test, do not use	CT	x	x		x		
Limited to . . . (specify)	LT	x	x		x		
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
High intensity runway lights (specify runway)		CODE	Traffic		Purpose		
		LH	I	V	N	B	O
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE						
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x			x	x	
Completely withdrawn	AW	x			x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x			x	x	
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: AGA — LIGHTING FACILITIES (L)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: A			
Runway end identifier lights (specify runway)		LI		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x		x	x	
Completely withdrawn	AW	x	x		x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: A			
Runway alignment indicator lights (specify runway)		LJ		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x		x	x	
Completely withdrawn	AW	x	x		x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: AGA — LIGHTING FACILITIES (L)

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: A					
		Traffic		Purpose			
Category II components of approach lighting system (specify runway)	LK						
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x			x	x	
Completely withdrawn	AW	x			x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x			x	x	
Trigger	TT	x			x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: A					
		Traffic		Purpose			
Low intensity runway lights (specify runway)	LL						
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x			x	x	
Completely withdrawn	AW	x			x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x			x	x	
Trigger	TT	x			x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: A					
		Traffic		Purpose			
Medium intensity runway lights (specify runway)	LM						
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x			x	x	
Completely withdrawn	AW	x			x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x			x	x	
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: AGA — LIGHTING FACILITIES (L)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE	Scope: A					
Precision approach path indicator (PAPI) (specify runway)		LP	Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)		AH	x	x		x	x	
Resumed normal operation		AK						
Operative (or re-operative subject to previously published limitations/conditions)		AL						
Operational		AO						
Available on request		AR	x	x		x	x	
Unserviceable		AS	x	x		x	x	
Completely withdrawn		AW	x	x		x	x	
Completed		CC						
Cancelled		CN						
Installed		CS	x	x		x	x	
On test, do not use		CT	x	x		x	x	
Trigger		TT	x	x		x	x	
Plain language		XX						

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: A					
		Traffic		Purpose			
All landing area lighting facilities	LR						
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x	x	x	x	
Completely withdrawn	AW	x	x	x	x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x	x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: AGA — LIGHTING FACILITIES (L)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Stopway lights (specify runway)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x			x		
Completely withdrawn	AW	x			x		
Completed	CC						
Cancelled	CN						
Installed	CS	x			x		
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Threshold lights (specify runway)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x		x	x	
Completely withdrawn	AW	x	x		x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: AGA — LIGHTING FACILITIES (L)

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: A					
		Traffic		Purpose			
Helicopter approach path indicator	LU	I	V	N	B	O	M
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x	x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available on request	AR	x	x	x	x	x	
Unserviceable	AS	x	x	x	x	x	
Completely withdrawn	AW	x	x	x	x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x	x	x	x	x	
On test, do not use	CT	x	x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: A					
		Traffic		Purpose			
Visual approach slope indicator system (specify type and runway)	LV	I	V	N	B	O	M
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x		x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available on request	AR	x	x		x	x	
Unserviceable	AS	x	x		x	x	
Completely withdrawn	AW	x	x		x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x	x		x	x	
On test, do not use	CT	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: AGA — LIGHTING FACILITIES (L)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Heliport lighting	CODE LW	Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available on request	AR	x	x		x		
Unserviceable	AS	x	x		x		
Completely withdrawn	AW	x	x		x		
Completed	CC						
Cancelled	CN						
Installed	CS	x	x		x		
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Taxiway centre line lights (specify taxiway)	CODE LX	Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x				x
Completely withdrawn	AW	x	x				x
Completed	CC						
Cancelled	CN						
Installed	CS	x	x				x
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Taxiway edge lights (specify taxiway)	CODE LY	Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x				x
Completely withdrawn	AW	x	x				x
Completed	CC						
Cancelled	CN						
Installed	CS	x	x				x
Plain language	XX						

CATEGORY: AGA — LIGHTING FACILITIES (L)

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: A					
		Traffic		Purpose			
Runway touchdown zone lights (specify runway)	LZ	I	V	N	B	O	M
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x			x	x	
Completely withdrawn	AW	x			x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x			x	x	
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: AGA — MOVEMENT AND LANDING AREA (M)

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: A					
		Traffic		Purpose			
Movement area	MA	I	V	N	B	O	M
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Cancelled	CN						
Work completed	HV						
Work in progress	HW	x	x		x		
Closed	LC	x	x	x	x	x	
Unserviceable for aircraft heavier than . . . (specify)	LH	x	x	x	x	x	
Aircraft restricted to runways and taxiways	LR	x	x	x	x	x	
Limited to . . . (specify)	LT	x	x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: AGA — MOVEMENT AND LANDING AREA (M)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Bearing strength (specify part of landing area or movement area)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Changed	CH	x	x		x	x	
Cancelled	CN						
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Clearway (specify runway)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Cancelled	CN						
Work completed	HV						
Work in progress	HW	x					x
Operating but caution advised due to . . . (specify)	LX	x					x
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Declared distances (specify runway)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Changed	CH	x	x	x	x	x	
Cancelled	CN						
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: AGA — MOVEMENT AND LANDING AREA (M)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Taxiing guidance system		MG		Scope: A			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x		x		
Completely withdrawn	AW	x	x		x		
Completed	CC						
Cancelled	CN						
Installed	CS	x	x		x		
Limited to . . . (specify)	LT	x	x		x		
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Runway arresting gear (specify runway)		MH		Scope: A			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x	x	x	x	
Completely withdrawn	AW	x	x	x	x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x	x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: AGA — MOVEMENT AND LANDING AREA (M)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Parking area		MK		Scope: A			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available, prior permission required	AP	x	x		x	x	
Available on request	AR	x	x		x	x	
Cancelled	CN						
Work completed	HV						
Work in progress	HW	x	x				x
Closed	LC	x	x		x	x	
Unserviceable for aircraft heavier than . . . (specify)	LH	x	x		x	x	
Limited to . . . (specify)	LT	x	x				x
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Daylight markings (specify threshold, centre line, etc.)		MM		Scope: A			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completely withdrawn	AW		x				x
Completed	CC						
Cancelled	CN						
Installed	CS		x				x
Plain language	XX						

CATEGORY: AGA — MOVEMENT AND LANDING AREA (M)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: A			
Apron		MN		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Cancelled	CN						
Installed	CS	x	x		x		
Work completed	HV						
Work in progress	HW	x	x		x	x	
Closed	LC	x	x	x	x	x	
Unserviceable for aircraft heavier than . . . (specify)	LH	x	x	x	x	x	
Aircraft restricted to runways and taxiways	LR	x	x	x	x	x	
Limited to . . . (specify)	LT	x	x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: A			
Stopbar (specify taxiway)		MO		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Available for daylight operation	AD	x	x		x		
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Available for night operation	AN	x	x		x		
Operational	AO						
Available on request	AR	x	x		x		
Completely withdrawn	AW	x	x		x		
Completed	CC						
Cancelled	CN						
Realigned	CL	x	x		x		
Installed	CS	x	x		x		
Work completed	HV						
Work in progress	HW	x	x		x		
Closed	LC	x	x		x		
Unserviceable for aircraft heavier than . . . (specify)	LH	x	x		x		
Usable for length of . . . and width of . . . (specify)	LL	x	x		x		
Closed to all night operations	LN	x	x		x		
Limited to . . . (specify)	LT	x	x		x		
Plain language	XX						

CATEGORY: AGA — MOVEMENT AND LANDING AREA (M)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE	Scope: A					
Aircraft stands (specify)			MP	Traffic		Purpose		
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE	I	V	N	B	O	M
Resumed normal operation		AK						
Operative (or re-operative subject to previously published limitations/conditions)		AL						
Operational		AO						
Available, prior permission required		AP	x	x		x	x	
Available on request		AR	x	x		x	x	
Completely withdrawn		AW	x	x				x
Completed		CC						
Cancelled		CN						
Installed		CS	x	x				x
Work completed		HV						
Work in progress		HW	x	x				x
Closed		LC	x	x		x	x	
Unserviceable for aircraft heavier than . . . (specify)		LH	x	x		x	x	
Limited to . . . (specify)		LT	x	x				x
Trigger		TT	x	x		x	x	
Plain language		XX						

CATEGORY: AGA — MOVEMENT AND LANDING AREA (M)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: A				
Runway (specify runway)	MR	Traffic		Purpose				
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M	
Available for daylight operation	AD	x	x	x	x	x		
Hours of service are now . . . (specify)	AH	x	x	x	x	x		
Resumed normal operation	AK							
Operative (or re-operative subject to previously published limitations/conditions)	AL							
Military operations only	AM	x	x	x	x	x		
Available for night operation	AN	x	x	x	x	x		
Operational	AO							
Available, prior permission required	AP	x	x	x	x	x		
Available on request	AR	x	x	x	x	x		
Completely withdrawn	AW	x	x	x	x	x		
Completed	CC							
Realigned	CL	x	x	x	x	x		
Displaced	CM	x	x	x	x	x		
Cancelled	CN							
Installed	CS	x	x	x	x	x		
Work completed	HV							
Work in progress	HW	x	x	x	x	x		
Concentration of birds	HX	x	x	x	x	x		
Reserved for aircraft based therein	LB	x	x	x	x	x		
Closed	LC	x	x	x	x	x		
Unserviceable for aircraft heavier than . . . (specify)	LH	x	x	x	x	x		
Closed to IFR operations	LI	x		x	x	x		
Usable for length of . . . and width of . . . (specify)	LL	x	x	x	x	x		
Closed to all night operations	LN	x	x	x	x	x		
Limited to . . . (specify)	LT	x	x	x	x	x		
Closed to VFR operations	LV		x	x	x	x		
Trigger	TT	x	x		x	x		
Plain language	XX							

CATEGORY: AGA — MOVEMENT AND LANDING AREA (M)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Stopway (specify runway)		MS		Scope: A			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completely withdrawn	AW	x	x		x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x	x		x	x	
Work completed	HV						
Work in progress	HW	x	x		x	x	
Closed	LC	x	x		x	x	
Unserviceable for aircraft heavier than . . . (specify)	LH	x	x		x	x	
Limited to . . . (specify)	LT	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Threshold (specify runway)		MT		Scope: A			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Completed	CC						
Displaced	CM	x	x	x	x	x	
Cancelled	CN						
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: AGA — MOVEMENT AND LANDING AREA (M)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: A			
Runway turning bay (specify runway)		MU		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completely withdrawn	AW	x	x		x		
Completed	CC						
Cancelled	CN						
Installed	CS	x	x		x		
Work completed	HV						
Work in progress	HW	x	x		x		
Closed	LC	x	x		x		
Limited to . . . (specify)	LT	x	x		x		
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: A			
Strip/shoulder (specify runway)		MW		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Cancelled	CN						
Work completed	HV						
Work in progress	HW	x	x				x
Closed	LC	x	x				x
Limited to . . . (specify)	LT	x	x				x
Plain language	XX						

CATEGORY: AGA — MOVEMENT AND LANDING AREA (M)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE	Scope: A					
Taxiway (specify)			MX	Traffic		Purpose		
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE	I	V	N	B	O	M
Available for daylight operation		AD	x	x				x
Resumed normal operation		AK						
Operative (or re-operative subject to previously published limitations/conditions)		AL						
Available for night operation		AN	x	x				x
Operational		AO						
Available on request		AR	x	x				x
Completely withdrawn		AW	x	x				x
Completed		CC						
Realigned		CL	x	x				x
Cancelled		CN						
Installed		CS	x	x				x
Work completed		HV						
Work in progress		HW	x	x				x
Closed		LC	x	x				x
Unserviceable for aircraft heavier than . . . (specify)		LH	x	x				x
Usable for length of . . . and width of . . . (specify)		LL	x	x				x
Closed to all night operations		LN	x	x				x
Limited to . . . (specify)		LT	x	x				x
Plain language		XX						

CATEGORY: AGA — MOVEMENT AND LANDING AREA (M)

SECOND AND THIRD LETTERS — SIGNIFICATION Rapid exit taxiway (specify)	CODE MY	Scope: A					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Available for daylight operation	AD	x	x	x	x	x	
Hours of service are now . . . (specify)	AH	x	x	x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Military operations only	AM	x	x	x	x	x	
Available for night operation	AN	x	x	x	x	x	
Operational	AO						
Available, prior permission required	AP	x	x	x	x	x	
Available on request	AR	x	x	x	x	x	
Completely withdrawn	AW	x	x	x	x	x	
Completed	CC						
Realigned	CL	x	x	x	x	x	
Displaced	CM	x	x	x	x	x	
Cancelled	CN						
Installed	CS	x	x	x	x	x	
Work completed	HV						
Work in progress	HW	x	x	x	x	x	
Concentration of birds	HX	x	x	x	x	x	
Reserved for aircraft based therein	LB	x	x	x	x	x	
Closed	LC	x	x	x	x	x	
Unserviceable for aircraft heavier than . . . (specify)	LH	x	x	x	x	x	
Closed to IFR operations	LI	x		x	x	x	
Usable for length of . . . and width of . . . (specify)	LL	x	x	x	x	x	
Closed to all night operations	LN	x	x	x	x	x	
Limited to . . . (specify)	LT	x	x	x	x	x	
Closed to VFR operations	LV		x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: AGA — FACILITIES AND SERVICES (F)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE	Scope: A				
Aerodrome	FA	Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Available for daylight operation	AD	x	x	x	x	x	
Hours of service are now . . . (specify)	AH	x	x	x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Military operations only	AM	x	x	x	x	x	
Available for night operation	AN	x	x	x	x	x	
Operational	AO						
Available, prior permission required	AP	x	x	x	x	x	
Available on request	AR	x	x	x	x	x	
Completely withdrawn	AW	x	x	x	x	x	
Completed	CC						
Identification or radio call sign changed to . . . (specify)	CI	x	x	x	x	x	
Cancelled	CN						
Installed	CS	x	x	x	x	x	
Grass cutting	HG	x	x				x
Work completed	HV						
Work in progress	HW	x	x	x	x	x	
Concentration of birds	HX	x	x	x	x	x	
Reserved for aircraft based therein	LB	x	x	x	x	x	
Closed	LC	x	x	x	x	x	
Unserviceable for aircraft heavier than . . . (specify)	LH	x	x	x	x	x	
Closed to IFR operations	LI	x		x	x	x	
Closed to all night operations	LN	x	x	x	x	x	
Aircraft restricted to runways and taxiways	LR	x	x		x	x	
Limited to . . . (specify)	LT	x	x	x	x	x	
Closed to VFR operations	LV		x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: AGA — FACILITIES AND SERVICES (F)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE	Scope: A					
Friction measuring device (specify type)		FB	Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE	I	V	N	B	O	M
Resumed normal operation		AK						
Operative (or re-operative subject to previously published limitations/conditions)		AL						
Operational		AO						
Unserviceable		AS	x	x				x
Completely withdrawn		AW	x	x				x
Completed		CC						
Cancelled		CN						
Installed		CS	x	x				x
Plain language		XX						

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: A					
		Traffic		Purpose			
Ceiling measurement equipment	FC						
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x				x
Completely withdrawn	AW	x	x				x
Completed	CC						
Cancelled	CN						
Installed	CS	x	x				x
Plain language	XX						

CATEGORY: AGA — FACILITIES AND SERVICES (F)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Docking system (specify AGNIS, BOLDS, etc.)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available, prior permission required	AP	x					x
Available on request	AR	x					x
Unserviceable	AS	x					x
Completely withdrawn	AW	x					x
Completed	CC						
Cancelled	CN						
Installed	CS	x					x
Limited to . . . (specify)	LT	x					x
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Oxygen (specify type)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x	x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available, prior permission required	AP	x	x	x	x	x	
Available on request	AR	x	x	x	x	x	
Not available (specify reason if appropriate)	AU	x	x	x	x	x	
Completely withdrawn	AW	x	x	x	x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x	x	x	x	x	
Reserved for aircraft based therein	LB	x	x	x	x	x	
Limited to . . . (specify)	LT	x	x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: AGA — FACILITIES AND SERVICES (F)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Firefighting and rescue		CODE	Traffic		Purpose		
		FF	I	V	N	B	O
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE						
Hours of service are now . . . (specify)	AH	x	x	x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available on request	AR	x	x	x	x	x	
Unserviceable	AS	x	x	x	x	x	
Completely withdrawn	AW	x	x	x	x	x	
Completed	CC						
Downgraded to . . . (specify)	CG	x	x	x	x	x	
Changed	CH	x	x	x	x	x	
Cancelled	CN						
Installed	CS	x	x	x	x	x	
Limited to . . . (specify)	LT	x	x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Ground movement control		CODE	Traffic		Purpose		
		FG	I	V	N	B	O
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE						
Available for daylight operation	AD	x	x				x
Hours of service are now . . . (specify)	AH	x	x				x
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Available for night operation	AN	x	x				x
Operational	AO						
Available on request	AR	x	x				x
Unserviceable	AS	x	x				x
Completely withdrawn	AW	x	x				x
Completed	CC						
Identification or radio call sign changed to . . . (specify)	CI	x	x				x
Cancelled	CN						
Installed	CS	x	x				x
Plain language	XX						

CATEGORY: AGA — FACILITIES AND SERVICES (F)

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: A					
		Traffic		Purpose			
Helicopter alighting area/platform	FH						
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Available for daylight operation	AD	x	x		x		
Hours of service are now . . . (specify)	AH	x	x		x		
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Military operations only	AM	x	x		x		
Available for night operation	AN	x	x		x		
Operational	AO						
Available, prior permission required	AP	x	x		x		
Available on request	AR	x	x		x		
Completely withdrawn	AW	x	x		x		
Completed	CC						
Identification or radio call sign changed to . . . (specify)	CI	x	x		x		
Displaced	CM	x	x		x		
Cancelled	CN						
Installed	CS	x	x		x		
Work completed	HV						
Work in progress	HW	x	x		x		
Concentration of birds	HX	x	x		x		
Reserved for aircraft based therein	LB	x	x		x		
Closed	LC	x	x		x		
Closed to IFR operations	LI	x			x		
Closed to all night operations	LN	x	x		x		
Limited to . . . (specify)	LT	x	x		x		
Closed to VFR operations	LV		x		x		
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: AGA — FACILITIES AND SERVICES (F)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Aircraft de-icing (specify)		CODE	Traffic		Purpose		
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x	x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available, prior permission required	AP	x	x	x	x	x	
Available on request	AR	x	x	x	x	x	
Not available (specify reason if appropriate)	AU	x	x	x	x	x	
Completely withdrawn	AW	x	x	x	x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x	x	x	x	x	
Reserved for aircraft based therein	LB	x	x	x	x	x	
Limited to . . . (specify)	LT	x	x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Oils (specify type)		CODE	Traffic		Purpose		
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x	x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available, prior permission required	AP	x	x	x	x	x	
Available on request	AR	x	x	x	x	x	
Not available (specify reason if appropriate)	AU	x	x	x	x	x	
Completely withdrawn	AW	x	x	x	x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x	x	x	x	x	
Reserved for aircraft based therein	LB	x	x	x	x	x	
Limited to . . . (specify)	LT	x	x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: AGA — FACILITIES AND SERVICES (F)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Landing direction indicator		FL		Scope: A			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS		x				x
Completely withdrawn	AW		x				x
Completed	CC						
Displaced	CM		x				x
Cancelled	CN						
Installed	CS		x				x
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Meteorological service (specify type)		FM		Scope: A			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x		x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available on request	AR	x	x		x	x	
Not available (specify reason if appropriate)	AU	x	x		x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x	x		x	x	
Closed	LC	x	x		x	x	
Limited to . . . (specify)	LT	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: AGA — FACILITIES AND SERVICES (F)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: A			
Fog dispersal system		FO		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available on request	AR	x					x
Unserviceable	AS	x					x
Completely withdrawn	AW	x					x
Completed	CC						
Cancelled	CN						
Installed	CS	x					x
Trigger	TT	x			x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: A			
Heliport		FP		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Available for daylight operation	AD	x	x		x		
Hours of service are now . . . (specify)	AH	x	x		x		
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Military operations only	AM	x	x		x		
Available for night operation	AN	x	x		x		
Operational	AO						
Available, prior permission required	AP	x	x		x		
Available on request	AR	x	x		x		
Completely withdrawn	AW	x	x		x		
Completed	CC						
Identification or radio call sign changed to . . . (specify)	CI	x	x		x		
Cancelled	CN						
Installed	CS	x	x		x		
Work completed	HV						
Work in progress	HW	x	x		x		
Concentration of birds	HX	x	x		x		
Reserved for aircraft based therein	LB	x	x		x		
Closed	LC	x	x		x		
Closed to IFR operations	LI	x			x		
Closed to all night operations	LN	x	x		x		
Limited to . . . (specify)	LT	x	x		x		
Closed to VFR operations	LV		x		x		
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: AGA — FACILITIES AND SERVICES (F)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Snow removal equipment		FS		Scope: A			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available on request	AR	x	x				x
Unserviceable	AS	x	x				x
Completely withdrawn	AW	x	x				x
Completed	CC						
Cancelled	CN						
Installed	CS	x	x				x
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Transmissometer (specify runway and, where applicable, designator(s) or transmissometer(s))		FT		Scope: A			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x			x		
Completely withdrawn	AW	x			x		
Completed	CC						
Cancelled	CN						
Installed	CS	x			x		
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: AGA — FACILITIES AND SERVICES (F)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Fuel availability		FU		Scope: A			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x	x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available, prior permission required	AP	x	x	x	x	x	
Available on request	AR	x	x	x	x	x	
Not available (specify reason if appropriate)	AU	x	x	x	x	x	
Completely withdrawn	AW	x	x	x	x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x	x	x	x	x	
Reserved for aircraft based therein	LB	x	x	x	x	x	
Limited to . . . (specify)	LT	x	x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Wind direction indicator		FW		Scope: A			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS		x				x
Completely withdrawn	AW		x				x
Completed	CC						
Displaced	CM		x				x
Cancelled	CN						
Installed	CS		x				x
Plain language	XX						

CATEGORY: AGA — FACILITIES AND SERVICES (F)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Customs/immigration		FZ		Scope: A			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x	x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available, prior permission required	AP	x	x	x	x	x	
Available on request	AR	x	x	x	x	x	
Not available (specify reason if appropriate)	AU	x	x	x	x	x	
Completely withdrawn	AW	x	x	x	x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x	x	x	x	x	
Reserved for aircraft based therein	LB	x	x	x	x	x	
Limited to . . . (specify)	LT	x	x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: CNS — COMMUNICATIONS AND SURVEILLANCE FACILITIES (C)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Air/ground facility (specify service and frequency)		CA		Scope: AE			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x		x		
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x		x		
Completely withdrawn	AW	x	x		x		
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x	x		x		
Identification or radio call sign changed to . . . (specify)	CI	x	x		x		
Temporarily replaced by . . . (specify)	CR	x	x		x		
Installed	CS	x	x		x		
Cancelled	CN						
Interference from . . . (specify)	LF	x	x		x		
Subject to interruption	LS	x	x		x		
Limited to . . . (specify)	LT	x	x		x		
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: CNS — COMMUNICATIONS AND SURVEILLANCE FACILITIES (C)

SECOND AND THIRD LETTERS — SIGNIFICATION Automatic dependent surveillance — broadcast (details)	CODE CB	Scope: AE					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x		x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x		x	x	
Completely withdrawn	AW	x	x		x	x	
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x	x		x	x	
Identification or radio call sign changed to . . . (specify)	CI	x	x		x	x	
Cancelled	CN						
Temporarily replaced by . . . (specify)	CR	x	x		x	x	
Installed	CS	x	x		x	x	
Interference from . . . (specify)	LF	x	x		x	x	
Subject to interruption	LS	x	x		x	x	
Limited to . . . (specify)	LT	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION Automatic dependent surveillance — contract (details)	CODE CC	Scope: AE					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x		x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x		x	x	
Completely withdrawn	AW	x	x		x	x	
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x	x		x	x	
Identification or radio call sign changed to . . . (specify)	CI	x	x		x	x	
Cancelled	CN						
Temporarily replaced by . . . (specify)	CR	x	x		x	x	
Installed	CS	x	x		x	x	
Interference from . . . (specify)	LF	x	x		x	x	
Subject to interruption	LS	x	x		x	x	
Limited to . . . (specify)	LT	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: CNS — COMMUNICATIONS AND SURVEILLANCE FACILITIES (C)

SECOND AND THIRD LETTERS — SIGNIFICATION Controller-pilot data link communications (specify application)	CODE CD	Scope: AE					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x		x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x		x	x	
Completely withdrawn	AW	x	x		x	x	
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x	x		x	x	
Identification or radio call sign changed to . . . (specify)	CI	x	x		x	x	
Cancelled	CN						
Temporarily replaced by . . . (specify)	CR	x	x		x	x	
Installed	CS	x	x		x	x	
Interference from . . . (specify)	LF	x	x		x	x	
Subject to interruption	LS	x	x		x	x	
Limited to . . . (specify)	LT	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION En-route surveillance radar	CODE CE	Scope: E					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x			x		
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x			x		
Completely withdrawn	AW	x			x		
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x			x		
Identification or radio call sign changed to . . . (specify)	CI	x			x		
Cancelled	CN						
Temporarily replaced by . . . (specify)	CR	x			x		
Installed	CS	x			x		
On test, do not use	CT	x			x		
Interference from . . . (specify)	LF	x			x		
Subject to interruption	LS	x			x		
Limited to . . . (specify)	LT	x			x		
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: CNS — COMMUNICATIONS AND SURVEILLANCE FACILITIES (C)

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: A					
		Traffic		Purpose			
Ground controlled approach system (GCA)	CG	I	V	N	B	O	M
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x			x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available, prior permission required	AP	x			x	x	
Available on request	AR	x			x	x	
Unserviceable	AS	x			x	x	
Completely withdrawn	AW	x			x	x	
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x			x	x	
Identification or radio call sign changed to . . . (specify)	CI	x			x	x	
Cancelled	CN						
Installed	CS	x			x	x	
On test, do not use	CT	x			x	x	
Limited to . . . (specify)	LT	x			x	x	
Trigger	TT	x			x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: E					
		Traffic		Purpose			
Selective calling system (SELCAL)	CL	I	V	N	B	O	M
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x					x
Completely withdrawn	AW	x					x
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x					x
Identification or radio call sign changed to . . . (specify)	CI	x					x
Cancelled	CN						
Installed	CS	x					x
On test, do not use	CT	x					x
Limited to . . . (specify)	LT	x					x
Plain language	XX						

CATEGORY: CNS — COMMUNICATIONS AND SURVEILLANCE FACILITIES (C)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Surface movement radar	CODE CM	Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x				x
Completely withdrawn	AW	x	x				x
Completed	CC						
Cancelled	CN						
Installed	CS	x	x				x
On test, do not use	CT	x	x				x
Limited to . . . (specify)	LT	x	x				x
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Precision approach radar (PAR) (specify runway)	CODE CP	Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x			x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available, prior permission required	AP	x			x	x	
Available on request	AR	x			x	x	
Unserviceable	AS	x			x	x	
Completely withdrawn	AW	x			x	x	
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x			x	x	
Cancelled	CN						
Identification or radio call sign changed to . . . (specify)	CI	x			x	x	
Installed	CS	x			x	x	
On test, do not use	CT	x			x	x	
Limited to . . . (specify)	LT	x			x	x	
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: CNS — COMMUNICATIONS AND SURVEILLANCE FACILITIES (C)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Surveillance radar element of precision approach radar system (specify wavelength)		CR		Scope: A			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x			x		
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available, prior permission required	AP	x			x		
Available on request	AR	x			x		
Unserviceable	AS	x			x		
Completely withdrawn	AW	x			x		
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x			x		
Cancelled	CN						
Identification or radio call sign changed to . . . (specify)	CI	x			x		
Installed	CS	x			x		
On test, do not use	CT	x			x		
Subject to interruption	LS	x			x		
Limited to . . . (specify)	LT	x			x		
Trigger	TT	x			x		
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Secondary surveillance radar (SSR)		CS		Scope: AE			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x			x		
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x			x		
Completely withdrawn	AW	x			x		
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x			x		
Identification or radio call sign changed to . . . (specify)	CI	x			x		
Cancelled	CN						
Installed	CS	x			x		
On test, do not use	CT	x			x		
Subject to interruption	LS	x			x		
Limited to . . . (specify)	LT	x			x		
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: CNS — COMMUNICATIONS AND SURVEILLANCE FACILITIES (C)

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: AE					
		Traffic		Purpose			
Terminal area surveillance radar (TAR)	CT	I	V	N	B	O	M
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x			x		
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x			x		
Completely withdrawn	AW	x			x		
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x			x		
Identification or radio call sign changed to . . . (specify)	CI	x			x		
Cancelled	CN						
Installed	CS	x			x		
On test, do not use	CT	x			x		
Subject to interruption	LS	x			x		
Limited to . . . (specify)	LT	x			x		
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: CNS — INSTRUMENT AND MICROWAVE LANDING SYSTEMS (I)

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: A					
		Traffic		Purpose			
Instrument landing system (ILS) (specify runway)	IC	I	V	N	B	O	M
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Operating but ground checked only, awaiting flight check	AG	x			x	x	
Hours of service are now . . . (specify)	AH	x		x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x		x	x	x	
Completely withdrawn	AW	x		x	x	x	
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x		x	x	x	
Identification or radio call sign changed to . . . (specify)	CI	x		x	x	x	
Cancelled	CN						
Installed	CS	x		x	x	x	
On test, do not use	CT	x		x	x	x	
Operating without identification	LG	x		x	x	x	
Subject to interruption	LS	x		x	x	x	
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: CNS — INSTRUMENT AND MICROWAVE LANDING SYSTEMS (I)

SECOND AND THIRD LETTERS — SIGNIFICATION DME associated with ILS	CODE ID	Scope: A					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Operating but ground checked only, awaiting flight check	AG	x		x	x	x	
Hours of service are now . . . (specify)	AH	x		x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x		x	x	x	
Completely withdrawn	AW	x		x	x	x	
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x		x	x	x	
Changed	CH	x		x	x	x	
Identification or radio call sign changed to . . . (specify)	CI	x		x	x	x	
Cancelled	CN						
Installed	CS	x		x	x	x	
On test, do not use	CT	x		x	x	x	
Operating without identification	LG	x		x	x	x	
Subject to interruption	LS	x		x	x	x	
Limited to . . . (specify)	LT	x		x	x	x	
Trigger	TT	x			x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION Glide path (ILS) (specify runway)	CODE IG	Scope: A					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Operating but ground checked only, awaiting flight check	AG	x			x	x	
Hours of service are now . . . (specify)	AH	x		x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x		x	x	x	
Completely withdrawn	AW	x		x	x	x	
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x		x	x	x	
Identification or radio call sign changed to . . . (specify)	CI	x		x	x	x	
Cancelled	CN						
Installed	CS	x		x	x	x	
On test, do not use	CT	x		x	x	x	
Operating without identification	LG	x		x	x	x	
Subject to interruption	LS	x		x	x	x	
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: CNS — INSTRUMENT AND MICROWAVE LANDING SYSTEMS (I)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: A					
Inner marker (ILS) (specify runway)		II		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE		I	V	N	B	O	M
Operating but ground checked only, awaiting flight check		AG		x			x		
Hours of service are now . . . (specify)		AH		x			x		
Resumed normal operation		AK							
Operative (or re-operative subject to previously published limitations/conditions)		AL							
Operational		AO							
Unserviceable		AS		x			x		
Completely withdrawn		AW		x			x		
Completed		CC							
Displaced		CM		x			x		
Cancelled		CN							
Installed		CS		x			x		
On test, do not use		CT		x			x		
Trigger		TT		x			x	x	
Plain language		XX							

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: A					
Localizer (ILS) (specify runway)	IL	Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Operating but ground checked only, awaiting flight check	AG	x			x	x	
Hours of service are now . . . (specify)	AH	x		x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x		x	x	x	
Completely withdrawn	AW	x		x	x	x	
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x		x	x	x	
Identification or radio call sign changed to . . . (specify)	CI	x		x	x	x	
Cancelled	CN						
Installed	CS	x		x	x	x	
On test, do not use	CT	x		x	x	x	
Operating without identification	LG	x		x	x	x	
Subject to interruption	LS	x		x	x	x	
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: CNS — INSTRUMENT AND MICROWAVE LANDING SYSTEMS (I)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Middle marker (ILS) (specify runway)		IM		Scope: A			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Operating but ground checked only, awaiting flight check	AG	x			x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x			x	x	
Completely withdrawn	AW	x			x	x	
Completed	CC						
Displaced	CM	x			x	x	
Cancelled	CN						
Installed	CS	x			x	x	
On test, do not use	CT	x			x	x	
Trigger	TT	x			x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Localizer (not associated with ILS)		IN		Scope: A			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Operating but ground checked only, awaiting flight check	AG	x			x	x	
Hours of service are now . . . (specify)	AH	x		x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x		x	x	x	
Completely withdrawn	AW	x		x	x	x	
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x		x	x	x	
Identification or radio call sign changed to . . . (specify)	CI	x		x	x	x	
Cancelled	CN						
Installed	CS	x		x	x	x	
On test, do not use	CT	x		x	x	x	
Operating without identification	LG	x		x	x	x	
Subject to interruption	LS	x		x	x	x	
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: CNS — INSTRUMENT AND MICROWAVE LANDING SYSTEMS (I)

SECOND AND THIRD LETTERS — SIGNIFICATION Outer marker (ILS) (specify runway)	CODE	Scope: A					
	IO	Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Operating but ground checked only, awaiting flight check	AG	x			x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x			x	x	
Completely withdrawn	AW	x			x	x	
Completed	CC						
Displaced	CM	x			x	x	
Cancelled	CN						
Installed	CS	x			x	x	
On test, do not use	CT	x			x	x	
Trigger	TT	x			x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION ILS category I (specify runway)	CODE	Scope: A					
	IS	Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Operating but ground checked only, awaiting flight check	AG	x			x	x	
Hours of service are now . . . (specify)	AH	x		x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x		x	x	x	
Completely withdrawn	AW	x		x	x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x		x	x	x	
On test, do not use	CT	x		x	x	x	
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: CNS — INSTRUMENT AND MICROWAVE LANDING SYSTEMS (I)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
ILS category II (specify runway)		IT		Scope: A			
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE		Traffic		Purpose	
				I	V	N	B O M
Operating but ground checked only, awaiting flight check		AG		x			x x
Hours of service are now . . . (specify)		AH		x		x	x x
Resumed normal operation		AK					
Operative (or re-operative subject to previously published limitations/conditions)		AL					
Operational		AO					
Unserviceable		AS		x		x	x x
Completely withdrawn		AW		x		x	x x
Completed		CC					
Downgraded to . . . (specify)		CG		x		x	x x
Cancelled		CN					
Installed		CS		x		x	x x
On test, do not use		CT		x		x	x x
Trigger		TT		x			x x
Plain language		XX					

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
ILS category III (specify runway)		IU		Scope: A			
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE		Traffic		Purpose	
				I	V	N	B O M
Operating but ground checked only, awaiting flight check		AG		x			x x
Hours of service are now . . . (specify)		AH		x		x	x x
Resumed normal operation		AK					
Operative (or re-operative subject to previously published limitations/conditions)		AL					
Operational		AO					
Unserviceable		AS		x		x	x x
Completely withdrawn		AW		x		x	x x
Completed		CC					
Downgraded to . . . (specify)		CG		x		x	x x
Cancelled		CN					
Installed		CS		x		x	x x
On test, do not use		CT		x		x	x x
Trigger		TT		x			x x
Plain language		XX					

CATEGORY: CNS — INSTRUMENT AND MICROWAVE LANDING SYSTEMS (I)

SECOND AND THIRD LETTERS — SIGNIFICATION Microwave landing system (MLS) (specify runway)	CODE IW	Scope: A					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Operating but ground checked only, awaiting flight check	AG	x			x	x	
Hours of service are now . . . (specify)	AH	x		x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x		x	x	x	
Completely withdrawn	AW	x		x	x	x	
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x		x	x	x	
Downgraded to . . . (specify)	CG	x		x	x	x	
Identification or radio call sign changed to . . . (specify)	CI	x		x	x	x	
Cancelled	CN						
Installed	CS	x		x	x	x	
On test, do not use	CT	x		x	x	x	
Operating without identification	LG	x		x	x	x	
Subject to interruption	LS	x		x	x	x	
Trigger	TT	x			x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION Locator, outer (ILS) (specify runway)	CODE IX	Scope: A					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Operating but ground checked only, awaiting flight check	AG	x			x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x			x	x	
Completely withdrawn	AW	x			x	x	
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x			x	x	
Identification or radio call sign changed to . . . (specify)	CI	x			x	x	
Displaced	CM	x			x	x	
Cancelled	CN						
Installed	CS	x			x	x	
On test, do not use	CT	x			x	x	
Operating without identification	LG	x			x	x	
Subject to interruption	LS	x			x	x	
Limited to . . . (specify)	LT	x			x	x	
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: CNS — INSTRUMENT AND MICROWAVE LANDING SYSTEMS (I)

SECOND AND THIRD LETTERS — SIGNIFICATION Locator, middle (ILS) (specify runway)	CODE IY	Scope: A					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Operating but ground checked only, awaiting flight check	AG	x			x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x			x	x	
Completely withdrawn	AW	x			x	x	
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x			x	x	
Identification or radio call sign changed to . . . (specify)	CI	x			x	x	
Displaced	CM	x			x	x	
Cancelled	CN						
Installed	CS	x			x	x	
On test, do not use	CT	x			x	x	
Operating without identification	LG	x			x	x	
Subject to interruption	LS	x			x	x	
Limited to . . . (specify)	LT	x			x	x	
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: CNS — GNSS SERVICES (G)

SECOND AND THIRD LETTERS — SIGNIFICATION GNSS airfield-specific operations (specify operation)	CODE GA	Scope: A					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Not available (specify reason if appropriate)	AU	x		x	x	x	
Completely withdrawn	AW	x		x	x	x	
Completed	CC						
Cancelled	CN						
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: CNS — GNSS SERVICES (G)

SECOND AND THIRD LETTERS — SIGNIFICATION GNSS area-wide operations (specify operation)	CODE GW	Scope: AE					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Not available (specify reason if appropriate)	AU	x	x	x	x	x	
Completely withdrawn	AW	x	x	x	x	x	
Completed	CC						
Cancelled	CN						
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: CNS — TERMINAL AND EN-ROUTE NAVIGATION FACILITIES (N)

SECOND AND THIRD LETTERS — SIGNIFICATION All radio navigation facilities (except . . .)	CODE NA	Scope: AE					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x		x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x	x	x	x	
Completely withdrawn	AW	x	x	x	x	x	
Completed	CC						
Cancelled	CN						
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: CNS — TERMINAL AND EN-ROUTE NAVIGATION FACILITIES (N)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Non-directional radio beacon		NB		Scope: AE			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Operating but ground checked only, awaiting flight check	AG	x	x		x	x	
Hours of service are now . . . (specify)	AH	x	x		x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x		x	x	
Completely withdrawn	AW	x	x		x	x	
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x	x		x	x	
Identification or radio call sign changed to . . . (specify)	CI	x	x		x	x	
Displaced	CM	x	x		x	x	
Cancelled	CN						
Installed	CS	x	x		x	x	
On test, do not use	CT	x	x		x	x	
Interference from . . . (specify)	LF	x	x		x	x	
Operating without identification	LG	x	x		x	x	
Subject to interruption	LS	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
DECCA		NC		Scope: E			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x				x
Completely withdrawn	AW	x	x				x
Completed	CC						
Cancelled	CN						
Installed	CS	x	x				x
Plain language	XX						

CATEGORY: CNS — TERMINAL AND EN-ROUTE NAVIGATION FACILITIES (N)

SECOND AND THIRD LETTERS — SIGNIFICATION Distance measuring equipment (DME)	CODE ND	Scope: AE					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Operating but ground checked only, awaiting flight check	AG	x	x		x	x	
Hours of service are now . . . (specify)	AH	x	x		x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x		x	x	
Completely withdrawn	AW	x	x		x	x	
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x	x		x	x	
Identification or radio call sign changed to . . . (specify)	CI	x	x		x	x	
Changed	CH	x	x		x	x	
Displaced	CM	x	x		x	x	
Cancelled	CN						
Installed	CS	x	x		x	x	
On test, do not use	CT	x	x		x	x	
Interference from . . . (specify)	LF	x	x		x	x	
Operating without identification	LG	x	x		x	x	
Subject to interruption	LS	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION Fan marker	CODE NF	Scope: AE					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Operating but ground checked only, awaiting flight check	AG	x	x				x
Hours of service are now . . . (specify)	AH	x	x				x
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x				x
Completely withdrawn	AW	x	x				x
Completed	CC						
Displaced	CM	x	x				x
Cancelled	CN						
Installed	CS	x	x				x
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: CNS — TERMINAL AND EN-ROUTE NAVIGATION FACILITIES (N)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Locator (specify identification)		NL		Scope: A			
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE		Traffic		Purpose	
				I	V	N	B O M
Operating but ground checked only, awaiting flight check		AG		x	x		x x
Hours of service are now . . . (specify)		AH		x	x		x x
Resumed normal operation		AK					
Operative (or re-operative subject to previously published limitations/conditions)		AL					
Operational		AO					
Unserviceable		AS		x	x		x x
Completely withdrawn		AW		x	x		x x
Completed		CC					
Operating frequency(ies) changed to . . . (specify)		CF		x	x		x x
Identification or radio call sign changed to . . . (specify)		CI		x	x		x x
Displaced		CM		x	x		x x
Cancelled		CN					
Installed		CS		x	x		x x
On test, do not use		CT		x	x		x x
Interference from . . . (specify)		LF		x	x		x x
Operating without identification		LG		x	x		x x
Subject to interruption		LS		x	x		x x
Trigger		TT		x	x		x x
Plain language		XX					

CATEGORY: CNS — TERMINAL AND EN-ROUTE NAVIGATION FACILITIES (N)

SECOND AND THIRD LETTERS — SIGNIFICATION VOR/DME	CODE NM	Scope: AE					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Operating but ground checked only, awaiting flight check	AG	x	x		x	x	
Hours of service are now . . . (specify)	AH	x	x		x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x		x	x	
Completely withdrawn	AW	x	x		x	x	
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x	x		x	x	
Identification or radio call sign changed to . . . (specify)	CI	x	x		x	x	
Displaced	CM	x	x		x	x	
Cancelled	CN						
Temporarily replaced by . . . (specify)	CR	x	x		x	x	
Installed	CS	x	x		x	x	
On test, do not use	CT	x	x		x	x	
Interference from . . . (specify)	LF	x	x		x	x	
Operating without identification	LG	x	x		x	x	
Subject to interruption	LS	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: CNS — TERMINAL AND EN-ROUTE NAVIGATION FACILITIES (N)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
TACAN		NN		Scope: E			
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE		Traffic		Purpose	
				I	V	N	B O M
Operating but ground checked only, awaiting flight check		AG		x	x		x x
Hours of service are now . . . (specify)		AH		x	x		x x
Resumed normal operation		AK					
Operative (or re-operative subject to previously published limitations/conditions)		AL					
Operational		AO					
Unserviceable		AS		x	x		x x
Completely withdrawn		AW		x	x		x x
Completed		CC					
Operating frequency(ies) changed to . . . (specify)		CF		x	x		x x
Identification or radio call sign changed to . . . (specify)		CI		x	x		x x
Displaced		CM		x	x		x x
Cancelled		CN					
Temporarily replaced by . . . (specify)		CR		x	x		x x
Installed		CS		x	x		x x
On test, do not use		CT		x	x		x x
Interference from . . . (specify)		LF		x	x		x x
Operating without identification		LG		x	x		x x
Subject to interruption		LS		x	x		x x
Trigger		TT		x	x		x x
Plain language		XX					

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
OMEGA		NO		Scope: E			
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE		Traffic		Purpose	
				I	V	N	B O M
Resumed normal operation		AK					
Operative (or re-operative subject to previously published limitations/conditions)		AL					
Operational		AO					
Unserviceable		AS		x			x x
Completely withdrawn		AW		x			x x
Completed		CC					
Operating frequency(ies) changed to . . . (specify)		CF		x			x x
Identification or radio call sign changed to . . . (specify)		CI		x			x x
Displaced		CM		x			x x
Cancelled		CN					
Installed		CS		x			x x
On test, do not use		CT		x			x x
Interference from . . . (specify)		LF		x			x x
Subject to interruption		LS		x			x x
Trigger		TT		x			x x
Plain language		XX					

CATEGORY: CNS — TERMINAL AND EN-ROUTE NAVIGATION FACILITIES (N)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE	Scope: AE					
VORTAC			NT		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M	
Operating but ground checked only, awaiting flight check	AG	x	x		x	x		
Hours of service are now . . . (specify)	AH	x	x		x	x		
Resumed normal operation	AK							
Operative (or re-operative subject to previously published limitations/conditions)	AL							
Operational	AO							
Unserviceable	AS	x	x		x	x		
Completely withdrawn	AW	x	x		x	x		
Completed	CC							
Operating frequency(ies) changed to . . . (specify)	CF	x	x		x	x		
Identification or radio call sign changed to . . . (specify)	CI	x	x		x	x		
Displaced	CM	x	x		x	x		
Cancelled	CN							
Temporarily replaced by . . . (specify)	CR	x	x		x	x		
Installed	CS	x	x		x	x		
On test, do not use	CT	x	x		x	x		
Interference from . . . (specify)	LF	x	x		x	x		
Operating without identification	LG	x	x		x	x		
Subject to interruption	LS	x	x		x	x		
Trigger	TT	x	x		x	x		
Plain language	XX							

CATEGORY: CNS — TERMINAL AND EN-ROUTE NAVIGATION FACILITIES (N)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: AE					
VOR		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Operating but ground checked only, awaiting flight check	AG	x	x		x	x	
Hours of service are now . . . (specify)	AH	x	x		x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x		x	x	
Completely withdrawn	AW	x	x		x	x	
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x	x		x	x	
Identification or radio call sign changed to . . . (specify)	CI	x	x		x	x	
Displaced	CM	x	x		x	x	
Cancelled	CN						
Temporarily replaced by . . . (specify)	CR	x	x		x	x	
Installed	CS	x	x		x	x	
On test, do not use	CT	x	x		x	x	
Interference from . . . (specify)	LF	x	x		x	x	
Operating without identification	LG	x	x		x	x	
Subject to interruption	LS	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: AE					
Direction finding station (specify type and frequency)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH		x		x		
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS		x		x		
Completely withdrawn	AW		x		x		
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF		x		x		
Identification or radio call sign changed to . . . (specify)	CI		x		x		
Cancelled	CN						
Installed	CS		x		x		
On test, do not use	CT		x		x		
Limited to . . . (specify)	LT		x		x		
Trigger	TT		x		x		
Plain language	XX						

CATEGORY: ATM — AIRSPACE ORGANIZATION (A)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Minimum altitude (specify en-route/crossing/safe)		AA		Scope: AE			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Changed	CH	x	x		x	x	
Cancelled	CN						
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Control zone (CTR)		AC		Scope: AE			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x	x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Military operations only	AM	x	x	x	x	x	
Operational	AO						
Completely withdrawn	AW	x	x	x	x	x	
Activated	CA	x	x	x	x	x	
Completed	CC						
Deactivated	CD	x	x	x	x	x	
Changed	CH	x	x	x	x	x	
Cancelled	CN						
Installed	CS	x	x	x	x	x	
Reserved for aircraft based therein	LB	x	x	x	x	x	
Closed	LC	x	x	x	x	x	
Prohibited to . . . (specify)	LP	x	x	x	x	x	
Closed to VFR operations	LV		x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: ATM — AIRSPACE ORGANIZATION (A)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: E					
Air defence identification zone (ADIZ)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Military operations only	AM	x	x	x	x	x	
Operational	AO						
Completely withdrawn	AW	x	x	x	x	x	
Activated	CA	x	x	x	x	x	
Completed	CC						
Deactivated	CD	x	x	x	x	x	
Changed	CH	x	x	x	x	x	
Realigned	CL	x	x	x	x	x	
Cancelled	CN						
Closed	LC	x	x	x	x	x	
Closed to IFR operations	LI	x	x	x	x	x	
Prohibited to . . . (specify)	LP	x		x	x	x	
Closed to VFR operations	LV		x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: E					
Control area (CTA)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Military operations only	AM	x	x	x	x	x	
Operational	AO						
Completely withdrawn	AW	x	x	x	x	x	
Activated	CA	x	x	x	x	x	
Completed	CC						
Deactivated	CD	x	x	x	x	x	
Changed	CH	x	x	x	x	x	
Identification or radio call sign changed to . . . (specify)	CI	x	x	x	x	x	
Realigned	CL	x	x	x	x	x	
Cancelled	CN						
Closed	LC	x	x	x	x	x	
Closed to IFR operations	LI	x		x	x	x	
Prohibited to . . . (specify)	LP	x	x	x	x	x	
Closed to VFR operations	LV		x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: ATM — AIRSPACE ORGANIZATION (A)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: E					
Flight information region (FIR)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Military operations only	AM	x	x	x	x	x	
Operational	AO						
Completely withdrawn	AW	x	x	x	x	x	
Activated	CA	x	x	x	x	x	
Completed	CC						
Deactivated	CD	x	x	x	x	x	
Changed	CH	x	x	x	x	x	
Identification or radio call sign changed to . . . (specify)	CI	x	x	x	x	x	
Realigned	CL	x	x	x	x	x	
Cancelled	CN						
Concentration of birds	HX	x	x	x	x	x	
Closed	LC	x	x	x	x	x	
Closed to IFR operations	LI	x		x	x	x	
Prohibited to . . . (specify)	LP	x	x	x	x	x	
Closed to VFR operations	LV		x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: E					
Upper control area (UTA)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Military operations only	AM	x		x	x	x	
Operational	AO						
Completely withdrawn	AW	x		x	x	x	
Activated	CA	x		x	x	x	
Completed	CC						
Deactivated	CD	x		x	x	x	
Changed	CH	x		x	x	x	
Identification or radio call sign changed to . . . (specify)	CI	x					x
Realigned	CL	x		x	x	x	
Cancelled	CN						
Closed	LC	x		x	x	x	
Prohibited to . . . (specify)	LP	x		x	x	x	
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: ATM — AIRSPACE ORGANIZATION (A)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: E					
Minimum usable flight level		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Changed	CH	x	x		x	x	
Cancelled	CN						
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: E					
Area navigation route		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Military operations only	AM	x		x	x	x	
Operational	AO						
Available, prior permission required	AP	x		x	x	x	
Available on request	AR	x		x	x	x	
Completely withdrawn	AW	x		x	x	x	
Activated	CA	x		x	x	x	
Completed	CC						
Deactivated	CD	x		x	x	x	
Changed	CH	x		x	x	x	
Identification or radio call sign changed to . . . (specify)	CI	x		x	x	x	
Realigned	CL	x		x	x	x	
Cancelled	CN						
Installed	CS	x		x	x	x	
Closed	LC	x		x	x	x	
Limited to . . . (specify)	LT	x		x	x	x	
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: ATM — AIRSPACE ORGANIZATION (A)

SECOND AND THIRD LETTERS — SIGNIFICATION Oceanic control area (OCA)	CODE AO	Scope: E					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Military operations only	AM	x	x	x	x	x	
Operational	AO						
Completely withdrawn	AW	x	x	x	x	x	
Activated	CA	x	x	x	x	x	
Completed	CC						
Deactivated	CD	x	x	x	x	x	
Changed	CH	x	x	x	x	x	
Identification or radio call sign changed to . . . (specify)	CI	x	x				x
Realigned	CL	x	x	x	x	x	
Cancelled	CN						
Closed	LC	x	x	x	x	x	
Closed to IFR operations	LI	x		x	x	x	
Prohibited to . . . (specify)	LP	x	x	x	x	x	
Limited to . . . (specify)	LT	x	x	x	x	x	
Closed to VFR operations	LV		x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION Reporting point (specify name or coded designator)	CODE AP	Scope: E					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completely withdrawn	AW	x	x		x	x	
Completed	CC						
Changed	CH	x	x		x	x	
Identification or radio call sign changed to . . . (specify)	CI	x	x		x	x	
Displaced	CM	x	x		x	x	
Cancelled	CN						
Temporarily replaced by . . . (specify)	CR	x	x		x	x	
Installed	CS	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: ATM — AIRSPACE ORGANIZATION (A)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: E				
ATS route (specify)		AR		Traffic		Purpose		
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M	
Resumed normal operation	AK							
Operative (or re-operative subject to previously published limitations/conditions)	AL							
Military operations only	AM	x	x	x	x	x		
Operational	AO							
Completely withdrawn	AW	x	x	x	x	x		
Activated	CA	x	x		x	x		
Completed	CC							
Deactivated	CD	x	x	x	x	x		
Changed	CH	x	x		x	x		
Identification or radio call sign changed to . . . (specify)	CI	x	x		x	x		
Realigned	CL	x	x		x	x		
Cancelled	CN							
Temporarily replaced by . . . (specify)	CR	x	x	x	x	x		
Installed	CS	x	x	x	x	x		
Closed	LC	x	x	x	x	x		
Closed to IFR operations	LI	x		x	x	x		
Prohibited to . . . (specify)	LP	x	x	x	x	x		
Limited to . . . (specify)	LT	x	x	x	x	x		
Closed to VFR operations	LV		x	x	x	x		
Trigger	TT	x	x		x	x		
Plain language	XX							

CATEGORY: ATM — AIRSPACE ORGANIZATION (A)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Terminal control area (TMA)		AT		Scope: AE			
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE		Traffic		Purpose	
				I	V	N	B O M
Resumed normal operation		AK					
Operative (or re-operative subject to previously published limitations/conditions)		AL					
Military operations only		AM		x	x	x	x
Operational		AO					
Completely withdrawn		AW		x	x	x	x
Activated		CA		x	x	x	x
Completed		CC					
Deactivated		CD		x	x	x	x
Changed		CH		x	x	x	x
Realigned		CL		x	x	x	x
Cancelled		CN					
Closed		LC		x	x	x	x
Closed to IFR operations		LI		x		x	x
Prohibited to . . . (specify)		LP		x	x	x	x
Limited to . . . (specify)		LT		x	x	x	x
Closed to VFR operations		LV			x	x	x
Trigger		TT		x	x		x
Plain language		XX					

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Upper flight information region (UIR)		AU		Scope: E			
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE		Traffic		Purpose	
				I	V	N	B O M
Resumed normal operation		AK					
Operative (or re-operative subject to previously published limitations/conditions)		AL					
Military operations only		AM		x		x	x
Operational		AO					
Completely withdrawn		AW		x		x	x
Completed		CC					
Changed		CH		x		x	x
Identification or radio call sign changed to . . . (specify)		CI		x			x
Realigned		CL		x		x	x
Cancelled		CN					
Closed		LC		x		x	x
Closed to IFR operations		LI		x		x	x
Prohibited to . . . (specify)		LP		x		x	x
Trigger		TT		x		x	x
Plain language		XX					

CATEGORY: ATM — AIRSPACE ORGANIZATION (A)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Upper advisory area (UDA)		AV		Scope: E			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Military operations only	AM	x			x	x	
Operational	AO						
Completely withdrawn	AW	x			x	x	
Activated	CA	x			x	x	
Completed	CC						
Deactivated	CD	x			x	x	
Changed	CH	x			x	x	
Identification or radio call sign changed to . . . (specify)	CI	x					x
Realigned	CL	x			x	x	
Cancelled	CN						
Closed	LC	x			x	x	
Prohibited to . . . (specify)	LP	x			x	x	
Trigger	TT	x			x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Significant point		AX		Scope: AE			
				Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completely withdrawn	AW	x	x		x	x	
Completed	CC						
Changed	CH	x	x		x	x	
Identification or radio call sign changed to . . . (specify)	CI	x	x		x	x	
Displaced	CM	x	x		x	x	
Cancelled	CN						
Temporarily replaced by . . . (specify)	CR	x	x		x	x	
Installed	CS	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: ATM — AIRSPACE ORGANIZATION (A)

SECOND AND THIRD LETTERS — SIGNIFICATION Aerodrome traffic zone (ATZ)	CODE AZ	Scope: AE					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x	x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Military operations only	AM	x	x	x	x	x	
Operational	AO						
Completely withdrawn	AW	x	x	x	x	x	
Activated	CA	x	x	x	x	x	
Completed	CC						
Deactivated	CD	x	x	x	x	x	
Changed	CH	x	x	x	x	x	
Cancelled	CN						
Installed	CS	x	x	x	x	x	
Reserved for aircraft based therein	LB	x	x	x	x	x	
Closed	LC	x	x	x	x	x	
Closed to IFR operations	LI	x		x	x	x	
Prohibited to . . . (specify)	LP	x	x	x	x	x	
Closed to VFR operations	LV		x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: ATM — AIR TRAFFIC AND VOLMET SERVICES (S)

SECOND AND THIRD LETTERS — SIGNIFICATION Automatic terminal information service (ATIS)	CODE SA	Scope: A					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x		x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x		x	x	
Completely withdrawn	AW	x	x		x	x	
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x	x		x	x	
Cancelled	CN						
Installed	CS	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: ATM — AIR TRAFFIC AND VOLMET SERVICES (S)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
ATS reporting office		SB	Scope: A				
			Traffic		Purpose		
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x		x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completely withdrawn	AW	x	x		x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x	x		x	x	
Closed	LC	x	x		x	x	
Limited to . . . (specify)	LT	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Area control centre (ACC)		SC	Scope: E				
			Traffic		Purpose		
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x		x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x	x		x	x	
Identification or radio call sign changed to . . . (specify)	CI	x	x		x	x	
Cancelled	CN						
Installed	CS	x	x		x	x	
Closed	LC	x	x	x	x	x	
Limited to . . . (specify)	LT	x	x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: ATM — AIR TRAFFIC AND VOLMET SERVICES (S)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: E					
Flight information service (FIS)		SE	Traffic		Purpose		
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH		x		x		
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available on request	AR		x		x		
Not available (specify reason if appropriate)	AU		x		x		
Completely withdrawn	AW		x		x		
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF		x		x		
Identification or radio call sign changed to . . . (specify)	CI		x		x		
Cancelled	CN						
Closed	LC		x		x		
Installed	CS		x		x		
Limited to . . . (specify)	LT		x		x		
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Aerodrome flight information service (AFIS)		SF	Traffic		Purpose		
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x		x		
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available on request	AR	x	x		x		
Not available (specify reason if appropriate)	AU	x	x		x		
Completely withdrawn	AW	x	x		x		
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x	x		x		
Identification or radio call sign changed to . . . (specify)	CI	x	x		x		
Cancelled	CN						
Closed	LC	x	x		x		
Installed	CS	x	x		x		
Limited to . . . (specify)	LT	x	x		x		
Trigger	TT	x	x		x		
Plain language	XX						

CATEGORY: ATM — AIR TRAFFIC AND VOLMET SERVICES (S)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE	Scope: AE					
Flow control centre		SL	Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M	
Hours of service are now . . . (specify)	AH	x	x		x	x		
Resumed normal operation	AK							
Operative (or re-operative subject to previously published limitations/conditions)	AL							
Operational	AO							
Completed	CC							
Cancelled	CN							
Installed	CS	x	x		x	x		
Closed	LC	x	x		x	x		
Limited to . . . (specify)	LT	x	x		x	x		
Trigger	TT	x	x		x	x		
Plain language	XX							

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: E					
		Traffic		Purpose			
Oceanic area control centre (OAC)	SO						
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x			x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x			x	x	
Identification or radio call sign changed to . . . (specify)	CI	x			x	x	
Cancelled	CN						
Installed	CS	x		x	x	x	
Closed	LC	x		x	x	x	
Limited to . . . (specify)	LT	x		x	x	x	
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: ATM — AIR TRAFFIC AND VOLMET SERVICES (S)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE	Scope: AE					
Approach control service (APP)		SP	Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)		AH	x	x		x	x	
Resumed normal operation		AK						
Operative (or re-operative subject to previously published limitations/conditions)		AL						
Operational		AO						
Completed		CC						
Operating frequency(ies) changed to . . . (specify)		CF	x	x		x	x	
Identification or radio call sign changed to . . . (specify)		CI	x	x		x	x	
Cancelled		CN						
Installed		CS	x	x		x	x	
Closed		LC	x	x		x	x	
Limited to . . . (specify)		LT	x	x		x	x	
Trigger		TT	x	x		x	x	
Plain language		XX						

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: A					
		Traffic		Purpose			
Flight service station (FSS)	SS						
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH		x		x		
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available on request	AR		x		x		
Completely withdrawn	AW		x		x		
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF		x		x		
Identification or radio call sign changed to . . . (specify)	CI		x		x		
Cancelled	CN						
Installed	CS		x		x		
Closed	LC		x		x		
Limited to . . . (specify)	LT		x		x		
Trigger	TT		x		x	x	
Plain language	XX						

CATEGORY: ATM — AIR TRAFFIC AND VOLMET SERVICES (S)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Aerodrome control tower (TWR)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x		x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x	x		x	x	
Identification or radio call sign changed to . . . (specify)	CI	x	x		x	x	
Cancelled	CN						
Installed	CS	x	x		x	x	
Closed	LC	x	x	x	x	x	
Limited to . . . (specify)	LT	x	x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: E					
Upper area control centre (UACC)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x			x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x			x	x	
Identification or radio call sign changed to . . . (specify)	CI	x			x	x	
Cancelled	CN						
Installed	CS	x			x	x	
Closed	LC	x		x	x	x	
Limited to . . . (specify)	LT	x		x	x	x	
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: ATM — AIR TRAFFIC AND VOLMET SERVICES (S)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: E					
VOLMET broadcast		SV	Traffic		Purpose		
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x		x		
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x		x		
Completely withdrawn	AW	x	x		x		
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x	x		x		
Identification or radio call sign changed to . . . (specify)	CI	x	x		x		
Cancelled	CN						
Installed	CS	x	x		x		
Interference from . . . (specify)	LF	x	x		x		
Subject to interruption	LS	x	x		x		
Limited to . . . (specify)	LT	x	x		x		
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: E					
Upper advisory service (specify)		SY	Traffic		Purpose		
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x			x		
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Not available (specify reason if appropriate)	AU	x			x		
Completely withdrawn	AW	x			x		
Completed	CC						
Operating frequency(ies) changed to . . . (specify)	CF	x			x		
Identification or radio call sign changed to . . . (specify)	CI	x			x		
Cancelled	CN						
Installed	CS	x			x		
Limited to . . . (specify)	LT	x			x		
Plain language	XX						

CATEGORY: ATM — AIR TRAFFIC PROCEDURES (P)

SECOND AND THIRD LETTERS — SIGNIFICATION Standard instrument arrival (STAR) (specify route designator)	CODE PA	Scope: A					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Available for daylight operation	AD	x		x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Military operations only	AM	x		x	x	x	
Available for night operation	AN	x		x	x	x	
Operational	AO						
Available on request	AR	x		x	x	x	
Not available (specify reason if appropriate)	AU	x		x	x	x	
Completely withdrawn	AW	x		x	x	x	
Completed	CC						
Changed	CH	x		x	x	x	
Identification or radio call sign changed to . . . (specify)	CI	x		x	x	x	
Cancelled	CN						
Temporarily replaced by . . . (specify)	CR	x		x	x	x	
Installed	CS	x		x	x	x	
Limited to . . . (specify)	LT	x		x	x	x	
Trigger	TT	x			x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION Standard VFR arrival	CODE PB	Scope: A					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Available for daylight operation	AD		x	x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Military operations only	AM		x	x	x	x	
Available for night operation	AN		x	x	x	x	
Operational	AO						
Available on request	AR		x	x	x	x	
Completely withdrawn	AW		x	x	x	x	
Completed	CC						
Changed	CH		x	x	x	x	
Identification or radio call sign changed to . . . (specify)	CI		x	x	x	x	
Cancelled	CN						
Temporarily replaced by . . . (specify)	CR		x	x	x	x	
Installed	CS		x	x	x	x	
Limited to . . . (specify)	LT		x	x	x	x	
Trigger	TT		x		x	x	
Plain language	XX						

CATEGORY: ATM — AIR TRAFFIC PROCEDURES (P)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Contingency procedures		PC	Scope: AE				
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE	Traffic		Purpose		
			I	V	N	B	O M
Resumed normal operation		AK					
Operative (or re-operative subject to previously published limitations/conditions)		AL					
Military operations only		AM	x	x	x	x	x
Operational		AO					
Completely withdrawn		AW	x	x	x	x	x
Activated		CA	x	x	x	x	x
Completed		CC					
Changed		CH	x	x	x	x	x
Cancelled		CN					
Temporarily replaced by . . . (specify)		CR	x	x	x	x	x
Limited to . . . (specify)		LT	x	x	x	x	x
Trigger		TT	x	x		x	x
Plain language		XX					

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Standard instrument departure (SID) (specify route designator)		PD	Scope: A				
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE	Traffic		Purpose		
			I	V	N	B	O M
Available for daylight operation		AD	x		x	x	x
Resumed normal operation		AK					
Operative (or re-operative subject to previously published limitations/conditions)		AL					
Military operations only		AM	x		x	x	x
Available for night operation		AN	x		x	x	x
Operational		AO					
Available on request		AR	x		x	x	x
Completely withdrawn		AW	x		x	x	x
Not available (specify reason if appropriate)		AU	x		x	x	x
Completed		CC					
Changed		CH	x		x	x	x
Identification or radio call sign changed to . . . (specify)		CI	x		x	x	x
Cancelled		CN					
Temporarily replaced by . . . (specify)		CR	x		x	x	x
Installed		CS	x		x	x	x
Limited to . . . (specify)		LT	x		x	x	x
Trigger		TT	x			x	x
Plain language		XX					

CATEGORY: ATM — AIR TRAFFIC PROCEDURES (P)

SECOND AND THIRD LETTERS — SIGNIFICATION Standard VFR departure	CODE PE	Scope: A					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Available for daylight operation	AD		x	x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Military operations only	AM		x	x	x	x	
Available for night operation	AN		x	x	x	x	
Operational	AO						
Available on request	AR		x	x	x	x	
Completely withdrawn	AW		x	x	x	x	
Not available (specify reason if appropriate)	AU		x	x	x	x	
Completed	CC						
Changed	CH		x	x	x	x	
Identification or radio call sign changed to . . . (specify)	CI		x	x	x	x	
Cancelled	CN						
Temporarily replaced by . . . (specify)	CR		x	x	x	x	
Installed	CS		x	x	x	x	
Limited to . . . (specify)	LT		x	x	x	x	
Trigger	TT		x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION Flow control procedure	CODE PF	Scope: AE					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Activated	CA	x	x	x	x	x	
Completed	CC						
Deactivated	CD	x	x	x	x	x	
Changed	CH	x	x	x	x	x	
Cancelled	CN						
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: ATM — AIR TRAFFIC PROCEDURES (P)

SECOND AND THIRD LETTERS — SIGNIFICATION Holding procedure	CODE PH	Scope: AE					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completely withdrawn	AW	x	x		x	x	
Completed	CC						
Changed	CH	x	x		x	x	
Cancelled	CN						
Installed	CS	x	x		x	x	
Limited to . . . (specify)	LT	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION Instrument approach procedure (specify type and runway)	CODE PI	Scope: A					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Available for daylight operation	AD	x		x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Military operations only	AM	x		x	x	x	
Available for night operation	AN	x		x	x	x	
Operational	AO						
Available on request	AR	x		x	x	x	
Not available (specify reason if appropriate)	AU	x		x	x	x	
Completely withdrawn	AW	x		x	x	x	
Completed	CC						
Changed	CH	x		x	x	x	
Identification or radio call sign changed to . . . (specify)	CI	x		x	x	x	
Cancelled	CN						
Temporarily replaced by . . . (specify)	CR	x		x	x	x	
Installed	CS	x		x	x	x	
Limited to . . . (specify)	LT	x		x	x	x	
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: ATM — AIR TRAFFIC PROCEDURES (P)

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: A					
		Traffic		Purpose			
VFR approach procedure	PK	I	V	N	B	O	M
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Available for daylight operation	AD		x	x	x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Military operations only	AM		x	x	x	x	
Available for night operation	AN		x	x	x	x	
Operational	AO						
Available on request	AR		x	x	x	x	
Completely withdrawn	AW		x	x	x	x	
Not available (specify reason if appropriate)	AU		x	x	x	x	
Completed	CC						
Changed	CH		x	x	x	x	
Identification or radio call sign changed to . . . (specify)	CI		x	x	x	x	
Cancelled	CN						
Temporarily replaced by . . . (specify)	CR		x	x	x	x	
Installed	CS		x	x	x	x	
Limited to . . . (specify)	LT		x	x	x	x	
Trigger	TT		x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION	CODE	Scope: AE					
		Traffic		Purpose			
Flight plan processing, filing and related contingency	PL	I	V	N	B	O	M
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Activated	CA	x	x				x
Completed	CC						
Deactivated	CD	x	x				x
Changed	CH	x	x				x
Cancelled	CN						
Limited to . . . (specify)	LT	x	x				x
Plain language	XX						

CATEGORY: ATM — AIR TRAFFIC PROCEDURES (P)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Aerodrome operating minima (specify procedure and amended minimum)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Changed	CH	x	x	x	x	x	
Cancelled	CN						
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Noise operating restrictions		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Activated	CA	x	x	x	x	x	
Completed	CC						
Deactivated	CD	x	x	x	x	x	
Changed	CH	x	x	x	x	x	
Cancelled	CN						
Limited to . . . (specify)	LT	x	x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Obstacle clearance altitude and height (specify procedure)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Changed	CH	x		x	x	x	
Cancelled	CN						
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: ATM — AIR TRAFFIC PROCEDURES (P)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: AE			
Radio failure procedure		PR		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Changed	CH	x	x		x	x	
Cancelled	CN						
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: A			
Transition altitude or transition level (specify)		PT		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Changed	CH	x	x		x	x	
Cancelled	CN						
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: A			
Missed approach procedure (specify runway)		PU		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Changed	CH	x			x	x	
Cancelled	CN						
Trigger	TT	x			x	x	
Plain language	XX						

CATEGORY: ATM — AIR TRAFFIC PROCEDURES (P)

SECOND AND THIRD LETTERS — SIGNIFICATION Minimum holding altitude (specify fix)	CODE PX	Scope: AE					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Changed	CH	x	x	x	x	x	
Cancelled	CN						
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION ADIZ procedure	CODE PZ	Scope: E					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Changed	CH	x	x	x	x	x	
Cancelled	CN						
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: NAVIGATION WARNINGS — AIRSPACE RESTRICTIONS (R)

SECOND AND THIRD LETTERS — SIGNIFICATION Airspace reservation (specify)	CODE RA	Scope: W					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Activated	CA	x	x	x	x	x	
Completed	CC						
Deactivated	CD	x	x	x	x	x	
Changed	CH	x	x	x	x	x	
Cancelled	CN						
Will take place . . . (specify)	LW	x	x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: NAVIGATION WARNINGS — AIRSPACE RESTRICTIONS (R)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: W					
Danger area (specify national prefix and number)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completely withdrawn	AW	x	x		x	x	
Activated	CA	x	x		x	x	
Completed	CC						
Deactivated	CD	x	x		x	x	
Changed	CH	x	x		x	x	
Realigned	CL	x	x		x	x	
Cancelled	CN						
Prohibited to . . . (specify)	LP	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: W					
Military operating area		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available, prior permission required	AP	x	x		x	x	
Available on request	AR	x	x		x	x	
Completely withdrawn	AW	x	x		x	x	
Activated	CA	x	x		x	x	
Completed	CC						
Deactivated	CD	x	x		x	x	
Changed	CH	x	x		x	x	
Realigned	CL	x	x		x	x	
Cancelled	CN						
Prohibited to . . . (specify)	LP	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: NAVIGATION WARNINGS — AIRSPACE RESTRICTIONS (R)

SECOND AND THIRD LETTERS — SIGNIFICATION Overflying of . . . (specify)	CODE RO	Scope: W					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Cancelled	CN						
Prohibited to . . . (specify)	LP	x	x	x	x	x	
Limited to . . . (specify)	LT	x	x	x	x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION Prohibited area (specify national prefix and number)	CODE RP	Scope: W					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completely withdrawn	AW	x	x	x	x	x	
Activated	CA	x	x	x	x	x	
Completed	CC						
Deactivated	CD	x	x	x	x	x	
Changed	CH	x	x	x	x	x	
Realigned	CL	x	x	x	x	x	
Cancelled	CN						
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: NAVIGATION WARNINGS — AIRSPACE RESTRICTIONS (R)

SECOND AND THIRD LETTERS — SIGNIFICATION Restricted area (specify national prefix and number)	CODE RR	Scope: W					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available, prior permission required	AP	x	x		x	x	
Available on request	AR	x	x		x	x	
Completely withdrawn	AW	x	x		x	x	
Activated	CA	x	x		x	x	
Completed	CC						
Deactivated	CD	x	x		x	x	
Changed	CH	x	x		x	x	
Realigned	CL	x	x		x	x	
Cancelled	CN						
Prohibited to . . . (specify)	LP	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION Temporary restricted area (specify area)	CODE RT	Scope: W					
		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Available, prior permission required	AP	x	x		x	x	
Available on request	AR	x	x		x	x	
Completely withdrawn	AW	x	x		x	x	
Activated	CA	x	x		x	x	
Completed	CC						
Deactivated	CD	x	x		x	x	
Changed	CH	x	x		x	x	
Realigned	CL	x	x		x	x	
Cancelled	CN						
Prohibited to . . . (specify)	LP	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: NAVIGATION WARNINGS — WARNINGS (W)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: W					
Air display		CODE	Traffic		Purpose		
		WA	I	V	N	B	O
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE						
Completed	CC						
Cancelled	CN						
Will take place . . . (specify)	LW	x	x				x
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: W					
Aerobatics		CODE	Traffic		Purpose		
		WB	I	V	N	B	O
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE						
Completed	CC						
Cancelled	CN						
Will take place . . . (specify)	LW	x	x				x
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: W					
Captive balloon or kite		CODE	Traffic		Purpose		
		WC	I	V	N	B	O
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE						
Completed	CC						
Cancelled	CN						
Will take place . . . (specify)	LW	x	x				x
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: W					
Demolition of explosives		CODE	Traffic		Purpose		
		WD	I	V	N	B	O
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE						
Completed	CC						
Cancelled	CN						
Will take place . . . (specify)	LW	x	x				x
Plain language	XX						

CATEGORY: NAVIGATION WARNINGS — WARNINGS (W)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: W			
Exercises (specify)		WE		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Completed	CC						
Cancelled	CN						
Will take place . . . (specify)	LW	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: W			
Air refuelling		WF		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Completed	CC						
Cancelled	CN						
Will take place . . . (specify)	LW	x	x				x
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: W			
Glider flying		WG		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Completed	CC						
Cancelled	CN						
Will take place . . . (specify)	LW	x	x				x
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE		Scope: W			
Blasting		WH		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Cancelled	CN						
Will take place . . . (specify)	LW	x	x				x
Plain language	XX						

CATEGORY: NAVIGATION WARNINGS — WARNINGS (W)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Banner/target towing		Scope: W					
		WJ		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Completed	CC						
Cancelled	CN						
Will take place . . . (specify)	LW	x	x				x
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Ascent of free balloon		Scope: W					
		WL		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Completed	CC						
Cancelled	CN						
Will take place . . . (specify)	LW	x	x				x
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Missile, gun or rocket firing		Scope: W					
		WM		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Completed	CC						
Cancelled	CN						
Will take place . . . (specify)	LW	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Parachute jumping exercises, paragliding or hang gliding		Scope: W					
		WP		Traffic		Purpose	
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Completed	CC						
Cancelled	CN						
Will take place . . . (specify)	LW	x	x				x
Plain language	XX						

CATEGORY: NAVIGATION WARNINGS — WARNINGS (W)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Radioactive materials or toxic chemicals (specify)		WR					
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE					
Completed		CC					
Cancelled		CN					
Will take place . . . (specify)		LW	x	x			x
Plain language		XX					

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Burning or blowing gas		WS					
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE					
Completed		CC					
Cancelled		CN					
Will take place . . . (specify)		LW	x	x			x
Plain language		XX					

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Mass movement of aircraft		WT					
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE					
Completed		CC					
Cancelled		CN					
Will take place . . . (specify)		LW	x	x			x
Plain language		XX					

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Unmanned aircraft		WU					
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE					
Completed		CC					
Cancelled		CN					
Will take place . . . (specify)		LW	x	x		x	x
Trigger		TT	x	x		x	x
Plain language		XX					

CATEGORY: NAVIGATION WARNINGS — WARNINGS (W)

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Formation flight		WV					
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE					
Completed		CC					
Cancelled		CN					
Will take place . . . (specify)		LW					
Plain language		XX					

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Significant volcanic activity		WW					
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE					
Completed		CC					
Cancelled		CN					
Will take place . . . (specify)		LW					
Trigger		TT					
Plain language		XX					

SECOND AND THIRD LETTERS — SIGNIFICATION		CODE					
Model flying		WZ					
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE					
Completed		CC					
Cancelled		CN					
Will take place . . . (specify)		LW					
Plain language		XX					

CATEGORY: OTHER INFORMATION (O)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: A					
Aeronautical information service		OA	Traffic		Purpose		
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x		x	x	
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completely withdrawn	AW	x	x		x	x	
Completed	CC						
Cancelled	CN						
Installed	CS	x	x		x	x	
Closed	LC	x	x		x	x	
Limited to . . . (specify)	LT	x	x		x	x	
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: AE					
Obstacle (specify details)		OB	Traffic		Purpose		
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completely withdrawn	AW	x	x				x
Completed	CC						
Erected	CE	x	x				x
Changed	CH	x	x				x
Displaced	CM	x	x				x
Cancelled	CN						
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: OTHER INFORMATION (O)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: E					
Aircraft entry requirements		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completed	CC						
Changed	CH	x	x	x	x	x	
Cancelled	CN						
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: AE					
Obstacle lights on . . . (specify)		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Unserviceable	AS	x	x				x
Completed	CC						
Realigned	CL	x	x				x
Cancelled	CN						
Installed	CS	x	x				x
Trigger	TT	x	x		x	x	
Plain language	XX						

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: E					
Rescue coordination centre		Traffic		Purpose			
FOURTH AND FIFTH LETTERS — SIGNIFICATION	CODE	I	V	N	B	O	M
Hours of service are now . . . (specify)	AH	x	x				x
Resumed normal operation	AK						
Operative (or re-operative subject to previously published limitations/conditions)	AL						
Operational	AO						
Completely withdrawn	AW	x	x				x
Completed	CC						
Cancelled	CN						
Installed	CS	x	x				x
Closed	LC	x	x				x
Limited to . . . (specify)	LT	x	x				x
Trigger	TT	x	x		x	x	
Plain language	XX						

CATEGORY: OTHER INFORMATION (O)

SECOND AND THIRD LETTERS — SIGNIFICATION		Scope: K					
Checklist		CODE	Traffic		Purpose		
FOURTH AND FIFTH LETTERS — SIGNIFICATION		CODE	K		K		
Checklist		KK	x		x		

Appendix C to Chapter 6

GUIDANCE ON THE USE OF THE AERONAUTICAL FIXED SERVICE (AFS)

1. INFORMATION FOR THE GUIDANCE OF ORIGINATORS OF AFS MESSAGES

1.1 General

1.1.1 The information that must be sent from the originator (one who writes or dictates message) to the person addressed is the TEXT.

TEXT

1.1.2 Clearly separated from the TEXT, there must be an ADDRESS. The messages can be passed most quickly through the communication network if the ADDRESS emerges from a receiving machine as soon as possible, so it is put at the top.

ADDRESS
TEXT

1.1.3 There is a need for both the time of filing of the message for transmission and the identity of the originator to be included somewhere in the message. Those are grouped together in a part called the ORIGIN.

1.1.4 It is desirable to group the ORIGIN with the ADDRESS as both of these are of interest to the communication service handling the message. If placed between the ADDRESS and the TEXT, it does not delay the arrival of the ADDRESS.

ADDRESS
ORIGIN
TEXT

1.1.5 As far as an originator is concerned, the message consists only of ADDRESS, ORIGIN and TEXT, regardless of the system or method being used for the transmission of the message in the AFS (manual, automatic, teletypewriter, etc.).

1.1.6 All messages must be legible and in the following characters:

Letters: A B C D E F G H I J K L M N O P Q
 R S T U V W X Y Z

Figures: 1 2 3 4 5 6 7 8 9 0

Other signs: - (hyphen)
 ? (question mark)
 : (colon)
 ((open bracket)
) (close bracket)
 . (full stop, period or decimal point)
 , (comma)
 = (double hyphen or equal sign)
 / (oblique)
 + (plus sign)

Characters other than those listed above must not be used in messages unless absolutely necessary for understanding of the text. When used, they must be spelled out in full.

1.1.6.1 Roman numerals must not be employed. If the originator of the message wishes the addressee to be informed that roman numerals are intended, the characters used must be preceded by the word "ROMAN".

1.1.6.2 The message, as prepared by the originator, must not contain the sequence ZCZC or an uninterrupted sequence of four or more of the letter N. These sequences are used as switching signals in the AFS automated relay stations and their presence in the message would cause a malfunction.

1.1.6.3 If the originator of a message wishes alignment functions [$<<\equiv$] to be transmitted at specific places in the text part of a message, the sequence $<<\equiv$ must be written at each of those places.

1.1.6.4 For the exchange of messages over the teletypewriter circuits the following signals of the International Telegraph Alphabet No. 2 are permitted:

Signal numbers

1–3	— in letter and in figure case
4	— in letter case only
5	— in letter and in figure case
6–8	— in letter case only
9	— in letter and in figure case
10	— in letter case only
11–18	— in letter and in figure case
19	— in letter case only
20–31	— in letter and in figure case

1.2 The form of the address

1.2.1 To completely define the addressee of any sort of message, it is necessary at least to indicate a location and an organization at that location. If the organization is a large one, it may be necessary to indicate a specific part of the organization to prevent needless re-routing of the message within the organization.

1.2.1.1 To indicate the location, which here means an airport, an air traffic service unit not situated at an airport, or some other distinct geographical location, ICAO uses a sequence of four letters and refers to this sequence as a location indicator (see *Location Indicators* (Doc 7910)). A sequence of four letters is necessary because of the large number of aerodromes, etc. which exist throughout the world.

1.2.1.2 To indicate the organization addressed at an aerodrome or other location, ICAO specifies a sequence of three letters and these are contained in *Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services* (Doc 8585). By “organization” it is meant air traffic control unit, international NOTAM office, airline office or similar service(s).

1.2.1.3 To indicate the part of an organization, ICAO allows the use of an additional letter. As it is only necessary to indicate a part of an organization if the organization is so big that message distribution becomes unwieldy, and as channel-time costs money, this letter is only to be used when necessary. Normally, the filler letter “X” should be used.

1.2.1.4 A complete indication of an addressee of a message is therefore given by a four-letter location indicator, a three-letter designator and, when necessary, a single letter designator. The eight-letter group so formed is referred to as an “addressee indicator”. To permit the introduction of automatic equipment which can only read a message starting at the beginning and ending at the end, the two (or at times, three) groups of the addressee indicator are printed in the address in decreasing order of routing importance, and are joined together, as in the following examples:

LGAPAWD

Location indicator of aerodrome ↑

Designation of airline ↑

Designation of flight dispatch ↑

ABBGYNYX

Location indicator of an aerodrome ↑

Designation of an international NOTAM office located at the aerodrome ↑

Filler letter ↑

Note.— A variation of the above is the predetermined distribution system addressee indicators (see Chapter 6).

1.2.1.5 To be complete, the address of a message must contain one addressee indicator for every addressee. Since an addressee indicator is an eight-letter group it is certainly not possible to read a number of them without separation and they should therefore be separated by a space.

Priority

1.2.2 Messages are classified into priority categories according to their urgency, and the priority category of a particular message must be detected by all stations handling it, just as the addressees must be detected. The priority indicator is a group of two identical letters (FF, GG, etc.) and a sensible place for it is close to the beginning of the address. It is separated from the addressee indicator by a space to avoid confusion.

ADDRESS GG LGACPAWD ABBGYAYX ABBGTWAX

1.2.2.1 The following categories of message should be handled by the AFS (see Annex 10, Volume II, 4.4.3.1.1).

<i>Message category</i>	<i>Priority indicator</i>
distress messages	SS
urgency messages	DD
flight safety messages	FF
meteorological messages	GG
flight regularity messages	GG
aeronautical information services messages	GG
aeronautical administrative messages	KK
service messages	(as appropriate)

1.2.2.2 The order of priority for the transmission of messages in the AFS should be as follows:

<i>Transmission priority</i>	<i>Priority indicator</i>
1	SS
2	DD, FF
3	GG, KK

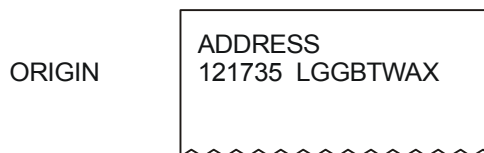
1.2.2.3 When justified by the requirement for special handling, messages should be assigned the priority indicator DD in place of the normal priority indicator.

1.2.2.4 Messages entitled to bear a specified priority indicator and which are originated by or addressed to authorities other than air traffic services should be assigned a lower priority indicator if such lower priority classification will serve the intended purpose.

1.3 The form of the origin

1.3.1 The origin does not present much difficulty. It must include both the identity of the originator (or rather of the organization) and the time of filing the message for transmission. For the first, a six-figure date-time group should be used, the first two figures being the date and the last four figures the hours and minutes in UTC. For the second, an “originator indicator” can be compiled in the same way as an addressee indicator using four letters to define the location, three to define the organization and, if necessary, one to define the part of the organization that originated the message.

1.3.2 The date-time group is placed first. It separates the last addressee indicator in the address from the originator indicator in the origin and this helps to avoid the latter being interpreted in torn-tape stations as one of the former. A space is left between the date-time group and originator indicator to improve clarity.



1.4 The form of the text

1.4.1 In 1.2.1.2, it was noted that a three-letter designator is to be used to indicate an organization addressed at a location. A three-letter designator gives enough combinations to cover most cases but cannot cover every small organization, individual aircraft (in the case where a message is being sent to an air/ground station for an aircraft in flight), or military organization.

1.4.2 For this reason, the following three-letter designators have been given the meanings shown:

YYY: An organization not given a specific two-letter designator but identified in the text.

YXY: A military (navy, army, air force, etc.) service or organization identified in the text.

ZZZ: An aircraft in flight identified in the text.

The same designators are used, with the same meaning, in the originator indicator.

1.4.3 When, and *only when*, “YYY” or “ZZZ” are used:

- the name of the organization or the identity of the aircraft concerned is to appear at the beginning of the text;
- the order of such insertions is to be the same as the order of the addressee indicators and/or the originator indicator;
- where there is more than one such insertion, the last should be followed by the word “STOP”;

- d) where there is one or more insertions in respect of addressee indicators plus an insertion in respect of the originator indicator, the word “FROM” is to appear before that relating to the originator indicator.

1.4.4 If originators of messages wish to include a reference in the text for their own purposes, it must go immediately after the material described above — or right at the beginning of the text if there is no such material.

**ADDRESS
ORIGIN**

Designation of organization(s), service(s) and/or aircraft if necessary, followed by word “STOP”, if required, followed by originator’s reference if necessary, followed by the rest of the TEXT.

1.4.5 What goes in the rest of the text is mainly for the originator to decide, but three rules are necessary to enable the communication service to do its job properly. These are:

Rule 1

The text must be drafted in plain language or in code. The originator shall ensure that the abbreviations and codes used are familiar to the aeronautical telecommunication agency accepting the message for transmission and to the intended recipient, or that a proper decode for the abbreviations and codes used is available.

Rule 2

The text must be as abbreviated as possible. The originator must avoid the use of plain language when abbreviation by an appropriate code is practicable (see PANS-ABC, Doc 8400). Words and phrases that are not essential, such as expressions of politeness, must not be used.

Rule 3

The text must not exceed 1 800 characters in length. If the originator desires that a communication exceeding 1 800 characters be transmitted over the AFS, such communication must be filed in the form of separate messages, of which each text must not exceed 1 800 characters. This is to avoid delay to higher priority traffic.

1.5 How to prepare a message

Note.— The following s refers to the preparation of a conventional AFS message. See also Chapter 6 for the preparation of predetermined distribution system messages.

Step 1

Determine the category of priority and write down the appropriate two-letter priority indicator (see Annex 10, Volume II, 4.4.3.1.1).



Step 2

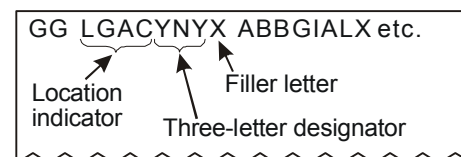
Determine the addressees, and from the appropriate ICAO documents or from memory:

- Firstly:* find the four-letter location indicator;
- Secondly:* find the three-letter designator for the organization, if there is one. Use “YYY”, “YXY” or “ZZZ” as appropriate if there is *not*;
- Thirdly:* if necessary, find the single letter designator for the part or department of the organization to which the message is addressed.

Step 3

Write down the eight-letter addressee indicator compiled for each addressee. Put them down following the priority indicator but spaced from it and from each other.

ADDRESS



Step 4

Begin on the next line and write down the date and the time as a continuous group. Then follow this by an originator

indicator consisting of the eight-letter group defining your organization and/or your part of the organization.

ADDRESS	GG LGACYNYX ABBGIALX etc.
ORIGIN	121735 LGGBYNYX

Note.— Sometimes, the communication service may require that you or they put the date-time group on the message at the instant that you hand it to them. This is actually correct as it should define the “time of filing” with the communication service.

Step 5

Begin on the next line and insert the names of any organization or services not possessing a three-letter designator, to which you have addressed the message, then the name of your own organization if there is no three-letter designator for the originator indicator. Follow the rules in 1.4.2 and 1.4.3 and insert the words “FROM” and “STOP” when this is prescribed.

ADDRESS	GG LGACYNYX ABBGIALX etc.
ORIGIN	121735 LGGBYNYX
TEXT	XYZ12345 . . . rest of TEXT

Note.— For the text of NOTAM, see Chapter 6, Appendix A.

2. INFORMATION FOR THE GUIDANCE OF RECIPIENTS OF AFS MESSAGES

2.1 General

2.1.1 As an addressee (one to whom the message is addressed) or recipient is concerned, only the parts of the message that were produced by the originator are of interest, i.e.

- the address, to be sure the message is addressed to the recipient;
- the origin, in order to know when the message was filed for transmission and who is sending the message;

- the text.

2.1.2 When received through a Morse channel the message will arrive to the addressee as it was written by the originator, since the operation and procedure signals used by the AFS stations for the transmission and routing of the message are not written by the operator in the final hard copy of the message.

2.1.3 The same is not the case for the messages received through a teletypewriter channel. As explained in the following paragraphs, in a teletypewriter page-copy there are always a number of additional abbreviations, words, etc. which, with few exceptions, are of no interest to the addressee.

2.2 How received page-copy appears

2.2.1 Apart from some non-typing or switching signals, which are of no interest to the addressee because they do not normally appear in page-copy, there are the following extra parts which appear in page-copy but are also of no interest to the addressee due to the fact that they are added by the communication service for its own purposes (see Figure 6-C-2).

2.2.2 A teletypewriter message, when received, should still look like the example in 1.5, Step 5 but, as explained above, there will be some extra parts that were added by the communication service for its own purposes, and for example it could appear as in Figure 6-C-2.

2.2.3 In Figure 6-C-2, the NNNN shown in the line of the heading is the end-of-message signal of the previous message and was left in the machine when that message was torn off. The heading of the NRA062 message was then printed on the same line. The end-of-message signal of NRA062 is similarly left in the machine and the heading of the next message will ultimately be printed on the same line.

2.2.4 The communication service will sometimes insert material at the beginning of the text to draw attention to something that has occurred during transmission. If, after a message has been transmitted *in toto* a station detects that the text or the origin of the message was mutilated or incomplete, a service message will be transmitted to all addressees concerned with the following text, if an unmutated copy of the message is available in the station:

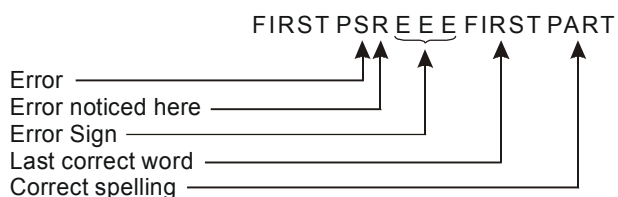
SVC CORRECTION (the origin of the incorrect message)
STOP (followed by the correct text).

2.2.5 The communication service will sometimes insert material, immediately after the end of the text, to draw attention to something that has occurred during transmission. There are three types of insertions, as follows:

- a) The groups “QTA QTA”. This means that the message has been spoiled in some way and should be ignored. A correct copy will follow.
- b) The group “DUPE”. This means that the communication service has found it necessary to transmit a duplicate copy of the message, either because the first copy was not transmitted perfectly or because there is some doubt that it was delivered. The addressee should check whether the message has already been received and a previous copy acted upon, or whether a copy that was incomplete or otherwise imperfect was acted upon.
- c) The expression “CHECK TEXT NEW ENDING ADDED”, appearing in upper case to attract attention. This means that an automatic relay station had received the message without a proper end-of-message signal and that one was added. The addressee should look for a remnant of the original end-of-message signal (NNNN) immediately above the word “CHECK”. If it is not there, it is possible that it has been completely lost and that a part of the text has been lost with it. The addressee should then check the text and, if it seems to be

incomplete, should ask the communication service for a repetition.

2.2.6 Errors made during the preparation of the text for transmission are corrected in teletypewriter operation in most cases on the tape, so they do not appear in the received page-copy. When this is not possible, the correction is done by following the error with the error sign, retyping the last correct word (or group), then continuing with the message. For example:



2.2.7 If it were necessary to confirm a part of the text, that confirmation would appear in page-copy like this:

CFM followed by the part being confirmed.

2.2.8 Similarly, if it were necessary to correct an error in the text that had not previously been noticed, that correction would appear in page-copy like this:

COR followed by the part being corrected.

Teletypewriter signals			Component of message part		When used
Before the address	Heading	ZCZC	Start-of-message signal		always
		Example: NRA062	Transmission identification, composed of:	(In example)	always
			Transmitting-terminal letter Receiving-terminal letter Channel-identification letter Channel-sequence number (3 digits)	N R A 062	
		Example: 271740	Additional service indication (no more than 10 characters)	(In example) The time of transmission of the message.	if required
		VVV	Diversion indicator		if required
After the text	Example: GG LGACYNYX		Shortened address		if required
	NNNN		End-of-message signal		always

Figure 6-C-1. Explanation of page-copy

This is of no interest to the addressee		The previous message was torn here
	NNNNZCZC NRA062 271740 GG LGACYNYX	Heading Shortened address
As made out by the originator, and of interest to the addressee	GG LGACYNYX ABBTIALX etc. 121735 LGGBYNYX BEGINNING OF TEXT MATERIAL END OF TEXT MATERIAL	Address Origin
		The message is torn here
This is of no interest to the addressee	NNNN	End-of-message signal

Figure 6-C-2 Example of a teletypewriter message

Chapter 7

AERONAUTICAL INFORMATION CIRCULARS (AIC)

7.1 CONTENTS

[Chapter 7]

7.1.1 It will usually be found necessary to distribute some types of aeronautical information, mainly of an administrative nature, which do not qualify for promulgation in AIP or NOTAM, such as:

- a) a long-term forecast of any major change in legislation, regulations, procedures or facilities;
- b) information of a purely explanatory or advisory nature liable to affect flight safety; and
- c) information or notification of an explanatory or advisory nature concerning technical, legislative or purely administrative matters.

7.1.2 In such cases, rather than overburden the AIP and/or NOTAM service, the information must be distributed by means of an AIC which is an element of the Integrated Aeronautical Information Package. The types of information appropriate to AIC are as follows:

- a) forecasts of important changes in the air navigation procedures, services and facilities provided (e.g. new layout of control sectors or implementation plan for a radar network);
- b) forecasts of implementation of new navigational systems (VOR, DME, etc.);
- c) significant information arising from aircraft accident/incident investigation that has a bearing on flight safety;
- d) information on regulations relating to the safeguarding of international civil aviation against acts of unlawful interference;
- e) advice on medical matters of special interest to pilots;

- f) warnings to pilots concerning the avoidance of physical hazards;
- g) effect of certain weather phenomena on aircraft operations;
- h) information on new hazards affecting aircraft handling techniques;
- i) regulations relating to the carriage of restricted articles by air;
- j) reference to the requirements of, and publication of changes in, national legislation;
- k) aircrew licensing arrangements;
- l) training of aviation personnel;
- m) application of, or exemption from, requirements in national legislation;
- n) advice on the use and maintenance of specific types of equipment;
- o) actual or planned availability of new or revised editions of aeronautical charts;
- p) carriage of radio equipment;
- q) explanatory information relating to noise abatement;
- r) selected airworthiness directives;
- s) changes in NOTAM series or distribution, new editions of AIP or major changes in their contents, coverage or format;
- t) advance information on the snow plan (Annex 15, 7.1.1.2 refers); and
- u) other information of a similar nature.

The format for AIC is provided in Figure 7-1.

Seasonal information supplementing a snow plan

7.1.3 Seasonal information supplementing the snow plan published in the AIP must be issued in an AIC and contain the following information:

- a) a list of aerodromes/heliports where snow clearance is expected to be performed during the coming winter:
 - 1) in accordance with the runway and taxiway systems, or
 - 2) planned snow clearing, deviating from the runway system (length, width and number of runways, affected taxiways and aprons or portions thereof);
- b) information concerning any centre designated to coordinate information on the current state of progress of clearance and on the current state of runways, taxiways and aprons;
- c) a division of the aerodromes/heliports into SNOWTAM distribution lists in order to avoid excessive NOTAM distribution;
- d) an indication, as necessary, of minor changes to the standing snow plan;
- e) a descriptive list of clearance equipment; and
- f) a listing of what will be considered as the minimum critical snow bank to be reported at each aerodrome/heliport at which reporting will commence.

7.1.4 This AIC must be issued not less than one month before the normal onset of winter conditions. The information, or any part of it, listed under a), b), d), e) and f) above may, if so desired, be included in the snow plan published in the AIP, Part 3, Aerodromes (AD), Subsection

AD 1.2.2. A specimen of a seasonal AIC supplementing a snow plan is contained in Figure 7-2.

7.2 ANNUAL REVIEW AND CHECKLIST

[7.2.1.2, 7.2.1.3, 7.2.2]

AIC should be numbered consecutively on a calendar year basis. Since AIC information is often effective for long periods and requires little amendment, it will usually be found that AIC can, if necessary, remain outstanding for several years without inconvenience. A review and re-issue on a yearly basis is however advisable. In any case, a checklist of AIC currently in force must be issued as an AIC (see Figure 7-1) at least once a year. Further, if AIC are issued in more than one series, each series must be identified by a letter (A 2/02, B 4/02, etc.)

7.3 DISTRIBUTION

[7.2.1.1, 7.2.1.4, 7.3]

7.3.1 The originating State selects the AIC that are to be given international distribution. AIC thus selected must be given the same distribution as the AIP, AIP Amendments and AIP Supplements. In addition, it is highly recommended that AIC be colour coded by subject where there are sufficient circulars in force to warrant such identification, e.g.:

- a) white — administrative;
- b) yellow — ATC;
- c) pink — safety;
- d) mauve — danger area map; and
- e) green — maps/charts.

7.3.2 Distribution of AIC on a national basis is left to the discretion of the originating State concerned.

<p>TEL: 0123 697 3464 FAX: 0123 697 3474 Telex: 99 1236 AFS: EADDYAYX E-mail: AIS@donc.xx</p>	<p>REPUBLIC OF DONLON DEPARTMENT OF CIVIL AVIATION AERONAUTICAL INFORMATION SERVICE P.O. BOX 744 DONLON CITY</p>	<p>AIC Series A</p> <p>11/03 14 OCT</p>

Note.— Sheet size should be 21 × 27 centimetres (8 × 10½ inches).

Figure 7-1. Format for an Aeronautical Information Circular

TEL: 0123 697 3464 FAX: 0123 697 3474 Telex: 99 1236 AFS: EADDYAYX E-mail: AIS@donc.xx	REPUBLIC OF DONLON DEPARTMENT OF CIVIL AVIATION AERONAUTICAL INFORMATION SERVICE P.O. BOX 744 DONLON CITY	AIC Series A <div style="border: 1px solid black; padding: 5px; margin-top: 20px; text-align: center;"> 11/02 14 OCT </div>
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SEASONAL SNOW PLAN FOR THE WINTER SEASON 2002/2003

1. During the winter season 2002/2003 snow, ice and standing water on aerodrome pavements will be reported by means of the SNOWTAM Format for DONLON/International, HOLMSTOCK/Landa and NIBORD/Nibord.
2. Information concerning the status of clearance is coordinated and SNOTAM will be issued by the AIS Unit at DONLON/International and sent to the following aerodromes:

 (List the aerodromes by name and AFTN address)
3. The following changes have been made to the Snow Plan:

 (List changes, if any.)
4. The following clearance equipment will be used:

 DONLON/International: 4 snow ploughs, 3 snow blowers;
 HOLMSTOCK/Landa: 3 snow ploughs, 3 snow blowers;
 NIBORD/Nibord: 2 snow ploughs, 2 snow blowers.
5. During the winter season, continuous snow clearance will be carried out.
6. Critical snowbanks outside runways and taxiways will be reported if the height exceeds 60 cm and a lateral distance of 15 m measured from the edge of the row of runway lights.

Note.— Sheet size should be 21 × 27 centimetres (8 × 10½ inches).

Figure 7-2. Specimen of a seasonal Aeronautical Information Circular supplementing a snow plan

Chapter 8

PRE-FLIGHT AND POST-FLIGHT INFORMATION

8.1 PROVISION OF PRE-FLIGHT INFORMATION SERVICE

Requirement [8.1.1]

8.1.1 Annex 15 specifies that pre-flight information must be made available at each aerodrome/heliport normally used for international operations. This includes all aerodromes/heliports designated for regular use by international commercial air transport as listed in the relevant ICAO regional plans and any aerodromes/heliports serving as alternates to these regular aerodromes/heliports.

8.1.2 The following guidance material is primarily intended to assist States in organizing their pre-flight information service. It should be noted that this service is required by all operators and particularly those who have not made specific arrangements to obtain such information. The service should also be arranged so as to supplement existing arrangements where these do not fully meet the operators' requirements. In determining the extent of the service that will be provided, States should note that the following information is mainly related to the provision of such a service in a manual environment. For those States intending to provide pre-flight information services by automated means, the guidance contained in Chapter 9 of this manual should also be taken into consideration.

Responsibility for execution

8.1.3 The State-administered AIS, or other agency appointed by the State, is responsible for the execution of the above requirement. Aerodrome/heliport AIS units established for this purpose should be organized and administered on the basis of the amount and type of traffic normally expected to use the aerodrome/heliport and on the length and number of the air routes originating at the aerodrome/heliport. Such units should be staffed by qualified AIS personnel, since a complete and responsible briefing can only be provided by staff possessing the

requisite knowledge in this field. It may be necessary, however, to delegate such responsibility to an air traffic services (ATS) unit or other operational service at an aerodrome/heliport where minimal traffic requires personnel to perform more than one task.

Facilitation of self-briefing

8.1.4 The main objective of an aerodrome/heliport AIS unit is to make available to pilots the aeronautical information required for a flight. Often, a pilot may not have sufficient time to spend in the AIS unit and it is therefore important that information be presented in a manner that will facilitate self-briefing. This will provide a time-saving method for the pilot to obtain required information. In order to provide this type of service, the main factors to be considered are:

- a) the layout of the briefing room;
- b) the format of the pre-flight information bulletins (PIB or "bulletins");
- c) the wall displays; and
- d) the access to basic information.

These factors are dealt with in detail in this chapter.

8.1.5 In addition to providing a self-briefing service, verbal briefings, when required, should also be available during the operational hours of the aerodrome/heliport.

8.2 LOCATION OF AN AIS UNIT

8.2.1 Aerodrome/heliport AIS units should be situated close to other aerodrome/heliport flight services and to airline flight operations offices to facilitate pre-flight functions by flight crews with maximum efficiency and without their being compelled to cover undue distances. Ideally, all such services, namely meteorological briefing,

flight clearance and the collection of fees and charges (if any), should be established in a group of soundproof offices located on the ground floor of the terminal building, preferably near the apron.

8.2.2 In order to reduce ground time, particularly for flights continuing without a change of crew, arrangements should be made for access to pre-flight information services without the necessity of customs clearance and/or other formalities. For the convenience of crews unfamiliar with the aerodrome/heliport, a diagram indicating the location of the aerodrome/heliport AIS unit should be placed at the apron entrance(s) to the terminal building.

8.2.3 Where the aerodrome/heliport is the site of a flight information centre or area control centre, it may be advisable to locate the ATS unit and the AIS unit in close proximity (providing the principles outlined above are not compromised).

8.3 LAYOUT OF AN AIS UNIT

General

8.3.1 There is no ideal layout for an AIS unit that can be applied generally. The space available, the extent of the coverage zone and the demand for pre-flight information services (which reflects the type and volume of traffic using the aerodrome/heliport) will be the determining factors. However, some principles are considered to be generally applicable, namely:

- a) briefing material relating to major facilities, ATS schemes and navigation warnings should also be displayed on maps and charts to the greatest extent possible;
- b) elements of the Integrated Aeronautical Information Package should be readily available for examination with a minimum amount of contact with briefing personnel;
- c) suitable space and work tables should be available for the study of documentary material, and for the plotting and planning of flight operations; and
- d) the displays and other facilities in the briefing room should, as far as possible, be arranged in a logical sequence so that personnel using the facilities may proceed with a minimum of time and effort. (This would be facilitated by a separate entrance and exit.)

Wall displays

8.3.2 Wall displays normally should consist of the following, although the extent of the coverage zone, the availability of suitable charts and the size of the available wall area may necessitate some deviation:

- a) two sets of charts of the coverage zone at small scale (1:1 000 000 to 1:3 000 000) showing:
 - 1) the ATS system, aerodromes/heliports and radio aids to navigation;
 - 2) areas over which the flight of aircraft is dangerous, restricted or prohibited;

Note.— The areas contained in navigation warning bulletins should be plotted on glass or transparent plastic sheeting and superimposed on this chart.

- b) a 1:500 000 or larger scale chart of the State in which the aerodrome/heliport is located;

Note.— In larger States this may be limited to the flight information region (FIR) in which the aerodrome/heliport is located and adjacent FIR.

- c) an outline chart of the coverage zone at small scale with an index to the area or route breakdown used in distributing briefing material. This chart should show the FIRs and items that would be mentioned in a briefing bulletin;
- d) a large scale chart or series of charts of the aerodrome/heliport traffic area showing controlled areas, approach aids, and holding, approach and departure procedures (the scale should be as large as practicable);
- e) an Aerodrome Obstacle Chart;
- f) a large scale chart (approximately 1:3 000) of the aerodrome/heliport movement area and approaches (in so far as necessary to include all lighting aids) showing the location of all technical services and the normal taxiing routes to be followed from apron to take-off positions; and
- g) a large scale diagram of the terminal area showing location of various offices and facilities of interest to visiting flight crews.

Updating of charts

8.3.3 Due to the frequent changes in the ATS system, the information about the current situation can best be indicated by the use of coloured tapes, pins, markers, etc., superimposed on a chart. Such a presentation can be amended from day to day and is much more intelligible to flight crews.

Bulletin trays and bulletin amendments

8.3.4 It will generally be found that the most convenient way of storing bulletins is to put them in trays. Each tray should be clearly marked with an indication of the type of bulletin (route, area, FIR, etc.). The tray should be deep enough to hold at least the number of bulletins anticipated to be required for a 24-hour period.

Access to basic documents

8.3.5 Basic documents (such as up-to-date AIP, AIP Supplements, AIC and ICAO documents) should be stored in such a way as to facilitate access to those wishing to refer to them. Whatever filing system a unit chooses to adopt for its reference library should be such that it is immediately identifiable to the intended user and thereby help to promote self-briefing.

Sale of aeronautical charts

8.3.6 At each aerodrome/heliport AIS unit arrangements could be made, where practicable, to have appropriate aeronautical charts available for sale. The quantity maintained on hand should be kept to the minimum consistent with the potential demand in order to avoid, as much as possible, the effect of obsolescence.

8.4 COVERAGE ZONE

[8.1.1, 8.1.2]

Geographic coverage

8.4.1 For each aerodrome/heliport AIS unit, the geographic area and/or the air routes for which aeronautical information is to be available must be determined and periodically reviewed as changes take place or are anticipated in the air traffic pattern.

8.4.2 The coverage zone must be sufficient to cater for at least the first route stage requirements of not only the national carriers of a State but also for those of the foreign airlines operating into or through its territory. This coverage must satisfy day-to-day requirements quickly and accurately while leaving sufficient margin to cater for new requirements without undue strain. Additionally, the possibility of charter flights to locations away from the routine traffic pattern must be kept in mind. The coverage zone for which information/data must be held can be obtained by a survey of the user requirements at each of the aerodromes/heliports, within a State, used for international air operations. An example of an information coverage zone form, which includes explanatory notes on the information/data required under column headings, is reproduced in Figure 8-1.

8.4.3 In general, the coverage zone should be limited to the FIR within which the aerodrome/heliport is located, the FIR(s) adjacent thereto and all air route stages (i.e. a route or portion of a route flown without an intermediate landing) originating at the aerodrome/heliport and extending beyond the FIR(s) mentioned.

Anticipation of traffic requirements

8.4.4 The existing traffic pattern is easily determined from operators, while useful indications of future trends may be gleaned from careful study of the reports of regional air navigation meetings, bilateral agreements and statements from operators. The aim should be to anticipate traffic requirements rather than be overtaken by them.

Depth of information

8.4.5 Having determined the geographical area of coverage, it is then necessary to take account of the depth of information required within that area. The immediately adjacent areas will be those most used by short-range traffic, whether it is commercial or private flying. For these areas it will be necessary to request the maximum amount of information relating to the State as a whole and in particular to every aerodrome/heliport available for use by international traffic. Quite frequently it may be necessary to request similar information in respect of aerodromes/heliports which, though not designated as airports of entry, may be used by charter or private aircraft which have cleared customs elsewhere. Thus, in determining the extent to which pre-flight information services are to be provided, States should ascertain that the requirements for “first sector briefing” (point of departure to point of first intended landing) are fully met.

Analysis

8.4.6 A careful analysis of the traffic emanating from each aerodrome/heliport is essential. This must be supplemented by close liaison with the representatives of the operators using the aerodrome/heliport. By this means, any changes in the route plans of any operator will be known by the AIS unit and it will then be possible to organize the adjustment, supply or additional information called for by such changes. Where the State is large enough to require AIS units at two or more aerodromes/heliports within its territory, the information held at each unit should be designed to meet the needs of the traffic normally emanating from that aerodrome/heliport.

8.4.7 The use of long-range aircraft often dictates a need for information far beyond that which may normally be available and the AIS should therefore ensure that briefings cover route segments which go further than the first point of landing (i.e. final destination) and that required information/data are readily available.

8.5 DETAILED INFORMATION TO BE HELD FOR EACH COVERAGE ZONE

[3.1, 8.1.2]

8.5.1 The aeronautical information documents to be available at an aerodrome/heliport AIS unit for pre-flight planning purposes are to be established on the basis of the unit's coverage zone as explained in 8.4. The documentation provided must include relevant elements of the Integrated Aeronautical Information Package. In cases where a complete library of aeronautical information is available at a central location and direct communications exist between it and the aerodrome/heliport AIS unit, such material can be limited to national publications and, where practicable, those of immediately adjacent States. The following, more detailed list is intended as a guide to the types of information that should be readily available for each coverage zone:

- a) air routes;
- b) regulations concerning entry into and transit of civil aircraft on international flights;
- c) aerodromes/heliports available to international aviation;
- d) air navigation aids and mobile communication facilities;
- e) meteorological facilities;
- f) rules of the air and ATS procedures;
- g) controlled and restricted airspace;
- h) hazards to air navigation;
- i) search and rescue facilities;
- j) survival information;
- k) appropriate maps and charts;
- l) a recapitulation of current NOTAM, and other information of an urgent character not contained in NOTAM, on aerodrome/heliport conditions, including the serviceability and operational status of visual ground aids, non-visual aids, and the manoeuvring area, e.g.:
 - 1) construction or maintenance work on or immediately adjacent to the manoeuvring area;
 - 2) rough portions of any part of the manoeuvring area, whether marked or not, e.g. broken parts of the surface of runways and taxiways;
 - 3) presence and depth of snow, ice or water on runways and taxiways, including their effect on surface friction;
 - 4) snow drifted or piled on or adjacent to runways or taxiways;
 - 5) parked aircraft or other objects on or immediately adjacent to taxiways;
 - 6) presence of other temporary hazards;
 - 7) presence of birds constituting a potential hazard to aircraft operations;
 - 8) failure or irregular operation of part or all of the aerodrome/heliport lighting system including approach, threshold, runway, taxiway, obstacle and manoeuvring area lights and aerodrome/heliport power supply;
 - 9) failure, irregular operation and changes in the operational status of ILS (including markers), MLS, Basic GNSS, SBAS, GBAS, SRE, PAR, DME, SSR, VOR, NDB, VHF aeromobile channels, RVR observing system, and secondary power supply; and

- 10) presence and operation of humanitarian relief missions, such as those undertaken under the auspices of the United Nations, together with any associated procedures and/or limitations applied thereto.

8.5.2 The recapitulation of current NOTAM and other information of urgent character must be made available to flight crews in the form of plain-language PIB.

8.5.3 All of the foregoing information should be contained in the various elements of the Integrated Aeronautical Information Package providing these documents are available for all States in the coverage zone. If such documentation is not available, the AIS should take steps to obtain adequate information, preferably through the aviation authority of the State concerned or, if necessary, from other sources, such as commercial airlines, airline service organizations and military services. Information from other sources must be verified, if possible, before distribution and if not verified, must, when distributed, be clearly identified as such.

8.5.4 NOTAM should be classified and filed systematically and in a manner that facilitates selection for publication of PIB.

8.5.5 ICAO documents should be selected from the list in Chapter 3 to meet local requirements for reference material.

8.5.6 Aeronautical charts, selected from the following list to meet local requirements, should be maintained for reference purposes (Charts for wall displays are treated under 8.3.2.):

- a) World Aeronautical Charts ICAO 1:1 000 000 or aeronautical charts of similar scale for areas where ICAO charts are not available;
- b) available chart series of a scale larger than 1:1 000 000, e.g. 1:500 000 and 1:250 000 scale;
- c) small scale Planning Chart(s), preferably covering the entire coverage zone on one or two sheets;
- d) one or more series of 1:2 000 000 or smaller scale Plotting Charts;
- e) any available charts for use with electronic aids to navigation;

- f) Approach and Aerodrome/Heliport Charts for all aerodromes/heliports normally used for international operations; and
- g) En-route Charts.

Note.— Charts referred to in f) and g) are normally contained in Aeronautical Information Publications.

8.6 VERBAL BRIEFING

Verbal briefing should be adjusted to the pilot's requirements depending upon familiarity with the route. A checklist may be used by the briefing officer to ensure that the briefing is as comprehensive as necessary; the completeness of a briefing should not be dependent upon the unaided memory of the briefing officer. The items to be included in such a checklist will vary according to the local situation. A list of items upon which the checklist may be based is given in Figure 8-2. If there is any reason to doubt published information, e.g. on aerodromes/heliports or aerodrome/heliport facilities, the briefing officer should not hesitate to telephone the appropriate authority for the latest information. To facilitate SAR action, the briefing officer must ensure that the exact location of the intended landing places of the flight which is being briefed is known, particularly in the case of light aircraft not equipped with a two-way radio. When it is impracticable to obtain information for the complete flight-planned route, or when it is more expeditious for information concerning part of the route to be provided by or through another unit, the briefing officer must ensure that the pilot knows where to obtain information for the next route segment. It may be necessary, in exceptional cases, to supplement the normal bulletins and verbal briefing with additional written material specially prepared for a pilot totally unfamiliar with the route to be flown.

8.7 SELF-BRIEFING

Pre-flight information bulletins

8.7.1 The provision of daily bulletins is of primary significance in a self-briefing service. Manually prepared, printed plain-language bulletins for collection by pilots, containing current information on the status of facilities and services should be provided. Additionally, amendments to the information contained in bulletins should be made available in the form of handout sheets or updated PIB.

Scope of bulletins

8.7.2 Bulletins may take the simple form of a list of current NOTAM covering selected routes or areas, or at the discretion of the State, may be presented in a more elaborate form. A list of the types of bulletins that can be made available is found in 8.7.8.

Treatment

8.7.3 Bulletins should be prepared for major traffic areas or air routes, the choice of areas and/or air routes being dependent upon the needs of the major users and the degree to which it is feasible to provide a specialized service. For example, a group of routes extending in the same general direction may be treated collectively. To facilitate use of the bulletins, the information for each area or route may be divided into the following two categories and published as separate bulletins:

- a) navigation warnings, i.e. activation of areas over which the flight of aircraft is dangerous or restricted (termed “NAV WARNINGS” — sample format at Figure 8-3); and
- b) information other than navigation warnings, i.e. routine serviceability reports, changes in procedures, etc. (termed “GENERAL” — sample format at Figure 8-4).

Navigation warning display

8.7.4 As mentioned in 8.3.2 a) 2), the wall display should include a plot of the navigation warnings that appear in the daily navigation warning bulletins. A 1:1 000 000 scale chart is suitable for this purpose, but the actual scale chosen will depend upon the coverage zone of the bulletins and the wall space available. If there is insufficient wall space, consideration should be given to the use of a mobile board. The bulletin coverage zone may be divided into areas (e.g. FIR or States) and each area allocated a letter. This letter should be allocated to all navigation warnings in that area. Additionally, each navigation warning should be allocated a number. Thus all navigation warnings in a particular area will have the same identifying letter and each a separate number. This reference would appear on the left side of the bulletin and, as a means of identification, on the chart on which the warnings are plotted (see Figure 8-5). To further facilitate self-briefing, and as a time saver for those using the service, the reference on the chart of navigation warnings that have an upper limit in excess of a specified flight level/altitude

may be underlined in red. This will help the users to readily identify navigation warnings that may affect their flight. A suitable notice would have to be displayed on or adjacent to the chart indicating the meaning of the red underlining.

Entries

8.7.5 Entries made on the bulletin relating to the serviceability of facilities should clearly indicate:

- a) the location of the facility including, if appropriate, the city and the aerodrome/heliport served by the facility, together with the four-letter location indicator where available; and
- b) the information to be conveyed, in plain language, including, where appropriate, ICAO abbreviations.

Central bulletin production

8.7.6 Where aerodrome/heliport AIS units have overlapping coverage zones or route stages, central bulletin production offers the most efficient method of providing PIB. For this purpose, sufficiently rapid and reliable air or surface (electronic) communications must be available for bulletin distribution. The local AIS unit will have to update the bulletin, whenever necessary, with the latest information. The date and time of issue should therefore be given in each bulletin. The use of automated processes is ideally suited to central bulletin production, since the information content is continually changing; direct line communications are, of course, essential for distribution purposes. This method of producing PIB can offer considerable savings in staffing requirements and enhance the consistency and consequent operational reliability of published information. The advantages of such a system are covered in greater detail in Chapter 9.

Bulletin types

8.7.7 There are two broad categories of bulletins, the “area” and “route” types, as well as a variety of subdivisions of each of these. The common set of NOTAM qualifiers, as explained in the instructions for completing the NOTAM Format (see Chapter 6, Appendix A), enables a system to provide this range of bulletins. From the foregoing it can be seen that NOTAM are the principal source of information which affect the contents of PIB and data can be structured to meet the needs of any user(s), based on specific operational requirements.

8.7.8 Depending on the requirements of users, PIB should be made available in the form of:

- a) area type bulletins;
- b) route type bulletins;
- c) aerodrome type bulletins;
- d) immediate automatic notification of items of urgent operational significance; and
- e) administrative bulletins.

8.7.9 The bulletins should be provided using a standard format and sequence of information. These standard formats are given in Figures 8-6 to 8-8. PIB should only contain information of operational significance that differs from that published in the AIP, and should be tailored to meet both operational and administrative users' needs.

Area type bulletins (FIR, groups of FIR or State(s))

8.7.10 The following area type bulletins can be made available from within an automated system:

- a) all PIB information;
- b) IFR PIB information;
- c) VFR PIB information;
- d) OPSIG information;
- e) IMMEDIATE NOTIFICATION information;
- f) only en-route information (IFR, VFR, OPSIG, IMMEDIATE NOTIFICATION, LOWER/UPPER);
- g) selected lists by aerodrome location indicators; and
- h) any combination of the above.

Route type bulletins

8.7.11 The following route type bulletins can contain the same type of information as the area type bulletins in the form of:

- a) *FIR route specific*: i.e. providing information regarding FIR crossed and specific departure, destination and alternate aerodromes/heliports; and

- b) *Narrow path route specific*: i.e. providing information only for an area determined by a strip defined geographically about the route with departure, destination and alternate aerodromes/heliports.

8.7.12 A benefit of route-specific bulletins based on FIR is that they can also include information for the return flight which does not always follow the same routing for the outgoing one. Also, when there is a choice of two or more routings between one city pair, for which a narrow path bulletin could be inadequate, a bulletin based on FIR may be preferable. There could be a requirement, in addition to the above, for the provision of more refined data retrieval which requires the introduction of a geographical reference feature. This form of retrieval can provide narrow-path route-specific bulletins which may be required for RNAV operations and to cater to a higher level of automation within certain air navigation services and user systems.

Aerodrome type bulletins

8.7.13 Essentially, aerodrome type bulletins should contain information on selected aerodromes/heliports as may be necessary. Depending on user requirements, such bulletins can contain data on aerodromes/heliports within one or more FIR, for specified sectors or for destination and alternate aerodromes/heliports only. These requirements should be established through agreement between the AIS authority and the operator(s) concerned.

Immediate automatic notification of items of urgent operational significance

8.7.14 Items of urgent operational significance, which are listed separately in the NOTAM Selection Criteria (see Chapter 6, Appendix B), must be brought to the attention of operators concerned even after the pre-flight briefing stage.

Administrative bulletins

8.7.15 The following administrative bulletins must be provided:

- a) checklists of all current NOTAM by State/FIR/aerodrome/heliport; and
- b) all NOTAM input since a specified date-time group. (This procedure greatly facilitates briefings.)

Bulletin update

8.7.16 The updating of PIB should be covered by:

- a) the system products listed in 8.7.14 or 8.7.15; or
- b) a request for a new bulletin.

8.7.17 The above-mentioned bulletin types would make obsolete the requirement for specific update bulletins which have been found to require complex time reference procedures.

Postal bulletins

8.7.18 It is envisaged that, for the foreseeable future, there will still be a need for a very comprehensive area type bulletin, containing information from a specified date-time group projected ahead to another date-time group, which will have to be distributed to minor aerodromes/heliports by post. AIS authorities should therefore ensure that such data are expedited with a minimum of delay.

Bulletin format

8.7.19 The bulletin output must have the following characteristics:

- a) NOTAM text in significations/uniform abbreviated phraseology assigned to the ICAO NOTAM Code complemented by ICAO abbreviations, indicators, identifiers, designators, call signs, frequencies, figures and plain language; and
- b) NOTAM number to the right of text.

8.7.20 Bulletins must be prepared in the following sequence:

- a) a heading (identity of origination, area covered and for whom prepared);
- b) en-route information;
- c) aerodrome/heliport information; and
- d) navigation warnings.

8.7.21 Within each of subparagraphs b) to d) above, the information should be presented in the order of subsections of the AIP. These may also be used as subheadings, if so desired, but are not essential as the subject should be clear from Item E) of the NOTAM (see Chapter 6).

8.8 POST-FLIGHT INFORMATION

[8.3]

Purpose of post-flight information

8.8.1 The purpose of post-flight information is to ensure that inadequacies of facilities essential to the safety of flight operations, and the presence of birds on or around the airport constituting a potential hazard to aircraft operations, observed by a pilot during the flight, are reported without delay to the authority responsible for those facilities. Annex 6, Part I, Chapter 4, 4.1.2 and Part III, Section II, Chapter 2, 2.1.2 places on the operator the responsibility for reporting any inadequacy. Annex 15, 8.3 requires States to ensure that arrangements are made at aerodromes/heliports to receive this information and to make it available to the AIS “for such distribution as the circumstances necessitate”. This is the basis on which the collection and distribution of post-flight information should be administered, and should influence the formulation of a format for the collection of such information.

8.8.2 Furthermore, Annex 15, 8.3.2 requires States to ensure that arrangements are made to receive at aerodromes/heliports information concerning the presence of birds observed by aircrews and ensure that such information is made available to the AIS for such distribution as the circumstances necessitate.

Collection of post-flight information

8.8.3 In most cases, an inadequacy of a facility or the presence of birds is reported by the pilot on the appropriate ATS frequency, and this information must then be passed on to the responsible authority and to AIS for required action.

8.8.4 After landing, a pilot wishing to confirm in writing any observations, or wishing to make an initial report, may do so at the aerodrome/heliport AIS unit, where a post-flight report form should be available. A specimen post-flight report form is at Figure 8-9. A space could also be provided on a PIB to facilitate the reporting of such data in writing at the aerodrome/heliport of destination.

8.8.5 Copies of the post-flight report form could also be made available in the airline operator’s offices at the aerodrome/heliport to facilitate filing of post-flight reports by the pilot. The report must subsequently be made available to the AIS without delay.

NAME OF AERODROME/HELIPORT AIS UNIT

Operator	Destination	Alternates	ATS route(s)	FIR	NOF	Frequency	Departure time(s)	Remarks

Explanatory notes on information required under column headings

1. *Operator.* All operators using or intending to use the aerodrome/heliport at which the aerodrome/heliport AIS unit is located.
2. *Destination.* The aerodrome of first intended landing on the air route stage originating at the aerodrome at which the aerodrome/heliport AIS unit is located.
3. *Alternates.* The alternate aerodrome(s)/heliport(s) for the destination given in the preceding column, specified by the operator.
4. *ATS route(s).* The air traffic service (ATS) route(s), as applicable, specified by the operator for flight to the destination and alternate(s).
5. *FIR.* The flight information region(s) through which the flight to the destination and alternate(s) is planned, together with those adjacent FIR which contain information significant to the flight.
6. *NOF.* The international NOTAM offices responsible for the provision of aeronautical information in the FIR specified in the preceding column.
7. *Frequency.* The number of flights, specified as per day or per week, for the given air route stage.

Note.— This will determine the pre-flight information bulletin reproduction requirements.

8. *Departure time(s).* The scheduled departure time(s) for the given air route stage.

Note.— This will determine the pre-flight information bulletin optimum release time.

9. *Remarks.* Any additional information concerning the given air route stage; e.g. pre-flight information required for lower airspace only.

Figure 8-1. Information coverage zone form

1. *Regulations and procedures*
 - a) Basic publications and recent amendments and supplements
 - b) Procedures applicable to airspace to be used
 - c) ATS procedures
 - d) Altimeter setting
2. *Meteorological information*
 - a) Availability of MET facilities, forecasts and weather reports
 - b) Provision of relevant available meteorological information where there is no meteorological office at the aerodrome/heliport, including weather information reported by en-route aircraft
3. *Route and destination information*
 - a) Suggestions concerning available routes
 - b) Tracks, distances, general topography and terrain features and information required to maintain safe levels en route
 - c) Availability and serviceability state of aerodromes/heliports and aerodrome/heliport facilities
 - d) Availability and serviceability state of navigation aids
 - e) SAR procedures and facilities and functions of the SAR organization
4. *Communication facilities and procedures*
 - a) Availability and serviceability of air/ground communication facilities
 - b) Procedures
 - c) Radio frequencies and hours of operation
 - d) Communication facilities available to aircraft not equipped with radio for forwarding movement reports
5. *Hazards to air navigation*
6. *Any other essential information* (including that requested by a pilot which might not be available locally but which can be obtained from the appropriate source)

Figure 8-2. Briefing checklist

Pre-flight information bulletin	AERONAUTICAL INFORMATION SERVICE		Date and time of issue	Route or area coverage
NAVIGATION WARNINGS			22/8/03 1200 UTC	NORTH ATLANTIC
FIR/UIR Ref.	<u>Period</u> Time (UTC)	Area and nature of activity		<u>Upper limit</u> Lower limit
SHANNON FIR				
A2	<u>28/8/03</u> 0945-1015	10 KM radius of 532800N 0105600W. Demolition of explosives.		<u>2 000 M MSL</u> GND
SHANNON OCEANIC FIR				
A5	<u>23/8/03</u> 0700-1600	Sector: 573000N 0111500W GEO BRG 200° and 280°, distance 45 KM. Firing on towed target.		<u>4 500 M MSL</u> SFC
A7	<u>21-25/8/03</u> 0800-2200	Area: 503600N 0114200W 502000N 0115300W 503300N 0125200W 505000N 0124500W 503600N 0114200W In-flight refuelling.		<u>FL 180</u> FL 120
GANDER FIR				
C1	<u>22/8/03</u> 0300-1200	20 KM radius of 473000N 0533000W. Air-to-air firing.		<u>500 M MSL</u> SFC

Figure 8-3. Sample of pre-flight information bulletin — navigation warnings

Pre-flight information bulletin	AERONAUTICAL INFORMATION SERVICE		Date and time of issue 4/11/03 1200 UTC	Route or area coverage NORTH ATLANTIC
Location	Facility	Information		
LONDON FIR				
LONDON/Heathrow EGLL	RWY 05/23	Closed for maintenance 2100 – 0500 on nights of 7, 8 and 9 Nov.		
REYKJAVIK FIR				
KEFLAVIK/Keflavik BIFK	ILS	AVBL for RWY 12 only.		
SONDRESTROM FIR				
PRINS CHRISTIANS SUND BGPC	HF/RTF	FREQ. 2868, 2945 and 2987 KHZ unserviceable.		
GANDER FIR				
GANDER CYQX	VOR	112.7 MHZ Voice unserviceable.		

Figure 8-4. Sample of pre-flight information bulletin — information other than navigation warnings

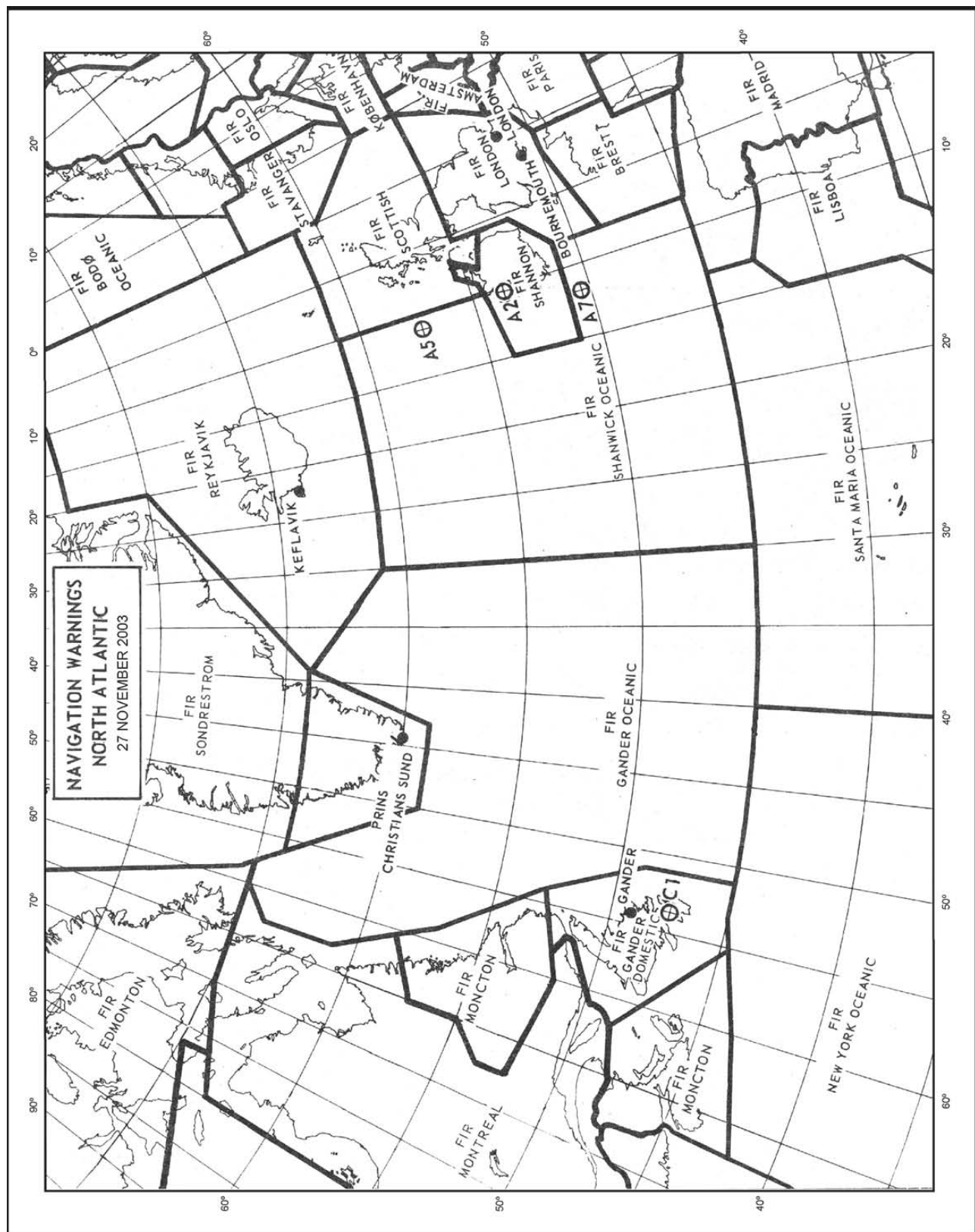


Figure 8-5 Sample navigation warning display

Pre-flight information bulletin (Aerodrome)	(State) AERONAUTICAL INFORMATION SERVICE
Date/time: 03/06/15/1000	Period: 03/06/15/0000 to 03/06/16/2400
Type of traffic: IFR/VFR	Height limits: Lower Upper
Bulletin contents: General purpose/OPSIG, AD	
Aerodromes: EDDF, EDDM, EDDV, etc.	
<p>FRANKFURT/MAIN (EDDF)</p> <p>[NOTAM sorted in the order of subsections of AIP Part 3 — Aerodromes (AD)]</p> <p>MUNCHEN/RIEM (EDDM)</p> <p>[NOTAM sorted in the order of subsections of AIP Part 3 — Aerodromes (AD)]</p> <p>HANNOVER/LANGENHAVEN (EDVV)</p> <p>[NOTAM sorted in the order of subsections of AIP Part 3 — Aerodromes (AD)]</p> <p>Other aerodromes (name/ICAO location indicator), etc.</p>	

**Figure 8-6 Example of standard PIB format — Aerodrome type
(skeleton for a two-day period)**

<div>Pre-flight information bulletin (Area)</div>	<div>(State) AERONAUTICAL INFORMATION SERVICE</div>
Date/time: 03/06/15/1000	Period: 03/06/15/0000 to 03/06/16/2400
Type of traffic: IFR/VFR	Height limits: Lower 000 Upper 999
Bulletin contents: General purpose/OPSIG, en-route, AD, NAV warning	
Area: RJTG (Tokyo)	

TOKYO FIR (RJTG)

EN-ROUTE

[NOTAM sorted in the order of subsections of AIP Part 2 — En-route (ENR)]

AERODROMES

RJAA (XXYYZZ aerodrome)

[NOTAM sorted in the order of subsections of AIP Part 3 — Aerodromes (AD)]

Other aerodromes (names of aerodromes)

NAV WARNINGS

Figure 8-7 Example of standard PIB format — Area type (skeleton for a two-day period)

Pre-flight information bulletin (Route)	(State) AERONAUTICAL INFORMATION SERVICE
Date: 03/06/15/1000	Time (UTC): 0835
Type of traffic: IFR	Period: 03/06/15/0000 to 03/06/16/2400
Bulletin contents: General purpose/OPSIG, en-route, AD, NAV warning	
Height limits — All FIR (Lower/upper) — First FIR	000/999 000/120 Other: 120/999 Last: 000/120
Flight number:	City pair:
ADDEP: EHAM ADDEST: CYMX	Alternates: CYYZ
FIR: EHAA — EGTT — EISN — EGGX — CZQX — CZYL — CYYZ	
<p>EN-ROUTE EHAA (AMSTERDAM FIR) [NOTAM sorted in the order of subsections of AIP Part 2 — En-route (ENR)]</p> <p>Next FIR (etc.)</p> <p>AERODROMES</p> <p>AERODROME (DEPARTURE EHAM (AMSTERDAM/Schiphol) [NOTAM sorted in the order of subsections of AIP Part 3 — Aerodromes (AD)]</p> <p>AERODROME (ARRIVAL) CYMX (MONTREAL/Mirabel) [NOTAM sorted in the order of subsections of AIP Part 3 — Aerodromes (AD)]</p> <p>AERODROMES (ALTERNATES) [Additional aerodrome information only if specially requested.]</p> <p>NAV WARNINGS</p>	

**Figure 8-8 Example of standard PIB format — Route type
(skeleton for a one-day period)**

POST-FLIGHT REPORT			
Aircraft nationality or common mark and registration mark:			
Owner/FLT NR:			
Departure aerodrome:		ATD (UTC):	
Arrival aerodrome:		ATA (UTC):	
Facility	Location	Details of inadequacy*	Time of observation
Birds	Location	Details	Time of observation
Date: _____ Signature of pilot: _____			

**Includes flight altitude/level distance and bearing from the facility(ies) observed.*

Figure 8-9 Post-flight report on inadequacies in the status and operation of air navigation facilities and presence of birds

Chapter 9

ORGANIZATION OF AN AUTOMATED AERONAUTICAL INFORMATION SERVICES SYSTEM

9.1 GENERAL

[8.2.1]

9.1.1 The main purpose of this chapter is to assist States that are interested in the development and introduction of automated processes within their AIS infrastructure. The guidance focuses on all levels of automation. States having such an interest are at liberty to decide on the degree of sophistication they wish to see implemented within their AIS. Much depends on the specific output (Aeronautical Information Publication (AIP), NOTAM, Aeronautical Information Circulars (AIC), etc.) of the service concerned and this will, of course, have a bearing on overall planning.

9.1.2 The guidance contained in Chapters 6 and 8 is primarily intended for use in a manual or semi-automated AIS environment. Where the civil aviation authority, or the agency to which the authority to provide aeronautical information service has been delegated, uses automated pre-flight information systems to make aeronautical information/data available to flight operations personnel, including flight crew members, for self briefing, flight planning and flight information service purposes, the information/data must comply with the provisions of 8.1.2 and 8.1.3 of Annex 15. These provisions specify the type of aeronautical information/data to be made available for pre-flight planning purposes and the availability of pre-flight information bulletins (PIB). (See also 8.5.1 and 8.5.2 of this manual.)

9.1.3 The following guidance does not propose the purchase of any particular brand of computer or software for developing an automated AIS system. The selection of such equipment and associated applications is therefore left to the discretion of the State(s) concerned in consultation with hardware and/or software manufacturers and bearing in mind the requirements of each AIS. The capacity of the equipment selected should be sufficient to cater for the immediate needs and future growth of the provider service. Also, it is conceivable that the automation requirements of an AIS could be integrated into an existing central

mainframe computer already providing such services as meteorology (MET) and air traffic services (ATS).

9.2 BASIC PRINCIPLES

9.2.1 The principal objective of developing an automated AIS system is to improve, through automation, the overall speed, efficiency, accuracy and cost-effectiveness of the AIS.

9.2.2 For States that are considering or already have an automated or computer-based AIS system, the following material focuses on the advantages and flexibility to be derived from such an application. Essentially, an automated AIS system should be capable of providing a more flexible pre-flight information service by tailoring its automation processes to cater to a wider spectrum of users. As such, the tailoring/selection functions required for this service should be performed by the automated AIS system with a minimum of manual intervention so that duplication of work can be reduced if not eliminated entirely. For reasons of cost-effectiveness, such a service must strike a balance between the degree of sophistication of the system required and the amount of information to be accepted in the various categories of bulletins. It is necessary therefore to:

- a) select a simple, flexible and efficient system for storage and retrieval of information; and
- b) develop methods of providing a greater selectivity of information in accordance with user requirements.

9.2.3 As such, the system should be designed with the intent of avoiding incompatibilities, divergencies and unnecessary duplication of effort thereby ensuring standardization of procedures, products and services to end-users. While some States have already automated their AIS, others are still in the process of doing so, or are in the planning stage. Consequently, it is highly desirable that all AIS

systems be automated along the same or similar lines in order to ensure compatibility.

9.2.4 With a view to ensuring progressive implementation of automated AIS systems and taking account of actual technical possibilities (e.g. the capacity and the capabilities of the systems currently automated, the communication facilities that are or will be available in the near future, and the existence of AIS that are manual or semi-automated) a number of basic principles should be adhered to as follows:

- a) National automated AIS system centres should be able to closely cooperate with other AIS in adopting the various elements that will make up an integrated automated AIS system, taking into account their current and planned degree of development.
- b) States should initially automate NOTAM service within their own AIS, taking into account user requirements.
- c) Certain national automated AIS systems should cooperate with other non-automated AIS systems to carry out agreed functions to improve the efficiency and the quality of processing of aeronautical information and distribution both within an agreed area of the system and externally.
- d) Optimum use should be made of available communication and public networks as well as new communication technology for the distribution, exchange and retrieval of aeronautical information, particularly NOTAM.
- e) The selection of the various means for the retrieval of data at a national level should be at the discretion of the individual State and should be largely dependent on the availability and cost of the various services, communication links available and user requirements.
- f) The NOTAM Format, containing the necessary qualifiers to facilitate the sorting and retrieval of NOTAM information in accordance with user requirements, should be used exclusively.
- g) A system interrogation capability which takes account of the different categories of system users should be in place.
- h) Common, user-friendly query procedures for the interrogation of AIS or NOTAM databases should

be used. These procedures should be in accordance with the different levels of user requirements.

- i) States must establish a quality system and procedures which will ensure that the available aeronautical information is of appropriate quality (accuracy, resolution, integrity) and timeliness.
- j) States that decide not to automate their AIS may, in the interest of improved efficiency, arrange for the provision of automated services on its behalf on the basis of bilateral or multilateral agreements between States or other non-governmental organizations. The arrangements must take into account the non-transferable responsibility of a State for the aeronautical information published as well as other technical and administrative aspects associated with such agreements.

9.2.5 The development of an automated AIS system must take into account the provisions in Annex 15 for the use of the World Geodetic System — 1984 (WGS-84), the adopted common geodetic reference system, when aeronautical geographical coordinates are provided.

9.3 USERS' OPERATIONAL REQUIREMENTS IN AN AUTOMATED AIS SYSTEM

[8.2.5]

9.3.1 The overall system should provide a service that is capable of satisfying users' operational requirements, which include:

- a) availability of the latest PIB of the specific type needed (e.g. route or area);
- b) provision of information on specific items for given areas required by flight planning services, ATS, AIS or other users;
- c) availability of NOTAM entered into the system after a specific date-time group, to facilitate briefing; and
- d) provision of immediate notification capability for items of urgent operational significance.

9.3.2 Automated pre-flight information systems for the supply of aeronautical information/data for self-briefing, flight planning and flight information service should:

- a) provide for continuous and timely updating of the system database and monitoring of the validity and quality of the aeronautical information stored;
- b) permit access to the system by flight operations personnel, including flight crew members, aeronautical personnel concerned and other aeronautical users, through a suitable means of telecommunications;
- c) ensure provision, in paper copy form, of the aeronautical information/data accessed, as required;
- d) use access and interrogation procedures based on abbreviated plain language and ICAO location indicators, as appropriate, or based on a menu-driven interface or other appropriate mechanism as agreed between the civil aviation authority and operator(s) concerned; and
- e) provide for rapid responses to user requests for information.

9.3.3 On the basis of the foregoing, an automated AIS system should be able to provide end-users, such as pilots, ATS and military, with PIB geared to meet their specific requirements.

9.4 TYPES OF INFORMATION TO BE PROVIDED

9.4.1 The system should provide NOTAM covering the area of service, the area of responsibility and the area of coverage. The system should additionally provide the following PIB and lists:

- a) route type bulletin containing NOTAM relevant to the aerodrome/heliport of departure, the planned route based on FIR crossed, the aerodrome/heliport of destination, and alternate aerodromes/heliports;
- b) area type bulletin containing NOTAM relevant to FIR or State;
- c) aerodrome type bulletin containing NOTAM concerning any aerodrome/heliport or group of aerodromes/heliports;
- d) immediate notification items;
- e) checklists of NOTAM by State, FIR and aerodrome/heliport; and

- f) list of NOTAM for a specific period or NOTAM entered into the system after a specific date-time group.

9.4.2 The updating of PIB should be covered by the items listed in 9.4.1 d), e) and f), or by request for a new PIB. The system features described in 9.7 should permit PIB to be tailored to the needs of users and should provide flexible options for information content ranging from full system data coverage to data of urgent operational significance. PIB should be provided in a standard format.

Geographical reference qualifiers

9.4.3 The provision of more flexible and referred data retrievals can be satisfied by the application of a geographical reference system which may be required for the expansion of the overall system in order to meet future requirements. These requirements may derive from the introduction of RNAV operations, the expansion of automation within the ATS and the users' systems.

9.4.4 Sufficient flexibility and tailoring of information for the first set-up of automation in AIS is achieved by the use of the geographical reference qualifier. This qualifier consists of latitude and longitude to one minute resolution and referenced to the World Geodetic System — 1984 (WGS-84) geodetic datum and a three-digit distance figure giving radius of influence.

9.5 DATABASE CONTENTS

9.5.1 The following lists the types of data which can be made available in an automated AIS system centre database. These data are divided into three categories:

a) *Static data*

Data common to civil aviation and documented in AIP or other related documents. Such data include FIR, aerodromes, nav aids, areas, maps, rules, and NOTAM related to these subjects;

b) *Basic data*

Data required by an AIS system to enable NOTAM processing, i.e. reference lists, standard routes, distribution files, the NOTAM Selection Criteria, association criteria as well some static data.

c) *Dynamic data*

National and foreign (worldwide NOTAM, NOTAMC, NOTAMS, NOTAMV, SNOWTAM, ASHTAM, all checklists received, all system messages exchanged, and other aeronautical information such as AIC).

9.5.2 The common set of static data and basic data is given in 9.5.4. Data marked with an (***) are considered to be a “minimum set of data” required for the verifications, cross-checks and other data requirements related to NOTAM processing.

9.5.3 It should be noted that the list of data should not be limited to data required for NOTAM processing and could be amended in light of future developments. One of these developments could, for example, be flight plan processing, using the same equipment as for AIS, within the framework of multi-access terminals development where different processing procedures could be based on common static data.

9.5.4 *Common AIS static and basic database contents for NOTAM processing*

a) *NOTAM originator*

- ICAO abbreviation of NOTAM originator (***)
- State (ICAO abbreviation and name)
- Reference table: State/originator
- Responsible source (***)
- Series and numbers used (***)

b) *FIR data*

- ICAO location indicator (***), name in plain language (***)
- Geographical description (polygon of LAT/LONG positions)
- Artificial description (based on centralized LAT/LONG position and radius for a circle comprising the FIR)
- Reference table: FIR/NOTAM originator

c) *Aerodrome data*

- ICAO location indicator (***)
- Four letter indicator, chosen if no ICAO locator exists (***)
- Aerodrome name (plain language) (***)
- IATA three-letter code
- Correspondence table (Name, ICAO, IATA)
- Correspondence table (ICAO locator — FIR)
- Position (LAT/LONG, radius of operational influence) (***)
- Runways (designation and ILS category)
- SIDs and STARs (designator and description)
- “International aerodrome/heliport” indicator

d) *Navaid data*

- Type of navaid (***)
- Identification (***), name in plain language (***)
- Frequency(ies) (***)
- Position (LAT/LONG, radius of operational influence) (***)
- Correspondence table (identification — FIR)
- Collocation with other nav aids
- ILS (frequency, category and runway)

e) *Route data*

- Airways (designator)
- ATS route segments (2 waypoints with LAT/LONG position — airway)
- ATS route segment association with FIR

f) *Areas*

- Identifier of airspace restrictions such as danger or restricted area
- Area name (plain language)
- Activity times, height limits
- Geographical description (polygon of LAT/LONG positions)
- Artificial description (based on centralized LAT/LONG position and radius for a circle comprising the area)
- Association of area to FIR(s)

g) *Selection criteria*

- Qualifiers: TRAFFIC, PURPOSE, SCOPE, and subject by NOTAM Code, as well as NOTAM Code-related English text

9.5.5 *NOTAM Selection Criteria*

9.5.5.1 The NOTAM Code contained in the PANS-ABC (Doc 8400) is the most comprehensive description of information requiring NOTAM promulgation. It is therefore used for the following:

- a) the storage and retrieval of information;
- b) to determine whether a particular item is of operational significance;
- c) the relevance of particular items for various types of flight operations; and
- d) the selection of those items of operational significance that require immediate notification.

9.5.5.2 The NOTAM Code constitutes the basis for the determination of the qualifiers TRAFFIC, PURPOSE and SCOPE. The relationship between these qualifiers and the NOTAM Code is given in the NOTAM Selection Criteria tables in Chapter 6, Appendix B. These tables constitute a rationalized version of the NOTAM Code. They also provide the English language text to be used in Item E) of the NOTAM Format.

9.6 HARMONIZATION OF AIS AND MET INFORMATION

[8.2.1, 8.2.2, 8.2.3]

9.6.1 AIS and MET play an important role in pre-flight planning of operations. To satisfy the needs of the user, the AIS and MET delivery systems should be collocated. This could be achieved through collocation of two separate terminals, i.e. one for AIS and one for MET. However, there is an increased demand for the provision of combined AIS and MET information in a harmonized manner.

9.6.2 Therefore, in an automated environment users should be able to access both AIS and MET information on request, from a common interface, based on the flight plan (including time, route or area and height).

9.6.3 Annex 15 specifies that automated pre-flight information systems providing for a harmonized, common point of access by operations personnel, to aeronautical information in accordance with 8.2.1 of Annex 15 and meteorological information in accordance with 9.9.1 of Annex 3, should be established by an agreement between the civil aviation authority concerned and the relevant meteorological authority.

9.6.4 To achieve this, it is important to produce concise and precise pre-flight information through a common user interface to both AIS and MET databases, tailored to meet the needs of the user (operators, flight crew members, individual pilots and other aeronautical personnel concerned).

9.6.5 The civil aviation authority concerned must remain responsible for the quality and timeliness of aeronautical information/data provided by means of such a system.

9.6.6 It should be noted that the meteorological authority concerned remains responsible for the quality of meteorological information provided by means of a harmonized automated pre-flight information system.

9.6.7 The following major aspects must be considered:

- a) the two information sources; and
- b) retrieval and processing of information from those sources.

9.6.8 The data from the information sources must be easily accessible in databases and be available in digital and standardized form to allow automatic processing, storage and retrieval.

9.6.9 An integration layer may have to be developed to access the AIS and MET information from a common interface for harmonized access to both AIS and MET information. The benefits of the integration layer to the user are:

- a) improved data consistency;
- b) transparent data access;
- c) extended functionality; and
- d) flexibility.

9.6.10 Technically, the benefits of harmonization would be:

- a) faster and simpler information retrieval;
- b) improvement of quality control; and
- c) savings, by eliminating the duplication of effort in handling of information.

9.6.11 Harmonized access to AIS and MET pre-flight services should be restricted to aeronautical users only, to avoid unauthorized use of this information.

9.6.12 Harmonization of AIS and MET data for pre-flight information purposes is being developed by several States and should be encouraged, as it would represent a significant improvement in service level as requested by the users.

9.7 CONCEPT FOR AN INTEGRATED AUTOMATED AIS SYSTEM

System configuration

9.7.1 An integrated automated AIS system should be based on the current AIS facilities of participating States with the following structure:

- a) national automated AIS systems of States that provide a national service;
- b) multinational automated AIS systems of States providing, on the basis of bilateral and multilateral agreements, service to other State(s) in addition to national service; and

- c) AIS of States that are not or not fully automated (i.e. manual or semi-automated).

9.7.2 The system should provide for automatic exchange of NOTAM between AIS centres providing national service and between these centres and AIS centres providing service based on bilateral and/or multilateral agreements.

National automated AIS system

9.7.3 The primary role of a national AIS system is to provide aeronautical information to users in a given State, either in accordance with predetermined arrangements or by computer interrogation. The system collects appropriate aeronautical information from national sources, processes the information, produces it in the form of a NOTAM, stores it in the national AIS database and makes it available:

- a) within the State;
- b) within the region, including an integrated system in accordance with bilateral or multilateral agreements; and
- c) worldwide, in accordance with predetermined arrangements.

9.7.4 In addition, the required aeronautical information from other States should be received in the NOTAM Format for direct input into the national system database or for further processing, if required, so that specific requirements for international/foreign aeronautical information for pre-flight briefing can also be carried out by the system.

Multinational automated AIS system

9.7.5 In the multinational AIS system, one or more national automated AIS systems will, in addition to national service, provide service to users in other participating States (with automated or non-automated AIS systems) in accordance with pre-arranged agreements.

Non-automated AIS

9.7.6 States not having an automated AIS system would have an option to be linked with a national automated AIS system, via an intelligent or non-intelligent remote terminal, resulting from bilateral agreement.

Area to be covered

9.7.7 The system should have the capacity of holding and processing aeronautical information covering the entire world to fulfil the operational requirements for pre-flight information service for flights from point of origin to final destination.

System service

9.7.8 The overall system, when fully developed, should provide a service that is capable of meeting both the users' operational requirements and the types of information detailed in 9.3 and 9.4, respectively. The capabilities of the system could also be utilized to obtain information for the preparation of AIP material, for aeronautical charting purposes and for the production of route manuals by chart-producing agencies. The basic functions of the system, as described below, relate to the handling of information promulgated by States. It should, however, be borne in mind that the availability of an integrated automated AIS system would affect the working methods used in participating States for the exchange and distribution of aeronautical information.

System functions

9.7.9 Within an automated AIS system there are a number of functions which should be performed. They are:

a) *Production function*

- 1) National NOTAM production
- 2) National NOTAM reception
- 3) National NOTAM correction/repetition (in case of corruption in transit)
- 4) National NOTAM translation (language and code)
- 5) NOTAM qualifier insertion
- 6) Addition of geographical reference
- 7) Filtering for particular correspondents
- 8) Transfer to the distribution function
- 9) National NOTAM database input
- 10) Foreign NOTAM reception
- 11) Foreign NOTAM first level verification (syntax)
- 12) Foreign NOTAM second level verification (validation of content)
- 13) Foreign NOTAM correction/repetition
- 14) Foreign NOTAM translation (language and code)

- 15) Foreign NOTAM qualifier insertion, when needed
- 16) Addition of geographical reference
- 17) Foreign NOTAM database input
- 18) Filtering for particular correspondents
- 19) Transfer to the distribution function

b) *Distribution function*

- 1) National administrative users
- 2) International administrative users
- 3) National operational users
- 4) International operational users

c) *Retrieval function*

- 1) National administrative users
- 2) International administrative users
- 3) National operational users
- 4) International operational users

9.7.10 This is a minimum requirement for a national automated AIS system, which States can expand as needed.

9.7.11 For a multinational automated AIS system, additional functions will depend on the agreement with the associated AIS system(s). This could include:

- a) the functions of reception, verification and distribution of NOTAM initiated by the associated AIS and reception, verification and distribution of foreign NOTAM to associated AIS;
- b) the international NOTAM office (NOF) of the multinational automated AIS system to act as the NOF of the associated AIS;
- c) storage of all aeronautical information of the associated State/AIS in the database of the multinational automated AIS system;
- d) provision of pre-flight data/briefing (via computer terminals) at aerodromes in the associated State;
- e) production of the AIP for the associated AIS.

Reception

9.7.12 The aeronautical fixed service (AFS) and other adequate and available communication networks should be used for distribution of the information concerned. The reception and initial distribution of NOTAM messages

should be performed by an AFS message-switching centre. As necessary, certain checks should be carried out prior to subsequent processing. These initial checks should be seen in the context of the verification function.

Verification

9.7.13 A certain number of checks need to be carried out in different forms in the majority of systems, whether they are automated or not. To maximize the number of NOTAM that can be accepted directly by the system, the verification function at first and second levels should be performed in accordance with a common format. The first and second levels of the verification function are differentiated by the complexity of the checking processing functions which are:

- a) *First level:* syntax verification; and
- b) *Second level:* verification of content.

Correction/repetition

9.7.14 One of the aims of an automated AIS system is to minimize the number of requests for repetition of NOTAM messages. In this connection, the checking operations mentioned above can, depending upon their scope, allow certain corrections to be made. It is necessary, however, to define precisely, at the system level itself, the nature of the corrections that could be made. In the event of an error that cannot be corrected, a request for repetition of the incorrect NOTAM should be made.

Translation

9.7.15 Translation may be needed for the creation of NOTAM, and should be taken into account as a function of local needs (e.g. use of national languages).

Qualifier insertion

9.7.16 The common set of qualifiers, as outlined in Appendix A to this chapter, must be used to ensure compatibility in any data exchange. It permits the production of common output products (e.g. PIB) that are adequately filtered and reduced to an acceptable amount of data of operational significance. It also permits the development of common, user-friendly, AIS query procedures. The qualifiers identify, for example, the area of concern, the type

of operation the NOTAM information relates to and, additionally, where and how the information must be stored in an AIS database.

9.7.17 Qualifier insertion is an important function seen from the viewpoint of the distribution of NOTAM. The insertion of qualifiers can be carried out as part of the production function. Recourse to basic data is necessary, and a list of the types of static and basic data that might have to be available are found in 9.5. Chapter 6, Appendix B includes a compendium of selection criteria for NOTAM processing.

Production

9.7.18 NOTAM, in the NOTAM Format, should constitute the basic data exchange source in the system. NOTAM should be prepared only once, at the entry into the system.

9.7.19 Any AIS in the process of being automated should generally make provisions for recourse to computer assistance for the drafting of NOTAM to be issued by the NOF concerned. NOTAM so produced should be capable of being used directly by the various national AIS systems concerned. It is essential that NOTAM issued by an automated centre be directly acceptable both by the other centres and by other users of the system and provide for automatic exchange of NOTAM between automated AIS systems (national and multinational).

Database input

9.7.20 The functions for database input should be related to the NOTAM Format. Essentially, the databases should be capable of being interrogated by users on a national and international basis.

System query procedures

9.7.21 The system should provide a common set of query procedures. Since the objective is to provide common procedures for AIS users, wherever they proceed for an AIS briefing and whatever AIS system is interrogated, it is appropriate to use the term “common AIS query procedures”. These query procedures should guide the user through transparent and common formulation of an interrogation, which would then be translated by each system into an appropriate query in the query language associated with the database management system in use.

9.7.22 For any automated pre-flight information service to be effective, it is essential that the query procedures established be user-friendly, i.e. they must allow an operator, trained or untrained, to obtain the desired information without the assistance of AIS personnel. This is the self-briefing concept for which menu-type query procedures are the most appropriate. Menu-type query procedures also permit easy access to output products other than PIB. It should also be possible for qualified staff to obtain output products quickly.

9.7.23 The query procedures should make the best use of the database management system applied, in order to give rapid responses to simple and short requests.

9.7.24 The query procedures should be flexible and cater for progressive developments, such as changes in the definitions of user outputs or to the common set of qualifiers. The terminal used for AIS briefings should also have a future multi-access capability, giving the user the possibility to interrogate MET databases as well as to input flight plans. These procedures should take into account the concept that there should be one, common method for multi-access processing.

9.7.25 The query procedures should preferably be in English and should be identical at each AIS centre. A version using the local language can also be made available in any AIS system, as appropriate.

Database access

9.7.26 Basically, three modes of interrogation should exist in an integrated system, i.e. via:

- a) intelligent terminals (computer terminals, PCs, etc.) on which the above-mentioned common AIS query procedures apply;
- b) teletype terminals (e.g. AFS, telex); and
- c) videotext terminals.

9.7.27 The procedures should allow for at least the following:

- a) access to the automated AIS system centre, which should normally be the database the terminal is connected to;

- b) access to other AIS databases within the system via available communication networks;
- c) access to meteorological databases (subject to agreement between the State authorities concerned); and
- d) ultimately, input of flight plans.

Access to an automated AIS system via intelligent terminals

9.7.28 There should be two modes of access to the database:

- a) via the common query procedures employed in the self-briefing mode, where user-friendly, step-by-step guidance is given to the user (e.g. menu-type query). Examples of these procedures are shown in Appendix B to this chapter; and
- b) to specific data directly by AIS briefing officers. Possible screen formats for direct formulation of bulletin products and for the retrieval of individual NOTAM are also shown in Appendix B to this chapter.

9.7.29 For each type of requested output, the query procedures should lead the user to the formulation of the shortest possible query. The application of the NOTAM qualifiers TRAFFIC, PURPOSE and SCOPE, appropriate to each case, should be implicit in the query.

Access to other AIS databases within the system (teletype terminals)

9.7.30 For various reasons, such as repeat messages or subscribed service data not stored in the national system, there may be a requirement to obtain data from databases situated in other States. In this case, the interrogation should be made via available communication networks, e.g. AFS, PSTN (telephone) or PSDN (Transpac, DSC, etc.). It is essential for the operation of the integrated system that, for this type of interrogation, agreed message formats be used. Such formats should be adequately supported by interrogation procedures available to AIS briefing officers but might exceptionally, however, be entered directly through a suitable network terminal, such as a teletype in the case of AFS. Examples of these messages are shown in Appendix C to this chapter.

Access to an automated AIS system via videotext terminals

9.7.31 Pre-flight information may be provided via videotext terminals (Minitel, BTX, etc.) which, in the self-briefing mode, also require user-friendly procedures. Screen standards being different to those of computer terminals, it is not possible to directly apply the common query procedures developed for intelligent terminals. For the benefit of the users, however, commonality should be achieved for this mode of interrogation, and query procedures should be, as much as possible, similar to the common query procedures.

Use of multi-access terminals

9.7.32 AIS terminals should ultimately be able to provide AIS and operational meteorological information for pre-flight briefings. This does not, of course, mean that AIS and MET data need to be in the same database. As a further enhancement, such terminals could also be programmed to contain a form for filing flight plans which would be completed on the visual display unit by the user and filed with the appropriate ATC authority directly from the terminal.

System reliability and redundancy

9.7.33 The system configuration should assure adequate reliability and redundancy.

9.7.34 The system should be provided with suitable equipment and be designed to ensure continuity of service.

Fallback procedures

9.7.35 When service based on bilateral and/or multilateral coordination and cooperation is provided, fallback procedures should be established.

Response time

9.7.36 With the features provided by the system, the use of modern computer techniques and means of communication, short response times should be assured.

Communications

9.7.37 The AFS should satisfy the communication requirements at an international level. Optimum use should

be made of available communication networks for the distribution, exchange and retrieval of aeronautical information, particularly NOTAM.

Access to consultation with AIS

[8.2.4]

9.7.38 Self-briefing facilities of automated pre-flight information systems must provide for easy access by flight operations personnel, including flight crew members and other aeronautical personnel concerned, to consultation, as necessary, with the AIS by telephone or other suitable communications means.

Human-machine interface

[8.2.4]

9.7.39 The human-machine interface of self-briefing facilities of automated pre-flight information systems must ensure easy access in a guided manner to all relevant information/data.

9.8 PLANNING FOR AND IMPLEMENTATION OF AN INTEGRATED AUTOMATED AIS SYSTEM

9.8.1 The planning and implementation of an integrated automated AIS system should be guided and adjusted by considerations related to efficiency, cost-effectiveness and experience.

9.8.2 Relevant bilateral or multilateral agreements should aim at minimizing costs by leading to work and equipment savings beneficial to all participants.

9.8.3 Regional Air Navigation Planning and Implementation Groups established by ICAO should:

- a) coordinate the general development of the system and the activities required of States;
- b) develop an appropriate form of system management;
- c) monitor the overall situation for the purpose of detecting in advance divergencies in developments that could lead to later incompatibilities.

9.8.4 The planning and implementation of the system should also be closely monitored by States to permit speedy

reaction to problems encountered and to shortcomings identified.

9.9 AFS ADDRESSING

Identification of the correspondents of a multinational automated AIS system

9.9.1 The correspondents of a multinational automated AIS system can be identified as:

- a) other multinational automated AIS systems;
- b) the NOF serving the State(s) and territories in its area of responsibility;
- c) the national systems (including NOF of non-automated AIS) for which it provides the service on the basis of bilateral or multilateral agreements;
- d) all concerned services in its own State;
- e) users in its own State;
- f) users in other associated States (subject to bilateral/multilateral agreements).

Rules for AFS addressing

9.9.2 Predetermined AFS distribution lists should be available at each multinational automated AIS system containing the addresses or collective addresses of all States with which it intends to exchange NOTAM. It should also have the distribution lists of associated States containing the required addresses to which they wish to send NOTAM (i.e. States not on a pre-determined distribution list).

9.9.3 Based on the origination of the NOTAM, which is derived from the location indicator of the FIR qualifier field in Item Q) of the arriving NOTAM or identified in the

AFS message preamble, the collective addresses required for distribution are entered (manually or automatically) in the preamble of the AFS message to be issued.

9.9.4 In some cases, the following procedures may be applicable:

- a) *Distribution of NOTAM produced by a multinational automated AIS system*

A multinational automated AIS system should use the distribution list prepared for promulgation of its own NOTAM. The list should normally contain the addresses (or collective addresses) of:

- the relevant State(s) (NOF) in its area of responsibility;
- the relevant State(s) (NOF) and users in the associated States;
- other multinational automated AIS systems which will each use their own list of addresses for further distribution.

- b) *Distribution of NOTAM received from other national automated AIS system centres*

The multinational automated AIS system identifies the originator abbreviation in the preamble of the arriving NOTAM or by the FIR qualifier in Item Q) and selects and applies the relevant distribution list accordingly. The list should contain the addresses (or collective addresses) of:

- the States (NOF) in its area of responsibility;
- the AIS systems and users in the associated States;
- other multinational automated AIS system centres which will each use their own list of addresses for further distribution.

Appendix A to Chapter 9

USE OF AUTOMATION IN THE COMPILATION, PROCESSING AND DISTRIBUTION OF NOTAM

[3.6.6, Chapter 5 and Appendix 6]

1. GENERAL

The NOTAM Format has been developed to facilitate its use in a manual or automated environment. As such, it ensures compatibility between all AIS and NOTAM offices exchanging information on a worldwide basis. Bearing in mind that many States have already automated their AIS and others are in the process of doing so, the importance of a compatible and comprehensive automated global system cannot be over-emphasized.

2. BASIC NOTAM ELEMENTS AND CHARACTERISTICS

The NOTAM is one of the basic elements that allows an integrated automated AIS system to be developed progressively while at the same time assuring that overall compatibility can be achieved with the manual AIS environment. Its format allows direct utilization for data processing as well as for presentation to users. It contains, in particular, the necessary qualifiers to facilitate data retrieval by common query procedures and for sorting of information in accordance with user requirements. The development of the NOTAM has resulted from the requirements for a number of characteristics to be met by the NOTAM message in order to permit the introduction of automation in AIS. These characteristics are related to retrieval, presentation to users, format and storage.

3. RETRIEVAL AND PRESENTATION TO USERS

The retrieval of NOTAM information must be geared to the requirements of the users. To achieve this, a common set of qualifiers has been developed for use in the NOTAM Format (Item Q)). Some of these qualifiers are already contained in the NOTAM while others need to be added as appropriate. One special feature of the NOTAM is its utility

as a source for pre-flight information bulletins (PIB). Generally, the data contained in a NOTAM are easily transferable to the PIB format.

4. FORMAT

4.1 There is no need to store NOTAM in several formats in order to satisfy the different requirements of users. The data can be stored in such a way that “editing” programmes will produce output in various forms as requested by the user.

4.2 NOTAM can appear in various forms, for example, as an AFS message, on an input terminal or in a database. Omitting the communication text, a NOTAM has the following AFS format:

(A1282/03 NOTAMN
Q) LFFF/QILAS/I/NBO/A/000/050/
Q) 4840N00220E010
A) LFPO B) 0304041000 C) 0304111200
D) DAILY 1000 TO 1200
E) RWY 25R LLZ U/S REF. AIP LFPO AD 2.19)

Further examples may be found in Appendix A to Chapter 6.

5. STORAGE

5.1 Storage of NOTAM must take place in a database. However, the NOTAM Format facilitates manual sorting and storage. One important aspect of the NOTAM Format is that each data item of the message can be stored individually in a different column of a database table. This method considerably simplifies further automatic data processing as it provides for:

- a) automatic database entry after automatic extraction of items from the original NOTAM;

- b) access to individual data items for the purpose of NOTAM retrieval;
- c) access to individual data items for different output formats; and
- d) easy identification of data items for automatic transmission on the AFS.

5.2 Examples of the storage of NOTAM data in a structured database are shown in Figures 9-A-1 to 9-A-5. Also shown are different output formats that can be produced from the database contents. As a result of the ability to structure the NOTAM contents, storage of several formats is not necessary. The merits of the NOTAM can best be appreciated in conjunction with the various steps in NOTAM production and processing inside and outside of an integrated automated AIS system.

6. COMMON SET OF QUALIFIERS

6.1 The qualifiers listed below represent the “common set of qualifiers”. Because these qualifiers have been derived from the NOTAM information itself, their use facilitates sorting and retrieval of NOTAM. States’ AIS may provide additional criteria for more refined data retrieval by its own users.

<i>Name of qualifier</i>	<i>Source (derived from NOTAM)</i>
Time	Date of entry into database
Series/number/ year	NOTAM number (e.g. A1282/03)
Type	NOTAM (N, C or R)
State	Item A) (e.g. LF--)
FIR	Item A) (e.g. LFFF)
AD	Item A) (e.g. LFPO)
VALFROM	Item B) (e.g. 0304041000)
VALTO	Item C) (e.g. 0304111200)
Schedule	Item D) (where applicable)
Lower	Item F)
Upper	Item G)
NOTAM Code	Item E) (significations/uniform abbreviated phraseology of the ICAO NOTAM Code complemented by ICAO abbreviations, indicators, identifiers, designators, call signs, frequencies, figures and plain language)
TRAFFIC	NOTAM Code (I, V, IV)
PURPOSE	NOTAM Code (N, B, O, M)
SCOPE	NOTAM Code (A, E, W)
Coordinates, radius	Lat, long, radius

6.2 As already indicated, a certain number of qualifiers are contained in NOTAM and their extraction is relatively easy. But, adherence to rules and sequencing to be applied at the production of NOTAM are essential for the automatic extraction process. These rules are:

- a) Items B) and C) must always show a date-time group (exception a PERM may appear in Item C));
- b) Item D) is always a time period when applicable;
- c) Item E) must contain a single subject.

6.3 The qualifiers not directly derived from the NOTAM (TRAFFIC, PURPOSE, SCOPE) must be added in order that the message contain all necessary elements for subsequent data processing. These are covered in detail in Chapter 6, Appendix A and need not be repeated here.

7. DISTRIBUTION

7.1 Essentially, the distribution of NOTAM originating from within an automated AIS system is identical to that for NOTAM processed manually. The guidance provided in Chapter 6 is therefore applicable to all NOTAM. To the extent possible, NOTAM should be transmitted via the AFS, although other international telecommunication networks can be used where required. With direct AFS links and the use of predetermined distribution lists, the exchange between NOF and other interested users of NOTAM prepared by automated means should require little human intervention. From this, it can be seen that the main objective of such automation is to improve the distribution process thereby enhancing overall efficiency in terms of speed, accuracy and cost-effectiveness.

7.2 The function of a multinational automated AIS system responsible for NOTAM distribution is based on the following principles:

- a) All associated national AIS systems are to initiate their NOTAM and “trigger” NOTAM relative to AIP Amendments and AIP Supplements.
- b) These NOTAM are to be sent only to the associated multinational automated AIS system which proceeds to automatic verification procedures and subsequent distribution in accordance with the relevant agreements.

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- | | |
|--|---|
| c) Distribution should be automatic and not cause any delay. | “trigger” NOTAM relative to AIP Amendments and AIP Supplements available in its database for preparation of PIB. |
| d) NOTAM coming from non-associated AIS systems should be received exclusively by the multinational automated AIS system. | g) Any NOTAM processed is to be sent as a new message, the multinational automated AIS system concerned being the originator. |
| e) For any AIP Supplements containing information that should be included in PIB, the multinational automated AIS system concerned must produce and distribute a “trigger” NOTAM. | h) All NOTAM are to be sent via AFS taking into account the AFS distribution procedures currently in use. |
| f) NOTAM received that are not of particular interest to its own State should nevertheless be stored in its database. Thus, each multinational automated AIS system would have worldwide NOTAM and | i) Each associated national system is to be responsible for the provision of NOTAM to users in its own territory. |

1) NOTAM

A1282/03NOTAMIN

Q) LFFF/QILAS//NBO/A/000/050/4840N00220E010

A) LFPO B) 0304041000 C) 0304111200

D) DAILY 1000 TO 1200

E) RWY 25R LLZ UNSERVICEABLE

2) TRANSITION INTO STORAGE (EXAMPLE OF DATABASE TABLE)

DATE	SERIES	NUMBER	TYPE	FIR	AD	NOTAM CODE	TRAFFIC	PURPOSE	SCOPE	LOWER	UPPER	FROM	TO	SCHEDULE	TEXT	COORDINATES	RADIUS
030401	A	1282/03	N	LFFF	LFPO	QILAS	I	NBO	A	000	050	0304041000	0304111200	DAILY 1000 TO 1200	RWY 25R LLZ UNSERVICEABLE	4840N 00220E	010

3) EXTRACT FOR PRE-FLIGHT BULLETIN ENTRY

LFPO

DAILY 1000 TO 1200 A1282/03

RWY 25R LLZ UNSERVICEABLE

Figure 9-A-1. NOTAM — Storage and treatment

NOTAM as received from AFS

(A1282/03 NOTAMN
Q) LFFF/QILAS/I/NBO/A/000/050/4840N00220E010
A) LFPO
B) 04041000
C) 04111200
D) DAILY 1000 TO 1200
E) RWY 25R LLZ UNSERVICEABLE)

Input operator terminal

Qualifiers		NOTAM INPUT AREA				Date: 01/04/03	
NOTAM Code:	QILAS	Series: A	Number:	1282/03	Type:	N	
Coordinates:	4840N 00220E	Traffic: I	Purpose:	NBO	Scope:	A	
State:	LF		Lower:	000	Upper:	050	
FIR:	LFFF	State name:	France*				
Aerodrome:	LFPO	FIR name:	Paris FIR*				
		AD name:	Orly*				
From:	03/04/04/1000	To:	03/04/11/1200				
Schedule:	Daily 1000 to 1200						
Text		RWY 25R LLZ UNSERVICEABLE					

* Names may be automatically derived from static database, if available.

**Figure 9-A-2. Example of NOTAM reception —
Transition from AFS format into input operator's display**

Input operator terminal

Qualifiers		NOTAM INPUT AREA				Date: 01/04/03	
		Series: A		Number: 1282/03		Type: N	
NOTAM Code:	QILAS	Traffic: I		Purpose:	NBO	Scope:	A
Coordinates:	4840N 00220E			Lower:	000	Upper:	050
State:	LF	State name:					
FIR:	LFFF	FIR name:		France*			
Aerodrome:	LFPO	AD name:		Paris FIR*			
				Only*			
From:	03/04/04/1000	To:		03/04/11/1200			
Schedule:	Daily 1000 to 1200						
Text							
		RWY 25R LLZ UNSERVICEABLE					

Database table							
Date	Series	Number	Type	NOTAM Code	Traffic	Purpose	Scope
030401	A	1282/03	N	QILAS	I	NBO	A
	Lower	Upper	Coordinates	Radius	State	FIR	AD
	000	050	4840N 00220E	010	LF	LFFF	LFPO
	Valfrom		Valto	Schedule			
	0304041000		0304111200	DAILY 1000 TO 1200			
				Text (decode)			
				RWY 25R LLZ UNSERVICEABLE			

**Figure 9-A-3. Example of NOTAM production —
Transition from AFS format input operator's display into database**

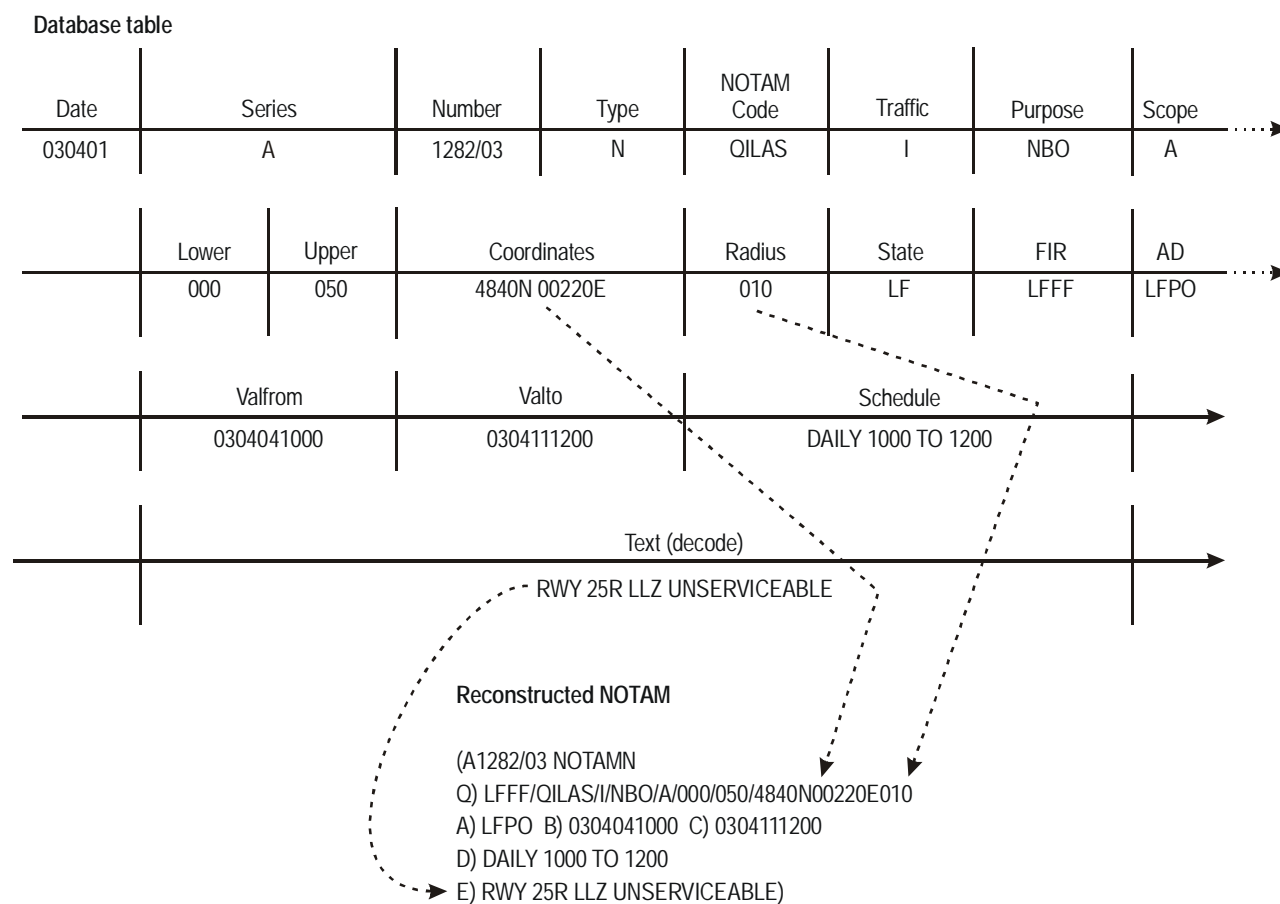
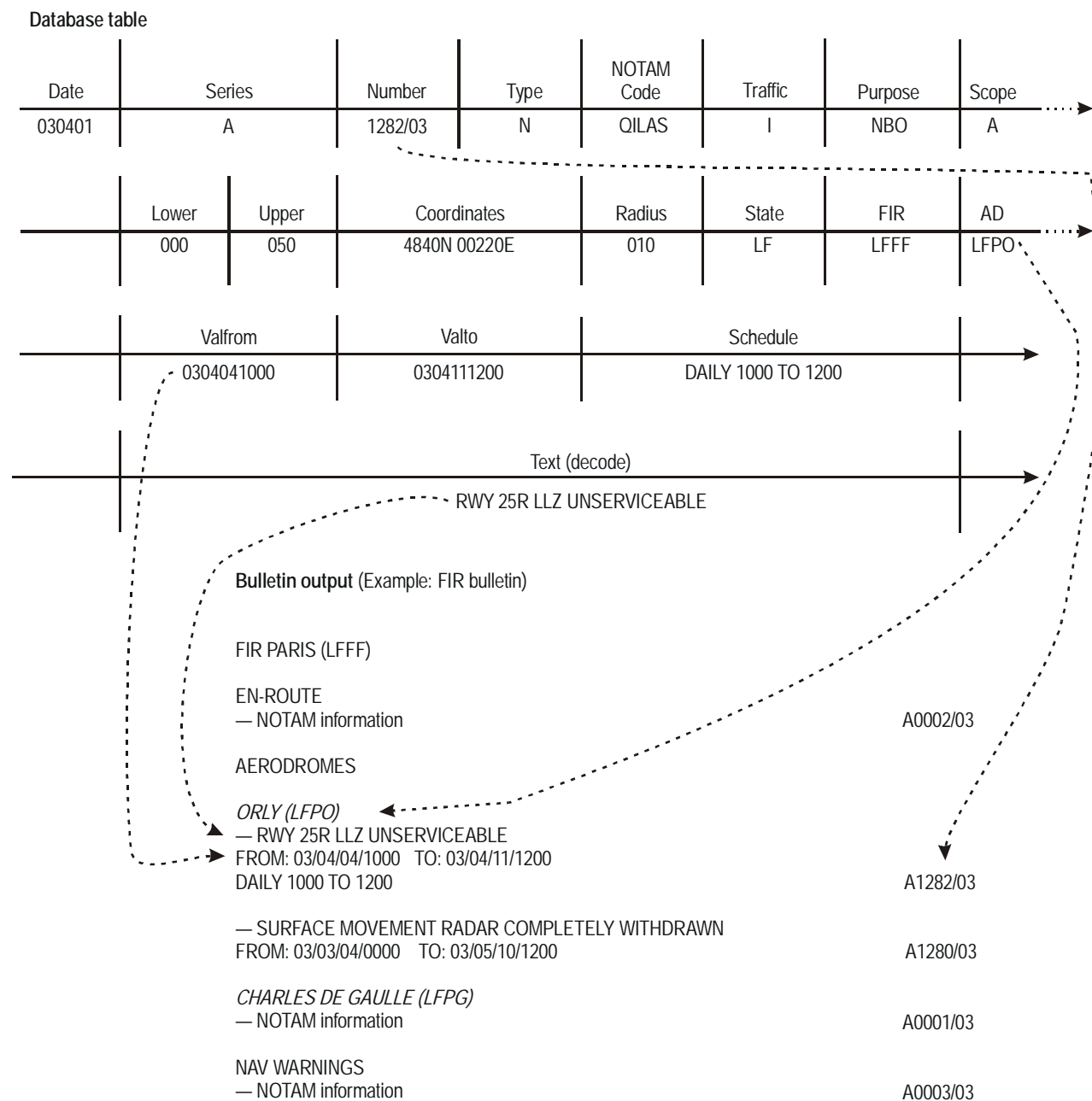


Figure 9-A-4. Example of AFS NOTAM Format reconstruction from database contents



Note.— Titles are generated by the edit programme.

Figure 9-A-5. Example of bulletin production from database

Appendix B to Chapter 9

COMMON AIS QUERY PROCEDURES FOR SELF-BRIEFING BY END-USERS

1. The examples that follow contain suggested common AIS query procedures for use in a self-briefing environment. Implementation of these procedures would enable end-users (pilots and flight operations personnel) to directly obtain required information from any aerodrome/heliport AIS unit participating in an integrated regional automated AIS system.

2. Because of local hardware/software requirements, the commonality is limited to the sequence and the contents of the frames presented. The keying used for interacting with the system may change depending on the hardware or software configuration. It is important, however, that all inputs be kept as simple as possible, preferably single key inputs, while ensuring that appropriate help menus are always available.

RESTPICTURE

1	<div style="text-align: right; margin-bottom: 20px;">DATE: / /</div> <div style="text-align: center; margin-bottom: 20px; border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">AIS SELF-BRIEFING</div> <p style="text-align: center;">"LOCAL" AIS SYSTEM OF STATE "XYZ"</p> <p style="text-align: center;">LANGUAGE CHOSEN — ENGLISH (E) — "LOCAL" (L)</p> <div style="display: flex; justify-content: space-between; margin-top: 40px;"> <div style="width: 60%;"> <p>-----</p> <p>Type the indicated letter and To quit</p> </div> <div style="width: 35%; text-align: right;"> <p>Press "Enter"</p> <p>Press "F12"</p> </div> </div>
---	---

Sample choice: E (English) → Panel 2

Sample choice on Panel 1: E

SELF-BRIEFING MENU (IN ENGLISH)

2	<div style="text-align: center; margin-bottom: 20px;">SELF-BRIEFING MENU</div> <p style="text-align: center;">THE "LOCAL" SYSTEM PROVIDES THE FOLLOWING CHOICES:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px 0;">1. FLIGHT PLAN INPUT</td> <td style="text-align: right; padding: 5px 0;">(F)</td> </tr> <tr> <td style="padding: 5px 0;">2. MET INFORMATION</td> <td style="text-align: right; padding: 5px 0;">(M)</td> </tr> <tr> <td style="padding: 5px 0;">3. PRE-FLIGHT INFORMATION — VFR</td> <td style="text-align: right; padding: 5px 0;">(V)</td> </tr> <tr> <td style="padding: 5px 0;">4. PRE-FLIGHT INFORMATION — IFR</td> <td style="text-align: right; padding: 5px 0;">(I)</td> </tr> <tr> <td style="padding: 5px 0;">5. PRE-FLIGHT INFORMATION — IFR/VFR</td> <td style="text-align: right; padding: 5px 0;">(B)</td> </tr> <tr> <td style="padding: 5px 0;">6. AIP CONSULTATION</td> <td style="text-align: right; padding: 5px 0;">(A)</td> </tr> </table> <div style="display: flex; justify-content: space-between; margin-top: 40px;"> <div style="width: 60%;"> <p>-----</p> <p>Type the indicated letter and To return to previous page To quit</p> </div> <div style="width: 35%; text-align: right;"> <p>Press "Enter"</p> <p>Press "F3"</p> <p>Press "F12"</p> </div> </div>	1. FLIGHT PLAN INPUT	(F)	2. MET INFORMATION	(M)	3. PRE-FLIGHT INFORMATION — VFR	(V)	4. PRE-FLIGHT INFORMATION — IFR	(I)	5. PRE-FLIGHT INFORMATION — IFR/VFR	(B)	6. AIP CONSULTATION	(A)
1. FLIGHT PLAN INPUT	(F)												
2. MET INFORMATION	(M)												
3. PRE-FLIGHT INFORMATION — VFR	(V)												
4. PRE-FLIGHT INFORMATION — IFR	(I)												
5. PRE-FLIGHT INFORMATION — IFR/VFR	(B)												
6. AIP CONSULTATION	(A)												

Sample choice: Pre-flight information — IFR (I) → Panel 3

Sample choice on Panel 2: I

BULLETIN TYPE IFR

3	<p style="text-align: center;">PRE-FLIGHT INFORMATION — IFR</p> <p>THE FOLLOWING BULLETINS ARE AVAILABLE:</p> <p>-----</p> <p>*COMMON OUTPUT FOR THE ENTIRE REGIONAL SYSTEM</p> <table><tr><td>1. AERODROME BULLETIN</td><td>(A)</td></tr><tr><td>2. AREA BULLETIN</td><td>(F)</td></tr><tr><td>3. ROUTE BULLETIN</td><td>(R)</td></tr></table> <p>-----</p> <p>SPECIAL OUTPUT FROM "LOCAL" SYSTEM</p> <table><tr><td>4. NARROW ROUTE BULLETIN</td><td>(N)</td></tr><tr><td>5. SPECIAL AREA BULLETIN</td><td>(S)</td></tr></table> <p>-----</p> <table><tr><td>Type the indicated letter and</td><td>Press "Enter"</td></tr><tr><td>To return to previous page</td><td>Press "F3"</td></tr><tr><td>To quit</td><td>Press "F12"</td></tr></table>	1. AERODROME BULLETIN	(A)	2. AREA BULLETIN	(F)	3. ROUTE BULLETIN	(R)	4. NARROW ROUTE BULLETIN	(N)	5. SPECIAL AREA BULLETIN	(S)	Type the indicated letter and	Press "Enter"	To return to previous page	Press "F3"	To quit	Press "F12"
1. AERODROME BULLETIN	(A)																
2. AREA BULLETIN	(F)																
3. ROUTE BULLETIN	(R)																
4. NARROW ROUTE BULLETIN	(N)																
5. SPECIAL AREA BULLETIN	(S)																
Type the indicated letter and	Press "Enter"																
To return to previous page	Press "F3"																
To quit	Press "F12"																

* This is the suggested common user output for an integrated regional AIS system

Sample choice: Aerodrome bulletin (A) —————> Panel 4

Sample choice: Area bulletin (F) —————> Panel 5

Sample choice: Route bulletin (R) —————> Panel 7

AERODROME BULLETIN — IFR

4

AERODROME BULLETIN — IFR

BULLETIN VALIDITY:

— ONE DAY (SPECIFY DATE (YYMMDD)):

— PERIOD

FROM (YYMMDDHH):
TO (YYMMDDHH):

YOU MAY SPECIFY UP TO 12 AERODROMES (FOUR-LETTER CODE)

	AD	AD	AD	AD
1	4	7	10	
2	5	8	11	
3	6	9	12	

IF YOU DO NOT KNOW THE ICAO FOUR-LETTER CODE, FUNCTION KEY "F2" WILL PROVIDE THE LIST OF AERODROMES WITH PLAIN LANGUAGE NAMES

Fill fields in sequence:

To print bulletin

For "Help" (list of aerodromes)

To return to previous page

To quit

Press "Enter"

Press "F2"

Press "F3"

Press "F12"

Sample choice on Panel 3: F

AREA BULLETIN — IFR

5	<p style="text-align: center;">PRE-FLIGHT INFORMATION — IFR</p> <p>(STANDARD VERSION CONTAINS EN-ROUTE AND AD INFORMATION)</p> <p>BULLETIN VALIDITY: — ONE DAY (SPECIFY DATE (YYMMDD)): — PERIOD FROM (YYMMDDHH): TO (YYMMDDHH):</p> <p>BULLETIN FOR STATE (ICAO TWO-LETTER CODE): OR BULLETIN FOR FIR(S) (ICAO FOUR-LETTER CODE):</p> <table border="1" style="margin-left: auto; margin-right: auto;"><thead><tr><th>FIR1</th><th>FIR2</th><th>FIR3</th><th>FIR4</th><th>FIR5</th><th>FIR6</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr></tbody></table> <p>— DESIRED FLIGHT LEVEL LIMITS (FOR NOTAM RETRIEVAL) LOWER FL: UPPER FL (OPTIONAL):</p> <p>-----</p> <p>Fill desired fields (FIR) in sequence: To print standard bulletin To obtain non-standard bulletin contents To return to previous page To quit</p> <p style="text-align: right;">Press "Enter" Press "F4" Press "F3" Press "F12"</p>	FIR1	FIR2	FIR3	FIR4	FIR5	FIR6						
FIR1	FIR2	FIR3	FIR4	FIR5	FIR6								

Sample choice: Non-standard bulletin contents ("F4") → Panel 6

Sample choice on Panel 5: "F4"

NON-STANDARD BULLETIN CONTENTS (AREA)

6	<p style="text-align: center;">NON-STANDARD BULLETIN CONTENTS (AREA)</p> <p>ALL BULLETINS INCLUDE ITEMS OF IMMEDIATE NOTIFICATION</p> <p>A) ITEMS OF OPERATIONAL SIGNIFICANCE ONLY</p> <table style="width: 100%;"> <tr> <td>— ALL INFORMATION:</td> <td style="text-align: right;">(O)</td> </tr> <tr> <td>— ONLY EN-ROUTE:</td> <td style="text-align: right;">(OE)</td> </tr> <tr> <td>— ONLY AERODROME:</td> <td style="text-align: right;">(OA)</td> </tr> </table> <hr/> <p>B) GENERAL PURPOSE BULLETIN</p> <table style="width: 100%;"> <tr> <td>— ONLY EN-ROUTE:</td> <td style="text-align: right;">(BE)</td> </tr> <tr> <td>— ONLY AERODROME:</td> <td style="text-align: right;">(BA)</td> </tr> </table> <hr/> <p>OPTION FOR GENERAL PURPOSE BULLETIN — INCLUSION OF</p> <table style="width: 100%;"> <tr> <td>— ALL MISCELLANEOUS INFORMATION:</td> <td style="text-align: right;">(M)</td> </tr> <tr> <td colspan="2">— SPECIFIC NOTAM, SUBJECT DEFINED BY 2/3 NOTAM CODE LETTER:</td> </tr> <tr> <td>AIRSPACE RESERV.: (RA)</td> <td style="text-align: right;">FIRING: (WM)</td> </tr> <tr> <td>AIR DISPLAY: (WA)</td> <td style="text-align: right;">FORMATION FLT: (WV)</td> </tr> <tr> <td>PARACHUTE JUMPING: (WP)</td> <td style="text-align: right;">OTHERS:</td> </tr> </table> <hr/> <p>Type indicated letter(s) for option, fill desired 2/3 NOTAM code letters:</p> <table style="width: 100%;"> <tr> <td>To print bulletin</td> <td style="text-align: right;">Press "Enter"</td> </tr> <tr> <td>For "Help" (other NOTAM codes)</td> <td style="text-align: right;">Press "F2"</td> </tr> <tr> <td>To return to previous page</td> <td style="text-align: right;">Press "F3"</td> </tr> <tr> <td>To quit</td> <td style="text-align: right;">Press "F12"</td> </tr> </table>	— ALL INFORMATION:	(O)	— ONLY EN-ROUTE:	(OE)	— ONLY AERODROME:	(OA)	— ONLY EN-ROUTE:	(BE)	— ONLY AERODROME:	(BA)	— ALL MISCELLANEOUS INFORMATION:	(M)	— SPECIFIC NOTAM, SUBJECT DEFINED BY 2/3 NOTAM CODE LETTER:		AIRSPACE RESERV.: (RA)	FIRING: (WM)	AIR DISPLAY: (WA)	FORMATION FLT: (WV)	PARACHUTE JUMPING: (WP)	OTHERS:	To print bulletin	Press "Enter"	For "Help" (other NOTAM codes)	Press "F2"	To return to previous page	Press "F3"	To quit	Press "F12"
— ALL INFORMATION:	(O)																												
— ONLY EN-ROUTE:	(OE)																												
— ONLY AERODROME:	(OA)																												
— ONLY EN-ROUTE:	(BE)																												
— ONLY AERODROME:	(BA)																												
— ALL MISCELLANEOUS INFORMATION:	(M)																												
— SPECIFIC NOTAM, SUBJECT DEFINED BY 2/3 NOTAM CODE LETTER:																													
AIRSPACE RESERV.: (RA)	FIRING: (WM)																												
AIR DISPLAY: (WA)	FORMATION FLT: (WV)																												
PARACHUTE JUMPING: (WP)	OTHERS:																												
To print bulletin	Press "Enter"																												
For "Help" (other NOTAM codes)	Press "F2"																												
To return to previous page	Press "F3"																												
To quit	Press "F12"																												

Sample choice on Panel 3: R

ROUTE BULLETIN — IFR

7	<p style="text-align: center;">ROUTE BULLETIN — IFR</p> <p>THE ROUTE BULLETIN OBTAINED IN THIS BIREFING MODE CORRESPONDS TO THE BULLETIN TYPE DEFINED AS COMMON FOR THE REGIONAL SYSTEM, I.E. BY DESCRIPTION OF: — AERODROMES OF DEPARTURE AND ARRIVAL, ALTERNATES — SEQUENCE OF FIRS TO BE OVERFLOWN</p> <p>YOU CAN OBTAIN ROUTE BULLETINS IN FOUR DIFFERENT WAYS:</p> <table><tr><td>1. MANUAL ROUTE DESCRIPTION</td><td>(M)</td></tr><tr><td>2. ROUTE PROPOSAL BY CITY PAIR</td><td>(C)</td></tr><tr><td>3. ROUTE PROPOSAL ACCORDING TO DESTINATION</td><td>(D)</td></tr><tr><td>4. ROUTE PROPOSAL BY FLIGHT NUMBER</td><td>(F)</td></tr></table> <p>-----</p> <table><tr><td>Type the indicated letter and</td><td>Press "Enter"</td></tr><tr><td>To return to previous page</td><td>Press "F3"</td></tr><tr><td>To quit</td><td>Press "F12"</td></tr></table>	1. MANUAL ROUTE DESCRIPTION	(M)	2. ROUTE PROPOSAL BY CITY PAIR	(C)	3. ROUTE PROPOSAL ACCORDING TO DESTINATION	(D)	4. ROUTE PROPOSAL BY FLIGHT NUMBER	(F)	Type the indicated letter and	Press "Enter"	To return to previous page	Press "F3"	To quit	Press "F12"
1. MANUAL ROUTE DESCRIPTION	(M)														
2. ROUTE PROPOSAL BY CITY PAIR	(C)														
3. ROUTE PROPOSAL ACCORDING TO DESTINATION	(D)														
4. ROUTE PROPOSAL BY FLIGHT NUMBER	(F)														
Type the indicated letter and	Press "Enter"														
To return to previous page	Press "F3"														
To quit	Press "F12"														

Sample choice: M (Manual route description)

—————> Panel 8

Sample choice: C (Route proposal by city pair)

—————> Panel 10

Sample choice: D (Route proposal according to destination)

—————> Panel 11

Sample choice: F (Route proposal by flight number)

—————> Panel 12

Sample choice on Panel 7: M

ROUTE BULLETIN (MANUAL ROUTE DESCRIPTION)

8	<p style="text-align: center;">ROUTE BULLETIN (MANUAL ROUTE DESCRIPTION)</p> <p>BULLETIN VALIDITY: — ONE DAY (SPECIFY DATE (YYMMDD)): — PERIOD FROM (YYMMDDHH): TO (YYMMDDHH):</p> <p>AERODROMES (ICAO FOUR-LETTER CODE) DEPARTURE: ARRIVAL: — ALTERNATE(S): : : : — SEQUENCE OF FIR (ICAO): : : : :</p> <p>DESIRED FLIGHT LEVEL LIMITS FOR NOTAM RETRIEVAL (OPTION) ALL FIR FIRST OTHER LAST — UPPER LEVEL (FL): OR : : : — LOWER LEVEL (EX. 090): OR : : : -----</p> <p>Fill desired fields (FIR) in sequence: To print standard bulletin Press "Enter" To obtain non-standard bulletin contents Press "F4" For "Help" (FIRS, aerodromes) Press "F2" To return to previous page Press "F3" To quit Press "F12"</p>
---	--

Sample choice: Non-standard bulletin contents ("F4") → Panel 9

Sample choice on Panel 8: "F4"

NON-STANDARD BULLETIN CONTENTS (ROUTE)

9	<p style="text-align: center;">NON-STANDARD BULLETIN CONTENTS (ROUTE)</p> <p>ALL BULLETINS INCLUDE ITEMS OF IMMEDIATE NOTIFICATION</p> <p>A) ITEMS OF OPERATIONAL SIGNIFICANCE ONLY</p> <p>— ALL INFORMATION: (O)</p> <p>— ONLY EN-ROUTE: (OE)</p> <hr/> <p>B) GENERAL PURPOSE BULLETIN</p> <p>— ALL INFORMATION (EN-ROUTE AND AD) (B)</p> <hr/> <p>OPTION FOR GENERAL PURPOSE BULLETIN — INCLUSION OF</p> <p>— ALL MISCELLANEOUS INFORMATION: (M)</p> <p>— SPECIFIC NOTAM, SUBJECT DEFINED</p> <p>BY 2/3 NOTAM CODE LETTER:</p> <table style="width: 100%;"> <tr> <td>AIRSPACE RESERV.: (RA)</td> <td>FIRING: (WM)</td> </tr> <tr> <td>AIR DISPLAY: (WA)</td> <td>FORMATION FLT: (WV)</td> </tr> <tr> <td>PARACHUTE JUMPING: (WP)</td> <td>OTHERS:</td> </tr> </table> <hr/> <p>Type indicated letter(s) for option, fill desired 2/3 NOTAM code letters:</p> <table style="width: 100%;"> <tr> <td>To print bulletin</td> <td>Press "Enter"</td> </tr> <tr> <td>For "Help" (other NOTAM codes)</td> <td>Press "F2"</td> </tr> <tr> <td>To return to previous page</td> <td>Press "F3"</td> </tr> <tr> <td>To quit</td> <td>Press "F12"</td> </tr> </table>	AIRSPACE RESERV.: (RA)	FIRING: (WM)	AIR DISPLAY: (WA)	FORMATION FLT: (WV)	PARACHUTE JUMPING: (WP)	OTHERS:	To print bulletin	Press "Enter"	For "Help" (other NOTAM codes)	Press "F2"	To return to previous page	Press "F3"	To quit	Press "F12"
AIRSPACE RESERV.: (RA)	FIRING: (WM)														
AIR DISPLAY: (WA)	FORMATION FLT: (WV)														
PARACHUTE JUMPING: (WP)	OTHERS:														
To print bulletin	Press "Enter"														
For "Help" (other NOTAM codes)	Press "F2"														
To return to previous page	Press "F3"														
To quit	Press "F12"														

Sample choice on Panel 7: C

ROUTE BULLETIN (ROUTE PROPOSAL BY CITY PAIR)

10	<p style="text-align: center;">ROUTE BULLETIN (BY CITY PAIR)</p> <p>BULLETIN VALIDITY:</p> <p>— ONE DAY (SPECIFY DATE (YYMMDD)):</p> <p>— PERIOD</p> <p style="padding-left: 40px;">FROM (YYMMDDHH): TO (YYMMDDHH):</p> <p>DEFINE CITY PAIR (ICAO FOUR-LETTER CODE)</p> <p>— AERODROME OF DEPARTURE : ADDEP</p> <p style="padding-left: 40px;">(GENERATED BY SYSTEM, CHANGE IF REQUIRED)</p> <p>— DESTINATION :</p> <p style="padding-left: 40px;">(AERODROME OF ARRIVAL)</p> <hr/> <p>Fill aerodrome(s), then Press "Enter"</p> <p style="padding-left: 40px;">(Predetermined route descriptions will be presented for selection (Panel 13). If no route is known to the system, "Manual Route Description" (Panel 8) is displayed.)</p> <table style="width: 100%;"> <tr> <td>For "Help" (list of aerodromes)</td> <td>Press "F2"</td> </tr> <tr> <td>To return to previous page</td> <td>Press "F3"</td> </tr> <tr> <td>To quit</td> <td>Press "F12"</td> </tr> </table>	For "Help" (list of aerodromes)	Press "F2"	To return to previous page	Press "F3"	To quit	Press "F12"
For "Help" (list of aerodromes)	Press "F2"						
To return to previous page	Press "F3"						
To quit	Press "F12"						

Sample choice: Display of predetermined routes ("Enter") → Panel 13

Sample choice on Panel 7: D

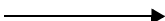
ROUTE BULLETIN (ROUTE PROPOSAL ACCORDING TO DESTINATION)

11	<p style="text-align: center;">ROUTE BULLETIN (ACCORDING TO DESTINATION)</p> <p>BULLETIN VALIDITY:</p> <p>— ONE DAY (SPECIFY DATE (YYMMDD)):</p> <p>— PERIOD</p> <p style="padding-left: 40px;">FROM (YYMMDDHH): TO (YYMMDDHH):</p> <p>DEFINE DESTINATION (ICAO FOUR-LETTER CODE)</p> <p>— DESTINATION : (AERODROME OF ARRIVAL)</p> <p>— AERODROME OF DEPARTURE : ADDEP (GENERATED BY SYSTEM)</p> <p>-----</p> <p>Fill aerodrome(s), then Press "Enter"</p> <p style="padding-left: 40px;">(Predetermined route descriptions will be presented for selection (Panel 13). If no route is known to the system, "Manual Route Description" (Panel 8) is displayed.)</p> <p>For "Help" (list of aerodromes) Press "F2"</p> <p>To return to previous page Press "F3"</p> <p>To quit Press "F12"</p>
----	---

Sample choice on Panel 7: F

ROUTE BULLETIN (ROUTE PROPOSAL BY FLIGHT NUMBER)

12	<p style="text-align: center;">ROUTE BULLETIN (BY FLIGHT NUMBER)</p> <p>BULLETIN VALIDITY:</p> <p>— ONE DAY (SPECIFY DATE (YYMMDD)):</p> <p>— PERIOD</p> <p style="padding-left: 40px;">FROM (YYMMDDHH): TO (YYMMDDHH):</p> <p>FLIGHT NUMBER:</p> <p>-----</p> <p>Give "Flight Number" and Press "Enter"</p> <p style="padding-left: 40px;">(Predetermined route descriptions will be presented for selection (Panel 14). If no route is known to the system, "Manual Route Description" (Panel 8) is displayed.)</p> <p>For "Help" (list of flight numbers) Press "F2"</p> <p>To return to previous page Press "F3"</p> <p>To quit Press "F12"</p>
----	---

Sample choice: Display of predetermined routes ("Enter")  Panel 14

Sample choice on Panel 10: Display of predetermined routes (“Enter”)

SELECTION OF PREDETERMINED ROUTES (CITY PAIR)

13	SELECTION OF PREDETERMINED ROUTE (SEQUENCES OF FIRS)			
FOR CITY PAIR		ICAO	NAME (IF KNOWN TO SYSTEM)	
*DEPARTURE		LFAD	CHAMPS VERT-LA-JOIE	
*ARRIVAL		EDAD	FLUGPLATZ LANDEFELD	
ROUTES PROPOSED:				
*1)	LFXX	EDXX	EDYY	: : : :
*2)	LFXX	LFSS	EDYY	: : : :
3)	:	:	:	: : : :
4)	:	:	:	: : : :
*ALTERNATES PROPOSED:			EDAA	EDAB EDAC :
ALTERNATES ADDED:			:	: : :
FLIGHT LEVEL LIMITS (OPTION) ALL FIR FIRST OTHER LAST				
— UPPER LEVEL (FL):		:	OR :	: :
— LOWER LEVEL (EX. 090):		:	OR :	: :

To print standard bulletin			Press “Enter”	
To obtain non-standard bulletin contents			Press “F4”	
For “Help” (aerodromes)			Press “F2”	
To return to previous page			Press “F3”	
To quit			Press “F12”	

*Fields filled by system.

Sample choice: Non-standard bulletin contents (“F4”) → Panel 9

Sample choice on Panel 12: Display of Predetermined Routes (“Enter”)

SELECTION OF PREDETERMINED ROUTES (FLIGHT NUMBER)

14					SELECTION OF PREDETERMINED ROUTE (SEQUENCES OF FIRS)				
FOR FLIGHT NUMBER *** AF1234 *** ETD: 14H30									
					ICAO		NAME (IF KNOWN TO SYSTEM)		
*DEPARTURE					LFPG		PARIS CHARLES DE GAULLE		
*ARRIVAL					EDDF		FRANKFURT MAIN		
ROUTES PROPOSED:YOUR SELECTION * * (EX. * 2 *)									
*1) LFFF		EDBB		EDFF		:	:	:	:
*2) LFFF		EDFF		:	:	:	:	:	:
3) :		:	:	:	:	:	:	:	:
4) :		:	:	:	:	:	:	:	:
*ALTERNATES PROPOSED:					EDAA		EDAB		EDAC :
ALTERNATES ADDED:					:	:	:	:	:
FLIGHT LEVEL LIMITS (OPTION)					ALL FIR		FIRST		OTHER LAST
— UPPER LEVEL (FL):					:	OR :	:	:	:
— LOWER LEVEL (EX. 090):					:	OR :	:	:	:

To print standard bulletin								Press "Enter"	
To obtain non-standard bulletin contents								Press "F4"	
For "Help" (aerodromes)								Press "F2"	
To return to previous page								Press "F3"	
To quit								Press "F12"	

*Fields filled by system.

Sample choice: Non-standard bulletin contents (“F4”) \longrightarrow Panel 9

STANDARD NOTAM RETRIEVAL FORMAT

AIS Briefing Service — Intermediate users

Example for area or AD information (one or several locations)

Output type: Summary (Summary bulletin) Traffic: I (I, V, IV)			NOTAM RETRIEVAL Validity: (YY/MM/DD/HHMM) Date: 03/05/12/0800 From: / / / To: / / /			
Location (State, FIR, AD)			Selection by:			
NR	Type	Name (ICAO)	Purpose (N, B, O, M)	Scope (A, E, W)	Above FL	Below FL
1	FIR	GOOO	B	—	000	250
2	FIR	GVSC	O	E	100	250
3						
4						
5						
6						

Example for route bulletin (DEP AD, ARR AD, FIR)

Output type: Summary (Summary bulletin) Traffic: I (I, V, IV)			NOTAM RETRIEVAL Validity: (YY/MM/DD/HHMM) Date: 03/05/12/0800 From: / / / To: / / /			
Location (State, FIR, AD)			Selection by:			
NR	Type	Name (ICAO)	Purpose (N, B, O, M)	Scope (A, E, W)	Above FL	Below FL
1	AD	WSSS	O	A		
2	AD	WIII	O	A		
3	FIR	WSJC	O	E	120	250
4	FIR	WIIZ	O	E	120	310
5						
6						

STANDARD NOTAM RETRIEVAL FORMAT FOR INDIVIDUAL NOTAM**AIS Briefing Service — Intermediate users*****Retrieval of one or several NOTAM***

INDIVIDUAL NOTAM RETRIEVAL				Date: (YYMMDDHHMM)
	State (Doc 7910) (HE)	NOF of origin (HECAYNYX)	Series (A, B, ...)	Number/Year/(1234/03)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
Fill, in sequence, desired NOTAM, then press "Execute" key. To retrieve more than 10 NOTAM, repeat query.				

Appendix C to Chapter 9

COMMON QUERY MESSAGES FOR THE INTERROGATION OF OTHER AIS DATABASES

1. The following query formats should be developed for the interrogation of database systems participating in an integrated regional automated AIS system. They are intended to complement the procedures described in Chapter 9 and could be used where self-briefing facilities are not directly available.

2. The command structure is simplified to allow a single-line inquiry format to be used which is not dependent upon the access terminal characteristics or the communication access method (AFS, public service telecommunication networks, public data transmission networks, etc.).

Inquiry format

3. An inquiry should comprise three sections separated by a stroke (/). The format should be:

<INQUIRY TYPE> / <FILTER> / <ARGUMENTS>

4. Different filters may be applied to different inquiry types. In some cases filters may be invalid for a particular inquiry type or, where no filter values are included in the inquiry, default values will be assumed. Table 9-C-1 depicts the range of inquiry types and the default/invalid filter values. In all cases the inquiry format delimiters (/) must be included whether or not filter values are provided in the inquiry. (See examples of inquiry formats.)

Common set of inquiries

5. The common set of inquiries is for interrogation of AIS databases using different access methods.

Inquiry type

6. A three-alpha-character sequence is to be used to identify the type of inquiry being made:

Route	Briefing	SPR
FIR area	Briefing	FAB
Aerodrome/Heliport	Briefing	AER
Original NOTAM	Briefing	ONB
NOTAM checklist	Briefing	NCB

Filters

7. The following serve as filter switches:

Traffic	IFR (I), VFR (V), BOTH (G)*	
Purpose	Immediate notification	(N)
	Operationally significant	(O)
	Bulletin item	(B)
	Miscellaneous	(M)
Scope	En-route information	(E)
	NAV warning information	(W)
	Aerodrome information	(A)
	Combined information	(C)*

**These filter switches do not exist in the NOTAM qualifier definition but are valid in this inquiry format.*

Arguments

8. Each argument must be separated by a comma.

FIR

AAAA = four-letter location indicator

Aerodrome

BBBB = four-letter location indicator

NOTAM identifier

LLLL, AnnnnYY = four-letter location indicator followed by a series letter, the number and the year.

Table 9-C-1. Inquiry types and default filters

<i>Inquiry type</i>	<i>Traffic</i>	<i>Purpose</i>	<i>Scope</i>
Route bulletin	SPR	G	O #
Area bulletin	FAB	G	O C
Aerodrome bulletin	AER	G	O #
Original NOTAM	ONB	#	# #
NOTAM checklist	NCB	#	# #
<i>Note.</i> — # indicates no filter required for this entry.			
<i>Examples of inquiry formats</i>			
Area type briefing	FAB/VNW/AAAA ₁ ,...,AAAA _n		
Route type briefing	SPR/ /ADEP,DEST,FIR ₁ ,..FIR ₂		
Aerodrome type briefing	AER/VB/BBBB ₁ ,...,BBBB _n		
NOTAM request	ONB/ /LLLL,AnnnnYY		
<i>Note.</i> — n is always less than 10 (0 to 9 inclusive).			

Chapter 10

PREPARATION OF ORIGINAL COPY, REPRODUCTION AND DISTRIBUTION

10.1 REPRODUCTION PROCESS

10.1.1 Any of the following reproduction processes is suitable to prepare and reproduce AIS publications, circulars, maps and notices.

- a) electronic pre-press;
- b) offset printing (sheet fed and web presses);
- c) digital printing;
- d) analog photocopying.

Brief descriptions of the processes are given hereunder.

Electronic pre-press

10.1.2 Electronic pre-press involves the steps required to turn a text or a design into final form, ready for final printing on a printing press or digital copier. This may include colour correction, colour trapping, imposition (the process of arranging individual pages on a form in preparation for the printing press so that the pages will be in the proper sequence after printing, folding and binding), colour separation, proofing and imagesetting. An electronic pre-press unit is equipped with a personal computer (PC), an imagesetter (a device that generates the highest resolution paper, plate, and film output for professional publishing needs) and spooler, ink-jet and hot- wax colour printers, film and metal plate processors, a plate burner, a register hole punch system and a darkroom. Material can be received in a hard copy (camera ready) or electronically. In this unit, a range of proofing can be carried out, such as traditional blues, colour keys, large colour printout, colour proofing, colour separation and colour management, as well as colour matching with Pantone or mix and match colour system.

10.1.3 The requirements of an AIS organization are such that this method is only suitable where:

- a) a government printing department is established and is able to give top priority to AIS publication requirements; or
- b) the work can be contracted to a suitable non-government organization able to provide a similar, rapid service at a reasonable cost.

Offset printing

10.1.4 The offset printing process is the most common commercial printing technology in use today and is suitable for larger AIS because of the speed and relatively low cost. The process consists of making a specially prepared lightweight metal plate or silver master (paper plate). Then, offset printing applies layers of ink on the page. For each layer, a reverse image of the page is placed on a roller in the printing press. Ink is applied to the non-image areas on the roller, so that as the roller presses against paper moving through the press, the proper image is left or transferred on the printing stock.

10.1.5 The equipment required to obtain those plates consists of a PC, an imagesetter, a film processor, a camera, a darkroom and plate-making facilities, a photoplatermaker (silver master) and an offset printing press and/or a duplicator offset press, which is a very sophisticated piece of equipment that gives a high standard of reproduction.

10.1.6 There are four basic steps involved in the offset printing process:

Step 1 — Original copy

Preparation of the electronic file or original hard copy is described in 10.2.4 and 10.2.5.

Step 2 — Film negative, colour separation and colour keys or colour proof

A film negative of the original copy is required to transfer an image of the original copy to a printing plate or the transfer could be done directly from an electronic file to a computer-to-plate (CTP) unit. The electronic or hard copy is prepared in the same size as the final format requested. To create an electronic document, it is very important to use the best resolution as possible in order to get the maximum definition. Then, if it is a multi-colour job, a colour match (Pantone or mix and match system) will be necessary, or if it is a four-colour process, a colour separation, a colour key or a colour proof will be required.

Step 3 — Printing plate

The film negative is placed on a fine-grained aluminum- or zinc-sensitized plate and brought into firm contact in a vacuum plate-burner frame. The negative/plate combination is then exposed to an arc light for a predetermined length of time; the light strikes through the clear parts (printing area) of the negative and the impression adheres to the chemically-treated plate. The plate is then processed through to metal processor, which consists of going through chemical solutions and water for developing, and then, when inked, is ready to use. If the document is regular black text, it would be easier, faster and more economical to use silver master plates (paper plates).

Step 4 — Printing

When step 3 has been completed, the plate is in a condition where the parts that were exposed through the film negative or by the photoplatemaker will repel water but accept a greasy substance such as printing ink; therefore, after being locked on the roller, the plate is first dampened and then inked, the ink adhering only to the printing area. This ink is transferred to the rubberized blanket, then transferred to the printing stock. For a multi-colour job this process will be repeated as many times as there are colours on the original. For a four-colour process, the above-mentioned process will be repeated four times to print the following colours: cyan, magenta, yellow and black. The superposition of these four colours will create a full coloured image.

Digital printing

10.1.7 Digital printing is the commercial-quality printing in which electronic source files are processed

directly on the printing system, rather than through analog steps such as film imagesetting and platemaking. Direct digital printing systems may be based on lithographic offset technology or laser/toner technology. Front-end Raster Image Processors (RIP) and servers are integrated components of these printing systems. This printing technology allows the production of material in black and white or in full colour and the scanning of hard copy. Digital printing is used for printing jobs with low print runs and for reprint-on-demand.

Photocopying

10.1.8 Photocopying equipment produces a direct positive image of a hard or electronic copy and is therefore equally suited to the reproduction of text or line diagrams with the added capabilities of enlarging or reducing the size (from 25 to 400 per cent), collating and stapling. High-speed photocopying machines are becoming increasingly sophisticated and computerized, and some training is required to use all the special features. The operating speed of a high-speed photocopying machine is higher than 100 copies per minute. This method of reproduction is therefore very well suited for low print runs and reprint-on-demand.

10.2 PREPARATION OF COPY

General

Text matter

10.2.1 It is advisable to consult, in advance of submitting text matter for printing, the composing room personnel who are responsible for setting up the type, regarding the following details:

- a) type styles (the style of typefaces to be used);
- b) type sizes (the sizes of type for headings, sub-headings and body text);
- c) measure (the length of a printed line, allowing for suitable margins);
- d) paper size, type and weight.

10.2.2 Draft copy can be passed to the composing room in either handwritten or typed form (preferably in the latter to avoid composing errors) and marked up as required by the composer. When preparing material to be reproduced

in sections or parts, it is advisable to prepare a master “dummy”, to assist and guide the composing room staff in the proper selection and quantity of type. Type can be set up either manually or by a number of composing machines, the latter being the more economical. A “galley” proof should be submitted to the editing staff by the printer for correction and approval prior to final printing.

Charts and line diagrams

10.2.3 To reproduce charts and line diagrams an original drawing is provided electronically or in hard copy (camera ready) which can be scanned, after which the appropriate reproduction process is selected.

Offset printing

Text matter

10.2.4 A choice can be made of the following for the preparation of final copy:

- a) typewriting;
- b) phototypesetting;
- c) word processing;
- d) typesetting (when a limited number of copies are to be printed, this more elaborate and expensive method of preparing copy can be disregarded).

10.2.5 Good clear type is obtainable from a typewriter, but the phototypesetting machine offers the advantage of providing contrasting type faces and bold headings and subheadings. Typing or phototypesetting should be done on very white paper to obtain the maximum contrast required for the photographic process which follows. Care must be exercised to avert smudging the text prior to photographing it, although errors or smudge marks may be eliminated by the use of retouch white, which is non-photographic.

Charts and line diagrams

10.2.6 Charts and line diagrams can be used effectively to portray information that would be too complicated to express in text form. The method of preparing the drawing will depend entirely upon the complexity of the drawing itself. Line diagrams are

generally sufficient when produced in black and white, while the addition of colours will often improve and add emphasis to particular features of a chart. The original drawing should be drawn so that the final reduction for plates can be at least a reduction of four to three. A smooth surface white paper that will resist humidity changes is most suitable.

Photocopying

10.2.7 As this is a photographic process, copy has to be camera ready, i.e. it has to be in the precise form of the required final print. Best results are obtained from high contrast copy (black type on white paper). Large areas of solid black should be avoided. If an area on the copy has to be filled in, use parallel or crossed lines to define the area.

10.3 SELECTION OF METHOD

10.3.1 A combination of methods may be employed.

Pre-press printing process

10.3.2 This should be used only when:

- a) a high standard of colour reproduction is required and to do traditional blues, colour keys, large colour printouts, colour proofing, colour separation, colour management, or colour matching with Pantone or mix and match colour system;
- b) a minimum print run (up to 20 copies) on an ink-jet printer of a map or a chart is required.

Offset printing process

10.3.3 This process can be considered suitable when:

- a) a good standard of reproduction is required;
- b) the equipment can be employed on other printing work to obtain economical plant utilization and generally reduce printing costs;
- c) a print run of 300 copies or more is required;
- d) multiple-colour processing is required.

Digital printing process

10.3.3 This process can be considered suitable when:

- a) black and white or colour jobs are submitted electronically;
- b) jobs have a low print run (300 copies or fewer);
- c) jobs are in the paper size range of 5.5" × 8.5" to 12" × 18";
- d) reprint-on-demand is required.

Photocopying process

10.3.4 Consideration can be given to the use of this process when:

- a) the originals are submitted in hard copy (camera ready);
- b) a good standard of reproduction is required;
- c) jobs have a low print run (300 copies or fewer);
- d) multiple-colour processing is not required;
- e) reprint-on-demand is required.

10.4 PAPER

10.4.1 Taking into account the requirements for durability and hand amending, recommended minimum paper standards are as follows.

Pre-press printing

10.4.2 Special paper must be used, such as photographic paper, and various types of ink-jet papers.

Offset printing

10.4.3 Various types of papers (from bond to offset and opaque papers of different weights) and various types of cardboard can be used to print publications and covers.

Digital printing

10.4.4 Various types of premium reprographic papers (from bond to offset and opaque papers of different

weights) and various types of cardboard can be used to print publications and covers.

Photocopying

10.4.5 Various types of premium reprographic papers (from bond to offset and opaque papers of different weights) can be used.

10.5 EQUIPMENT

10.5.1 The scale of equipment required by an AIS will depend on its requirement for the production of copy, whether it is for delivery to a printing establishment, or for reproduction within the unit, or a combination of both. PCs, a printer and photocopying equipment should be adequate and should be considered.

10.5.2 The minimum equipment required by an aerodrome/heliport AIS unit, if only for the production of pre-flight information bulletins (PIB), is a typewriter and a photocopying machine. However, a PC and printer would be more suitable as they would provide for instant updating of PIB when required.

10.6 MAINTENANCE OF DISTRIBUTION LIST

Function

10.6.1 A distribution list for outgoing publications should include:

- a) up-to-date lists of addressees and their requirements;
- b) a current record of total quantities to be produced; and
- c) a record of dispatches.

Method

10.6.2 If a computer-generated application is not used, suggested alternative methods are:

- a) *Card index*. One card per subscriber, with all the necessary details (address, number of copies

required, etc.), should be used. To safeguard against the list becoming incomplete due to the loss of a card or cards, it is advisable to allocate a serial number to each holder. A cross-reference list by serial number can then be maintained, against which the alphabetical list can be checked; or

- b) *Loose-leaf ledger*: One folio per subscriber with all the necessary details should be used and each folio numbered. An alphabetical index can be maintained on index sheets kept in the front of the ledger.

printing, and divide it by the total number of holders (both paying and non-paying subscribers). An individual annual production cost is thus arrived at, to which can be added mailing costs plus a small handling charge, to arrive at the price for paid subscriptions. The desirability of recovery by a charge that is set annually is stressed, as charging for individual issues not only gives rise to considerable petty accounting, but can delay quick distribution. For similar reasons it is desirable to establish a combined charge for AIP, AIP Amendments and AIP Supplements since each holder of an AIP should also receive all amendments and supplements.

10.7 SALE OF AIS DOCUMENTATION

State AIS

10.7.1 Annex 15 requires the exchange of all elements of the Integrated Aeronautical Information Package between States on a reciprocal, no-cost basis. This requirement includes any AIS publications produced by a commercial agency on behalf of a State. The value of aeronautical information thus received more than offsets any production costs incurred by an individual State, and the prompt distribution of information is thereby facilitated.

Paid subscription

10.7.2 States can expect to receive subscription orders for AIS documentation from organizations such as airlines and chart-producing agencies. When calculating charges, only a reasonable proportion of production costs should be recovered from paying subscribers. Excessive charges tend to discourage sales. A reasonable formula would be to take annual production costs, including editing, drafting and

10.8 MAILING

10.8.1 AIS documentation, in particular AIP Amendments and AIP Supplements, should never be folded but dispatched flat inside an envelope. This ensures that the loose-leaf AIP material is received in good condition by holders. All dispatches should be by the most expeditious means. Several types of addressing equipment are available; automatic or semi-automatic addressing equipment is a great asset, since rapid distribution is a necessity.

10.8.2 To expedite delivery of AIS material, envelopes should be suitably marked with labels of the types shown below.

10.9 AUTOMATION

The attention of States considering automation in the distribution of AIS material is drawn to Chapter 9 of this manual, which contains guidance on the development and operation of an automated AIS system.

<p>PRINTED MATTER</p> <p>AERONAUTICAL INFORMATION</p> <p>Certified to contain only information regarding safety of air navigation.</p> <p>NO COMMERCIAL VALUE</p>

<p>URGENT</p> <p>PRINTED MATTER</p> <p>AERONAUTICAL INFORMATION</p> <p>Certified to contain only information regarding safety of air navigation.</p> <p>URGENT</p>
--

AIP
AERONAUTICAL INFORMATION PUBLICATION

(Name of State)

_____ **EDITION**

CONSULT NOTAM FOR LATEST INFORMATION

AERONAUTICAL INFORMATION SERVICE
DEPARTMENT OF CIVIL AVIATION

AIP
AERONAUTICAL INFORMATION PUBLICATION

(Name of State)

PART 1
GENERAL (GEN)

VOLUME NR
(If more than one volume)

PART 1 — GENERAL (GEN)

GEN 0.

GEN 0.1 PREFACE

1. Name of the publishing authority

The AIP is published by authority of the Civil Aviation Administration.

2. Applicable ICAO documents

The AIP is prepared in accordance with the Standards and Recommended Practices (SARPs) of Annex 15 to the Convention on International Civil Aviation and the ICAO *Aeronautical Information Services Manual* (Doc 8126). Charts contained in the AIP are produced in accordance with Annex 4 to the Convention on International Civil Aviation and the ICAO *Aeronautical Chart Manual* (Doc 8697). Differences from ICAO Standards, Recommended Practices and Procedures are given in subsection GEN 1.7.

3. The AIP structure and established regular amendment interval

3.1 *The AIP structure*

The AIP forms part of the Integrated Aeronautical Information Package, details of which are given in subsection GEN 3.1. The principal AIP structure is shown in graphic form on page GEN 0.1-3.

The AIP is made up of three parts, General (GEN), En-route (ENR) and Aerodromes (AD), each divided into sections and subsections as applicable, containing various types of information subjects.

3.1.1 *Part 1 — General (GEN)*

Part 1 consists of five sections containing information as briefly described hereafter.

GEN 0. — Preface; Record of AIP Amendments; Record of AIP Supplements; Checklist of AIP pages; List of hand amendments to the AIP; and the Table of Contents to Part 1.

GEN 1. National regulations and requirements — Designated authorities; Entry, transit and departure of aircraft; Entry, transit and departure of passengers and crew; Entry, transit and departure of cargo; Aircraft instruments, equipment and flight documents; Summary of national regulations and international agreements/conventions; and Differences from ICAO Standards, Recommended Practices and Procedures.

GEN 2. Tables and codes — Measuring system, aircraft markings, holidays; Abbreviations used in AIS publications; Chart symbols; Location indicators; List of radio navigation aids; Conversion tables; and Sunrise/Sunset tables.

GEN 3. Services — Aeronautical information services; Aeronautical charts; Air traffic services; Communication services; Meteorological services; and Search and rescue.

GEN 4. Charges for aerodromes/heliports and air navigation services — Aerodrome/heliport charges; and Air navigation services charges.

3.1.2 *Part 2 — En-route (ENR)*

Part 2 consists of seven sections containing information as briefly described hereafter.

ENR 0. — Preface; Record of AIP Amendments; Record of AIP Supplements; Checklist of AIP pages; List of hand amendments to the AIP; and the Table of Contents to Part 2.

ENR 1. General rules and procedures — General rules; Visual flight rules; Instrument flight rules; ATS

airspace classification; Holding, approach and departure procedures; Radar services and procedures; Altimeter setting procedures; Regional supplementary procedures; Air traffic flow management; Flight planning; Addressing of flight plan messages; Interception of civil aircraft; Unlawful interference; and Air traffic incidents.

ENR 2. Air traffic services airspace — Detailed description of Flight information regions (FIR); Upper flight information regions (UIR); Terminal control areas (TMA); and Other regulated airspace.

ENR 3. ATS routes — Detailed description of Lower ATS routes; Upper ATS routes; Area navigation routes; Helicopter routes; Other routes; and En-route holding.

Note.— *Other types of routes which are specified in connection with procedures for traffic to and from aerodromes/heliports are described in the relevant sections and subsections of Part 3 — Aerodromes.*

ENR 4. Radio navigation aids/systems — Radio navigation aids — en-route; Special navigation systems; Name-code designators for significant points; and Aeronautical ground lights — en-route.

ENR 5. Navigation warnings — Prohibited, restricted and danger areas; Military exercise and training areas and air defence identification zone (ADIZ); Other activities of a dangerous nature and other potential hazards; Air navigation obstacles — en-route; Aerial sporting and recreational activities; and Bird migration and areas with sensitive fauna.

ENR 6. En-route charts — En-route Chart — ICAO and index charts.

3.1.3 Part 3 — Aerodromes (AD)

Part 3 consists of four sections containing information as briefly described hereafter.

AD 0. — Preface; Record of AIP Amendments; Record of AIP Supplements; Checklist of AIP pages; List of hand amendments to the AIP; and the Table of Contents to Part 3.

AD 1. Aerodromes/Heliports — Introduction — Aerodrome/heliport availability; Rescue and fire fighting services and Snow plan; Index to aerodromes and heliports; and Grouping of aerodromes/heliports.

AD 2. Aerodromes — Detailed information about aerodromes, including helicopter landing areas, if located at the aerodromes, listed under 24 subsections.

AD 3. Heliports — Detailed information about heliports (not located at aerodromes), listed under 23 subsections.

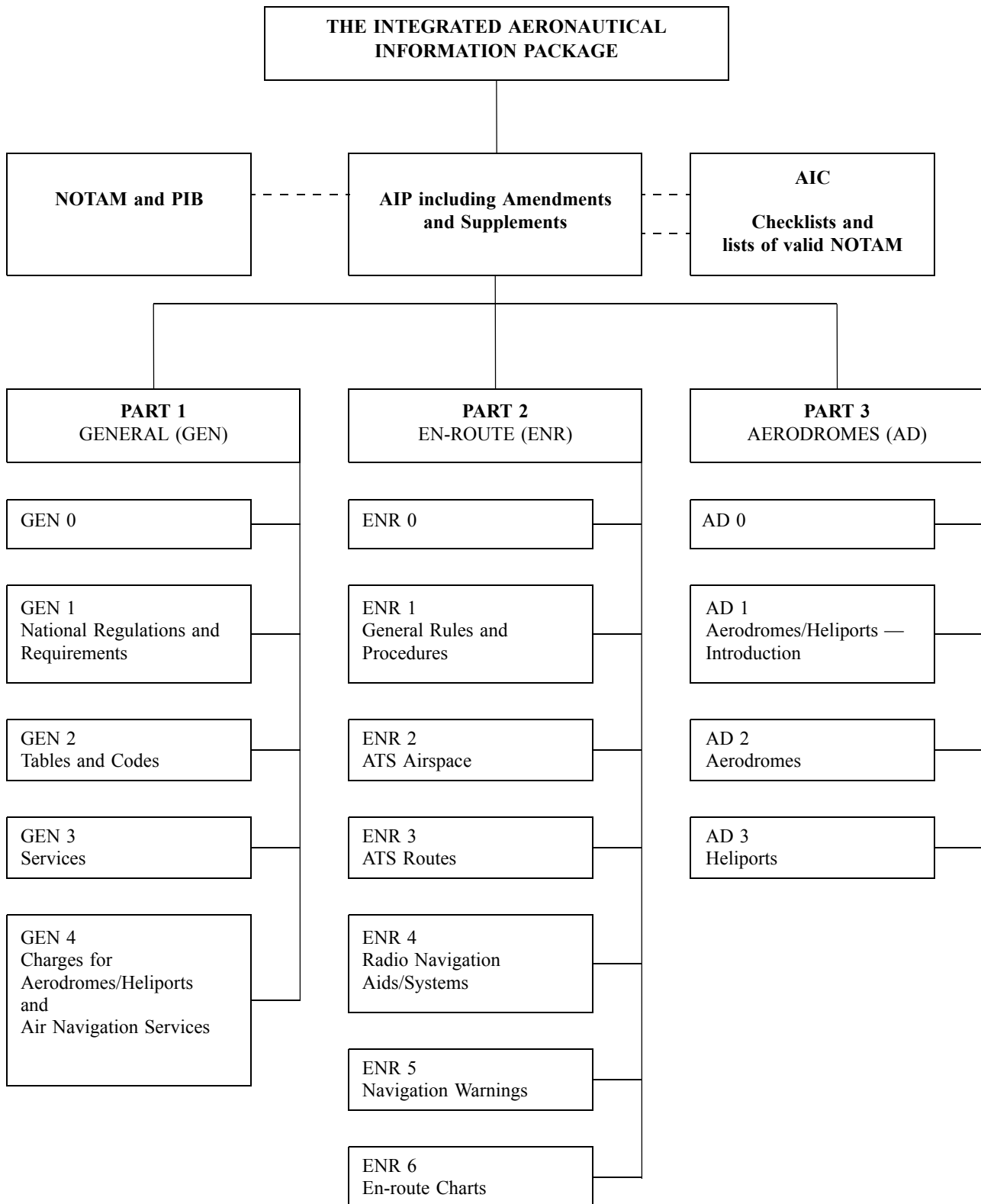
3.2 Regular amendment interval

Regular amendments to the AIP will be issued once every three months. The publication dates will be on the first day of February, May, August and November of each year.

4. Service to contact in case of detected AIP errors or omissions

In the compilation of the AIP, care has been taken to ensure that the information contained therein is accurate and complete. Any errors and omissions which may nevertheless be detected, as well as any correspondence concerning the Integrated Aeronautical Information Package, should be referred to:

Aeronautical Information Service
P.O. Box 744
1050 State Street
Donlon



GEN 0.2 RECORD OF AIP AMENDMENTS

[illegible][illegible]

GEN 0.3 RECORD OF AIP SUPPLEMENTS

[illegible]

GEN 0.4 CHECKLIST OF AIP PAGES

<i>Page</i>	<i>Date</i>	<i>Page</i>	<i>Date</i>	<i>Page</i>	<i>Date</i>
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0.1-2	27 NOV 03	3.3-1	27 NOV 03	1.10-3	27 NOV 03
0.1-3	27 NOV 03	3.3-2	27 NOV 03	1.11-1	27 NOV 03
0.2-1	27 NOV 03	3.4-1	27 NOV 03	1.12-1	27 NOV 03
0.3-1	27 NOV 03	3.4-2	27 NOV 03	1.12-2	27 NOV 03
0.4-1	27 NOV 03	3.4-3	27 NOV 03	1.12-3	27 NOV 03
0.4-2	27 NOV 03	3.4-4	27 NOV 03	1.13-1	27 NOV 03
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0.6-1	27 NOV 03	3.5-2	27 NOV 03	1.14-2	27 NOV 03
0.6-2	27 NOV 03	3.5-3	27 NOV 03	1.14-3	27 NOV 03
0.6-3	27 NOV 03	3.5-4	27 NOV 03	1.14-4	27 NOV 03
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GEN 1. NATIONAL REGULATIONS AND REQUIREMENTS

GEN 1.1 DESIGNATED AUTHORITIES

The addresses of the designated authorities concerned with facilitation of international air navigation are as follows:

- | | |
|--|---|
| <p>1. Civil aviation
Ministry of Transport
Civil Aviation Administration
Government Square
Donlon
TEL: 0123 697 3434
Telefax: 0123 697 3445
Telex: 99 1234
AFS: EADDYAYX</p> <p>2. Meteorology
Meteorological Bureau
101 West Avenue
Donlon
TEL: 0123 695 3333
Telefax: 0123 695 3344
Telex: 99 2345
AFS: EADDYMYX</p> <p>3. Customs
The Commissioner of Customs and Excise
Department of Customs and Excise
Government Square
Donlon
TEL: 0123 697 1212
Telefax: 0123 697 1223
Telex: 99 1264
AFS: NIL</p> <p>4. Immigration
The Controller of Immigration
Department of Immigration
Government Square
Donlon
TEL: 0123 697 5555
Telefax: 0123 697 5655
Telex: 99 1274
AFS: NIL</p> | <p>5. Health
The Director of Health Services
Department of Health
Government Square
Donlon
TEL: 0123 697 4444
Telefax: 0123 697 4455
Telex: 99 1244
AFS: NIL</p> <p>6. En-route and aerodrome/heliport charges
The Ministry of Transport
Civil Aviation Administration
Government Square
Donlon
TEL: 0123 697 2222
Telefax: 0123 697 2233
Telex: 99 1254
AFS: EADDYAYH</p> <p>7. Agricultural quarantine
The Commissioner of Agricultural Quarantine
Department of Agricultural Quarantine
Government Square
Donlon
TEL: 0123 697 6768
Telefax: 0123 697 6868
Telex: 99 1284
AFS: NIL</p> <p>8. Aircraft accident investigation
Aircraft Accident Investigation Board
45 Aviation Road, first floor
Donlon
TEL: 0123 696 7222
Telefax: 0123 696 7322
Telex: 99 1345
AFS: EADDYLYX</p> |
|--|---|

GEN 1.2 ENTRY, TRANSIT AND DEPARTURE OF AIRCRAFT**1. General**

1.1 International flights into, from or over (State) territory shall be subject to the current (State) regulations relating to civil aviation. These regulations correspond in all essentials to the Standards and Recommended Practices contained in Annex 9 to the Convention on International Civil Aviation.

1.2 Aircraft flying into or departing from (State) territory shall make their first landing at, or final departure from, an international aerodrome/heliport (see AIP (State), AD 1.3, AD 2 and AD 3).

2. Scheduled flights**2.1 General**

2.1.1 For regular international scheduled flights operated by foreign airlines into or in transit across (State), the following requirements must be met:

- a) the State of the airline must be a party to the International Air Services Transit Agreement and/or the International Air Transport Agreement (State) is a party to both Agreements;
- b) the airline must be eligible to make the flights under the provisions of a bilateral or multilateral agreement to which the State of the airline and (State) are contracting parties and must have a permit to operate into or in transit across (State). Applications for such permits shall be submitted to (name and address of authority concerned) at least (advance notification).

2.2 Documentary requirements for clearance of aircraft

2.2.1 It is necessary that the undermentioned aircraft documents be submitted by airline operators for clearance on entry and departure of their aircraft to and from (State). All documents listed below must follow the ICAO standard format as set forth in the relevant appendices to Annex 9 and are acceptable when furnished

in (language(s)) and completed in legible handwriting. No visas are required in connection with such documents.

2.2.2 Aircraft documents required (arrival/departure)

	General declaration (if still required)	Passenger manifest	Cargo manifest
Required by			
(List all govern- mental agencies)	(Under each heading opposite the related agency, show number of copies required.)		

Notes.— a) *One copy of the General Declaration is endorsed and returned by Customs, signifying clearance.*

b) *If no passengers are embarking (disembarking) and no articles are laden (unladen), no aircraft documents except copies of the General Declaration need be submitted to the above authorities.*

3. Non-scheduled flights**3.1 Procedures**

3.1.1 If an operator intends to carry out a (series of) non-scheduled flight(s) in transit across, or making non-traffic stops in, the territory of (State), it is not necessary for the operator to obtain prior permission.

3.1.2 If an operator intends to perform a (series of) non-scheduled flight(s) into (State) for the purpose of taking on or discharging passengers, cargo or mail, it is necessary for the operator to apply to (name and address of authority concerned) for permission to carry out such operations not less than twenty-four hours in advance of the intended landing. The application must include the following information in the order shown hereunder:

- a) name of operator;
- b) type of aircraft and registration marks;
- c) date and time of arrival at, and departure from (aerodrome);

- d) place or places of embarkation or disembarkation abroad, as the case may be, of passengers and/or freight;
- e) purpose of flight and number of passengers and/or nature and amount of freight; and
- f) name, address and business of charterer, if any.

3.2 *Documentary requirements for clearance of aircraft*

3.2.1 Same requirements as for SCHEDULED FLIGHTS.

4. Private flights

4.1 *Advance notification of arrival*

4.1.1 The information contained in the flight plan is accepted as adequate advance notification of the arrival of incoming aircraft with the exception as stated in 4.1.2; such information must be transmitted so that it will be received by the public authorities concerned at least two hours in advance of arrival; the landing must be carried out at a previously designated international aerodrome.

4.1.2 For reasons of flight safety, special permission in addition to the filing of a flight plan is required under the following circumstances: (specify).

4.1.3 Application for special permission must be submitted to (name and address of authority

concerned) at least (specify) days in advance of the entry into the airspace over (State).

4.2 *Documentary requirements for clearance of aircraft*

4.2.1 No documents, in addition to those mentioned under 2.2.2 above, are required in the case of an aircraft remaining within (State) for less than (specify) days. For a stay beyond (specify) days after the date of arrival, a “carnet de passages en douane” will be accepted in lieu of a bond or of any other financial guarantee.

5. Public health measures applied to aircraft

5.1 No public health measures are required to be carried out in respect of aircraft entering (State) with the following exception: (specify).

5.2 Aircraft arriving from (region or State) may land at any international aerodrome in (State) provided that the aircraft has been disinfected approximately thirty minutes before arrival at the aerodrome. This action must be properly recorded in the Health Section of the General Declaration. The insecticide to be used is (specify). If, in special circumstances, a second spraying of the aircraft to be carried out on the ground is deemed necessary by the public health authorities, passengers and crew are permitted to disembark beforehand.

GEN 1.3 ENTRY, TRANSIT AND DEPARTURE OF PASSENGERS AND CREW**1. Customs requirements**

1.1 Baggage or articles belonging to disembarking passengers and crew are immediately released except for those selected for inspection by the customs authorities. Such baggage will be cleared on the basis of an oral declaration except in the case of returning citizens.

1.2 No customs formalities are normally required on departure.

2. Immigration requirements

2.1 No documents or visas are required of passengers arriving and departing on the same through flight or transferring to another flight at the same or a nearby airport.

2.2 A person entering (State) for the purpose of immigration must hold a valid passport and an immigration visa, the latter being issued at (State) consulates abroad. Temporary visitors must be in possession of a valid passport, with the exception of the following nationals from whom existing official documents of identity, such as expired passports, national registration cards or alien resident permits, are acceptable in lieu of a valid passport: (specify).

(No) entrance visas are required from temporary visitors, with the exception of the nationals of the following States: (specify).

The standard ICAO embarkation/disembarkation card is (or is not) required from the following States: (specify).

2.3 For flight crew members on scheduled services who keep possession of their licences when embarking and disembarking, remain at the airport where the aircraft has stopped or within the confines of the cities adjacent thereto, and depart on the same aircraft or on their next regularly scheduled flight out of (State), the crew member licence or certificate is accepted in lieu of a passport or visa for temporary admission into (State). This provision is also applicable if the crew member enters (State) by other means of transport for the purpose of joining an aircraft.

2.4 No departure formalities are required for embarking passengers.

3. Public health requirements

3.1 Disembarking passengers are not required to present vaccination certificates except when coming directly from an area infected with cholera, yellow fever or smallpox.

3.2 On departure, no health formalities are required.

GEN 1.4 ENTRY, TRANSIT AND DEPARTURE OF CARGO**1. Customs requirements concerning cargo and other articles**

1.1 The following documents are required for the clearance of goods through customs: (specify). No documents are required in respect of shipments not exceeding the value (weight) of (specify). No advance notification is required but the documents must accompany the shipment.

1.1.1 The following customs documentation applies to shipments above the value (weight) of (specify) but not exceeding (specify).

1.1.2 All air cargo shipments are free of consular formalities and charges.

1.2 As regards air cargo simply being trans-shipped from one flight to another flight at the same airport under customs supervision, (specify if any particular

documents or procedures are required). In the case of cargo and other articles being transferred to another international airport in (State), the following procedures must be adhered to: (specify).

1.3 No clearance documents are required with respect to goods retained on board an aircraft for on-carriage to a destination outside (State).

1.4 Upon exportation, the following documents are required for the clearance of shipments to be exported by air: (specify).

2. Agricultural quarantine requirements

Sanitary certificates or related documents are required only in respect of the following animal and plant shipments in the circumstances specified: (specify).

GEN 1.5 AIRCRAFT INSTRUMENTS, EQUIPMENT AND FLIGHT DOCUMENTS**1. General**

Commercial air transport aircraft operating in (State) must adhere to the provisions of Annex 6 — *Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes*, Chapter 6 (Aeroplane Instruments, Equipment and Flight Documents) and Chapter 7 (Aeroplane Communication and Navigation Equipment).

2. Special equipment to be carried

2.1 In addition to the above-mentioned, all aircraft operating within Amwell FIR, whereby (State) territory is overflowed, must adhere to the provisions detailed below in accordance with the type of flight.

2.2 Types of flight**2.2.1 Transiting**

- a) Flights transiting Amwell FIR, whereby (State) territory is overflowed.
- b) Flights to and from (State), whereby a maximum of two landings are made.

2.2.2 Internal

Flights conducted within (specify) area, except such flights to and from (specify), whereby a maximum of two landings are made.

3. Equipment to be carried by all types of flights

The following radio and navigation equipment shall be carried within (State or FIR): (specify).

4. Equipment to be carried on all internal and on certain flights

4.1 On all internal flights and on flights with single-engined and multi-engined aircraft which are not capable of maintaining the prescribed minimum safe altitude in the event of engine failure, the following emergency equipment shall be carried.

4.2 Signalling equipment

- a) An emergency locator transmitter (ELT);
- b) Two signal flares of the day and night type;
- c) Eight red signal cartridges and a means of firing them;
- d) A signal sheet (minimum 1 × 1 m) in a reflecting colour;
- e) A signal mirror; and
- f) An electric hand torch.

4.3 Survival equipment

- a) A compass;
- b) A knife;
- c) A sleeping bag with waterproof inner lining or a rescue blanket (Astron) per person;
- d) Four boxes of matches in waterproof containers;
- e) A ball of string;
- f) A cooking stove with fuel and the accompanying cooking and eating utensils.

During winter conditions and when flying over the icecap, the following shall also be carried;

- g) A snow saw or snow shovel;
- h) Candles with a burning time of about 2 hours per person. The minimum burning time of the candles shall not be less than 40 hours; and
- i) Tent(s) for all on board. If dinghies are carried, the tent(s) need not be carried.

Note.— It is recommended that a rifle and the necessary ammunition be carried when overflying areas where wild animals can be expected. Personal clothing should be suitable for the climatic conditions along the route to be overflowed.

GEN 1.6 SUMMARY OF NATIONAL REGULATIONS AND INTERNATIONAL AGREEMENTS/CONVENTIONS

1. Following is a list of civil aviation legislation, air navigation regulations, etc., in force in (State) and on the Islands. It is essential that anyone engaged in air operations be acquainted with the relevant regulations. Copies of these documents may be obtained from the Aeronautical Information Service. (Their address can be found on page GEN 3.1-1.)

1.1 *Aviation Act (Statute Book 1958, NR 47), as amended*

<i>Article NR</i>	<i>Regulations and Decrees pursuant to the Aviation Act</i>
1.	Designation of machines that are not defined as aircraft as expressed in Article 1, sub b, of the Aviation Act (St. B. 1981, NR 344).
6.	Nationality and registration marks of civil aircraft. Order of 24 March 1966, NR LI/11430, as amended.
8.	Regulations on the use of communication equipment in the ..., ... and ... control zones without a flight radio telephone operator licence (St. G. 1988, NR 54).
9.	Exemption for the use of radio equipment on behalf of aviation for recreation (St. G. 1983, NR 55).
11.	Determination of a prohibited area on the occasion of the opening of the Parliament (St. G. 1959, NR 169).
14.	Restriction or prohibition on the execution of civil aviation in certain areas (St. G. 1969, NR 63), as amended.
19.	Prohibition of civil aviation in certain areas with respect to military exercises. Order of 30 October 1984, NR 065.127/044.771.
21.	Restriction of civil aviation in military exercise area over Order of 12 March 1973, NR 832234/588979 (St. G. 1973, NR 57).

1.2 *Civil Air Navigation Regulation*

<i>Article NR</i>	<i>Regulations and Decrees pursuant to the Civil Air Navigation Regulation</i>
5.	Data to be supplied with an application for entering an aircraft in or transferring of possession of an aircraft to the register of civil aircraft (St. G. 1981, NR 223).
20.	Regulation concerning the physical and mental fitness required for licences and ratings (St. G. 1988, NR 137).
23.	Regulations concerning the knowledge, skill and experience required for licences and ratings (St. G. 1984, NR 44), as amended.
24.	Regulations concerning the granting of exemptions from medical examinations (St. G. 1988, NR 28).
26.	Determination of the manner of extension of the term of validity for licences and qualification certifications (St. G. 1988, NR 37).
31.	Regulations on rendering a foreign licence valid (St. G. 1988, NR 7).

1.3 *Air Traffic Regulation 1980 (St. B. 1980, NR 786), as amended*

<i>Article NR</i>	<i>Regulations and Decrees pursuant to the Air Traffic Regulation 1980</i>
8.	Regulations on Air Traffic Services (St. G. 1985, NR 226), as amended.
9.	Designation of areas for controlled VFR flights and aerodrome traffic zones (St. G. 1981, NR 223).
10.	Establishment of special rules areas ...R7 and ...R10 in the vicinity of ... aerodrome (St. G. 1982, NR 32).

11. Designation of an aerodrome traffic zone (ATZ) ... (St. G. 1982, NR 13).
12. Circuit procedures for aerodrome traffic (St. G. 1982, NR 171).
13. Regulations to formalize approach and departure routes, procedures and traffic patterns for aerodrome traffic (St. G. 1986, NR 13), as amended.
17. Regulations in relation to the use of altimeters and the determination of cruising levels (St. G. 1981, NR 164), as amended.
18. Exemption from the prohibition on aerial dropping and spraying (St. G. 1981, NR 164).

1.4 *International agreements/conventions*

Convention on International Civil Aviation (The Chicago Convention)

Convention for the Unification of Certain Rules Relating to International Carriage by Air (The Warsaw Convention)

International Air Services Transit Agreement

Multilateral Agreement relating to Certificates of Airworthiness for Imported Aircraft

Convention on the International Recognition of Rights in Aircraft

Convention on Offenses and Certain Other Acts Committed on Board Aircraft (The Tokyo Convention)

Convention for the Suppression of Unlawful Seizure of Aircraft (The Hague Convention)

International Agreement on the Procedures for the Establishment of Tariffs for the Scheduled Air Services

Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation (The Montreal Convention)

Multilateral Agreement relating to Certificates of Airworthiness for Imported Aircraft

1.5 *Miscellaneous*

Regulations on the search and rescue service in (State), Decree NR 83/507/005 dated 7 February 1984.

Act holding the collection of charges for the use of airspace (St. B. 1971, NR 719).

Act holding approval of the concluded Multilateral and Bilateral Agreement concerning the En-Route charges of 8 September 1970 at Brussels (St. B. 1971, NR 720).

Regulations concerning authorization of the use of radio transmitting installations operating in the aeronautical mobile frequency bands (St. G. 1988, NR 254).

Regulations on aerodrome information by radio, 1983 (St. G. 1983, NR 42).

Regulations on the air transport of animals (St. G. 1989, NR 249 and St. G. 1990, NR 10).

Government inspection of ground stations transmitting on aeronautical mobile frequencies on behalf of uncontrolled aerodromes (St. G. 1986, NR 169).

Government inspection of ground stations on behalf of aviation for recreation (St. G. 1986, NR 169).

**GEN 1.7 DIFFERENCES FROM ICAO STANDARDS,
RECOMMENDED PRACTICES AND PROCEDURES**

1. ANNEX 1 — PERSONNEL LICENSING, (specify) edition: NIL

2. ANNEX 2 — RULES OF THE AIR, (specify) edition**Chapter 2****2.5 *Use of intoxicating liquor, narcotics or drugs***

Para. 2.5 of the (State) Rules of the Air contains the following provision: No person shall perform or attempt to perform such service on board an aircraft for which a licence is required in pursuance of Section 35 of the (State) Air Navigation Act while under the influence of intoxicating liquor, by reason of which that person's capacity so to act is impaired, apart from duties of secondary importance to safety, in case there is a blood alcohol concentration of 0.40 per thousand or more.

Neither shall any person perform or attempt to perform such service on board an aircraft for which a licence is required in pursuance of Section 35 of the (State) Air Navigation Act if, on account of illness, impairment, strain, lack of sleep, or the influence of narcotics or drugs, the ability to act safely on board an aircraft is impaired.

Chapter 3**3.1 *Protection of persons and property***

In addition to para. 3.1 of Annex 2, the (State) Rules of the Air contain the following provisions:

3.1.1.1 The pilot-in-command shall take care that other air traffic is not unnecessarily impeded or disturbed.

3.1.1.2 The pilot-in-command shall take care that the flight interferes with the surroundings as little as possible. This applies in particular when flying over built-up areas, recreational areas and areas with sensitive fauna.

3.1.7 *Acrobatic flight*

In pursuance of para. 3.1.7 of Annex 2, the following provisions have been established:

3.1.7.1 No aircraft shall be flown acrobatically unless it is approved for such flight. Acrobatic flight shall be conducted in such a manner as not to endanger life or property of others or other air traffic.

3.1.7.2 Unless permitted by the Civil Aviation Administration, acrobatic flight shall not be conducted:

- a) over densely built-up areas including areas with summer houses, inhabited camping sites and areas with large gatherings in the open;
- b) under instrument meteorological conditions; and
- c) at a height less than 2 000 ft (600 m) above the highest obstacle within a radius of 1.5 km from the aircraft.

3.2.5 *Operation on and in the vicinity of an aerodrome*

In addition to para. 3.2.5 of Annex 2, the (State) Rules of the Air contain the following provision:

The runway in use determined by the appropriate ATS unit shall be used unless safety determines that another runway be preferred.

3.7 *Unlawful interference*

In addition to para. 3.7 of Annex 2, the (State) Rules of the Air contain the following provision:

On an aircraft which is equipped with an SSR transponder, the pilot-in-command shall, if possible, select Mode A, Code 7500.

Chapter 4

4.1 *Weather minima for VFR flights*

In pursuance of para. 4.1 of Annex 2, the following provisions have been established within (State):

Within a control zone, the appropriate ATS unit can permit special VFR flights to be conducted so that the aircraft is flown with a flight visibility of not less than 1.5 km, clear of clouds and in sight of ground or water.

Helicopters may operate, as special VFR flights, with a flight visibility of not less than 0.8 km, clear of clouds and in sight of ground or water if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstructions in time to avoid collision.

Gliders may operate under instrument meteorological conditions within the specified airspace provided that clearance is obtained from the appropriate ATS unit and the conditions specified in Civil Air Navigation Regulations are followed.

4.4 *Minimum heights*

In addition to para. 4.4 of Annex 2, the (State) Rules of the Air contain the following provision:

Flying under bridges and under overhead lines or similar installations is prohibited unless specially authorized by the Civil Aviation Administration.

PROCEDURES FOR AIR NAVIGATION SERVICES — AIR TRAFFIC MANAGEMENT (PANS-ATM, Doc 4444)

Chapter 7, 12 Special VFR flights will not be authorized when the cloud base is less than 200 m and visibility less than prescribed minima.

REGIONAL SUPPLEMENTARY PROCEDURES (Doc 7030)

The supplementary procedures in force are given in their entirety; differences are shown in bold.

1) Visual flight rules (VFR) (Annex 2, paras. 4.7 and 4.8 refer):

VFR flights to be operated within a control zone established at an aerodrome serving international flights and in specified portions of the associated terminal control area shall:

- a) have two-way radio communications;
- b) obtain permission from the appropriate air traffic control unit; and
- c) report positions, as required.

Note.— The phrase “specified portions of the associated terminal control area” is intended to signify at least those portions of the TMA used by international IFR flights in association with approach, holding, departure and noise abatement procedures.

2) Special application of instrument flight rules:

Flights shall be conducted in accordance with the instrument flight rules (even when not operating in instrument meteorological conditions) when operated more than 90 km seaward from the shoreline.

3) Air traffic advisory service (PANS-ATM, Chapter 4):

All IFR flights shall comply with the procedures for air traffic advisory service when operating in advisory airspace.

4) Adherence to flight plan (Annex 2, para. 3.6.2):

If an aircraft has inadvertently deviated from the route specified in its ATC clearance, it shall forthwith take action to regain such route within **ONE HUNDRED (100)** nautical miles from the position at which the deviation was observed.

3. ANNEX 3 — METEOROLOGICAL SERVICE FOR INTERNATIONAL AIR NAVIGATION, (specify) edition

Chapter 7

- 7.4.1 Wind shear warnings are prepared only for aerodromes on which a meteorological office is established and only within the hours of operation of that office.

4. ANNEX 4 — AERONAUTICAL CHARTS, (specify) edition

Chapter 7

- 7.2.1 This chart is not yet produced. However, the various elements specified to be depicted on the chart are shown on individual thematic charts contained in the AIP.

5. ANNEX 5 — UNITS OF MEASUREMENT TO BE USED IN AIR AND GROUND OPERATIONS, (specify) edition: NIL

6. ANNEX 6 — OPERATION OF AIRCRAFT, (specify) edition: NIL

7. ANNEX 7 — AIRCRAFT NATIONALITY AND REGISTRATION MARKS, (specify) edition: NIL

8. ANNEX 8 — AIRWORTHINESS OF AIRCRAFT, (specify) edition: NIL

9. ANNEX 9 — FACILITATION, (specify) edition: NIL

10. ANNEX 10 — AERONAUTICAL TELECOMMUNICATIONS, (specify) edition: NIL
11. ANNEX 11 — AIR TRAFFIC SERVICES, (specify) edition: NIL
12. ANNEX 12 — SEARCH AND RESCUE, (specify) edition: NIL
13. ANNEX 13 — AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION, (specify) edition: NIL
14. ANNEX 14 — AERODROMES, (specify) edition: NIL
15. ANNEX 15 — AERONAUTICAL INFORMATION SERVICES, (specify) edition: NIL
16. ANNEX 16 — ENVIRONMENTAL PROTECTION, (specify) edition: NIL
17. ANNEX 17 — SECURITY, (specify) edition: NIL
18. ANNEX 18 — THE SAFE TRANSPORT OF DANGEROUS GOODS BY AIR, (specify) edition: NIL

GEN 2. TABLES AND CODES**GEN 2.1 MEASURING SYSTEM, AIRCRAFT MARKINGS, HOLIDAYS****1. Units of measurement**

The table of units of measurement shown below will be used by aeronautical stations within AMSWELL FIR (and on the Island of) for air and ground operations.

..... (State) is UTC plus 1 hour. The “summer period” will be introduced every year on the last Sunday in MAR at 0100 UTC and it will cease on the last Sunday in SEP at 0100 UTC. Times applicable during the “summer period” are given in brackets. Local time in (State) is UTC.

2. Temporal reference system**General**

Co-ordinated Universal Time (UTC) and the Gregorian calendar are used by air navigation services and in publications issued by the Aeronautical Information Service. Reporting of time is expressed to the nearest minute, e.g. 12:40:35 is reported as 1241.

In the AIP and associated publications, the expression “summer period” will indicate that part of the year in which “daylight saving time” is in force. The other part of the year will be named the “winter period”. Daylight saving time in

3. Horizontal reference system**3.1 Name/designation of system**

All published geographical coordinates indicating latitude and longitude are expressed in terms of the World Geodetic System — 1984 (WGS-84) geodetic reference datum.

3.2 Projection

Projection is expressed in term os Universal Transverse Mercator (UTM).

<i>For measurement of</i>	<i>Units used</i>
Distance used in navigation, position reporting, etc. — generally in excess of 2 nautical miles	Nautical miles and tenths
Relatively short distances such as those relating to aerodromes (e.g. runway lengths)	Metres
Altitudes, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per minute
Wind direction for landing and taking off	Degrees magnetic
Wind direction except for landing and taking off	Degrees true
Visibility including runway visual range	Kilometres or metres
Altimeter setting	Hectopascal
Temperature	Degrees Celsius
Weight	Metric tonnes or kilogrammes
Time	Hours and minutes, beginning at midnight UTC

3.3 *Ellipsoid*

Ellipsoid is expressed in terms of the World Geodetic System — 1984 (WGS-84) ellipsoid.

3.4 *Datum*

The World Geodetic System — 1984 (WGS-84) is used.

3.5 *Area of application*

The area of application for the published geographical coordinates coincides with the area of responsibility of the Aeronautical Information Service, i.e. the entire territory of (State) as well as the airspace over the high seas encompassed by the AMSWELL FIR in accordance with the regional air navigation agreement.

3.6 *Use of an asterisk to identify published geographical coordinates*

An asterisk (*) will be used to identify those published geographical coordinates which have been transformed into WGS-84 coordinates but whose accuracy of original field work does not meet the accuracy requirements in Annex 11, Chapter 2 and Annex 14, Volumes I and II, Chapter 2.

4. **Vertical reference system**

4.1 *Name/designation of system*

The vertical reference system corresponds to mean sea level (MSL).

4.2 *Geoid model*

The geoid model used is the Earth Gravitational Model 1996 —(EGM-96)

5. **Aircraft nationality and registration marks**

The nationality mark for aircraft registered in (State) is the letter The nationality mark is followed by a hyphen and a registration mark consisting of 3 letters, e.g. W-ABA.

6. **Public holidays**

<i>Name</i>	<i>Date/Day</i>
New Year's Day	1 January
Maundy Thursday	Thursday before Easter
Good Friday	Friday before Easter
Easter Monday	Monday after Easter Sunday
Prayer Day	4th Friday after Easter
Ascension Day	6th Thursday after Easter
Christmas Day	25 December
Boxing Day	26 December

Note.— Some administrative services may not be available and banks and other institutions may not be open on the following days:

1 May from noon (Labour Day)
5 June from noon (Constitution Day)
24 December (Christmas Eve)
31 December (New Year's Eve)

GEN 2.2 ABBREVIATIONS USED IN AIS PUBLICATIONS

Abbreviations marked by an asterisk (*) are either different from or not contained in ICAO Doc 8400.

A		AGA	Aerodromes, air routes and ground aids
A	Amber	AGL	Above ground level
AAA	(or AAB, AAC....etc. in sequence)	AGN	Again
	Amended meteorological message (<i>message type designator</i>)	AIC	Aeronautical information circular
A/A	Air-to-air	AIDC	Air traffic services inter-facility data communication
AAD	Assigned altitude deviation	AIP	Aeronautical information publication
AAL	Above aerodrome level	AIRAC	Aeronautical information regulation and control
ABI	Advance boundary information	AIREP†	Air report
ABM	Abeam	AIRMET†	Information concerning en-route weather phenomena which may affect the safety of low-level aircraft operations
ABN	Aerodrome beacon		
ABT	About	AIS	Aeronautical information services
ABV	Above	ALA	Alighting area
AC	Altocumulus	ALERFA‡	Alert phase
ACARS†	(to be pronounced "AY-CARS") Aircraft communication addressing and reporting system	ALR	Alerting (<i>message type designator</i>)
ACAS	Airborne collision avoidance system	ALRS	Alerting service
ACC‡	Area control centre or area control	ALS	Approach lighting system
ACCID	Notification of an aircraft accident	ALT	Altitude
ACFT	Aircraft	ALTN	Alternate or alternating (<i>light alternates in colour</i>)
ACK	Acknowledge	ALTN	Alternate (<i>aerodrome</i>)
ACL	Altimeter check location	AMA	Area minimum altitude
ACN	Aircraft classification number	AMD	Amend or amended (<i>used to indicate amended meteorological message; message type designator</i>)
ACP	Acceptance (<i>message type designator</i>)	AMDT	Amendment (<i>AIP Amendment</i>)
ACPT	Accept or accepted	AMSL	Above mean sea level
ACT	Active or activated or activity	AMSS	Aeronautical mobile satellite service
AD	Aerodrome	ANC	Aeronautical chart 1:500 000 (<i>followed by name/title</i>)
ADA	Advisory area	ANCS	Aeronautical navigation chart — small scale (<i>followed by name/title and scale</i>)
ADC	Aerodrome chart	ANS	Answer
ADDN	Addition or additional	AOC	Aerodrome obstacle chart (<i>followed by type and name/title</i>)
ADF‡	Automatic direction-finding equipment	AP	Airport
ADIZ†	(to be pronounced "AY DIZ") Air defence identification zone	APAPI	(to be pronounced "AY PAPI") Abbreviated precision approach path indicator
ADJ	Adjacent	APCH	Approach
ADO	Aerodrome office (<i>specify service</i>)	APDC	Aircraft parking docking chart (<i>followed by name/title</i>)
ADR	Advisory route	APN	Apron
ADS	Automatic dependent surveillance	APP	Approach control office or approach control or approach control service
ADS	The address (<i>when this abbreviation is used to request a repetition, the question mark (IMI) precedes the abbreviation, e.g. IMI ADS (to be used in AFS as a procedure signal)</i>)	APR	April
ADSU	Automatic dependent surveillance unit	APRX	Approximate or approximately
ADVS	Advisory service	APSG	After passing
ADZ	Advise	APV	Approve or approved or approval
AES	Aircraft earth station	ARC	Area chart
AFIL	Flight plan filed in the air	*ARFOR	Area forecast (<i>in aeronautical meteorological code</i>)
AFIS	Aerodrome flight information service		
AFM	Yes or affirm or affirmative or that is correct		
AFS	Aeronautical fixed service		
AFT	After.... (<i>time or place</i>)		
AFTN‡	Aeronautical fixed telecommunication network		
A/G	Air-to-ground		etc.










† When radiotelephony is used, the abbreviations and terms are transmitted as spoken words.

‡ When radiotelephony is used, the abbreviations and terms are transmitted using the individual letters in non-phonetic form.



GEN 2.3 CHART SYMBOLS

1. Aerodromes

1.1 *Charts other than approach charts*

Civil (land)	
Civil (water)	
Joint civil and military (land)	
Joint civil and military (water)	
Military (land)	
Military (water)	
Emergency aerodrome or aerodrome with no facilities	
Sheltered anchorage	
Heliport	


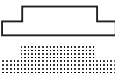











1.2 *Approach charts*

The aerodrome on which the procedure is based	
Aerodromes affecting the traffic pattern on the aerodrome on which the procedure is based	





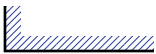


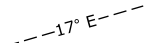
1.3 *Aerodrome charts*

Hard surface runway	
Unpaved runway	
Stopway □ □ □ □ SWY	

2. Aerodrome installations and lights

Aerodrome reference point (ARP)	
Taxiways and parking areas	
Control tower	Control Tower 
Point light	
	
Barrette	
Marine light	F 
Obstacle light	
Aeronautical ground light	
Wind direction indicator (lighted)	
Wind direction indicator (unlighted)	
Landing direction indicator (lighted)	
Landing direction indicator (unlighted)	

3. Miscellaneous

Highest elevation on chart	• 3365
Obstacles	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <i>180</i>  <i>(75)</i> </div> <div style="text-align: center;"> Lighted <i>171</i>  <i>(90)</i> </div> </div>
Group obstacles <i>Note.- Numerals in italics indicate elevation of top of obstacle above sea level. Upright numerals in parentheses indicate height above specified datum.</i>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <i>125</i>  <i>(40)</i> </div> <div style="text-align: center;"> <i>163</i>  <i>(45)</i> </div> </div>
Restricted airspace (prohibited, restricted or danger areas)	
Common boundary of two areas	
Air defence identification zone (ADIZ)	ADIZ 
Transmission line or overhead cable	—T—T—
Isogonal	

GEN 2.4 LOCATION INDICATORS

The location indicators marked with an asterisk (*) cannot be used in the address component of AFS messages.

1. ENCODE		2. DECODE	
<i>Location</i>	<i>Indicator</i>	<i>Indicator</i>	<i>Location</i>
AKVIN/Akvin	EADA	EACC	AMSWELL ACC
AMSWELL ACC	EACC	EADA	AKVIN/Akvin
Appenyfod	EADP	EADB	SIBY/Bistock
Bardoe	EADO	EADC*	Essence
DENGRON/Deleede	EADE	EADD	DONLON/Intl.
DONLON/Intl.	EADD	EADE	DENGRON/Deleede
DONLON/Downtown Heliport	EADH	EADF*	Faladin
Essence	EADC*	EADG	Galan
Faladin	EADF*	EADH	DONLON/Downtown Heliport
Galan	EADG	EADL	Haggingwell
Haggingwell	EADL	EADM	Malan
HOLMSTOCK/Landa	EADS	EADN	NIBORD/Nibord
Malan	EADM	EADO	Bardoe
NIBORD/Nibord	EADN	EADP	Appenyfod
Richmaast	EADT	EADR*	Yanmore
SIBY/Bistock	EADB	EADS	HOLMSTOCK/Landa
Toriluille	EADU*	EADT	Richmaast
WICHNOR/Slipton	EADW	EADU*	Toriluille
Yanmore	EADR*	EADW	WICHNOR/Slipton
Yunwell (MIL)	EADY	EADY	Yunwell (MIL)
Zanby (MIL)	EADZ	EADZ	Zanby (MIL)

GEN 2.5 LIST OF RADIO NAVIGATION AIDS

<i>ID</i>	<i>Station name</i>	<i>Aid</i>	<i>Purpose</i>	<i>Station name</i>	<i>Aid</i>	<i>ID</i>	<i>Purpose</i>
AK	Akvin	NDB	AE	Akvin	NDB	AK	AE
BOR	Boorspijk	VOR/DME	E	Boorspijk	VOR/DME	BOR	E
DN	Donnord	NDB	E	Donest	NDB	DS	E
DS	Donest	NDB	E	Donlon	ILS	OXS	A
EKO	Ekcombe	VOR	E	Donlon	L	KL	A
KL	Donlon	L	A	Donnord	NDB	DN	E
LG	Ugo	CON	E	Ekcombe	VOR	EKO	E
LMD	Limador	VOR	AE	Limador	VOR	LMD	AE
NHS	Nieuhans	VOR	E	Nieuhans	VOR	NHS	E
OXS	Donlon	ILS	A	Ugo	CON	LG	E

GEN 2.6 CONVERSION TABLES

NM to KM 1 NM = 1.852 KM		KM to NM 1 KM = 0.54 NM		FT to M 1 FT = 0.3048 M		M to FT 1 M = 3.281 FT	
<i>NM</i>	<i>KM</i>	<i>KM</i>	<i>NM</i>	<i>FT</i>	<i>M</i>	<i>M</i>	<i>FT</i>
0.1	0.185	0.1	0.05	1	0.305	1	3.28
0.2	0.370	0.2	0.11	2	0.610	2	6.56
0.3	0.556	0.3	0.16	3	0.914	3	9.84
0.4	0.741	0.4	0.22	4	1.219	4	13.12
0.5	0.926	0.5	0.27	5	1.524	5	16.40
0.6	1.111	0.6	0.32	6	1.829	6	19.69
0.7	1.296	0.7	0.38	7	2.134	7	22.97
0.8	1.482	0.8	0.43	8	2.438	8	26.25
0.9	1.667	0.9	0.49	9	2.743	9	29.53
1	1.852	1	0.54	10	3.048	10	32.81
2	3.704	2	1.08	20	6.096	20	65.62
3	5.556	3	1.62	30	9.144	30	98.43
4	7.408	4	2.16	40	12.192	40	131.23
5	9.260	5	2.70	50	15.240	50	164.04
6	11.112	6	3.24	60	18.288	60	196.85
7	12.964	7	3.78	70	21.336	70	229.66
8	14.816	8	4.32	80	24.384	80	262.47
9	16.668	9	4.86	90	27.432	90	295.28
10	18.520	10	5.40	100	30.480	100	328.08
20	37.040	20	10.80	200	60.960	200	656.17
30	55.560	30	16.20	300	91.440	300	984.25
40	74.080	40	21.60	400	121.920	400	1 312.34
50	92.600	50	27.00	500	152.400	500	1 640.42
60	111.120	60	32.40	600	182.880	600	1 968.50
70	129.640	70	37.80	700	213.360	700	2 296.59
80	148.160	80	43.20	800	243.840	800	2 624.67
90	166.680	90	48.60	900	274.320	900	2 952.76
100	185.200	100	54.00	1 000	304.800	1 000	3 280.84
200	370.400	200	107.99	2 000	609.600	2 000	6 561.68
300	555.600	300	161.99	3 000	914.400	3 000	9 842.52
400	740.800	400	215.98	4 000	1 219.200	4 000	13 123.36
500	926.000	500	269.98	5 000	1 524.000	5 000	16 404.20
				6 000	1 828.800		
				7 000	2 133.600		
				8 000	2 438.400		
				9 000	2 743.200		
				10 000	3 048.000		

From decimal minutes of an arc to seconds of an arc

<i>MIN</i>	<i>SEC</i>	<i>MIN</i>	<i>SEC</i>	<i>MIN</i>	<i>SEC</i>	<i>MIN</i>	<i>SEC</i>
0.01	0.6	0.26	15.6	0.51	30.6	0.76	45.6
0.02	1.2	0.27	16.2	0.52	31.2	0.77	46.2
0.03	1.8	0.28	16.8	0.53	31.8	0.78	46.8
0.04	2.4	0.29	17.4	0.54	32.4	0.79	47.4
0.05	3.0	0.30	18.0	0.55	33.0	0.80	48.0
0.06	3.6	0.31	18.6	0.56	33.6	0.81	48.6
0.07	4.2	0.32	19.2	0.57	34.2	0.82	49.2
0.08	4.8	0.33	19.8	0.58	34.8	0.83	49.8
0.09	5.4	0.34	20.4	0.59	35.4	0.84	50.4
0.10	6.0	0.35	21.0	0.60	36.0	0.85	51.0
0.11	6.6	0.36	21.6	0.61	36.6	0.86	51.6
0.12	7.2	0.37	22.2	0.62	37.2	0.87	52.2
0.13	7.8	0.38	22.8	0.63	37.8	0.88	52.8
0.14	8.4	0.39	23.4	0.64	38.4	0.89	53.4
0.15	9.0	0.40	24.0	0.65	39.0	0.90	54.0
0.16	9.6	0.41	24.6	0.66	39.6	0.91	54.6
0.17	10.2	0.42	25.2	0.67	40.2	0.92	55.2
0.18	10.8	0.43	25.8	0.68	40.8	0.93	55.8
0.19	11.4	0.44	26.4	0.69	41.4	0.94	56.4
0.20	12.0	0.45	27.0	0.70	42.0	0.95	57.0
0.21	12.6	0.46	27.6	0.71	42.6	0.96	57.6
0.22	13.2	0.47	28.2	0.72	43.2	0.97	58.2
0.23	13.8	0.48	28.8	0.73	43.8	0.98	58.8
0.24	14.4	0.49	29.4	0.74	44.4	0.99	59.4
0.25	15.0	0.50	30.0	0.75	45.0		

From seconds of an arc to decimal minutes of an arc

<i>SEC</i>	<i>MIN</i>	<i>SEC</i>	<i>MIN</i>	<i>SEC</i>	<i>MIN</i>	<i>SEC</i>	<i>MIN</i>
1	0.02	16	0.27	31	0.52	46	0.77
2	0.03	17	0.28	32	0.53	47	0.78
3	0.05	18	0.30	33	0.55	48	0.80
4	0.07	19	0.32	34	0.57	49	0.82
5	0.08	20	0.33	35	0.58	50	0.83
6	0.10	21	0.35	36	0.60	51	0.85
7	0.12	22	0.37	37	0.62	52	0.87
8	0.13	23	0.38	38	0.63	53	0.88
9	0.15	24	0.40	39	0.65	54	0.90
10	0.17	25	0.42	40	0.67	55	0.92
11	0.18	26	0.43	41	0.68	56	0.93
12	0.20	27	0.45	42	0.70	57	0.95
13	0.22	28	0.47	43	0.72	58	0.97
14	0.23	29	0.48	44	0.73	59	0.98
15	0.25	30	0.50	45	0.75		

GEN 2.7 SUNRISE/SUNSET TABLES

1. The tables on the following pages have been prepared by the (State) Astronomic Observatory and are reproduced here with their permission. The tables include (number) public airports and aerodromes and also (number) elevated heliports in that part of the High Sea, which is being served by the (State) air traffic services.

1.1 The times in the tables are given in UTC for beginning of civil morning twilight (TWIL FROM), sunrise (SR) sunset (SS), and end of civil evening twilight (TWIL TO) for the years from 1991 to 2000.

1.2 The times given for the beginning of civil morning twilight and end of civil evening twilight are calculated for an altitude of the Sun 6° below the horizon, as commonly used.

1.3 The tables are calculated for the year 1994, which is used as an “average year” for the years from 1991 to 2000. In this period, the times on an arbitrary date and place will deviate less than 2 minutes from the times on the same date and place in the “average year”.

2. Alphabetical index

<i>Location</i>	<i>Page</i>	<i>Location</i>	<i>Page</i>
AKVIN/Akvin	GEN 2.7-2		
DONLON/International	GEN 2.7-3		

3. Sunrise-Sunset tables

3.1

AKVIN/Akvin EADA 52 36 06N 032 55 12W						AKVIN/Akvin EADA 52 36 06N 032 55 12W						AKVIN/Akvin EADA 52 36 06N 032 55 12W					
MONTH/ DAY		TWIL FROM	SR	SS	TWIL TO	MONTH/ DAY		TWIL FROM	SR	SS	TWIL TO	MONTH/ DAY		TWIL FROM	SR	SS	TWIL TO
JAN	1	0702	0749	1504	1551	MAY	1	0302	0346	1855	1940	SEP	2	0352	0432	1812	1851
—	5	0701	0748	1509	1555	—	5	0252	0338	1903	1949	—	6	0400	0440	1802	1841
—	9	0700	0746	1515	1601	—	9	0243	0330	1910	1958	—	10	0408	0447	1752	1830
—	13	0657	0742	1521	1606	—	13	0234	0322	1917	2006	—	14	0416	0455	1741	1820
—	17	0654	0738	1528	1613	—	17	0225	0315	1924	2015	—	18	0424	0502	1731	1809
—	11	0649	0733	1536	1620	—	21	0217	0309	1931	2023	—	22	0431	0509	1721	1759
—	15	0644	0727	1544	1627	—	25	0210	0303	1937	2031	—	26	0439	0517	1711	1748
—	19	0639	0721	1552	1634	—	29	0203	0258	1943	2038	—	30	0447	0524	1700	1738
FEB	2	0632	0714	1600	1642	JUN	2	0158	0254	1948	2045	OCT	4	0454	0532	1650	1728
—	6	0625	0706	1608	1649	—	6	0153	0251	1953	2051	—	8	0502	0540	1640	1718
—	10	0618	0658	1617	1657	—	10	0150	0248	1957	2056	—	12	0509	0547	1630	1709
—	14	0610	0650	1625	1705	—	14	0147	0247	2000	2059	—	16	0517	0555	1621	1659
—	18	0602	0641	1634	1713	—	18	0146	0246	2002	2102	—	20	0524	0603	1611	1650
—	22	0553	0632	1642	1721	—	22	0147	0247	2003	2103	—	24	0532	0611	1602	1641
—	26	0544	0622	1650	1729	—	26	0148	0248	2003	2103	—	28	0540	0619	1553	1633
						—	30	0151	0251	2002	2101						
MAR	2	0535	0613	1658	1736	JUL	4	0155	0254	2000	2058	NOV	1	0547	0627	1545	1625
—	6	0525	0603	1706	1744	—	8	0201	0258	1957	2054	—	5	0555	0636	1537	1618
—	10	0515	0553	1714	1752	—	12	0207	0303	1953	2049	—	9	0602	0644	1529	1611
—	14	0505	0543	1722	1800	—	16	0214	0308	1949	2043	—	13	0609	0652	1522	1604
—	18	0455	0533	1730	1808	—	20	0221	0314	1943	2036	—	17	0617	0700	1515	1558
—	22	0445	0523	1738	1816	—	24	0229	0320	1937	2028	—	21	0623	0707	1510	1553
—	26	0435	0513	1746	1824	—	28	0237	0327	1931	2020	—	25	0630	0715	1504	1549
—	30	0424	0502	1754	1832							—	29	0636	0722	1500	1546
APR	3	0414	0452	1801	1840	AUG	1	0245	0334	1923	2011	DEC	3	0642	0728	1457	1543
—	7	0403	0442	1809	1848	—	5	0254	0341	1916	2002	—	7	0647	0734	1454	1541
—	11	0353	0432	1817	1857	—	9	0302	0348	1907	1953	—	11	0652	0739	1453	1540
—	15	0342	0423	1824	1905	—	13	0311	0355	1859	1943	—	15	0655	0743	1453	1540
—	19	0332	0413	1832	1914	—	17	0319	0403	1850	1933	—	19	0658	0746	1454	1541
—	23	0322	0404	1840	1923	—	21	0328	0410	1841	1923	—	23	0701	0748	1455	1543
—	27	0311	0355	1848	1931	—	25	0336	0418	1831	1912	—	27	0702	0749	1458	1546
						—	29	0344	0425	1822	1902	—	31	0702	0750	1502	1550

3.2

DONLON/International EADD 52 22 18N 031 56 58W						DONLON/International EADD 52 22 18N 031 56 58W						DONLON/International EADD 52 22 18N 031 56 58W					
MONTH/ DAY		TWIL FROM	SR	SS	TWIL TO	MONTH/ DAY		TWIL FROM	SR	SS	TWIL TO	MONTH/ DAY		TWIL FROM	SR	SS	TWIL TO
JAN	1	0652	0741	1445	1534	MAY	1	0244	0330	1845	1931	SEP	2	0337	0417	1800	1840
–	5	0651	0739	1451	1539	–	5	0234	0321	1852	1940	–	6	0345	0425	1749	1829
–	9	0649	0737	1457	1544	–	9	0224	0313	1900	1949	–	10	0353	0433	1739	1818
–	13	0647	0733	1503	1550	–	13	0215	0305	1908	1958	–	14	0401	0440	1728	1807
–	17	0643	0729	1511	1556	–	17	0206	0258	1915	2007	–	18	0409	0448	1718	1757
–	21	0638	0723	1518	1603	–	21	0158	0251	1922	2016	–	22	0417	0456	1707	1746
–	25	0633	0717	1527	1611	–	25	0150	0245	1928	2024	–	26	0425	0503	1657	1735
–	29	0627	0711	1535	1618	–	29	0143	0240	1934	2032	–	30	0433	0511	1647	1725
FEB	2	0621	0703	1543	1626	JUN	2	0137	0236	1940	2039	OCT	4	0441	0519	1636	1715
–	6	0614	0656	1552	1634	–	6	0132	0232	1944	2045	–	8	0448	0527	1626	1704
–	10	0606	0647	1601	1642	–	10	0128	0230	1948	2050	–	12	0456	0535	1616	1655
–	14	0558	0638	1610	1650	–	14	0125	0228	1951	2054	–	16	0504	0543	1606	1645
–	18	0549	0629	1618	1658	–	18	0124	0228	1953	2057	–	20	0512	0551	1556	1636
–	22	0541	0620	1627	1706	–	22	0125	0228	1954	2058	–	24	0520	0600	1547	1627
–	26	0531	0610	1635	1714	–	26	0126	0230	1954	2058	–	28	0527	0608	1538	1618
						–	30	0129	0232	1953	2056						
MAR	2	0522	0600	1644	1723	JUL	4	0134	0235	1951	2053	NOV	1	0535	0616	1529	1610
–	6	0512	0550	1652	1731	–	8	0139	0240	1949	2048	–	5	0543	0625	1520	1602
–	10	0502	0540	1700	1739	–	12	0146	0244	1945	2043	–	9	0551	0633	1512	1555
–	14	0452	0530	1709	1747	–	16	0153	0250	1940	2036	–	13	0558	0642	1505	1548
–	18	0441	0520	1717	1755	–	20	0201	0256	1934	2029	–	17	0605	0650	1458	1543
–	22	0431	0509	1725	1803	–	24	0209	0303	1928	2021	–	21	0613	0658	1452	1537
–	26	0420	0459	1733	1812	–	28	0218	0309	1921	2012	–	25	0619	0705	1447	1533
–	30	0409	0448	1741	1820							–	29	0626	0712	1442	1529
APR	3	0358	0438	1749	1828	AUG	1	0227	0317	1913	2003	DEC	3	0632	0719	1439	1526
–	7	0348	0428	1757	1837	–	5	0236	0324	1905	1953	–	7	0637	0725	1436	1524
–	11	0337	0418	1805	1846	–	9	0245	0331	1857	1944	–	11	0641	0730	1435	1523
–	15	0326	0408	1813	1854	–	13	0253	0339	1848	1933	–	15	0645	0734	1434	1523
–	19	0315	0358	1821	1903	–	17	0302	0347	1839	1923	–	19	0648	0738	1435	1524
–	23	0305	0348	1829	1912	–	21	0311	0354	1829	1921	–	23	0651	0740	1437	1526
–	27	0254	0339	1837	1921	–	25	0320	0402	1820	1902	–	27	0652	0741	1440	1529
						–	29	0328	0410	1810	1851	–	31	0652	0741	1444	1533

GEN 3. SERVICES

GEN 3.1 AERONAUTICAL INFORMATION SERVICES

1. Responsible service

1.1 The Aeronautical Information Service, which forms part of the (State) Division of the Civil Aviation Administration, ensures the flow of information necessary for the safety, regularity and efficiency of international and national air navigation within the area of its responsibility as indicated under GEN 3.1.2. It consists of AIS Headquarters, International NOTAM Office (NOF) and AIS units established at certain aerodromes as listed under GEN 3.1.5.

1.2 AIS Headquarters

Aeronautical Information Service
P.O. Box 744
1050 State Street
Donlon
TEL: 0123 697 3464
Telefax: 0123 697 3474
Telex: 99 1236
AFS: EADDYAYX
E-mail: ais@donc.xx

1.3 International NOTAM office (NOF)

International NOTAM Office
Donlon Airport
134 Airport Road
Donlon
TEL: 0123 696 5698
Telefax: 0123 696 5788
Telex: 99 1247
AFS: EADDYNYX

The service is provided in accordance with the provisions contained in Annex 15 — *Aeronautical Information Services*.

(Editorial note: If the service is not H24, this should be indicated here.)

2. Area of responsibility

The Aeronautical Information Service is responsible for the collection and dissemination of information for the entire territory of (State) and for the airspace over the high seas encompassed by the AMSWELL Flight Information Region.

3. Aeronautical publications

3.1 The aeronautical information is provided in the form of the Integrated Aeronautical Information Package consisting of the following elements:

- Aeronautical Information Publication (AIP);
- Amendment service to the AIP (AIP AMDT);
- Supplement to the AIP (AIP SUP);
- NOTAM and Pre-flight Information Bulletins (PIB);
- Aeronautical Information Circulars (AIC); and
- Checklists and lists of valid NOTAM.

NOTAM and the related monthly checklists are issued via the Aeronautical Fixed Service (AFS), while PIB are made available at aerodrome AIS units. All other elements of the package are distributed by air mail.

3.2 Aeronautical Information Publication (AIP)

The AIP is the basic aviation document intended primarily to satisfy international requirements for the exchange of permanent aeronautical information and long duration temporary changes essential for air navigation.

AIP (State) is published in (specify) volume(s).

The AIP is published in a loose-leaf form with bilingual text (English and) (or in English only) for use in international and domestic operations, whether the flight is a commercial or a private one.

3.3 *Amendment service to the AIP (AIP AMDT)*

Amendments to the AIP are made by means of replacement sheets. Two types of AIP AMDT are produced:

- regular AIP Amendment (AIP AMDT), issued in accordance with the established regular interval (ref. GEN ...) and identified by a light blue cover sheet, incorporates permanent changes into the AIP on the indicated publication date; and
- AIRAC AIP Amendment (AIRAC AIP AMDT), issued in accordance with the AIRAC system and identified by a pink cover sheet and the acronym — AIRAC, incorporates operationally significant permanent changes into the AIP on the indicated AIRAC effective date.

A brief description of the subjects affected by the amendment is given on the AIP Amendment cover sheet. New information included on the reprinted AIP pages is annotated or identified by a vertical line in the left margin (or immediately to the left) of the change/addition.

Each AIP page and each AIP replacement page introduced by an amendment, including the amendment cover sheet, are dated. The date consists of the day, month (by name) and year of the publication date (regular AIP AMDT) or of the AIRAC effective date (AIRAC AIP AMDT) of the information. Each AIP amendment cover sheet includes references to the serial number of those elements, if any, of the Integrated Aeronautical Information Package which have been incorporated in the AIP by the amendment and are consequently cancelled.

Each AIP AMDT and each AIRAC AIP AMDT are allocated separate serial numbers which are consecutive and based on the calendar year. The year, indicated by two digits, is a part of the serial number of the amendment, e.g. AIP AMDT 1/96; AIRAC AIP AMDT 1/96.

A checklist of AIP pages containing page number/chart title and the publication or effective date (day, month by name and year) of the information is reissued with each amendment and is an integral part of the AIP.

3.4 *Supplement to the AIP (AIP SUP)*

Temporary changes of long duration (three months and longer) and information of short duration which consists of extensive text and/or graphics, supplementing the permanent information contained in the AIP, are published as AIP Supplements (AIP SUP). Operationally significant

temporary changes to the AIP are published in accordance with the AIRAC system and its established effective dates and are identified clearly by the acronym AIRAC AIP SUP.

AIP Supplements are separated by information subject (General — GEN, En-route — ENR and Aerodromes — AD) and are placed accordingly at the beginning of each AIP Part. Supplements are published on yellow paper to be conspicuous and to stand out from the rest of the AIP. Each AIP Supplement (regular or AIRAC) is allocated a serial number which is consecutive and based on the calendar year, i.e. AIP SUP 1/96; AIRAC AIP SUP 1/96.

An AIP Supplement is kept in the AIP as long as all or some of its contents remain valid. The period of validity of the information contained in the AIP Supplement will normally be given in the supplement itself. Alternatively, NOTAM may be used to indicate changes to the period of validity or cancellation of the supplement.

The checklist of AIP Supplements currently in force is issued in the monthly printed plain-language list of valid NOTAM.

3.5 *NOTAM and Pre-flight Information Bulletins (PIB)*

NOTAM contain information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential for personnel concerned with flight operations. The text of each NOTAM contains the information in the order shown in the ICAO NOTAM Format and is composed of the significations/uniform abbreviated phraseology assigned to the ICAO NOTAM Code complemented by ICAO abbreviations, indicators, identifiers, designators, call signs, frequencies, figures and plain language. NOTAM are originated and issued for Amswell FIR and are distributed in seven series identified by the letters A, B, C, D, E, S and V.

Series A. General rules, en-route navigation and communication facilities, airspace restrictions and activities taking place above FL 245 and information concerning major international aerodromes.

Series B. Information on airspace restrictions, on activities taking place below FL 195 and on other international aerodromes at which IFR flights are permitted.

Series C. Information on other international aerodromes at which only VFR flights are permitted.

Series D. Information on national aerodromes.

Series E. Information on heliports.

Series S (SNOWTAM). Information concerning snow, slush, ice or standing water associated with snow and slush and ice in the movement areas. SNOWTAM are prepared in accordance with Annex 15, Appendix 2, and are issued by the individual aerodrome directly, with separate serial numbers. Details are given in the Snow plan in the Aerodrome (AD) Part.

Series V (ASHTAM). Information concerning the occurrence of pre-eruption volcanic activity, or an operationally significant change in volcanic activity, the location, date and time of volcanic eruptions and horizontal and vertical extent of volcanic ash cloud, including direction of movement, flight levels and routes or portions of routes which could be affected. ASHTAM are prepared in accordance with Annex 15, Appendix 3.

Pre-flight Information Bulletins (PIB), which contain a recapitulation of current NOTAM and other information of urgent character for the operator/flight crews, are available at the aerodrome AIS units. The extent of the information contained in the PIB is indicated under 5. of this subsection.

3.6 *Aeronautical Information Circulars (AIC)*

The Aeronautical Information Circulars (AIC) contain information on the long-term forecast of any major change in legislation, regulations, procedures or facilities; information of a purely explanatory or advisory nature liable to affect flight safety; and information or notification of an explanatory or advisory nature concerning technical, legislative or purely administrative matters. AIC are divided by subject and are issued in two series (A and B). AIC Series A contains information affecting international civil aviation and is given international distribution, while AIC Series B contains information affecting national aviation only and is given national distribution.

Each AIC is numbered consecutively within each series on a calendar year basis. The year, indicated by two digits, is a part of the serial number of the AIC, e.g. AIC A 1/96; AIC B 1/96. A checklist of AIC currently in force is issued as an AIC twice a year.

3.7 *Checklist and list of valid NOTAM*

A checklist of valid NOTAM is issued monthly via the AFS. The checklist is followed by a printed list of valid NOTAM distributed by mail to all recipients of the Integrated Aeronautical Information Package. It contains a plain language (in English) presentation of the valid NOTAM and information about the number of the latest issued AIP AMDT, AIRAC AIP AMDT, AIP SUP and AIC as well as the numbers of the elements issued under the AIRAC that will become effective or, if none, the NIL AIRAC notification.

3.8 *Sale of publications*

The said publications can be obtained from the Aeronautical Information Service. Purchase prices are published in AIC Series A.

4. AIRAC System

4.1 In order to control and regulate the operationally significant changes requiring amendments to charts, route-manuals etc., such changes, whenever possible, will be issued on predetermined dates according to the AIRAC System. This type of information will be published as an AIRAC AIP AMDT or an AIRAC AIP SUP. If an AIRAC AMDT or SUP cannot be produced due to lack of time, NOTAM clearly marked AIRAC will be issued. Such NOTAM will immediately be followed by an AMDT or SUP.

4.2 The table below indicates AIRAC effective dates for the coming years. AIRAC information will be issued so that the information will be received by the user not later than 28 days, and for major changes not later than 56 days, before the effective date. At AIRAC effective date, a trigger NOTAM will be issued giving a brief description of the contents, effective date and reference number of the AIRAC AIP AMDT or AIRAC AIP SUP that will become effective on that date. Trigger NOTAM will remain in force as a reminder in the PIB until the new checklist/list is issued.

If no information was submitted for publication at the AIRAC date, a NIL notification will be issued by NOTAM not later than one AIRAC cycle before the AIRAC effective date concerned.

Schedule of AIRAC effective dates

2003	2004	2005	2006	2007
23 JAN	22 JAN	20 JAN	19 JAN	18 JAN
20 FEB	19 FEB	17 FEB	16 FEB	15 FEB
20 MAR	18 MAR	17 MAR	16 MAR	15 MAR
17 APR	15 APR	14 APR	13 APR	12 APR
15 MAY	13 MAY	12 MAY	11 MAY	10 MAY
12 JUN	10 JUN	9 JUN	8 JUN	7 JUN
10 JUL	8 JUL	7 JUL	6 JUL	5 JUL
7 AUG	5 AUG	4 AUG	3 AUG	2 AUG
4 SEP	2 SEP	1 SEP	31 AUG	30 AUG
2 OCT	30 SEP	29 SEP	28 SEP	27 SEP
30 OCT	28 OCT	27 OCT	26 OCT	25 OCT
27 NOV	25 NOV	24 NOV	23 NOV	22 NOV
25 DEC	23 DEC	22 DEC	21 DEC	20 DEC

5. Pre-flight information service at aerodromes/heliports

Pre-flight information is available at aerodromes as detailed below.

<i>Aerodrome/Heliport</i>	<i>Briefing coverage</i>
DONLON/International	All States within the ICAO AFI, EUR, MID, NAT and SAT regions
DENGRON/Deleede	Adjacent FIR
HOLMSTOCK/Landa	Belgium, Denmark, France, Germany
SIBY/Bistock	All States within the ICAO EUR and NAT regions
DONLON/Downtown Heliport	Adjacent FIR

Daily Pre-flight Information Bulletins (PIB) — Route Bulletins and lists of valid NOTAM are available for distribution at the aerodrome AIS units. The aerodrome AIS units are connected to the central NOTAM data bank at DONLON/International. At DONLON/International, pre-flight information in the form of PIB may be obtained at computer terminals in the aerodrome AIS unit and at two locations, which are clearly marked/identified, in the terminal building. Instructions for use are available at each of the computer terminals.

6. Electronic terrain and obstacle data

Air navigation obstacle data sets may be obtained from:

Aeronautical Information Service
P.O. Box 744
1050 State Street
Donlon
TEL: 0123 697 3464
Telefax: 0123 697 3474
Telex: 99 1236
AFS: EADDYAYX
E-mail: ais@donc.xx

Electronic terrain data sets may be obtained from:

National Geodetic Institute
23South Arthur Drive
Donlon
TEL: 0123 343 7268
Telefax: 0123 343 7278
Telex: 99 0021
AFS: NIL

GEN 3.2 AERONAUTICAL CHARTS**1. Responsible services**

1.1 The Civil Aviation Administration of (State) provides a wide range of aeronautical charts for use by all types of civil aviation. The Aeronautical Information Service produces the charts which are part of the AIP; all other aeronautical charts are produced by the Department of Surveys. Charts, suitable for pre-flight planning and briefing, are available for reference at aerodrome AIS units. (Their addresses can be found under paragraph 3 below.) The charts are produced in accordance with the provisions contained in Annex 4 — *Aeronautical Charts*. Differences to these provisions are detailed in subsection GEN 1.7.

2. Maintenance of charts

2.1 The aeronautical charts included in the AIP are kept up to date by amendments to the AIP. Corrections to aeronautical charts not contained in the AIP are promulgated by AIP Amendments and are listed under 8. of this subsection. Information concerning the planning for or issuance of new maps and charts is notified by Aeronautical Information Circular.

2.2 If incorrect information detected on published charts is of operational significance, it is corrected by NOTAM.

3. Purchase arrangements

The charts as listed under 5. of this subsection may be obtained either from the:

Aeronautical Information Service
P.O. Box 744
1050 State Street
Donlon
TEL: 0123 697 3464
Telefax: 0123 697 3474
Telex: 99 1236
AFS: EADDYAYS

or through the following accredited chart agents:

- a) Messrs. George Stopes Ltd.
17-18 Harding Lane
Donlon, 18007
TEL: 0123 694 5030
Telefax: 0123 694 5040
Telex: 99 2142
AFS: NIL
- b) Department of Surveys
21 South Arthur Drive
Donlon
TEL: 0123 343 7267
Telefax: 0123 3437277
Telex: 99 0020
AFS: NIL

4. Aeronautical chart series available

4.1 The following series of aeronautical charts are produced:

- a) World Aeronautical Chart — ICAO 1:1 000 000;
- b) Plotting Chart — ICAO;
- c) Aerodrome/Heliport Chart — ICAO;
- d) Aerodrome Ground Movement Chart — ICAO;
- e) Aircraft Parking/Docking Chart — ICAO;
- f) Aerodrome Obstacle Chart — ICAO — Type A (for each runway);
- g) Aerodrome Obstacle Chart — ICAO — Type C;
- h) Precision Approach Terrain Chart — ICAO (precision approach Cat II and III runways);
- i) En-route Chart — ICAO;
- j) Area Chart — ICAO;
- k) ATC Surveillance Minimum Altitude Chart — ICAO;
- l) Standard Departure Chart — Instrument (SID) — ICAO;
- m) Standard Arrival Chart — Instrument (STAR) — ICAO;
- n) Instrument Approach Chart — ICAO (for each runway and procedure type);
- o) Visual Approach Chart — ICAO.

The charts currently available are listed under 5. of this subsection.

4.2 General description of each series

- a) *World Aeronautical Chart — ICAO 1:1 000 000*. This series is constructed on Lambert Conical Orthomorphic Projection up to 80°N and the Polar Stereographic Projection between 80°N and 90°N with the scales matching at 80°N. The aeronautical data shown have been kept to a minimum, consistent with the use of the chart for visual air navigation. It includes a selection of aerodromes, obstacles, elements of the ATS system, prohibited, restricted and danger areas, and radio navigation aids. The chart provides information to satisfy visual air navigation and is also used as a pre-flight planning chart.

- b) *Plotting Chart — ICAO*. This series, covering the North Atlantic, Western Europe and North Africa, is designed for in-flight long-range navigation and is constructed on Mercator's projection with simple outline of land areas at a scale of 1:5 000 000. Aeronautical data consist of major international aerodromes, selected radio navigation aids, lattices of long-range electronic aids to navigation, FIR, CTA, CTR, reporting points, etc. The chart is designed to provide a means of maintaining a continuous flight record of the aircraft position.

- c) *Aerodrome/Heliport Chart — ICAO*. This chart contains detailed aerodrome/heliport data to provide flight crews with information that will facilitate the ground movement of aircraft:

— from the aircraft stand to the runway; and

— from the runway to the aircraft stand;

and helicopter movement:

— from the helicopter stand to the touchdown and lift-off area and to the final approach and take-off area;

— from the final approach and take-off area to the touchdown and lift-off area and to the helicopter stand;

— along helicopter ground and air taxiways; and

— along air transit routes.

It also provides essential operational information at the aerodrome/heliport.

- d) *Aerodrome Ground Movement Chart — ICAO*. This chart is produced for those aerodromes where, due to congestion of information, details necessary for the ground movement of aircraft along the taxiways to and from the aircraft stands and for the parking/docking of aircraft cannot be shown with sufficient clarity on the Aerodrome/Heliport Chart — ICAO.

- e) *Aircraft Parking/Docking Chart — ICAO*. This chart is produced for those aerodromes where, due to the complexity of the terminal facilities, the information to facilitate the ground movement of aircraft between the taxiways and the aircraft stands and the parking/docking of aircraft cannot be shown with sufficient clarity on the Aerodrome/Heliport Chart — ICAO or on the Aerodrome Ground Movement Chart — ICAO.

- f) *Aerodrome Obstacle Chart — ICAO — Type A (operating limitations)*. This chart contains detailed information on obstacles in the take-off flight path areas of aerodromes. It is shown in plan and profile view. This obstacle information, in combination with an Obstacle Chart — ICAO — Type C, provides the data necessary to enable an operator to comply with the operating limitations of Annex 6, Parts I and II, Chapter 5.

- g) *Aerodrome Obstacle Chart — ICAO — Type C*. This chart contains obstacle data necessary to enable an operator to develop procedures to comply with the operating limitations of Annex 6, Parts I and II, Chapter 5, with particular reference to information on obstacles that limit the maximum permissible take-off mass.

This chart must provide certain obstacle data and topographical information covering a distance of 45 km (24 NM) from the aerodrome reference point.

Appropriate topographical charts which are available for the area around the airports, if supplemented with “overprint” obstacle data and other significant aeronautical information, should be suitable for use as the topographic base for the AOC — ICAO — Type C.

This chart is not produced if:

— the required obstacle data is included in the AIP; or

— no obstacles exist, and this fact is included in the AIP.

h) *Precision Approach Terrain Chart — ICAO.* This chart provides detailed terrain profile information within a defined portion of the final approach so as to enable aircraft operating agencies to assess the effect of the terrain on decision height determination by the use of radio altimeters. This chart is produced for all precision approach Cat II and III runways.

i) *En-route Chart — ICAO.* This chart is produced for the entire Amswell FIR. The aeronautical data include all aerodromes, prohibited, restricted and danger areas and the air traffic services system in detail. The chart provides the flight crew with information that will facilitate navigation along ATS routes in compliance with air traffic services procedures.

j) *Area Chart — ICAO.* This chart is produced when the air traffic services routes or position reporting requirements are complex and cannot be shown on an En-route Chart — ICAO.

It shows, in more detail, those aerodromes that affect terminal routings, prohibited, restricted and danger areas and the air traffic services system. This chart provides the flight crew with information that will facilitate the following phases of instrument flight:

— the transition between the en-route phase and the approach to an aerodrome;

— the transition between the take-off/missed approach and the en-route phase of flight; and

— flights through areas of complex ATS routes or airspace structure.

k) *ATC Surveillance Minimum Altitude Chart — ICAO.* This chart is supplementary to the Area Chart and provides information which will enable flight crews to monitor and cross-check altitudes assigned while under radar control.

l) *Standard Departure Chart — Instrument (SID) — ICAO.* This chart is produced whenever a standard departure route — instrument has been established and cannot be shown with sufficient clarity on the Area Chart — ICAO.

The aeronautical data shown include the aerodrome of departure, aerodrome(s) which affect the designated standard departure route — instrument, prohibited, restricted and danger areas and the air traffic services system. This chart provides the flight crew with information that will enable them to comply with the designated standard departure route — instrument from the take-off phase to the en-route phase.

m) *Standard Arrival Chart — Instrument (STAR) — ICAO.* This chart is produced whenever a standard arrival route — instrument has been established and cannot be shown with sufficient clarity on the Area Chart — ICAO.

The aeronautical data shown include the aerodrome of landing, aerodrome(s) which affect the designated standard arrival route — instrument, prohibited, restricted and danger areas and the air traffic services system. This chart provides the flight crew with information that will enable them to comply with the designated standard arrival route — instrument from the en-route phase to the approach phase.

n) *Instrument Approach Chart — ICAO.* This chart is produced for all aerodromes used by civil aviation where instrument approach procedures have been established. A separate Instrument Approach Chart — ICAO has been provided for each approach procedure.

The aeronautical data shown include information on aerodromes, prohibited, restricted and danger areas, radio communication facilities and navigation aids, minimum sector altitude, procedure track portrayed in plan and profile view, aerodrome operating minima, etc.

This chart provides the flight crew with information that will enable them to perform an approved instrument approach procedure to the runway of intended landing including the missed approach procedure and where applicable, associated holding patterns.

o) *Visual Approach Chart — ICAO.* This chart is produced for aerodromes used by civil aviation where:

— only limited navigation facilities are available;
or

- radio communication facilities are not available;
or
- no adequate aeronautical charts of the
aerodrome and its surroundings at 1:500 000 or
greater scale are available; or
- visual approach procedures have been
established.

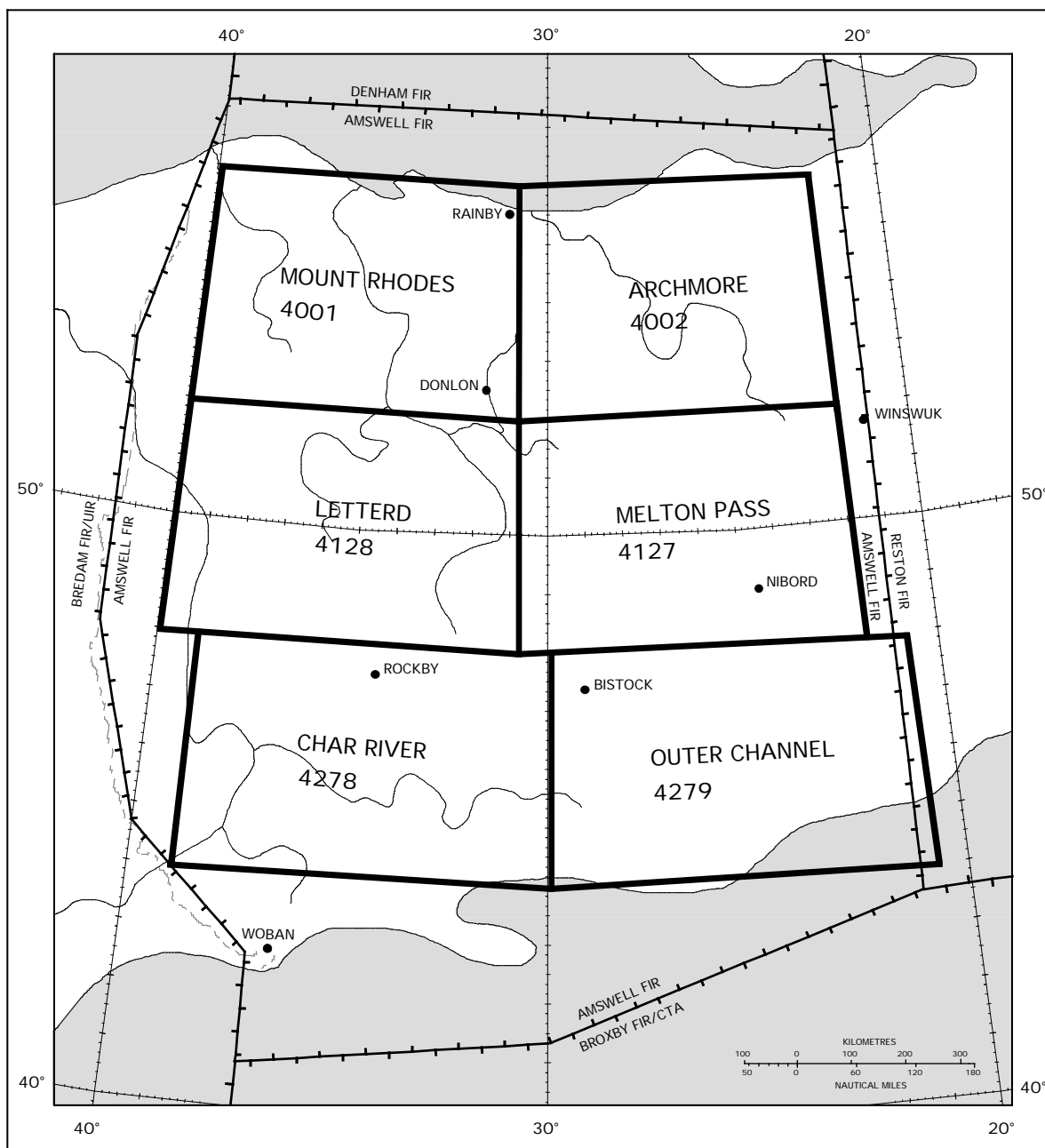
The aeronautical data shown include information on
aerodromes, obstacles, designated airspace, visual
approach information, radio navigation aids and
communication facilities, as appropriate.

5. List of aeronautical charts available

Those chart series marked by an asterisk(*) form part of the AIP.

<i>Title of series</i>	<i>Scale</i>	<i>Name and/or number</i>	<i>Price (\$)</i>	<i>Date</i>
World Aeronautical Chart — ICAO (WAC)	1:1 000 000	Mount Rhodes (4001)	10.00	27 NOV 03
		Archmore (4002)	10.00	27 NOV 03
		Letterd (4128)	10.00	27 NOV 03
		Melton Pass (4127)	10.00	27 NOV 03
		Char River (4278)	10.00	27 NOV 03
		Outer Channel (4288)	10.00	27 NOV 03
Plotting Chart — ICAO (PC)	1:5 000 000	North West — 1001	5.50	27 NOV 03
		North East — 1002	5.50	27 NOV 03
		South West — 1003	5.50	27 NOV 03
		South East — 1004	5.50	27 NOV 03
Instrument Approach Chart — ICAO* (IAC)	1:250 000	Donlon	1.50	27 NOV 03
		EADD ILS/PAR 27R	1.50	27 NOV 03
		EADD ILS 27R	1.50	27 NOV 03
		EADD VDF 27R	1.50	27 NOV 03
		EADD VOR/DME	1.50	27 NOV 03
		EADD ILS 09L	1.50	27 NOV 03
		EADD L 09L	1.50	27 NOV 03
		Siby		
		EADS NDB/ILS 19	1.50	27 NOV 03
		EADS VOR 19	1.50	27 NOV 03
		Wichnor		
		EADW ILS 27	1.50	27 NOV 03
		EADW NDB/VDF	1.50	27 NOV 03
		EADW VOR 19	1.50	27 NOV 03
Visual Approach Chart — ICAO* (VAC)	1:250 000	Siby/Bistock		
		EADS VAC 01	1.50	27 NOV 03
		Wichnor/Slipton		
Aerodrome/Heliport Chart — ICAO* (AC)	1:10 000	EADW VAC	1.50	27 NOV 03
		Akvin	1.50	27 NOV 03
		Donlon	1.50	27 NOV 03
Aerodrome Obstacle Chart — ICAO* TYPE A (AOC)	1:15 000	Siby	1.50	27 NOV 03
		Wichnor	1.50	27 NOV 03
		Akvin AOC-A 04/22	1.50	27 NOV 03
		Donlon AOC-A 09L/27R	1.50	27 NOV 03
Precision Approach Terrain Chart — ICAO* (PATC)	1:2 500	Siby AOC-A 06/24	1.50	27 NOV 03
		Wichnor AOC-A 07/25	1.50	27 NOV 03
		Donlon		
		EADD PATC 27R	1.50	27 NOV 03
		EADD PATC 09L	1.50	27 NOV 03
		Siby		
		EADS PATC 19	1.50	27 NOV 03

6. Index to the World Aeronautical Chart (WAC) - ICAO 1:1 000 000



7. Topographical charts

To supplement the aeronautical charts, a wide range of topographical charts is available from:

Department of Surveys
21 South Arthur Drive
Donlon
TEL: 0123 343 7267
Telefax: 0123 343 7277
Telex: 99 0020
AFS: NIL

8. Corrections to charts not contained in the AIP

<i>Charts</i>	<i>Location</i>	<i>Corrections</i>
WAC 1:1 000 000, 4001 — Mount Rhodes	520104N 0311737W	Change OBST ELEV “220 (219)” TO READ “401 (400)” and insert remark “under construction”
Plotting Chart — ICAO 1:5 000 000, 1003 — SW	525227N 0251008W	Add spot ELEV “1608”
	451916N 0395322W	Change OBST ELEV “2245” to read “2145”
	520842N 0252018W	Change spot ELEV “202” to read “1202”

GEN 3.3 AIR TRAFFIC SERVICES

1. Responsible service

The Air Navigation Services Department of the (State) Civil Aviation Administration is the responsible authority for the provision of air traffic services within the area indicated under 2. below.

Director of Air Navigation Services Department
Civil Aviation Administration
Government Square
Donlon
TEL: 0123 697 3534
Telefax: 0123 697 3544
Telex: 99 1235
AFS: EADDZGZX

The services are provided in accordance with the provisions contained in the following ICAO documents:

Annex 2 — *Rules of the Air*
Annex 11 — *Air Traffic Services*
Doc 4444 — *Procedures for Air Navigation Services — Air Traffic Management (PANS-ATM)*
Doc 8168 — *Procedures for Air Navigation Services — Aircraft Operations (PANS-OPS)*
Doc 7030 — *Regional Supplementary Procedures*

Differences to these provisions are detailed in subsection GEN 1.7.

2. Area of responsibility

Air traffic services are provided for the entire territory of (State), including its territorial waters as well as the airspace over the high seas within the Amswell FIR.

In some cases, in accordance with the regional air navigation agreement, air traffic services are provided, under the delegated authority, in the airspace within another bordering FIR. Details of such services are provided in section ENR 2.

3. Types of services

The following types of services are provided:

- Flight Information Service (FIS) and Alerting Service (ALRS),
- Area Control (ACC); and
- Radar.

With the exception of services provided at military air bases, the following types of services are provided at aerodromes:

- Aerodrome Control (TWR);
- Aerodrome Flight Information Service (AFIS); and
- Automatic Terminal Information Service (ATIS), at certain aerodromes.

4. Coordination between the operator and ATS

Coordination between the operator and air traffic services is effected in accordance with 2.15 of Annex 11.

5. Minimum flight altitude

The minimum flight altitudes on the ATS routes, as presented in section ENR 3, have been determined so as to ensure a minimum vertical clearance above the controlling obstacle in the area concerned.

Note.— The navigation performance accuracy necessary for operation on air routes within Amswell FIR is expressed as an RNP type. RNP type is a containment value expressed as a distance in NM from the intended position within which flights would be for at least 95 per cent of the total flying time. For operation on the air routes in Amswell FIR, the required navigation performance (RNP) is RNP 4. RNP 4 represents a navigation accuracy of plus or minus 7.4 km (4 NM) on a 95 per cent containment basis.

6. ATS units address list

<i>Unit name</i>	<i>Postal address</i>	<i>Telephone NR</i>	<i>Telefax NR</i>	<i>Telex NR</i>	<i>AFS address</i>
1	2	3	4	5	6
AMSWELL ACC	Air Traffic Service/ACC Donlon Airport 134 Airport Road Donlon 1	0123 4567399	0123 4577288	99 9943	EADAZRZK
AMSWELL FIS	As ACC				
AMSWELL RADIO	As ACC				
BISTOCK APP	Air Traffic Service Bistock Airport 506 Lane Bistock	0234 7890211	0234 7895220	98 3456	EADBZAZX
DONLON APP	Air Traffic Service/APP Donlon Airport 134 Airport Road Donlon 1	0123 5678695	0123 5688750	99 2121	EADDZAZX
NIBORD APP	Air Traffic Service/APP Nibord Airport 308 Road Nibord	0235 3232340	0235 3242351	96 3212	EADNZAZX

GEN 3.4 COMMUNICATION SERVICES**1. Responsible service**

The responsible service for the provision of telecommunication and navigation facility services in (State) is the Civil Aviation Administration.

Director of Communication Services
Civil Aviation Administration
Government Square
Donlon
TEL: 0123 697 5151
Telefax: 0123 697 5161
Telex: 99 4312
AFS: EADDYTYX

The service is provided in accordance with the provisions contained in the following ICAO documents:

Annex 10 — *Aeronautical Telecommunications*
Doc 8400 — *Procedures for Air Navigation Services — ICAO Abbreviations and Codes (PANS-ABC)*
Doc 8585 — *Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services*
Doc 7030 — *Regional Supplementary Procedures*
Doc 7910 — *Location Indicators*

2. Area of responsibility

Communication services are provided for the entire AMSWELL FIR. Arrangements for such services on a continuing basis should be made with the Director of Communication Services, who is also responsible for the application of the regulations concerning the design, type and installations of aircraft radio stations. Responsibility for the day-to-day operation of these services is vested in Station Communication Officers located at each international aerodrome. Inquiries, suggestions or complaints regarding any telecommunication service should be referred to the relevant Station Communication Officer or to the Director of Communication Services, as appropriate.

3. Types of service**3.1 Radio navigation services**

The following types of radio aids to navigation are available:

CONSOL

LORAN

LF/MF non-directional beacon (NDB)

VHF direction-finding station (VDF)

Precision approach radar (PAR)

Instrument landing system (ILS)

VHF omnidirectional radio range (VOR)

Distance-measuring equipment (DME)

Note.— Special navigation systems such as CONSOL, DECCA and LORAN are provided as specified in section ENR 4.

Selected radio broadcasting stations are included as additional navigational facilities. The information is limited to stations with a power of 10 kw or more. It should be noted that unserviceability of these stations will not be reported.

The coordinates listed refer to the transmitting antennas with the exception of direction-finding stations, for which the coordinates of the receiving antennas are given.

According to the judgment of the direction-finding station, bearings are classified as follows:

Class A — accurate within ± 2 degrees

Class B — accurate within ± 5 degrees

Class C — accurate within ± 10 degrees

Direction-finding stations have authority to refuse to give bearings or headings to steer when conditions are unsatisfactory or when bearings do not fall within the calibrated limits of the station, stating the reason at the time of refusal. VOT on 113.9 MHz is available at DONLON/International.

3.2 Voice/data link services*Voice service*

The aeronautical stations maintain a continuous watch on their stated frequencies during the published hours of service unless otherwise notified.

An aircraft should normally communicate with the air-ground control radio station that exercises control in the area in which the aircraft is flying. Aircraft should maintain a continuous watch on the appropriate frequency of the control station and should not abandon watch, except in an emergency, without informing the control radio station.

Data link service

The messages to be transmitted over the Aeronautical Fixed Service (AFS) are accepted only if:

- a) they satisfy the requirements of Annex 10, Vol. II, Chapter 3, 3.3;
- b) they are prepared in the form specified in Annex 10;
- c) the text of an individual message does not exceed 200 groups.

General aircraft operating agency messages are only accepted for transmission to countries that have agreed to accept Class "B" traffic.

3.3 Broadcasting service

Sub-area meteorological broadcasts (VOLMET radio-telegraphy broadcasts) are available for the use of aircraft in flight. Full details are given in subsection GEN 3.5.

3.4 Language used: English.

3.5 Where detailed information can be obtained

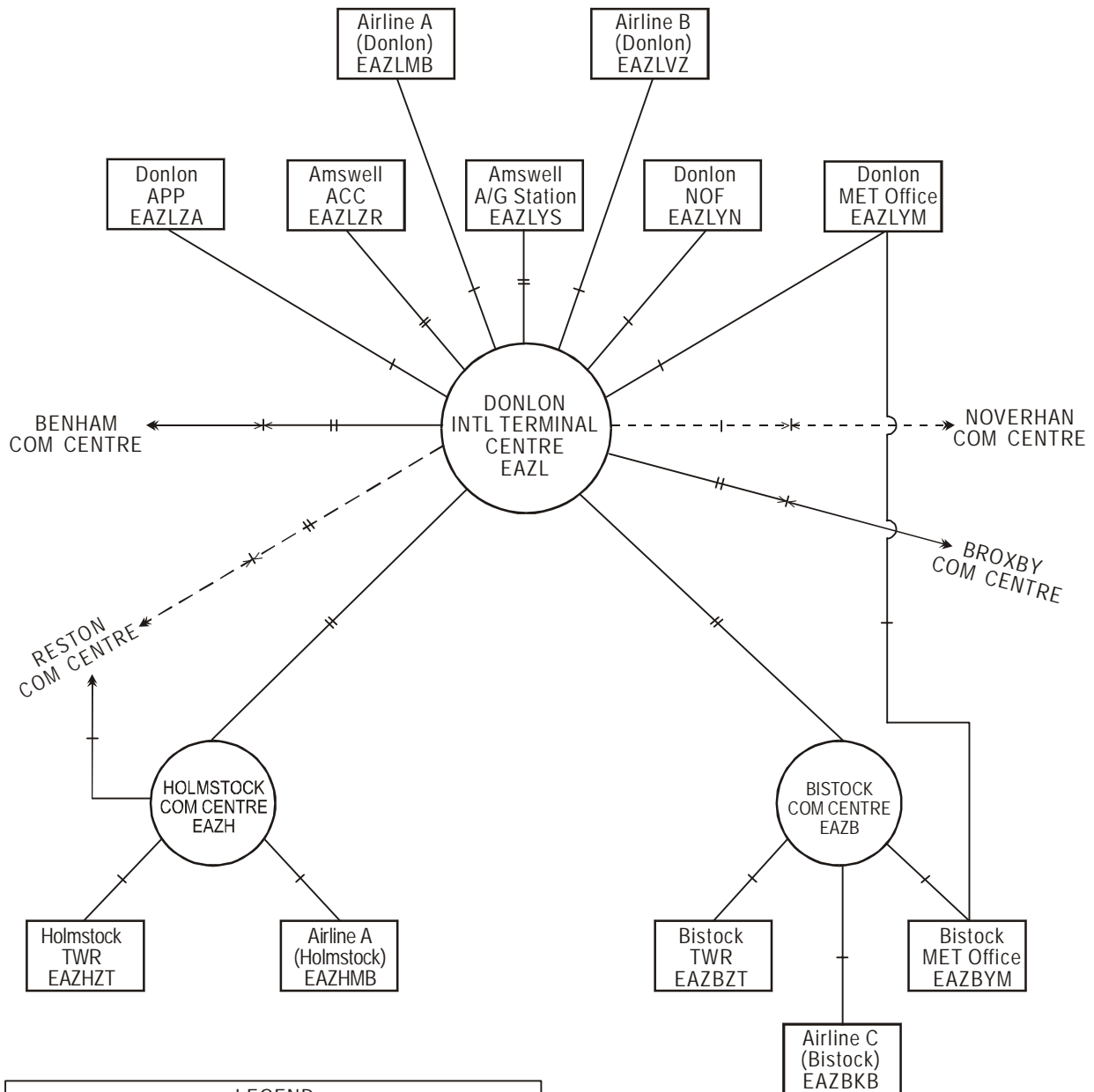
Details of the various facilities available for the en-route traffic can be found in Part 2, ENR 4.

Details of the facilities available at the individual aerodromes can be found in the relevant sections of Part 3 (AD). In cases where a facility is serving both the en-route traffic and the aerodromes, details are given in the relevant sections of Part 2 (ENR) and Part 3 (AD).

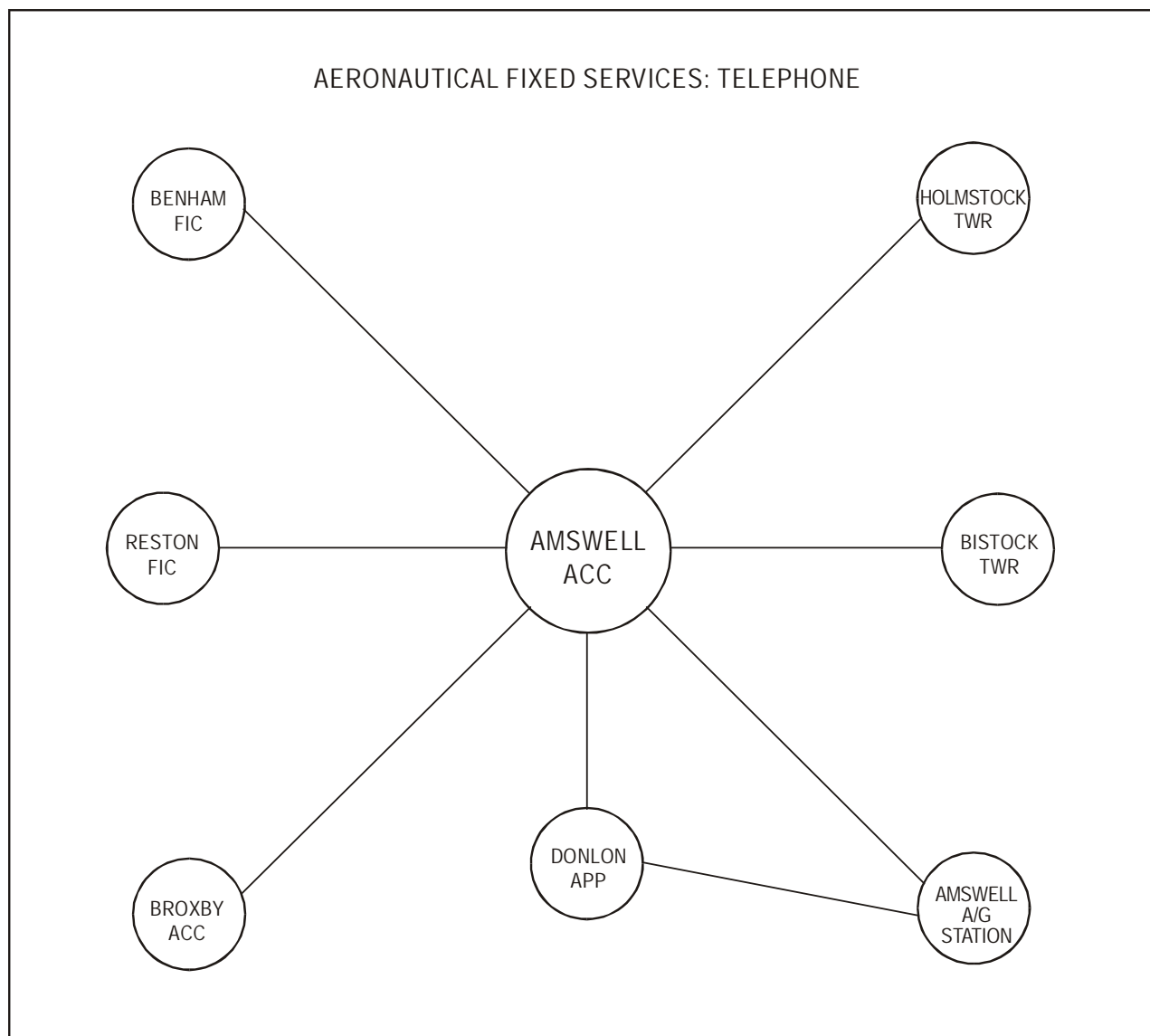
4. Requirements and conditions

The requirements of the Directorate of Communication Services and the general conditions under which the communication services are available for international use, as well as the requirements for the carriage of radio equipment, are contained in the Air Navigation (Radio) Regulations of (State). The main provisions are briefly summarized below (specify).

AERONAUTICAL FIXED SERVICES: TELEGRAPH



LEGEND		
Landline teletypewriter circuit (LTT)	=====	
Radio teletypewriter circuit (RTT)	-----	
Manual A1 circuit simplex (MAS)	- - - - -	
Simplex circuit		
Duplex circuit		
International circuit	> <	



GEN 3.5 METEOROLOGICAL SERVICES**1. Responsible service**

The meteorological services for civil aviation are provided by the Meteorological Bureau of the Ministry of Transport.

Meteorological Bureau
Ministry of Transport
101 West Avenue
Donlon 4
TEL: 0123 695 3333
Telefax: 0123 695 3344
Telex: 99 2345
AFS: EADDYMYX

The service is provided in accordance with the provisions contained in the following ICAO documents:

Annex 3 — *Meteorological Service for International Air Navigation*

Doc 7030 — *Regional Supplementary Procedures*

Doc — *Regional Air Navigation Plan* — *Region*

Differences to these provisions are detailed in subsection GEN 1.7.

2. Area of responsibility

Meteorological service is provided within the Amswell FIR.

3. Meteorological observations and reports

Table GEN 3.5.3 Meteorological observations and reports

<i>Name of station/ Location indicator</i>	<i>Type & frequency of observation/ automatic observing equipment</i>	<i>Types of MET reports & availability of trend forecasts</i>	<i>Observation system & site(s)</i>	<i>Hours of operation</i>	<i>Climatological information</i>
1	2	3	4	5	6
AKVIN/Akvin EADA	Half hourly routine plus special observations/ automatic: NIL	MET REPORT	SFC wind sensors: see AD chart RVR EQPT: see AD chart Ceilometer: see AD chart Thermometer: see AD chart	H24	Climatological tables AVBL
DONLON/International EADD	Half hourly routine plus special observations/ automatic: NIL	METAR, SPECI TREND	Cup Anemometer: 300 m FM THR 09L RVR EQPT: 300 m FM RWY THR Ceilometer: at ILS MM	H24 *BTN 0600–1530 (0500–1430)	Climatological tables AVBL
SIBY/Bistock EADB	Half hourly routine plus special observations/ automatic: NIL	METAR, SPECI	Cup Anemometer: 300 m FM MID RWY RVR EQPT: 300 m, 1 500 m and 2 600 m FM THR 05 Ceilometer: close to Cup Anemometer	0430–2300 (0330–2200)	NIL
WICHNOR/Slipton EADW	Hourly routine plus special observations/ automatic: NIL	MET REPORT	Complete observation station: 300 m S of THR 26	0530–1900	NIL
YANMORE/Runslip EADR	Hourly routine plus special observations/ automatic: NIL	METAR, SPECI TREND	Pressure tube Anemometer: on TWR Ceilometer: near ILS MM	0530–1900 (0430–1800)	NIL

4. Types of services

Personal briefing and consultation for flight crew members are provided only at DONLON/International. For all other aerodromes, consultation is available by telephone.

Limited flight documentation is normally provided for domestic flights. For international flights, the flight documentation comprises a significant weather chart, an upper wind and upper air temperature chart and the latest available aerodrome forecast for the destination and its alternate aerodromes.

For the planning of low level flights below flight level 100, plain language forecasts are issued in GAMET format. They are also disseminated by means of recorded telephone messages. Pilots can obtain this information by dialling one of the following telephone numbers:

Akvin	0123 888-4127
Donlon	0123 888-7412
Yanmore	0123 888-2714

The GAMET information will be issued and kept up to date every day between 0700–2200 (0600–2100 UTC). AIRMET messages are issued concerning the occurrence and/or expected occurrence of specified en-route weather phenomena which have not been included in Section I of the GAMET forecast.

- VMC forecast, TAF and TREND for a number of aerodromes and a special forecast for glider flying.

This information will be issued and kept up to date every day between 0700–2200 (0600–2100).

5. Notification required from operators

Notification from operators in respect of briefing, consultation, flight documentation and other meteorological information needed by them (ref. Annex 3, 2.3) is normally required for intercontinental flights of more than 3 500 km. Such notification should be received at least 6 hours before the expected time of departure.

6. Aircraft reports

Pursuant to Annex 3, Chapter 5, when air-ground data link is used and automatic dependent surveillance (ADS) is being applied, ADS meteorological reports are required to be provided every 15 minutes. However, when voice communications are used and ADS reports are not available, routine aircraft observations (AIREPs) are required at the following ATS reporting points:

..... (specify)
.....
.....

The ATS/MET reporting points in respect of routes crossing FIR/UIR are indicated on page (specify).

7. VOLMET service

Table GEN 3.5.7 VOLMET service

<i>Name of station</i>	<i>CALL SIGN/ IDENT/ Abbreviation (EM)</i>	<i>Frequency</i>	<i>Broadcast period</i>	<i>Hours of service</i>	<i>Aerodromes/ Heliports included</i>	<i>REP, SIGMET INFO, FCST & Remarks</i>
1	2	3	4	5	6	7
DONLON	DONLON VOLMET (A3E)	3 418.5 KHZ 5 574 KHZ	0220 2255	H+20 to H+25 and H+50 to H+55	YANMORE DERNEFORD DONLON	METAR, TREND METAR, TREND METAR, TREND and TAF SIGMET METAR
DONLON VOR	DON (A3E)	116.400 MHZ	H24	CNS	YUCC AKVIN DONLON	METAR, TREND

8. SIGMET and AIRMET service**Table GEN 3.5.8 SIGMET and AIRMET service**

<i>Name of MWO/ location indicators</i>	<i>Hours</i>	<i>FIR or CTA served</i>	<i>Validity</i>	<i>Specific SIGMET procedures</i>	<i>AIRMET procedures</i>	<i>ATS unit served</i>	<i>Additional information</i>
1	2	3	4	5	6	7	8
DONLON	H24	Amswell FIR	SIGMET/4 HR	SIGMET VA/TC: VALIDITY 6 HR	Issued during daytime only (0600-1800 UTC)	Donlon ACC	NIL

8.1 **General**

For the safety of air traffic, the Meteorological Authority maintains a continuous watch over meteorological conditions affecting flight operations within the lower and upper FIR and when necessary, SIGMET and AIRMET information is issued by the Meteorological Watch Office (MWO). Furthermore, aerodrome warnings are issued to operators, in accordance with local arrangements, by all aeronautical MET offices at aerodromes.

8.2 **Meteorological watch**

The meteorological watch is performed by the following MWOs: (specify).

The MWOs issue SIGMET and AIRMET information in accordance with Annex 3, Chapter 7.

8.3 **Aerodrome warnings**

Aerodrome warnings for the protection of parked aircraft or of other equipment at the airport are issued by all aerodrome meteorological offices, if one or several of the following phenomena are expected to occur at the airport:

- strong surface winds and gusts¹
- thunderstorm
- hail
- frost²
- hoar frost or rime

- snow
- freezing precipitation

The aerodrome warnings are issued in English and are distributed in accordance with a distribution list agreed upon locally.

8.4 **Dissemination of SIGMET/AIRMET information to aircraft in flight**

SIGMET and AIRMET information is disseminated, in addition to directed transmissions to aircraft general calls, as an aeronautical broadcast between 0700 (0600 during legal summer time) until SS + 30

- a) by the Area Control Centre Donlon for Donlon FIR;
- b) by the ATS units for their own area of responsibility.

The information is repeated every half and full hour during the period of validity of the SIGMET and AIRMET information.

1. The warning is designated as “storm warning” and will be issued when the mean speed of the surface wind is expected to exceed 34 kt (Beaufort Scale 8) or when gusts in excess of 41 kt (Beaufort Scale 9) are expected to occur.
2. A “frost warning” will be issued when the air temperature is expected to fall below 0°C on those dates when protective measures have generally not yet been taken and also when a substantial deposit of hoarfrost, e.g. on wing surfaces, is expected.

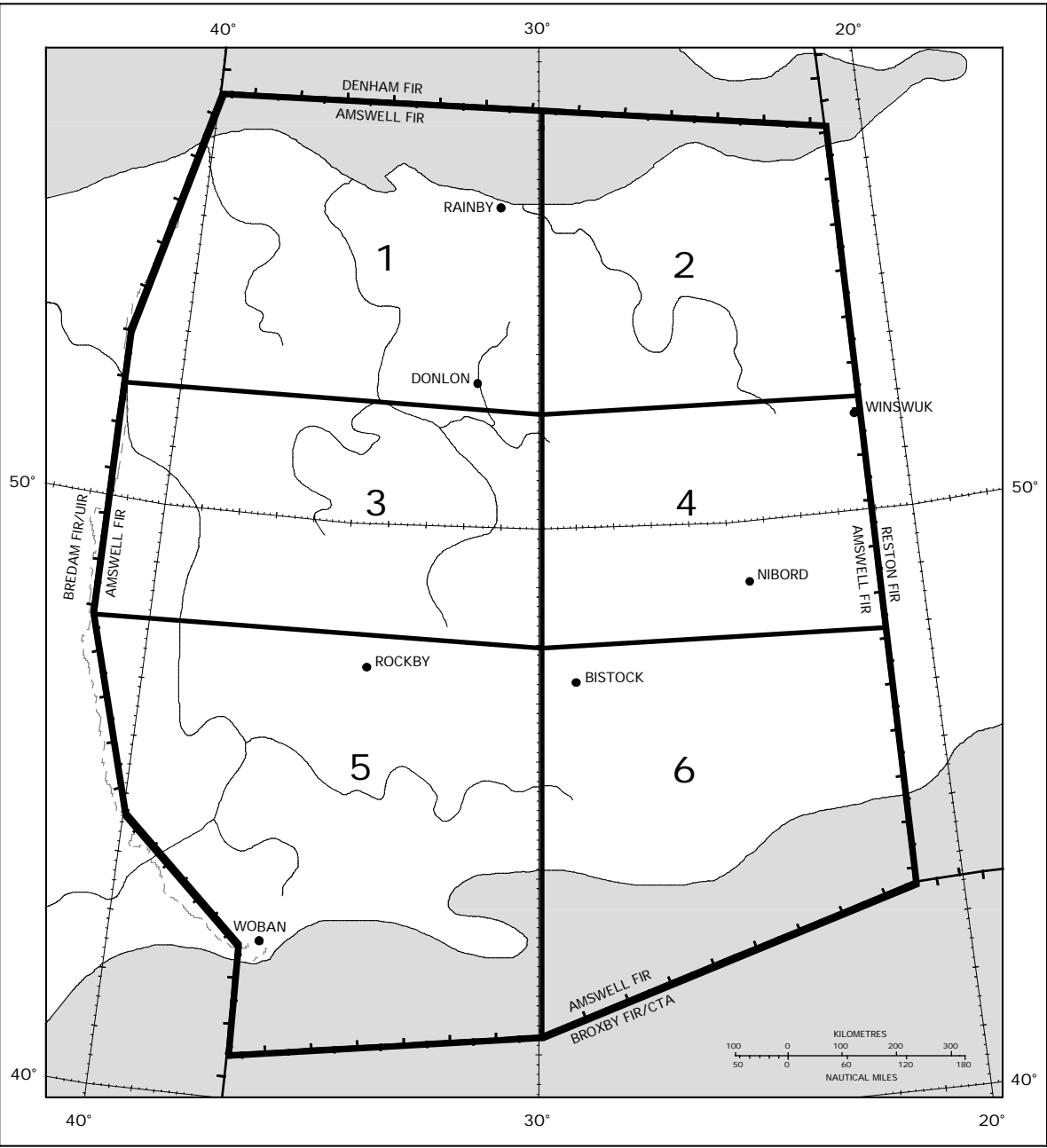
9. Other automated meteorological services

Table GEN 3.5.9 Other automated meteorological services

<i>Service name</i>	<i>Information available</i>	<i>Area, route and aerodrome coverage</i>	<i>Telephone, telex and telefax numbers</i> <i>Remarks</i>
1	2	3	4
Aeronautical Meteorological Division DONLON/International “pre-flight polling”	The prognostic General Aviation Weather Chart (GWC) The European Low Level SWC The European Significant Weather Chart (EVR-GWC) The 850, 700, 400, 300, 250 and 200 hPa contour map	All of Europe including British Isles and Ireland	TEL: 0123 647 4733 Telefax: 01236484799 Telex: 993828 AFS: EADDYMYA
Meteorological Information Self-briefing Terminal (MIST) Obtainable at any Flight Briefing Unit or Office PC by dedicated line or dial-up facility Broadcast FAX. Broadcast of WX FCST to telefax machines registered to the service	TAF; METAR; National/Regional WX — Radar INFO; Satellite imagery; Analysis FCST Charts of MSL pressure: FSC wind; SFC T; Significant cloud; SGWX, wind data; AIRMET; Aviation WX WRNG Upper wind/temperature charts; F 214 WIND; F 215 WX; ASXX; FSXX; AIRMET; TAF; METAR	Europe; North Atlantic	Contact local weather centre or Aeronautical Meteorological Division DONLON/International TEL: 0123 648 4733 Telefax: 0123 6484799 Telex: 993828 AFS: EADDYMYA
Aeronautical Meteorological Division DONLON/International. On TV (teletext) available	General Aviation MET FCST system (GAMET/AIRMET) VMC FCST; TAF; TREND; Special FCST for GLD FLY	Amswell FIR in 6 sub-areas (see index chart)	See above

Note.— Details of meteorological briefing at aerodromes are given in the individual aerodrome sections, i.e. AD2 and AD3.

GAMET/AIRMET AREAS



GEN 3.6 SEARCH AND RESCUE**1. Responsible service(s)**

The search and rescue service in (State) is provided by the Civil Aviation Administration, in collaboration with the Department of Defence which has the responsibility for making the necessary facilities available. The postal and telegraphic addresses of the Civil Aviation Administration are given on page GEN 1.1-1.

The address of the Department of Defence is as follows:

Search and Rescue Coordinator
Department of Defence
Government Square
Donlon
TEL: 0 123 697 9111
Telefax: 0 123 697 9112
Telex: 99 1911
AFS: EADDYXYR

When SAR operations are needed, a Rescue Coordination Centre is established; the address is as follows:

Rescue Coordination Centre
134 Airport Road
Donlon 1
TEL: 0 123 5788
Telefax: 0 123 5798
Telex: 99 2911
AFS: EADDYCYX

The service is provided in accordance with the provisions contained in Annex 12 — *Search and Rescue*.

2. Area of responsibility

The search and rescue service is responsible for SAR operations within Amswell FIR.

3. Types of service

Details of related rescue units are given in Table 3.6.3 — Search and Rescue Units. In addition, various elements of the State Police organization, the merchant marine and the armed forces are also available for search and rescue missions, when required. The aeronautical, maritime and public telecommunication services are also available to the search and rescue organization.

All aircraft are amphibious and carry survival equipment, capable of being dropped, consisting of inflatable rubber dinghies equipped with medical supplies, emergency rations and survival radio equipment. Aircraft and marine craft are equipped to communicate on 121.5 MHz, 123.1 MHz, 243 MHz, 500 kHz, 2 182 kHz and 8 364 kHz. Ground rescue teams are equipped to communicate on 121.5 MHz, 500 kHz and 8 364 kHz. SAR aircraft and marine craft are equipped with direction-finding equipment and radar.

Table 3.6.3 Search and Rescue Units

<i>Name</i>	<i>Location</i>	<i>Facilities</i>	<i>Remarks</i>
1	2	3	4
Akvin	52 37 06N 032 55 12W	Bell – 47 SRG	Catalina LRG on stand-by from Burgkenvalk 5 HR PN
Burgkenvalk	55 01 00N 034 00 00W 5 NM S from Zeewijkaan lighthouse	Catalina LRG	1 HR PN
Göan (Harbour)	43 58 00N 033 00 00W	Patrol vessel	Endurance 48 HR, speed 18 kt, capacity 200 casualties. 15 MIN PN
Winswuk	52 03 00N 026 31 00 W		Mountain rescue unit. 2 HR PN

4. SAR agreements

An agreement has been concluded between the SAR service of (State) and the SAR service of neighbouring States concerning the provision of assistance upon receipt by the former of a request from the latter for aid. This agreement provides for facilitation of the overflight and landing of search and rescue aircraft without prior permission after dispatch of a flight plan, for similar facilitation of the entry of surface vessels of the SAR service and their operation in border areas, for notification of entry to the authorities controlling entry, for defraying the costs of stop-overs, accommodation and transportation of crew members, and for direct communication between the two SAR services on all common search and rescue matters. Copies of this agreement are available, upon request, from the Civil Aviation Administration.

Requests for the entry of aircraft, equipment and personnel from other States to engage in the search for aircraft in distress or to rescue survivors of aircraft accidents should be transmitted to the Rescue Coordination Centre. Instructions as to the control which will be exercised on entry of such aircraft and/or personnel will be given by the Rescue Coordination Centre in accordance with a standing plan for the conduct of search and rescue in its area.

5. Conditions of availability

The SAR service and facilities in (State) are available without charge to neighbouring States upon request to the Civil Aviation Administration at all times when they are not engaged in search and rescue operations in their home territory. All facilities are specialized in SAR techniques and functions. The mountain rescue unit at Winswuk is

composed of elements of the State police and local volunteers trained for SAR work and is activated as necessary.

6. Procedures and signals used

Procedures and signals used by aircraft

Procedures for pilots-in-command observing an accident or intercepting a distress call and/or message are outlined in Annex 12, Chapter 5.

Communications

Transmission and reception of distress messages within the Amswell Search and Rescue Area are handled in accordance with Annex 10, Volume II, 5.3.

For communications during search and rescue operations, the codes and abbreviations published in *ICAO Abbreviations and Codes* (Doc 8400) are used.

The frequency 121.5 MHz is guarded continuously during the hours of service at all area control centres and flight information centres. It is also available at Donlon/International approach control office. In addition, the aerodrome control towers serving international aerodromes and international alternate aerodromes will, on request, guard the frequency 121.5 MHz. All coast stations guard the international distress frequencies.

Rescue aircraft belonging to permanent Search and Rescue Units use both the call sign RESCUE and additional identification marks (ALFA, BRAVO, CHARLIE, etc.) during rescue operations.

Search and rescue signals

The search and rescue signals to be used are those prescribed in Annex 12, 5.8.

Ground/air visual signal codes for use by survivors

<i>No.</i>	<i>Message</i>	<i>Code symbol</i>
1	Require assistance	✓
2	Require medical assistance	✕
3	No or Negative	N
4	Yes or Affirmative	Y
5	Proceeding in this direction	↑
Instructions for use: 1. Make signals not less than 8 ft (2.5 m). 2. Take care to lay out signals exactly as shown. 3. Provide as much colour contrast as possible between signals and background. 4. Make every effort to attract attention by other means such as radio, flares, smoke, reflected light.		

GEN 4. CHARGES FOR AERODROMES/HELIPORTS AND AIR NAVIGATION SERVICES

GEN 4.1 AERODROME/HELIPORT CHARGES

1. Landing of aircraft

Maximum permissible take-off weight allowed as specified under the regulations of the State in which the aircraft is registered.

a) International flights

<i>Aircraft weight (kg)</i>	<i>Charge per 1 000 kg or part thereof (\$)</i>
up to 25 000	3.00
25 001–100 000	4.50
100 001–200 000	5.55
any part over 200 000	6.05

b) Domestic flights

<i>Aircraft weight (kg)</i>	<i>Charge (\$)</i>
up to 1 000	1.75
1 001–6 000	3.50
	charge per 1 000 kg or part thereof
6 001–25 000	2.50
25 001–100 000	3.85
any part over 100 000	4.25

At DONLON International aerodrome, aircraft weighing less than 6 000 kg are charged \$5.05 per landing.

Helicopter. The landing charge for helicopters is 20 per cent of the charge that would be made for a fixed wing aircraft of equivalent weight.

2. Parking, hangarage and long-term storage of aircraft

2.1 *Parking of aircraft*

The first 6 hours are free.

<i>Aircraft weight (kg)</i>	<i>Charge per 1 000 kg per 24 hours (\$)</i>
up to 25 000	0.45
25 001–100 000	0.40
over 100 000	0.35

2.2 *Hangarage charges*

The charge for hangarage is double that for parking.

2.3 *Long-term storage*

The owner or user of a civil aircraft of which the space occupied will be less than 200 square metres may, for the stay of such an aircraft on the aerodrome, apply to the airport manager for a monthly contract. A monthly contract may become effective on the day of arrival of any aircraft mentioned under 1. If, within 3 days after arrival, an application for a monthly contract is made, this contract will be deemed to become effective on the day of arrival of the aircraft involved. Such a contract expires one month after the day of conclusion, one half-hour after sunset. A contract may be renewed for a month, or a longer or shorter period, on the basis of the rate fixed for a monthly contract. The airport manager reserves the right of parking instead of housing an aircraft for which a monthly contract has been concluded, in which case the fees for the aircraft involved will be reduced accordingly. The fees pursuant to a monthly contract must be paid in advance in the manner indicated by the airport manager.

3. Passenger service

Each passenger arriving from a foreign country at an international aerodrome is charged \$5. This charge is collected by the Airport Authority on behalf of the Civil Aviation Administration.

4. Security

Aviation security charges may be levied at DONLON/International, NIBORD/Nibord, RICHMAAST/Richmaast and SIBY/Bistock aerodromes. The current charges are published in the AIC.

5. Noise-related items

Noise surcharges are levied on users of aircraft with an all up mass of more than 6 000 kg. The charges per user of an aerodrome are related to the user's share in the total noise exposure as well as to the noise production of the type of aircraft in use. Users can calculate their charges from the formulae as published in AIC.

6. Other

Nil.

7. Exemptions and reductions

Exemptions

- a) Diplomatic aircraft
- b) Test flights
- c) Emergency landings

Reductions

- a) International flights — 20 per cent on landings in excess of 300 per month performed by aircraft of any one operator.
- b) Domestic flights — 20 per cent on landings in excess of 100 per month performed by aircraft of any one operator.

Surcharges

An additional 10 per cent of the landing charge is levied for each landing made at night or outside of the published operational hours of the aerodrome.

Night: 1 April–30 September 2000–0530 (UTC)
1 October–31 March 1700–0700 (UTC)

Cargo

Cargo charges are based on the gross weight of the cargo being loaded or unloaded. The charge is collected by the airline operator on behalf of the Civil Aviation Administration. The rate of charge is \$0.01 per kg.

8. Methods of payment

Landing charges and parking or hangar charges levied at daily rates are payable at the time the aerodrome is used or, in the case of regular users, on demand at the end of each calendar month in respect of charges accruing during the month. Hangar or parking charges levied at monthly or quarterly rates are payable in advance at the beginning of the period.

GEN 4.2 AIR NAVIGATION SERVICES CHARGES**1. Approach control**

1.1 Users of DONLON/International, NIBORD/Nibord, RICHMAAST/Richmaast and SIBY/Bistock aerodromes will be charged for the services rendered by the ATC units of the above-mentioned aerodromes.

1.2 The charges will be collected by the aerodrome authorities, in addition to the landing fees.

1.3 The calculation of the charges will be made on the basis of the landing fees charged for use of these aerodromes.

1.4 The charges will be assessed in accordance with the following regulations:

- a) for an aircraft executing a training or test flight, a charge of 50% of the current landing fees, with a maximum of U.S.\$100 per landing.
- b) for each other aircraft, a charge of 50% of the current landing fees, with a maximum of \$500 per landing.

2. Route air navigation services**2.1 General**

For aircraft with a Maximum Take-Off Mass (MTOM) exceeding 2 000 kg, flying en-route in accordance with the Instrument Flight Rules (IFR) within AMSWELL Flight Information Region (FIR), a charge shall be paid for each flight in accordance with the following stipulations:

2.2 Calculation formula

The charge per flight will be calculated in accordance with the following formula:

$$r = t_i \times N$$

in which r is the charge, t_i the service unit rate, and N the number of service units corresponding to the actual flight in AMSWELL FIR.

The number of service units (N) is obtained by applying the following formula:

$$N = d \times P$$

in which d is the distance factor of the flight within AMSWELL FIR and P the weight factor for the aircraft concerned.

2.2.1 Distance factor

The distance factor shall be calculated on the basis of the total distance (great circle distance in kilometres) between

- aerodrome/airfield of departure within, or point of entry into, AMSWELL FIR and
- aerodrome/airfield of arrival within AMSWELL FIR, or point of exit from AMSWELL FIR.

However, the distance to be taken into account shall be reduced by 20 kilometres for each take-off or landing, considering that a separate charge is paid for the air navigation services and facilities at aerodromes. The distances to be taken into account are published in an average distance catalogue; in case a distance is not shown in the catalogue, the charge will be based on the actual flown distance.

The value of the distance factor (d) shall be calculated as 1/100 of the distance for which a charge is imposed.

2.2.2 Weight factor

The weight factor is defined as the square root of the quotient obtained by dividing the number of metric tonnes in the maximum certificated take-off mass of the aircraft (as set out in the certificate of airworthiness) by 50:

$$P = \sqrt{\frac{MTOM}{50}}$$

For the calculation of the charge, the weight factor will be expressed with two decimals.

In those cases where an operator has informed the Civil Aviation Administration that two or more aircraft, which are

different versions of the same type, are in operation, the average of the maximum take-off mass of all aircraft of that type shall be used for the calculation of the weight factor for each aircraft of that type. The calculation of this factor per aircraft type and per operator will be effected at least once a year. If the operator has given no such indication, the weight factor for an aircraft of any type shall be calculated by taking the mass of the heaviest aircraft of that type.

2.2.3 Service unit rate

The service unit rate, t_i , is fixed at \$33.50.

In order to illustrate the effect of the rules, some examples of IFR flights are given below.

a) Flight from to with DC-9-41

The distance is 238 km*

The distance factor, $d = (238 - (2 \times 20))/100 = 1.98$

The mass (MTOM) is 52 tonnes

The weight factor, $P = \sqrt{\frac{52}{50}} = 1.02$

The number of service units, $N = 1.98 \times 1.02 = 2.02$

Charge = $2.02 \times \$33.50 = \67.67

*The distance according to the catalogue is 198 km.

The distance factor, $d = 198/100 = 1.98$.

b) Flight from to with Piper PA-28-140

The mass of the aircraft (MTOM) is 1 000 kg

Therefore the flight is **free of charge**

c) Flight from to with Beech 200

The distance is 219 km*

The distance factor, $d = (219 - (2 \times 20))/100 = 1.79$

The mass (MTOM) is 5.6 tonnes.

The weight factor, $P = \sqrt{\frac{5.6}{50}} = 0.33$

The number of service units, $N = 1.79 \times 0.33 = 0.59$

Charge = $0.59 \times \$33.50 = \19.76

*The distance according to the catalogue is 179 km.

The distance factor, $d = 179/100 = 1.79$.

3. Cost basis for air navigation services and exemptions/reductions

3.1 Cost basis for Air Navigation Services

The cost basis for Air Navigation Services is available on request from the Ministry of Transport, Civil Aviation Administration (for address, see GEN 1.1.6).

3.2 Exemptions/reductions

The following categories of flights shall be exempted from payment of air navigation facility charges:

- a) test flights made at the request of the Civil Aviation Administration;
- b) technical check flights made by aircraft engaged in commercial aviation, with no remuneration being received for passengers and goods, if such be on board;
- c) flights made for search and rescue purposes;
- d) technical return flights, i.e. take-off with forced return to the aerodrome of departure due to technical disturbances, adverse weather conditions, and the like;
- e) aircraft owned by the Civil Aviation Administration;
- f) (State) military aircraft;
- g) foreign military aircraft and aircraft used solely for the transportation of the representatives of foreign States or of United Nations personnel; and
- h) aircraft owned by foreign States assigned to Police and Customs Authorities and navigation aid inspection.

It is a condition for obtaining the exemption mentioned under a), b) and c) that special prior notification be made to the Air Traffic Service, Donlon Area Control Centre (ACC).

4. Methods of payment

The owner and user of an aircraft are jointly and severally responsible for payment of the charge. Notification of the charge will be made monthly by the Civil Aviation Administration by forwarding an invoice. Payment is due 30 days after the date of the invoice. If payment is not made by that day (or if the payment day falls on a Saturday, Sunday or holiday, then by the following weekday), the user/owner is bound to pay interest of 1% per month on

overdue payments commencing on the day payment of the charge was due.

If payments are not made,

- a) collection can be done by distress,
- b) permission to fly to or from (State) territory can be denied, and
- c) permission already granted can be withdrawn.

AIP
AERONAUTICAL INFORMATION PUBLICATION

(Name of State)

PART 2
EN-ROUTE (ENR)

VOLUME NR
(If more than one volume)

PART 2 — EN-ROUTE (ENR)**ENR 0.**

- ENR 0.1 PREFACE — Not applicable**
ENR 0.2 RECORD OF AIP AMENDMENTS — Not applicable
ENR 0.3 RECORD OF AIP SUPPLEMENTS — Not applicable
ENR 0.4 CHECKLIST OF AIP PAGES — Not applicable
ENR 0.5 LIST OF HAND AMENDMENTS TO THE AIP — Not applicable

ENR 0.6 TABLE OF CONTENTS TO PART 2

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ENR 1. GENERAL RULES AND PROCEDURES

ENR 1.1 GENERAL RULES

EXAMPLE 1

(Reference to ICAO documents)

The air traffic rules and procedures applicable to air traffic in (State) territory conform to Annexes 2 and 11 to the Convention on International Civil Aviation and to those portions of the *Procedures for Air Navigation Services — Air Traffic Management* applicable to aircraft and of the *Regional Supplementary Procedures* applicable to the (specify) Region, except for the differences listed in GEN 1.7.

EXAMPLE 2

(Published in full)

1. Minimum safe height

Aircraft shall not be flown below the minimum safe height except when necessary for take-off and landing. The minimum safe height is the height at which neither an unnecessary noise disturbance nor unnecessary hazards to persons and property in the event of an emergency landing are to be feared; however, over cities, other densely populated areas and assemblies of persons, this height shall be at least 300 m (1 000 ft) above the highest obstacle within a radius of 600 m, and elsewhere at least 150 m (500 ft) above ground or water. Gliders and balloons may be operated below a height of 150 m if necessary for the kind of operation and if danger to persons and property is not to be feared. Aircraft shall not be flown below bridges and similar constructions nor below overhead lines and antennas. For flights conducted for special purposes, the local aeronautical authority may grant exemptions.

2. Dropping of objects

The dropping or spraying of objects or other substances out of or from aircraft is prohibited. This does not apply to ballast in the form of water or fine sand, fuel, tow ropes, tow banners and similar objects if dropped or discharged at

places where no danger to persons or property exists. The local aeronautical authority may grant exemptions to the interdiction if no danger to persons or property exists.

The dropping of mail is controlled by the Postal Authority or by the designated unit, in agreement with the aeronautical authority.

3. Acrobatic flying

Acrobatic flights are only permitted in visual meteorological conditions and with the explicit consent of all persons on board. Acrobatic flights are prohibited at heights of less than 450 m (1 500 ft) as well as over cities, other densely populated areas, assemblies of persons, and airports. The local aeronautical authority may grant exemptions in individual cases. Acrobatic flights conducted in the vicinity of aerodromes without an ATS unit require special permission in addition to the air traffic control clearance.

4. Towing and advertising flights

Advertising flights with towed objects require permission from the local aeronautical authority in the area in which the applicant is a resident. Permission shall be granted only if:

- 1) the pilot holds the rating for towing;
- 2) the aircraft is equipped with a calibrated barograph for recording altitudes during flight;
- 3) during the proposed flight not more than three aircraft are flying in formation, in which case a distance of at least 60 m shall be maintained both between the towed object of the preceding aircraft and the following aircraft, as well as between the aircraft;

- 4) the legal liability insurance also explicitly covers the towing of objects.

The above applies to the towing of objects for other than advertising purposes and subparagraph 2) does not apply to aerial work of rotorcraft. Towing of gliders does not require permission, as the rating for towing will suffice.

For reasons of public safety or order and in particular for noise abatement, the authority granting permission may impose conditions. This authority may assign higher minimum safe heights and impose time limitations.

Advertising flights, where advertising consists only of inscriptions on the aircraft, do not require permission. Flights for advertising with acoustical means are prohibited.

5. Times and units of measurement

Co-ordinated Universal Time (UTC) and the prescribed units of measurement shall be applied to flight operations. The Minister of Transport will establish the units of measurement to be used and they will be published in the Aeronautical Information Publication (AIP).

6. Airspace structure

For the performance of the flight information service and the alerting service, the Minister of Transport establishes flight information regions which are published in the AIP. Within the flight information regions, the Minister of Transport establishes the controlled and uncontrolled airspace according to the extent of the air traffic services maintained there, on the basis of the classification described in subsection ENR 1.4. Within controlled airspace, VFR flights may be prohibited completely or partly by the air traffic services with regard to limitation of space and time if urgently required by the degree of intensity of air traffic subject to air traffic control.

7. Prohibited areas and flight restrictions

The Minister of Transport establishes prohibited and restricted areas, if necessary, for the prevention of danger to public safety or order, especially for the safety of air traffic. The areas are published in the AIP.

An Air Defence Identification Zone (ADIZ SOUTH) has been established along the southern border of the AMSWELL FIR. All aircraft entering ADIZ SOUTH must provide positive identification on the Amswell ACC frequency 120.300 MHZ, 10 minutes before entry. Unidentified aircraft will be intercepted by military aircraft. See ENR 1.12 — *Interception of civil aircraft*.

8. Cloud flights with gliders

Cloud flights with gliders may be permitted by the air traffic services if the safety of air traffic can be maintained by appropriate measures. Conditions may be attached to the permission.

9. Take-offs and landings of aeroplanes, rotorcraft, airships, powered gliders, gliders and parachutists outside aerodromes admitted for them

For take-offs and landings of aeroplanes, rotorcraft and airships, permission from the local aeronautical authority is required. For take-offs of powered gliders and gliders outside designated aerodromes, permission from the local aeronautical authority is required; however, for landings of powered gliders and gliders on a cross-country flight, permission is not required. This is to be applied analogously to landings of parachutists outside designated aerodromes.

The authority granting permission may ask the applicant to produce evidence of the consent of the terrain owner or of other entitled parties.

10. Ascents of balloons, kites, self-propelled flying models and flying bodies

The ascent of a manned free balloon outside an aerodrome admitted for balloon ascents requires permission from the local aeronautical authority.

The ascent of captive balloons is permitted only with the consent of the local aeronautical authority. For kites, this consent is required if they are held by a rope of more than 100 m (300 ft) in length. Kite ascents within the construction restriction zone of airports as well as within a distance of less than 3 km from the boundary of airfields and gliding sites are prohibited. The local aeronautical authority may grant exemptions.

.....

The mooring rope of captive balloons and kites, the ascent of which requires permission, shall be marked, at spacings of 100 m (300 ft), by red/white flags during the day, and by red and white lights at night, in such a manner that it is recognizable to other aircraft from all directions.

The ascent of flying models of less than 5 kg total weight requires no permission, with the exception of rocket-

propelled models. The operation of flying models with combustion engines within a distance of less than 1.5 km from housing areas is permitted only with the consent of the local aeronautical authority. The same applies to flying models of all types within a distance of less than 1.5 km from the boundary of aerodromes. The operation of all types of flying models on aerodromes is permitted only with the consent of the air traffic services.

ENR 1.2 VISUAL FLIGHT RULES

1. Except when operating as a special VFR flight, VFR flights shall be conducted so that the aircraft is flown in conditions of visibility and distance from clouds equal to or greater than those specified in Table 1.

2. Except when a clearance is obtained from an air traffic control unit, VFR flights shall not take off or land at an aerodrome within a control zone, or enter the aerodrome traffic zone or traffic pattern:

- a) when the ceiling is less than 450 m (1 500 ft); or
- b) when the ground visibility is less than 5 km.

3. VFR flights between sunset and sunrise, or such other period between sunset and sunrise as may be prescribed by the appropriate ATS authority, shall be operated in accordance with the conditions prescribed by such authority.

4. Unless authorized by the appropriate ATS authority, VFR flights shall not be operated:

- a) above FL 200;
- b) at transonic and supersonic speeds.

5. Except when necessary for take-off or landing, or except by permission from the appropriate authority, a VFR flight shall not be flown:

- a) over the congested areas of cities, towns or settlements or over an open-air assembly of persons at a height less than 300 m (1 000 ft) above the highest obstacle within a radius of 600 m from the aircraft;
- b) elsewhere than as specified in 5 a), at a height less than 150 m (500 ft) above the ground or water.

Table 1*

Airspace class	B	C D E	F G	
			ABOVE 900 M (3 000 FT) AMSL or above 300 M (1 000 FT) above terrain, whichever is the higher	At and below 900 M (3 000 FT) AMSL or 300 M (1 000 FT) above terrain, whichever is the higher
Distance from cloud	Clear of cloud	1 500 M horizontally 300 M (1 000 FT) vertically	Clear of cloud and in sight of the surface	
Flight visibility	8 KM at and above 3 050 M (10 000 FT) AMSL 5 KM below 3 050 M (10 000 FT) AMSL			5 KM**

* When the height of the transition altitude is lower than 3 050 M (10 000 FT) AMSL, FL 100 should be used in lieu of 10 000 FT.

** When so prescribed by the appropriate ATS authority:

- a) lower flight visibilities to 1 500 M may be permitted for flights operating:
 - 1) at speeds that, in the prevailing visibility, will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision; or
 - 2) in circumstances in which the probability of encounters with other traffic would normally be low, e.g. in areas of low volume traffic and for aerial work at low levels.
- b) HELICOPTERS may be permitted to operate *in less than 1 500 M* flight visibility, if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.

6. Except where otherwise indicated in air traffic control clearances or specified by the appropriate ATS authority, VFR flights in level cruising flight when operated above 900 m (3 000 ft) from the ground or water, or a higher datum as specified by the appropriate ATS authority, shall be conducted at a flight level appropriate to the track as specified in the tables of cruising levels.

7. VFR flights shall comply with the provisions of 3.6 of Annex 2:

- a) when operated within Classes B, C and D airspace;
- b) when forming part of aerodrome traffic at controlled aerodromes; or

- c) when operated as special VFR flights.

8. An aircraft operated in accordance with the visual flight rules which wishes to change to compliance with the instrument flight rules shall:

- a) if a flight plan was submitted, communicate the necessary changes to be effected to its current flight plan, or
- b) when so required by 3.3 of Annex 2, submit a flight plan to the appropriate air traffic services unit and obtain a clearance prior to proceeding IFR when in controlled airspace.

ENR 1.3 INSTRUMENT FLIGHT RULES**1. Rules applicable to all IFR flights****1.1 Aircraft equipment**

Aircraft shall be equipped with suitable instruments and with navigation equipment appropriate to the route to be flown.

1.2 Minimum levels

Except when necessary for take-off or landing or when specifically authorized by the appropriate authority, an IFR flight shall be flown at a level that is not below the minimum flight altitude established by the State whose territory is overflown, or, where no such minimum flight altitude has been established:

- a) over high terrain or in mountainous areas, at a level which is at least 600 m (2 000 ft) above the highest obstacle located within 8 km of the estimated position of the aircraft;
- b) elsewhere than as specified in a), at a level which is at least 300 m (1 000 ft) above the highest obstacle located within 8 km of the estimated position of the aircraft.

Note.— The estimated position of the aircraft will take account of the navigational accuracy which can be achieved on the relevant route segment, having regard to the navigational facilities available on the ground and in the aircraft.

1.3 Change from IFR flight to VFR flight

1.3.1 An aircraft electing to change the conduct of its flight from compliance with the instrument flight rules to compliance with the visual flight rules shall, if a flight plan was submitted, notify the appropriate air traffic services unit specifically that the IFR flight is cancelled and communicate thereto the changes to be made to its current flight plan.

1.3.2 When an aircraft operating under the instrument flight rules is flown in or encounters visual meteorological conditions, it shall not cancel its IFR flight unless it is anticipated, and intended, that the flight will be continued for a reasonable period of time in uninterrupted visual meteorological conditions.

2. Rules applicable to IFR flights within controlled airspace

2.1 IFR flights shall comply with the provisions of 3.6 of Annex 2 to the Convention on International Civil Aviation when operated in controlled airspace.

2.2 An IFR flight operating in cruising flight in controlled airspace shall be flown at a cruising level, or, if authorized to employ cruise climb techniques, between two levels or above a level, selected from:

- a) the tables of cruising levels in Appendix 3 of Annex 2, or
- b) a modified table of cruising levels, when so prescribed in accordance with Appendix 3 of Annex 2 for flight above FL 410,

except that the correlation of levels to track prescribed therein shall not apply whenever otherwise indicated in air traffic control clearances or specified by the appropriate ATS authority in the Aeronautical Information Publication (AIP).

3. Rules applicable to IFR flights outside controlled airspace**3.1 Cruising levels**

An IFR flight operating in level cruising flight outside of controlled airspace shall be flown at a cruising level appropriate to its track as specified in:

- a) the tables of cruising levels in Appendix 3 of Annex 2, except when otherwise specified by the appropriate ATS authority for flight at or below 900 m (3 000 ft) above mean sea level; or
- b) a modified table of cruising levels, when so prescribed in accordance with Appendix 3 of Annex 2 for flight above FL 410.

Note.— This provision does not preclude the use of cruise climb techniques by aircraft in supersonic flight.

3.2 **Communications**

An IFR flight operating outside controlled airspace but within or into areas, or along routes, designated by the appropriate ATS authority in accordance with 3.3.1.2 c) or d) of Annex 2 shall maintain a listening watch on the appropriate radio frequency and establish two-way communication, as necessary, with the air traffic services unit providing flight information service.

3.3 **Position reports**

An IFR flight operating outside controlled airspace and required by the appropriate ATS authority to:

- submit a flight plan, and

- maintain a listening watch on the appropriate radio frequency and establish two-way communication, as necessary, with the air traffic services unit providing flight information service

shall report position as specified in 3.6.3 of Annex 2 for controlled flights.

Note.— Aircraft electing to use the air traffic advisory service whilst operating IFR within specified advisory airspace are expected to comply with the provisions of 3.6 of Annex 2, except that the flight plan and changes thereto are not subjected to clearances and that two-way communication will be maintained with the unit providing the air traffic advisory service.

ENR 1.4 ATS AIRSPACE CLASSIFICATION**1. Classification of airspaces**

ATS airspaces are classified and designated in accordance with the following:

Class A. IFR flights only are permitted, all flights are subject to air traffic control service and are separated from each other.

Class B. IFR and VFR flights are permitted, all flights are subject to air traffic control service and are separated from each other.

Class C. IFR and VFR flights are permitted, all flights are subject to air traffic control service and IFR flights are separated from other IFR flights and from VFR flights. VFR flights are separated from IFR flights and receive traffic information in respect of other VFR flights.

Class D. IFR and VFR flights are permitted and all flights are subject to air traffic control service, IFR

flights are separated from other IFR flights and receive traffic information in respect of VFR flights, VFR flights receive traffic information in respect of all other flights.

Class E. IFR and VFR flights are permitted, IFR flights are subject to air traffic control service and are separated from other IFR flights. All flights receive traffic information as far as is practical.

Class F. IFR and VFR flights are permitted, all participating IFR flights receive an air traffic advisory service and all flights receive flight information service if requested.

Class G. IFR and VFR flights are permitted and receive flight information service if requested.

The requirements for the flights within each class of airspace are as shown in the following table.

Class	Type of flight	Separation provided	Service provided	VMC visibility and distance from cloud minima*	Speed limitation*	Radio communication requirement	Subject to an ATC clearance
A	IFR only	All aircraft	Air traffic control service	Not applicable	Not applicable	Continuous two-way	Yes
B**	IFR	All aircraft	Air traffic control service	Not applicable	Not applicable	Continuous two-way	Yes
	VFR	All aircraft	Air traffic control service	8 KM at and above 3 050 M (10 000 FT) AMSL 5 KM below 3 050 M (10 000 FT) AMSL Clear of clouds	Not applicable	Continuous two-way	Yes
C	IFR	IFR from IFR IFR from VFR	Air traffic control service	Not applicable	Not applicable	Continuous two-way	Yes
	VFR	VFR from IFR	1) Air traffic control service for separation from IFR; 2) VFR/VFR traffic information (and traffic avoidance advice on request)	8 KM at and above 3 050 M (10 000 FT) AMSL 5 KM below 3 050 M (10 000 FT) AMSL 1 500 M horizontal; 300 M vertical distance from cloud	250 KT IAS below 3 050 M (10 000 FT) AMSL	Continuous two-way	Yes
D	IFR	IFR from IFR	Air traffic control service including traffic information about VFR flights (and traffic avoidance advice on request)	Not applicable	250 KT IAS below 3 050 M (10 000 FT) AMSL	Continuous two-way	Yes
	VFR	Nil	Traffic information between VFR and IFR flights (and traffic avoidance advice on request)	8 KM at and above 3 050 M (10 000 FT) AMSL 5 KM below 3 050 M (10 000 FT) AMSL 1 500 M horizontal; 300 M vertical distance from cloud	250 KT IAS below 3 050 M (10 000 FT) AMSL	Continuous two-way	Yes

Class	Type of flight	Separation provided	Service provided	VMC visibility and distance from cloud minima*	Speed limitation*	Radio communication requirement	Subject to an ATC clearance
E**	IFR	IFR from IFR	Air traffic control service and traffic information about VFR flights as far as practical	Not applicable	250 KT IAS below 3 050 M (10 000 FT) AMSL	Continuous two-way	Yes
	VFR	Nil	Traffic information as far as practical	8 KM at and above 3 050 M (10 000 FT) AMSL 5 KM below 3 050 M (10 000 FT) AMSL 1 500 M horizontal; 300 M vertical distance from cloud	250 KT IAS below 3 050 M (10 000 FT) AMSL	No	No
F**	IFR	IFR from IFR as far as practical	Air traffic advisory service; flight information service	Not applicable	250 KT IAS below 3 050 M (10 000 FT) AMSL	Continuous two-way	No
	VFR	Nil	Flight information service	8 KM at and above 3 050 M (10 000 FT) AMSL 5 KM below 3 050 M (10 000 FT) AMSL 1 500 M horizontal; 300 M vertical distance from cloud At and below 900 M AMSL or 300 M above terrain whichever is higher – 5 KM***, clear of cloud and in sight of ground or water	250 KT IAS below 3 050 M (10 000 FT) AMSL	No	No
G	IFR	Nil	Flight information service	Not applicable	250 KT IAS below 3 050 M (10 000 FT) AMSL	Continuous two-way	No
	VFR	Nil	Flight information service	8 KM at and above 3 050 M (10 000 FT) AMSL 5 KM below 3 050 M (10 000 FT) AMSL 1 500 M horizontal; 300 M vertical distance from cloud At and below 900 M AMSL or 300 M above terrain whichever is higher – 5 KM***, clear of cloud and in sight of ground or water	250 KT IAS below 3 050 M (10 000 FT) AMSL	No	No
<p>* When the height of the transition altitude is lower than 3 050 M (10 000 FT) AMSL, FL 100 should be used in lieu of 10 000 FT.</p> <p>** Classes of airspace B, E and F are not used in AMSWELL FIR.</p> <p>*** When so prescribed by the appropriate ATS authority:</p> <p>a) lower flight visibilities to 1 500 M may be permitted for flights operating:</p> <ol style="list-style-type: none"> 1) at speeds that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision; or 2) in circumstances in which the probability of encounters with other traffic would normally be low, e.g. in areas of low traffic volume and for aerial work at low levels; <p>b) helicopters may be permitted to operate in less than 1 500 M flight visibility, if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.</p>							

ENR 1.5 HOLDING, APPROACH AND DEPARTURE PROCEDURES**1. General**

1.1 The holding, approach and departure procedures in use are based on those contained in the latest edition of ICAO Doc 8168 — *Procedures for Air Navigation Services — Aircraft Operations* (PANS-OPS).

1.2 The holding and approach procedures in use have been based on the values and factors contained in Parts III and IV of Vol. I of the PANS-OPS. The holding patterns shall be entered and flown as indicated below.

2. Arriving flights

2.1 IFR flights entering and landing within a terminal control area will be cleared to a specified holding point and instructed to contact approach control at a specified time, level or position. The terms of this clearance shall be adhered to until further instructions are received from approach control. If the clearance limit is reached before

further instructions have been received, holding procedure shall be carried out at the level last authorized.

2.2 Due to the limited airspace available, it is important that the approaches to the patterns and the holding procedures be carried out as precisely as possible. Pilots are strongly requested to inform ATC if for any reason the approach and/or holding cannot be performed as required.

3. Departing flights

3.1 IFR flights departing from controlled aerodromes will receive initial ATC clearance from the local aerodrome control tower. The clearance limit will normally be the aerodrome of destination. IFR flights departing from non-controlled aerodromes must make arrangements with the area control centre concerned prior to take-off.

3.2 Detailed instructions with regard to routes, turns, etc. will be issued after take-off.

Flight level (FL)	Category A and B aircraft	Jet aircraft	
		Normal conditions	Turbulence conditions
Up to FL 140 (4 250 M) inclusive	170 KT	230 KT (425 KM/H)	280 KT (520 KM/H) or Mach 0.8, whichever is less
Above FL 140 (4 250 M) to FL 200 (6 100 M) inclusive	240 KT (445 KM/H)		
Above FL 200 (6 100 M) to FL 340 (10 350 M) inclusive	265 KT (490 KM/H)		
Above FL 340 (10 350 M)	Mach 0.83		Mach 0.83

ENR 1.6 ATC SURVEILLANCE SERVICES AND PROCEDURES**1. Primary radar****1.1 *Supplementary services***

1.1.1 A radar unit normally operates as an integral part of the parent ATS unit and provides radar service to aircraft, to the maximum extent practicable, to meet the operational requirement. Many factors, such as radar coverage, controller workload and equipment capabilities, may affect these services, and the radar controller shall determine the practicability of providing or continuing to provide radar services in any specific case.

1.1.2 A pilot will know when radar services are being provided because the radar controller will use the following call signs:

- a) aircraft under area control — “Amswell Radar”;
- b) aircraft under approach control — “Donlon Director”;
- c) aircraft carrying out a precision radar approach or ILS approach monitored by PAR — “Donlon Precision”.

1.1.3 Amswell area control service operates two radar stations:

- a) LRR — station at Donby position 53 14N 033 15W, range 440 km;
- b) LRR — station at Siby position 46 48N 028 50W, range 440 km.

1.1.4 Donlon approach control service operates:

- a) TAR — station at Donlon Airport at position, range 100 km;
- b) PAR — station at Donlon Airport at position, covering approach sector to RWY 27R.

1.2 *The application of radar control service*

1.2.1 Radar identification is achieved according to the provisions specified by ICAO.

1.2.2 Radar control service is provided in controlled airspace to aircraft operating within the Donlon TMA and

along all AWYs, except the segment between WOBAN and ROCKBY of AWY A6. This service may include:

- a) radar separation of arriving, departing and en-route traffic;
- b) radar monitoring of arriving, departing and en-route traffic to provide information on any significant deviation from the normal flight path;
- c) radar vectoring when required;
- d) assistance to aircraft in emergency;
- e) assistance to aircraft crossing controlled airspace;
- f) warnings and position information on other aircraft considered to constitute a hazard;
- g) information to assist in the navigation of aircraft;
- h) information on observed weather.

1.2.3 The minimum horizontal radar separations are:

- a) 9 km en route along airways;
- b) 6 km in the Donlon TMA.

1.2.4 Levels assigned by the radar controller to pilots will provide a minimum terrain clearance according to the phase of flight.

1.3 *Radar and air-ground communication failure procedures***1.3.1 *Radar failure***

In the event of radar failure or loss of radar identification, instructions will be issued to restore non-radar standard separation and the pilot will be instructed to communicate with the parent ATS unit.

1.3.2 *Air-ground communication failure*

1.3.2.1 The radar controller will establish whether the aircraft radio receiver is working by instructing the pilot to carry out a turn or turns. If the turns are observed, the radar controller will continue to provide radar service to the aircraft.

1.3.2.2 If the aircraft's radio is completely unserviceable, the pilot should carry out the procedures for radio failure in accordance with ICAO provisions. If radar identification has already been established, the radar controller will vector other identified aircraft clear of its track until such time as the aircraft leaves radar cover.

1.4 **Graphic portrayal of area of radar coverage**

Since the area of radar coverage is identical to that of SSR, see ENR 1.6.2.4 — Graphic portrayal of area of coverage of radar/SSR.

2. **Secondary surveillance radar (SSR)**

2.1 **Emergency procedures**

2.1.1 Except when encountering a state of emergency, pilots shall operate transponders and select modes and codes in accordance with ATC instructions. In particular, when entering Amswell FIR, pilots who have already received specific instructions from ATC concerning the setting of the transponder shall maintain that setting until otherwise instructed.

2.1.2 Pilots of aircraft about to enter Amswell FIR who have not received specific instructions from ATC concerning the setting of the transponder shall operate the transponder on Mode A/3, Code 20 (or 2000) before entry and maintain that code setting until otherwise instructed.

2.1.3 If the pilot of an aircraft encountering a state of emergency has previously been directed by ATC to operate the transponder on a specific code, this code setting shall be maintained until otherwise advised.

2.1.4 In all other circumstances, the transponder shall be set to Mode A/3, Code 77 (or 7700). Notwithstanding the procedure in 2.1.1 above, a pilot may select Mode A/3, Code 77 (or 7700) whenever the nature of the emergency is such that this appears to be the most suitable course of action.

Note.— Continuous monitoring of responses on Mode A/3, Code 77 is provided.

2.2 **Radio communication failure and unlawful interference procedures**

2.2.1 *Radio communication failure procedure*

In the event of an aircraft radio receiver failure, a pilot shall select Mode A/3, Code 76 (or 7600) and follow established procedures; subsequent control of the aircraft will be based on those procedures.

2.2.2 *Unlawful interference procedure*

Pilots of aircraft in flight subjected to unlawful interference shall endeavour to set the transponder to Mode A, Code 7500 to make the situation known, unless circumstances warrant the use of Mode A/B, Code 77 (or 7700).

Note.— Mode A, Code 7500 is permanently monitored in the Amswell FIR/UIR.

2.3 **System of SSR Code assignment**

The following functional codes (first two digits) are assigned by Amswell ACC:

Departing traffic	
Cruising level below FL 195	:04
Cruising level above FL 195	:21
Domestic flights	:47
Arriving traffic	
Donlon TMA	:45/46
Other TMAs	:47
Overflying traffic	
Cruising level below FL 195	:04
Cruising level above FL 195	:21 (eastbound)
Cruising level above FL 195	:07 (westbound)
Test and training flights	:47

Note.— Although the equipment of Amswell ACC and Donlon approach cannot as yet distinguish individual codes (only the first and second digits are decoded), four-digit codes are assigned for the benefit of adjacent centres and civil-military coordination.

2.4 *Graphic portrayal of area of coverage of radar/SSR*

TO BE DEVELOPED

ENR 1.7 ALTIMETER SETTING PROCEDURES**1. Introduction**

The altimeter setting procedures in use generally conform to those contained in ICAO Doc 8168, Vol. I, Part 6 and are given in full below. Differences are shown in quotation marks.

Transition altitudes are given on the instrument approach charts.

QNH reports and temperature information for use in determining adequate terrain clearance are provided in MET broadcasts and are available on request from the air traffic services units. QNH values are given in hectopascals.

2. Basic altimeter setting procedures**2.1 General**

2.1.1 A transition altitude is specified for each aerodrome. No transition altitude is less than 450 m above an aerodrome.

2.1.2 Vertical positioning of aircraft when at or below the transition altitude is expressed in terms of altitude, whereas such positioning at or above the transition level is expressed in terms of flight levels. While passing through the transition layer, vertical positioning is expressed in terms of altitude when descending and in terms of flight levels when ascending.

2.1.3 Flight level zero is located at the atmospheric pressure level of 1 013.2 hPa (29.92 in). Consecutive flight levels are separated by a pressure interval corresponding to 500 ft (152.4 m) in the standard atmosphere.

Note.— Examples of the relationship between flight levels and altimeter indications are given in the following table, the metric equivalents being approximate:

Flight level number	Altimeter indication	
	Feet	Metres
10	1 000	300
15	1 500	450
20	2 000	600
50	5 000	1 500
100	10 000	3 050
150	15 000	4 550
200	20 000	6 100

2.2 Take-off and climb

2.2.1 A QNH altimeter setting is made available to aircraft in taxi clearance prior to take-off.

2.2.2 Vertical positioning of aircraft during climb is expressed in terms of altitudes until reaching the transition altitude above which vertical positioning is expressed in terms of flight levels.

2.3 Vertical separation — en route

2.3.1 Vertical separation during en-route flight shall be expressed in terms of flight levels at all times “during an IFR flight and at night”.

2.3.2 IFR flights, and VFR flights above 900 m (3 000 ft), when in level cruising flight, shall be flown at such flight levels, corresponding to the magnetic tracks shown in the following table, so as to provide the required terrain clearance:

	000°–179°		180°–359°	
	IFR	VFR	IFR	VFR
	10		20	
	30	35	40	45
	50	55	60	65
Flight	70	75	80	85
level	90	95	100	105
number	etc.	etc.
	270		280	
	290		310	
	330		350	
	etc.		etc.	

Note.— Some of the lower levels in the above table may not be usable due to terrain clearance requirements.

2.4 Approach and landing

2.4.1 A QNH altimeter setting is made available in approach clearance and in clearance to enter the traffic circuit.

2.4.2 QFE altimeter settings are not available.

2.4.3 Vertical positioning of aircraft during approach is controlled by reference to flight levels until reaching the transition level below which vertical positioning is controlled by reference to altitudes.

2.5 Missed approach

2.5.1 The relevant portions of 2.1.2, 2.2 and 2.4 shall be applied in the event of a missed approach.

3. Description of altimeter setting region

The altimeter setting regions are Bistock, Donlon and Richmaast. The areas covered by these regions are shown on the Air Traffic Services Airspace Chart ENR 2.

4. Procedures applicable to operators (including pilots)

4.1 Flight planning

The levels at which a flight is to be conducted shall be specified in a flight plan:

- a) in terms of flight levels if the flight is to be conducted at or above the transition level, and
- b) in terms of altitudes if the flight is to be conducted in the vicinity of an aerodrome and at or below the transition altitude.

Note 1.— Short flights in the vicinity of an aerodrome may often be conducted only at altitudes below the transition altitude.

Note 2.— Flight levels are specified in a plan by number and not in terms of feet or metres as is the case with altitudes.

**5. Tables of
cruising levels**

The cruising levels to be observed when so required are as follows:

- a) in areas where, on the basis of regional air navigation agreement and in accordance with conditions specified therein, a vertical separation minimum (VSM) of 300 m (1 000 ft) is applied between FL 290 and FL 410 inclusive.*

TRACK**											
From 000 degrees to 179 degrees						From 180 degrees to 359 degrees					
IFR Flights			VFR Flights			IFR Flights			VFR Flights		
Altitude			Altitude			Altitude			Altitude		
FL	Metres	Feet	FL	Metres	Feet	FL	Metres	Feet	FL	Metres	Feet
-90			—	—	—	0			—	—	—
10	300	1 000	—	—	—	20	600	2 000	—	—	—
30	900	3 000	35	1 050	3 500	40	1 200	4 000	45	1 350	4 500
50	1 500	5 000	55	1 700	5 500	60	1 850	6 000	65	2 000	6 500
70	2 150	7 000	75	2 300	7 500	80	2 450	8 000	85	2 600	8 500
90	2 750	9 000	95	2 900	9 500	100	3 050	10 000	105	3 200	10 500
110	3 350	11 000	115	3 500	11 500	120	3 650	12 000	125	3 800	12 500
130	3 950	13 000	135	4 100	13 500	140	4 250	14 000	145	4 400	14 500
150	4 550	15 000	155	4 700	15 500	160	4 900	16 000	165	5 050	16 500
170	5 200	17 000	175	5 350	17 500	180	5 500	18 000	185	5 650	18 500
190	5 800	19 000	195	5 950	19 500	200	6 100	20 000	205	6 250	20 500
210	6 400	21 000	215	6 550	21 500	220	6 700	22 000	225	6 850	22 500
230	7 000	23 000	235	7 150	23 500	240	7 300	24 000	245	7 450	24 500
250	7 600	25 000	255	7 750	25 500	260	7 900	26 000	265	8 100	26 500
270	8 250	27 000	275	8 400	27 500	280	8 550	28 000	285	8 700	28 500
290	8 850	29 000				300	9 150	30 000			
310	9 450	31 000				320	9 750	32 000			
330	10 050	33 000				340	10 350	34 000			
350	10 650	35 000				360	10 950	36 000			
370	11 300	37 000				380	11 600	38 000			
390	11 900	39 000				400	12 200	40 000			
410	12 500	41 000				430	13 100	43 000			
450	13 700	45 000				470	14 350	47 000			
490	14 950	49 000				510	15 550	51 000			
etc.	etc.	etc.				etc.	etc.	etc.			

* Except when, on the basis of regional air navigation agreements, a modified table of cruising levels based on a nominal vertical separation minimum of 300 m (1 000 ft) is prescribed for use, under specified conditions, by aircraft operating above FL 410 within designated portions of the airspace.

** Magnetic track, or in polar areas at latitudes higher than 70 degrees and within such extensions to those areas as may be prescribed by the appropriate ATS authorities, grid tracks as determined by a network of lines parallel to the Greenwich Meridian superimposed on a polar stereographic chart in which the direction towards the North Pole is employed as the Grid North.

b) in other areas:

TRACK*											
From 000 degrees to 179 degrees						From 180 degrees to 359 degrees					
IFR Flights			VFR Flights			IFR Flights			VFR Flights		
Altitude			Altitude			Altitude			Altitude		
FL	Metres	Feet	FL	Metres	Feet	FL	Metres	Feet	FL	Metres	Feet
-90			—	—	—	0			—	—	—
10	300	1 000	—	—	—	20	600	2 000	—	—	—
30	900	3 000	35	1 050	3 500	40	1 200	4 000	45	1 350	4 500
50	1 500	5 000	55	1 700	5 500	60	1 850	6 000	65	2 000	6 500
70	2 150	7 000	75	2 300	7 500	80	2 450	8 000	85	2 600	8 500
90	2 750	9 000	95	2 900	9 500	100	3 050	10 000	105	3 200	10 500
110	3 350	11 000	115	3 500	11 500	120	3 650	12 000	125	3 800	12 500
130	3 950	13 000	135	4 100	13 500	140	4 250	14 000	145	4 400	14 500
150	4 550	15 000	155	4 700	15 500	160	4 900	16 000	165	5 050	16 500
170	5 200	17 000	175	5 350	17 500	180	5 500	18 000	185	5 650	18 500
190	5 800	19 000	195	5 950	19 500	200	6 100	20 000	205	6 250	20 500
210	6 400	21 000	215	6 550	21 500	220	6 700	22 000	225	6 850	22 500
230	7 000	23 000	235	7 150	23 500	240	7 300	24 000	245	7 450	24 500
250	7 600	25 000	255	7 750	25 500	260	7 900	26 000	265	8 100	26 500
270	8 250	27 000	275	8 400	27 500	280	8 550	28 000	285	8 700	28 500
290	8 850	29 000	300	9 150	30 000	310	9 450	31 000	320	9 750	32 000
330	10 050	33 000	340	10 350	34 000	350	10 650	35 000	360	10 950	36 000
370	11 300	37 000	380	11 600	38 000	390	11 900	39 000	400	12 200	40 000
410	12 500	41 000	420	12 800	42 000	430	13 100	43 000	440	13 400	44 000
450	13 700	45 000	460	14 000	46 000	470	14 350	47 000	480	14 650	48 000
490	14 950	49 000	500	15 250	50 000	510	15 550	51 000	520	15 850	52 000
etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.

* Magnetic track, or in polar areas at latitudes higher than 70 degrees and within such extensions to those areas as may be prescribed by the appropriate ATS authorities, grid tracks as determined by a network of lines parallel to the Greenwich Meridian superimposed on a polar stereographic chart in which the direction towards the North Pole is employed as the Grid North.

ENR 1.8 REGIONAL SUPPLEMENTARY PROCEDURES (DOC 7030)

The supplementary procedures in force are given in their entirety. Differences are shown in quotation marks.

**1. Visual flights rules (VFR)
(Annex 2, 4.8)**

VFR flights to be operated within a control zone established at an aerodrome serving international flights and in specified portions of the associated terminal control area shall:

- a) have two-way radio communications;
- b) obtain permission from the appropriate air traffic control unit; and
- c) report positions, as required.

Note.— The phrase “specified portions of the associated terminal control area” is intended to signify at least those portions of the TMA used by international IFR flights in association with approach, holding, departure and noise abatement procedures.

**2. Special application of
instrument flight rules**

Flights shall be conducted in accordance with the instrument flight rules even when not operating in instrument meteorological conditions, when operated more than 90 km seaward from the shoreline.

**3. Air traffic advisory service
(PANS-ATM, 9.1.4)**

All IFR flights shall comply with the procedures for air traffic advisory service when operating in advisory airspace.

**4. Adherence to ATC approved route
(Annex 2, 3.6.2.2)**

If an aircraft has inadvertently deviated from the route specified in its ATC clearance, it shall forthwith take action to regain such route within “one hundred (100)” nautical miles from the position at which the deviation was observed.

ENR 1.9 AIR TRAFFIC FLOW MANAGEMENT (ATFM)**1. Air traffic flow management structure,
service area, service provided, location of unit(s)
and hours of operation****1.1 Service area**

Within the AMSWELL ATFM structure, the Donlon Air Traffic Flow Management Unit (Donlon ATFMU) is responsible for the provision of ATFM service in the (specify) region comprising the AMSWELL FIR and the (specify as appropriate) FIR/UIR.

1.2 Service provided

In this context the unit is charged with the following tasks, in so far as they are applicable:

- a) issuance of flow management messages;
- b) flow regulation;
- c) time-slot procurement;
- d) coordination with associated ATFM positions and contiguous ATFMUs.

1.3 Location of unit

The DONLON ATFMU is located at the AMSWELL Upper Area Control Centre. The unit may be contacted at the following address:

Donlon AFTMU
7 Airport Road
Donlon/International, Donlon
TEL: 0123 8686
Telefax: 0123 8696
Telex: 996667
AFS: EADDZDZX

1.4 Hours of operation

The hours of operation are 0430/2030 UTC (0330/1930 UTC during the summertime period). Outside these hours the functions of the Donlon ATFMU are assumed by the AMSWELL UAC watch supervisor.

1.5 Remarks

ATFM positions at (specify if appropriate) ACC and (specify if appropriate) ACC serve as the interface for contacts with operators on flow management matters.

**2. Types of flow messages and descriptions
of the formats**

Messages containing information on ATFM measures, as distributed by the Donlon Air Traffic Flow Management Unit by AFS, will be formatted as depicted below.

Note.— These AFS messages can be obtained on request to EADDYTYX.

All messages will be preceded by:

- Priority indicator, addressee indicator(s)
- Date/time group, originator indicator

a) FLOW CONTROL EXECUTION MESSAGE

1. Flow control execution MSG NR (*sequence number*) valid (*date*)
2. Due to (*reason for restriction*)
3. Period concerned (*time*) at (*slot reference point*)
4. Traffic concerned (*route, destination, etc.*)
5. Flight level(s) concerned
6. SLAP ATFMU (*name*)
7. Communication and slot request procedure (*indicates normally "according local procedures"*)
8. Off-load route available (*designation, conditions*)
9. Remarks

b) FLOW CONTROL EXECUTION CANCELLATION MESSAGE

1. Flow control execution (*date/time group*) CNL

c) FLOW CONTROL EXECUTION CHANGE MESSAGE

1. Flow control execution CHG (*item(s) to be changed*)

d) FLOW MANAGEMENT INFORMATION MESSAGE

1. Flow management information (*text as required*)

3. Procedures applicable for departing flights

3.1 Service responsible for provision of information on applied ATFM measures

Information with respect to ATFM measures can be obtained from the ATS Reporting Office (ARO) responsible for the departure aerodrome.

3.2 Flight plan requirements

3.2.1 Non-repetitive (ICAO) flight plans to or via flow-restricted areas shall be submitted to the appropriate ARO at least 3 hours before ETD.

3.2.2 Changes in ETD of more than 20 minutes and/or cancellation of both repetitive and non-repetitive flight plans shall be reported immediately to the appropriate ARO.

3.3 Slot allocations

3.3.1 A request for a (departure) slot shall be made to the ATFM position AMSWELL ACC, telephone NR 0123 8686.

3.3.2 A slot request shall be made not earlier than 2 hours but not later than 30 minutes prior to ETD, using the following phraseology:

“..... (flight identification)
destination aerodrome (specify)
ETD (time)
REQUEST SLOT ”.

Operators shall ensure that the (departure) time slot can be met.

3.3.3 If it becomes apparent that an assigned slot is no longer required or cannot be met, the operator shall inform the slot allocation position immediately (see above). A new time slot, if needed, shall be allocated in such a way that assigned slots are not affected.

3.3.4 If the slot allocation for the planned route results in considerable delay, it may well be possible to select an alternative routing to the same destination. Information can be obtained from the slot allocation position.

ENR 1.10 FLIGHT PLANNING

(Restriction, limitation or advisory information)

1. Procedures for the submission of a flight plan

A flight plan shall be submitted in accordance with Annex 2, 3.3.1, prior to operating:

- a) any IFR flight;
- b) any VFR flight:
 - departing from or destined for an aerodrome within a control zone;
 - crossing (specify) CTR;
 - operated along the designated VFR routes in the (specify) TMA;
 - across the FIR boundary, i.e. international flights.

Time of submission

Except for repetitive flight plans, a flight plan shall be submitted at least 30 minutes prior to departure, taking into account the requirements of ATS units in the airspace along the route to be flown for timely information, including requirements for early submission for Air Traffic Flow Management (ATFM) purposes.

Place of submission

- a) Flight plans shall be submitted at the Air Traffic Services Reporting Office (ARO) at the departure aerodrome.
- b) In the absence of such an office at the departure aerodrome, a flight plan shall be submitted by telephone or teletype to the nearest ARO as listed below (except as indicated under c. and d.)
 - (specify ARO) TEL: (specify)
 - (specify ARO) TEL: (specify)
 - (specify ARO) TEL: (specify)
 - (specify ARO) TEL: (specify).
- c) For VFR flights between uncontrolled aerodromes operating along designated VFR routes in the (specify) TMA, a flight plan shall be submitted by telephone to the ARO at (specify).

- d) For domestic flights from an uncontrolled to a controlled aerodrome, a flight plan shall be submitted by telephone to the ARO at destination.

VFR flight plan for alerting service only

An alerting service is, in principle, provided to flights for which a flight plan has been submitted.

Contents and form of a flight plan

- a) ICAO flight plan forms are available at AROs and airport offices at uncontrolled aerodromes. The instructions for completing those forms shall be followed.
- b) Flight plans concerning IFR flights along ATS routes need not include FIR-boundary estimates. Inclusion of FIR-boundary estimates is, however, required for off-route IFR flights and international VFR flights.
- c) When a flight plan is submitted by telephone, teletype or telefax, the sequence of items in the flight plan form shall be strictly followed.

Adherence to ATS route structure

No flight plans shall be filed for routes deviating from the published ATS route structure unless prior permission has been obtained from the (specify) ATC authorities.

Authorization for special flights

Flights of a specific character, such as survey flights, scientific research flights, etc., may be exempted from the restriction specified above. A request for exemption shall be mailed so as to be received at least one week before the intended day of operation to (specify).

Maximum cruising levels for short-range flights

It is generally recommended not to select levels above FL 240 for flights up to a distance of 300 NM. Traffic from the (specify) TMA with a destination in the (specify) TMA should file MAX FL 290.

2. Repetitive flight plan system

General

The procedures concerning the use of Repetitive Flight Plans (RPL) conform to ICAO Doc 7030 and the PANS-ATM.

RPL lists relating to flights in and to flights overflying the AMSWELL FIR shall be submitted at least two weeks in advance, in duplicate, to the following address:

- a) by airmail: (specify)
- b) via AFS: (specify)
- c) by telex: (specify)

RPL lists shall be replaced in their entirety by new lists prior to the introduction of the summer and winter schedules. RPL will not be accepted for any flight conducted on 25 December between 0000 and 2400 UTC. On this day individual flight plans shall be filed for all flights.

Incidental changes and cancellations of RPL

Incidental changes to and cancellations of RPL relating to departures from (specify) shall be notified as early as possible and not later than 30 minutes before departure to the Flight Data Section (specify), TEL: (specify). Incidental changes to and cancellations of RPL relating to departures from aerodromes other than (specify) shall be notified as early as possible and not later than 30 minutes before departure to the ARO serving the departure aerodrome.

Delay

When a specific flight is likely to encounter a delay of one hour or more in excess of the departure time stated in the RPL, the ATS unit serving the departure aerodrome shall be notified immediately. Delays relating to departures from (specify) shall be notified to the Flight Data Section (specify), TEL: (specify).

Note.— Failure to comply with this procedure may result in the automatic cancellation of the RPL for that specific flight at one or more of the ATS units concerned.

ATS messages

For a flight operated on an RPL, no flight plan message (FPL) will be transmitted. Departure messages (DEP) or

delay messages (DLA) relating to such flights will not be transmitted to ATS units outside the AMSWELL FIR.

3. Changes to the submitted flight plan

All changes to a flight plan submitted for an IFR flight or a controlled VFR flight and significant changes to a flight plan submitted for an uncontrolled VFR flight shall be reported as soon as possible to the appropriate ATS unit. In the event of a delay in departure of 30 minutes or more for a flight for which a flight plan has been submitted, the flight plan shall be amended or a new flight plan shall be submitted after the old plan has been cancelled.

Note 1.— If a delay in departure of a controlled flight is not properly reported, the relevant flight plan data may no longer be readily available to the appropriate ATS unit when a clearance is ultimately requested, which will consequently result in extra delay for the flight.

Note 2.— If a delay in departure (or cancellation) of an uncontrolled VFR flight is not properly reported, alerting or search and rescue action may be unnecessarily initiated when the flight fails to arrive at the destination aerodrome within 30 minutes after its current ETA.

Whenever a flight, for which a flight plan has been submitted, is cancelled, the appropriate ATS unit shall be informed immediately.

Changes to a current flight plan for a controlled flight during flight shall be reported or requested, subject to the provisions in Annex 2, 3.6.2. (Adherence to flight plan). Significant changes to a flight plan for an uncontrolled VFR flight include changes in endurance or in the total number of persons on board and changes in time estimates of 30 minutes or more.

Arrival report (closing a flight plan)

A report of arrival shall be made at the earliest possible moment after landing to the airport office of the arrival aerodrome by any flight for which a flight plan has been submitted except when the arrival has been acknowledged by the local ATS unit. After landing at an aerodrome which is not the destination aerodrome (diversionary landing), the local ATS unit shall be specifically informed accordingly. In the absence of a local ATS unit at the aerodrome of diversionary landing, the pilot is responsible for passing the arrival report to the destination aerodrome.

.....

Arrival reports shall contain the following elements of information:

- destination aerodrome
- time of arrival.

- aircraft identification
- departure aerodrome

In the case of diversion, insert the “arrival aerodrome” between “destination aerodrome” and “time of arrival”.

ENR 1.11 ADDRESSING OF FLIGHT PLAN MESSAGES

Flight movement messages relating to traffic into or via the AMSWELL FIR shall be addressed as stated below in order to warrant correct relay and delivery.

Note.— Flight movement messages in this context comprise flight plan messages, amendment messages relating thereto and flight plan cancellation messages (PANS-ATM refers).

<i>Category of flight (IFR, VFR or both)</i>	<i>Route (into or via FIR and/or TMA)</i>	<i>Message address</i>
1	2	3
IFR flights	into or via AMSWELL FIR and, in addition, for flights: — within the AMSWELL FIR above FL 245 — into DONLON TMA — via DONLON TMA — via NIBORD TMA	EACCCZQZX EACCCZQZX EADDZQZX EADDZTZX EADNZTZX
VFR flights		EACCCZFZX
All flights (specify controlled aerodrome) (specify uncontrolled aerodrome) (specify ICAO location indicator) + ZTZX (specify ICAO location indicator) + ZPZX

ENR 1.12 INTERCEPTION OF CIVIL AIRCRAFT

1. Interception procedures

1.1 The following procedures and visual signals apply over the territory and territorial waters of (State) in the event of interception of an aircraft. An aircraft which is intercepted by another aircraft shall immediately:

- a) follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals in accordance with the specifications in Appendix 1 of Annex 2;
- b) notify, if possible, the appropriate air traffic services unit;
- c) attempt to establish radiocommunication with the intercepting aircraft or with the appropriate

intercept control unit, by making a general call on the emergency frequency 121.5 MHz, giving the identity of the intercepted aircraft and the nature of the flight; if no contact has been established and if practicable, repeat this call on the emergency frequency 243 MHz;

- d) if equipped with SSR transponder, select Mode A, Code 7700, unless otherwise instructed by the appropriate air traffic services unit.

1.2 If radio contact is established during interception but communication in a common language is not possible, attempts shall be made to convey instructions, acknowledgment of instructions and essential information by using the phrases and pronunciations in the following table, transmitting each phrase twice:

<i>Phrase</i>	<i>Pronunciation¹</i>	<i>Meaning</i>
CALL SIGN (call sign) ²	KOL SA-IN (call sign)	My call sign is (call sign)
WILCO	VILL -KO	Understood. Will comply
CAN NOT	KANN NOTT	Unable to comply
REPEAT	REE- PEET	Repeat your instruction
AM LOST	AM LOSST	Position unknown
MAYDAY	MAYDAY	I am in distress
HIJACK ³	HI - JACK	I have been hijacked
LAND (place name)	LAAND (place name)	I request to land at (place name)
DESCEND	DEE- SEND	I require descent

- 1. Syllables to be emphasized are printed in bold letters.
- 2. The call sign required to be given is that used in radiotelephony communications with air traffic services units and corresponding to the aircraft identification in the flight plan.
- 3. Circumstances may not always permit, nor make desirable, the use of the phrase "HIJACK".

1.3 The phrases shown in the table below shall be used by the intercepting aircraft and transmitted twice in the circumstances described in the preceding paragraph.

1.4 If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by visual signals, the intercepted aircraft shall request immediate clarification while continuing to comply with the visual instructions given by the intercepting aircraft.

1.5 If instructions received by radio from any sources conflict with those given by the intercepting aircraft by radio, the intercepted aircraft shall request immediate clarification while continuing to comply with the radio instructions given by the intercepting aircraft.

1.6 The visual signals for use in the event of interception are detailed on page ENR 1.12-3.

<i>Phrase</i>	<i>Pronunciation</i> ¹	<i>Meaning</i>
CALL SIGN	KOL SA-IN	What is your call sign?
FOLLOW	FOL -LO	Follow me
DESCEND	DEE- SEND	Descend for landing
YOU LAND	YOU LAAND	Land at this aerodrome
PROCEED	PRO- SEED	You may proceed

1. Syllables to be emphasized are printed in bold letters.

SIGNALS FOR USE IN THE EVENT OF INTERCEPTION

Signals initiated by intercepting aircraft and responses by intercepted aircraft

Series	INTERCEPTING Aircraft Signals	Meaning	INTERCEPTED Aircraft Responds	Meaning
1	<p>DAY or NIGHT — Rocking aircraft and flashing navigational lights at irregular intervals (and landing lights in the case of a helicopter) from a position slightly above and ahead of, and normally to the left of, the intercepted aircraft (or to the right if the intercepted aircraft is a helicopter) and, after acknowledgement, a slow level turn, normally to the left, (or to the right in the case of a helicopter) on the desired heading.</p> <p><i>Note 1.— Meteorological conditions or terrain may require the intercepting aircraft to reverse the positions and direction of turn given above in Series 1.</i></p> <p><i>Note 2.— If the intercepted aircraft is not able to keep pace with the intercepting aircraft, the latter is expected to fly a series of racetrack patterns and to rock the aircraft each time it passes the intercepted aircraft.</i></p>	You have been intercepted. Follow me.	<p>DAY or NIGHT — Rocking aircraft, flashing navigational lights at irregular intervals and following.</p> <p><i>Note.— Additional action required to be taken by intercepted aircraft is prescribed in Annex 2, Chapter 3, 3.8.</i></p>	Understood, will comply.
2	DAY or NIGHT — An abrupt breakaway manoeuvre from the intercepted aircraft consisting of a climbing turn of 90 degrees or more without crossing the line of flight of the intercepted aircraft.	You may proceed.	DAY or NIGHT — Rocking the aircraft.	Understood, will comply.
3	DAY or NIGHT — Lowering landing gear (if fitted), showing steady landing lights and overflying runway in use or, if the intercepted aircraft is a helicopter, overflying the helicopter landing area. In the case of helicopters, the intercepting helicopter makes a landing approach, coming to hover near to the landing area.	Land at this aerodrome.	DAY or NIGHT — Lowering landing gear, (if fitted), showing steady landing lights and following the intercepting aircraft and, if, after overflying the runway in use or helicopter landing area, landing is considered safe, proceeding to land.	Understood, will comply.

Signals initiated by intercepted aircraft and responses by intercepting aircraft

Series	INTERCEPTED Aircraft Signals	Meaning	INTERCEPTING Aircraft Responds	Meaning
4	DAY or NIGHT — Raising landing gear (if fitted) and flashing landing lights while passing over runway in use or helicopter landing area at a height exceeding 300 m (1 000 ft) but not exceeding 600 m (2 000 ft) (in the case of a helicopter, at a height exceeding 50 m (170 ft) but not exceeding 100 m (330 ft)) above the aerodrome level, and continuing to circle runway in use or helicopter landing area. If unable to flash landing lights, flash any other lights available.	Aerodrome you have designated is inadequate.	<p>DAY or NIGHT — If it is desired that the intercepted aircraft follow the intercepting aircraft to an alternate aerodrome, the intercepting aircraft raises its landing gear (if fitted) and uses the Series 1 signals prescribed for intercepting aircraft.</p> <p>If it is decided to release the intercepted aircraft, the intercepting aircraft uses the Series 2 signals prescribed for intercepting aircraft.</p>	Understood, follow me.
5	DAY or NIGHT — Regular switching on and off of all available lights but in such a manner as to be distinct from flashing lights.	Cannot comply.	DAY or NIGHT — Use Series 2 signals prescribed for intercepting aircraft.	Understood.
6	DAY or NIGHT — Irregular flashing of all available lights.	In distress.	DAY or NIGHT — Use Series 2 signals prescribed for intercepting aircraft.	Understood.

ENR 1.13 UNLAWFUL INTERFERENCE**1. General**

The following procedures are intended for use by aircraft when unlawful interference occurs and the aircraft is unable to notify an ATS unit of this fact.

2. Procedures

2.1 Unless considerations aboard the aircraft dictate otherwise, the pilot-in-command should attempt to continue flying on the assigned track and at the assigned cruising level at least until notification to an ATS unit is possible or the aircraft is within radar coverage.

2.2 When an aircraft subjected to an act of unlawful interference must depart from its assigned track or its assigned cruising level without being able to make radiotelephony contact with ATS, the pilot-in-command should, whenever possible:

- a) attempt to broadcast warnings on the VHF emergency frequency and other appropriate frequencies, unless considerations aboard the aircraft dictate otherwise. Other equipment such as on-board transponders, data links, etc. should also be used when it is advantageous to do so and circumstances permit; and
- b) proceed in accordance with applicable special procedures for in-flight contingencies, where such procedures have been established and promulgated in ICAO Doc 7030 — *Regional Supplementary Procedures*; or
- c) if no applicable regional procedures have been established, proceed at a level which differs from the cruising levels normally used for IFR flight in the area by 300 m (1 000 ft) if above FL 290 or by 150 m (500 ft) if below FL 290.

ENR 1.14 AIR TRAFFIC INCIDENTS**1. Definition of air traffic incidents**

1.1 “Air traffic incident” is used to mean a serious occurrence related to the provision of air traffic services, such as:

- a) aircraft proximity (AIRPROX);
- b) serious difficulty resulting in a hazard to aircraft caused, for example, by:
 - 1) faulty procedures
 - 2) non-compliance with procedures, or
 - 3) failure of ground facilities.

1.1.1 Definitions for aircraft proximity and AIRPROX.

Aircraft proximity. A situation in which, in the opinion of the pilot or the air traffic services personnel, the distance between aircraft, as well as their relative positions and speed, has been such that the safety of the aircraft involved may have been compromised. Aircraft proximity is classified as follows:

Risk of collision. The risk classification of aircraft proximity in which serious risk of collision has existed.

Safety not assured. The risk classification of aircraft proximity in which the safety of the aircraft may have been compromised.

No risk of collision. The risk classification of aircraft proximity in which no risk of collision has existed.

Risk not determined. The risk classification of aircraft proximity in which insufficient information was available to determine the risk involved, or inconclusive or conflicting evidence precluded such determination.

AIRPROX. The code word used in an air traffic incident report to designate aircraft proximity.

1.2 Air traffic incidents are designated and identified in reports as follows:

<i>Type</i>	<i>Designation</i>
Air traffic incident	Incident
as a) above	AIRPROX (aircraft proximity)
as b) 1) and 2) above	Procedure
as b) 3) above	Facility

**2. Use of the Air Traffic Incident Report Form
(See model on pages ENR 1.14-3 to 1.14-7)**

The Air Traffic Incident Report Form is intended for use:

- a) by a pilot for filing a report on an air traffic incident after arrival or for confirming a report made initially by radio during flight.

Note.— The form, if available on board, may also be of use in providing a pattern for making the initial report in flight.

- b) by an ATS unit for recording an air traffic incident report received by radio, telephone or teleprinter.

Note.— The form may be used as the format for the text of a message to be transmitted over the AFS network.

**3. Reporting procedures
(including in-flight procedures)**

3.1 The following are the procedures to be followed by a pilot who is or has been involved in an incident:

- a) during flight, use the appropriate air/ground frequency for reporting an incident of major significance, particularly if it involves other aircraft, so as to permit the facts to be ascertained immediately;
- b) as promptly as possible after landing, submit a completed Air Traffic Incident Report Form
 - 1) for confirming a report of an incident made initially as in a) above, or for making the initial report on such an incident if it had not been possible to report it by radio;

- 2) for reporting an incident which did not require immediate notification at the time of occurrence.

3.2 An initial report made by radio should contain the following information:

- a) aircraft identification;
- b) type of incident, e.g. aircraft proximity;
- c) the incident; 1. a) and b); 2. a), b), c), d), n); 3. a), b), c), i); 4. a), b);
- d) miscellaneous: 1. e).

3.3 The confirmatory report on an incident of major significance initially reported by radio or the initial report on any other incident should be submitted to The Aviation Safety Board, Government Square, Donlon or to the ATS Reporting Office of the aerodrome of first landing for submission to The Aviation Safety Board. The pilot should

complete the Air Traffic Incident Report Form, supplementing the details of the initial reports as necessary.

Note.— Where there is no ATS Reporting Office, the report may be submitted to another ATS unit.

4. Purpose of reporting and handling of the form

4.1 The purpose of the reporting of aircraft proximity incidents and their investigation is to promote the safety of aircraft. The degree of risk involved in an aircraft proximity incident should be determined in the incident investigation and classified as “risk of collision”, “safety not assured”, “no risk of collision” or “risk not determined”.

4.2 The purpose of the form is to provide investigatory authorities with as complete information on an air traffic incident as possible and to enable them to report back, with the least possible delay to the pilot or operator concerned, the result of the investigation of the incident and, if appropriate, the remedial action taken.

AIR TRAFFIC INCIDENT REPORT FORM		
<i>For use when submitting and receiving reports on air traffic incidents. In an initial report by radio, shaded items should be included.</i>		
A — AIRCRAFT IDENTIFICATION	B — TYPE OF INCIDENT	
	AIRPROX / PROCEDURE / FACILITY*	
C — THE INCIDENT		
1. General		
a) Date / time of incident UTC		
b) Position		
2. Own aircraft		
a) Heading and route		
b) True airspeed _____ measured in () kt _____ () km/h _____		
c) Level and altimeter setting		
d) Aircraft climbing or descending		
() Level flight	() Climbing	() Descending
e) Aircraft bank angle		
() Wings level	() Slight bank	() Moderate bank
() Steep bank	() Inverted	() Unknown
f) Aircraft direction of bank		
() Left	() Right	() Unknown
g) Restrictions to visibility (select as many as required)		
() Sun glare	() Windscreen pillar	() Dirty windscreen
() Other cockpit structure	() None	
h) Use of aircraft lighting (select as many as required)		
() Navigation lights	() Strobe lights	() Cabin lights
() Red anti-collision lights	() Landing / taxi lights	() Logo (tail fin) lights
() Other	() None	
i) Traffic avoidance advice issued by ATS		
() Yes, based on radar	() Yes, based on visual sighting	() Yes, based on other information
() No		
j) Traffic information issued		
() Yes, based on radar	() Yes, based on visual sighting	() Yes, based on other information
() No		
k) Airborne collision avoidance system — ACAS		
() Not carried	() Type	() Traffic advisory issued
() Resolution advisory issued	() Traffic advisory or resolution advisory not issued	
l) Radar identification		
() No radar available	() Radar identification	() No radar identification
m) Other aircraft sighted		
() Yes	() No	() Wrong aircraft sighted

*Delete as appropriate

n)	Avoiding action taken		
	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
o)	Type of flight plan IFR / VFR / none*		
3. Other aircraft			
a)	Type and call sign / registration (if known)		
b)	If a) above not known, describe below		
	<input type="checkbox"/> High wing	<input type="checkbox"/> Mid wing	<input type="checkbox"/> Low wing
	<input type="checkbox"/> Rotorcraft		
	<input type="checkbox"/> 1 engine	<input type="checkbox"/> 2 engines	<input type="checkbox"/> 3 engines
	<input type="checkbox"/> 4 engines	<input type="checkbox"/> More than 4 engines	
	Marking, colour or other available details		
c)	Aircraft climbing or descending		
	<input type="checkbox"/> Level flight	<input type="checkbox"/> Climbing	<input type="checkbox"/> Descending
	<input type="checkbox"/> Unknown		
d)	Aircraft bank angle		
	<input type="checkbox"/> Wings level	<input type="checkbox"/> Slight bank	<input type="checkbox"/> Moderate bank
	<input type="checkbox"/> Steep bank	<input type="checkbox"/> Inverted	<input type="checkbox"/> Unknown
e)	Aircraft direction of bank		
	<input type="checkbox"/> Left	<input type="checkbox"/> Right	<input type="checkbox"/> Unknown
f)	Lights displayed		
	<input type="checkbox"/> Navigation lights	<input type="checkbox"/> Strobe lights	<input type="checkbox"/> Cabin lights
	<input type="checkbox"/> Red anti-collision lights	<input type="checkbox"/> Landing / taxi lights	<input type="checkbox"/> Logo (tail fin) lights
	<input type="checkbox"/> Other	<input type="checkbox"/> None	<input type="checkbox"/> Unknown
g)	Traffic avoidance advice issued by ATS		
	<input type="checkbox"/> Yes, based on radar	<input type="checkbox"/> Yes, based on visual sighting	<input type="checkbox"/> Yes, based on other information
	<input type="checkbox"/> No	<input type="checkbox"/> Unknown	
h)	Traffic information issued		
	<input type="checkbox"/> Yes, based on radar	<input type="checkbox"/> Yes, based on visual sighting	<input type="checkbox"/> Yes, based on other information
	<input type="checkbox"/> No	<input type="checkbox"/> Unknown	
i)	Avoiding action taken		
	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown

*Delete as appropriate

4. Distance a) Closest horizontal distance b) Closest vertical distance	
5. Flight weather conditions a) IMC / VMC* b) Above / below* clouds / fog / haze or between layers* c) Distance vertically from cloud _____ m / ft* below _____ m / ft* above d) In cloud / rain / snow / sleet / fog / haze* e) Flying into / out of* sun f) Flight visibility _____ m / km*	
6. Any other information considered important by the pilot-in-command 	
D — MISCELLANEOUS 1. Information regarding reporting aircraft a) Aircraft registration b) Aircraft type c) Operator d) Aerodrome of departure e) Aerodrome of first landing _____ destination _____ f) Reported by radio or other means to _____ (name of ATS unit) at time UTC g) Date / time / place of completion of form	
2. Function, address and signature of person submitting report a) Function b) Address c) Signature d) Telephone number	
3. Function and signature of person receiving report a) Function _____ b) Signature _____	

*Delete as appropriate

E — SUPPLEMENTARY INFORMATION BY ATS UNIT CONCERNED

1. Receipt of report

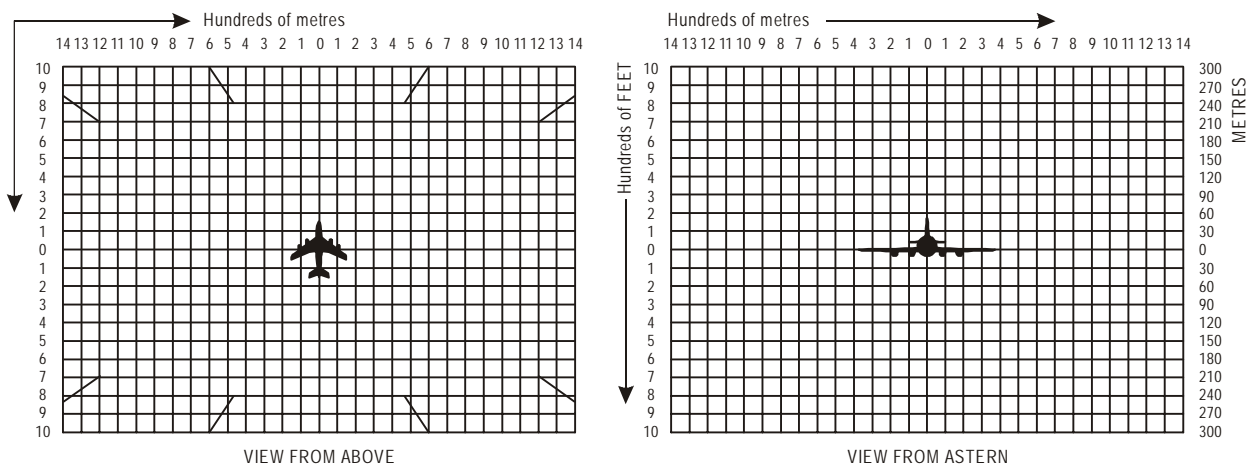
- a) Report received via AFTN / radio / telephone / other (specify)* _____
b) Report received by _____ (name of ATS unit)

2. Details of ATS action

Clearance, incident seen (radar/visually, warning given, result of local enquiry, etc.)

DIAGRAMS OF AIRPROX

Mark passage of other aircraft relative to you, in plan on the left and in elevation on the right, assuming YOU are at the centre of each diagram. Include first sighting and passing distance.



*Delete as appropriate

Instructions for the completion of the Air Traffic Incident Report Form*Item*

- A Aircraft identification of the aircraft filing the report.
- B An AIRPROX report should be filed immediately by radio.
- C1 Date/time UTC and position in bearing and distance from a navigation aid or in LAT/LONG.
- C2 Information regarding aircraft filing the report, tick as necessary.
- C2 c) E.g. FL 350/1 013 hPa or 2 500 ft/QNH 1 007 hPa or 1 200 ft/QFE 998 hPa.
- C3 Information regarding the other aircraft involved.
- C4 Passing distance — state units used.
- C6 Attach additional papers as required. The diagrams may be used to show aircraft's positions.
- D1 f) State name of ATS unit and date/time in UTC.
- D1 g) Date and time in UTC.
- E2 Include details of ATS unit such as service provided, radiotelephony frequency, SSR Codes assigned and altimeter setting. Use diagram to show the aircraft's position and attach additional papers as required.

ENR 2. AIR TRAFFIC SERVICES AIRSPACE**ENR 2.1 FIR, UIR, TMA**

<i>Name Lateral limits Vertical limits Class of airspace</i>	<i>Unit providing service</i>	<i>Call sign Languages Area and conditions of use Hours of service</i>	<i>Frequency/Purpose</i>	<i>Remarks</i>
1	2	3	4	5
AMSWELL FIR 5705N 04000W – 5640N 02108W – 4331N 02108W – 4124N 03003W – 4044N 03711W – 4236N 03700W – 4402N 04000W – 4828N 04120W – 5251N 04147W – 5705N 04000W.	Amswell ACC	Amswell control ENG H24	120.300 MHz 117.900 MHz/MIL ACFT 121.500 MHz/Emergency FREQ 4689.5 KHZ ¹⁾ /EUR network 8871.0 KHZ ¹⁾ /Sub-regional network 4675.5 KHZ	VDF AVBL 1) SELCAL AVBL
UNL GND Class of airspace outside other regulated airspace: A – Above FL 195 D – BTN FL 195 and 3 500 FT MSL G – BTN 3 500 FT MSL and GND	Amswell FIC	Amswell Information ENG H24	121.100 MHz 116.100 MHz/MIL ACFT 121.500 MHz Emergency FREQ	
UIR: NIL	G/A/G	Amswell Radio ENG Mon–Fri: 0800–2000 (0700–1900) Outside these periods: O/R via ACC	127.00 MHz	Range: 370 KM at 1 500 M 555 KM at 13 000 M
DONLON TMA 530104N 0321719W – 530204N 0320009W – 520816N 0310004W – 515812N 0515021W – 515005N 0322509W – 515005N 0324119W – 522521N 0332117W – 524503N 0331516W – 530204N 0311719W. FL 450 450 M AGL Class of airspace: C	Donlon APP	Donlon Approach ENG HR: As AD	119.1 MHz Primary FREQ 117.900 MHz/MIL ACRT 121.500 MHz/Emergency FREQ	
NIBORD TMA A circle, 50 NM radius centred on Lima NDB (48 50 54N 023 14 12E) FL 450 450 M AGL Class of airspace: C	Nibord APP	Nibord Approach ENG HR: As AD		

ENR 2.2 OTHER REGULATED AIRSPACE**Northern Alma Sea — lower airspace responsibility
(at 3 000 ft MSL and below)****1. General**

..... (State) and (State) have arranged, by bilateral agreement, to transfer responsibility for providing air traffic service to all aircraft at 3 000 ft and below in those areas of the Noverhan and Broxby FIRs between the FIR boundaries and the Median Line (the line of demarcation of national areas for the exploration and exploitation of natural resources from the seabed) to (State).

**2. The area involved in the transfer of
ATS responsibility**

2.1 The area involved is depicted on page ENR 6-2.

2.2 In these parts of the Noverhan and Broxby FIRs, (State) will provide ATS to all aircraft at 3 000 ft and below. Procedures and communications will be as if the airspace were an integral part of the Amswell FIR. This area is bounded by arcs of great circles joining in succession the following positions:

423006N 0260054W 410000N 0200000W
431807N 0170536W 450000N 0210800W
along the FIR BDRY to 433030N 0210800W
along the FIR BDRY to 423006N 0260054W.

Note.— If no “other regulated airspace” is available, indicate “NIL”.

ENR 3. ATS ROUTES

ENR 3.1 LOWER ATS ROUTES

Route designator (RNP/RNAV ¹) Name of significant points Coordinates	Track MAG ↓/↑ VOR RDL DIST (COP)	<u>Upper limits</u> <u>Lower limits</u> or Minimum altitude ² Airspace classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address
				Odd	Even	
1	2	3	4	5		6
A4 (RNP 4) ³						For continuation, see AIP (specify).
▲ BARIM 423006N 0370006W	074°/254° 69.3 KM	FL 195 900 M AMSL (or) MEA = 1 200 M Class C	18	↓		Amswell ACC channel: 120.300
▲ WOBAN VOR (WOB) 424030N 0361024W	053°/233° 771.6 KM (489/282)					
▲ EKCOMBE VOR (EKO) 470812N 0283830W	064°/244° 446.0 KM					
▲ LIMAD VOR (LMD) 484800N 0231300W	064°/244° 163.2 KM					
▲ VEGAT 492130N 0210800W					↑	For continuation, see AIP (specify).
A6 (RNP 4)						For continuation, see AIP (specify).
▲ TEMPO (FIR BDRY) 565024N 0295136W	210°/030° 165.9 KM	FL 195 900 M AMSL (or) MEA = 1 200 M Class C	18	↓		All flights between TEMPO and DONNARD shall file a flight plan, maintain two-way radio contact with Amswell ACC and report positions as instructed to eliminate or reduce the need for interception.
△ RAINBY NDB (RNB) 553854N 0310400W	196°/016° 289.4 KM					
▲ DONNARD NDB (DON) 530218N 0320906W	194°/014° 76.5 KM					
▲ BOORSPIJK VOR/DME (BOR) 552206N 0322230W	195°/015° 57.1 KM	FL 195 1 350 M AMSL (or) MEA = 1 700 M Class C	18	↑	↓	Amswell ACC channel: 120.300
▲ ROBINE NDB (ROB) 515900N 0323300W	199°/017° 509.0 KM	MOCA = 4 000 ft Class C	18	↑	↓	
▲ ROCKBY NDB (ROK) 473500N 0342942W	199°/019° 561.8 KM					
▲ WOBAN VOR (WOB) 424036N 0361024W						For continuation, see AIP (specify).
<ol style="list-style-type: none"> 1. RNP = required navigation performance specification; RNAV = area navigation specification. 2. MEA = minimum en-route altitude; MOCA = minimum obstacle clearance altitude. 3. RNP 4 represents aircraft and operating requirements, including a 7.4 KM (4 NM) lateral performance, with on-board performance monitoring and alerting that are detailed in the <i>Performance-based Navigation (PBN) Manual</i> (Doc 9613). 						

ENR 3.2 UPPER ATS ROUTES

Route designator (RNP/RNAV ¹) Name of significant points Coordinates	Track MAG ↓/↑ VOR RDL DIST (COP)	Upper limits Lower limits Airspace classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address
				Odd	Even	
1	2	3	4	5		6
UA4 (RNP 4) ²						For continuation, see AIP (specify).
▲ BARIM 423006N 0370006W	074°/254° 69.3 KM	FL 450 FL 195 Class C	18	↓		Amswell ACC channel: 120.300
▲ WOBAN VOR (WOB) 424030N 0361024W	053°/233° 771.6 KM (489/282)					
▲ EKCOMBE VOR (EKO) 470812N 0283830W	064°/244° 446.0 KM					
▲ LIMAD VOR (LMD) 484800N 0231300W	064°/244° 163.2 KM					
▲ VEGAT 492130N 0210800W					↑	
						For continuation, see AIP (specify).
UA6 (RNP 4)						For continuation, see AIP (specify).
▲ TEMPO (FIR BDRY) 565024N 0295136W	210°/030° 165.9 KM	FL 450 FL 195 Class C	18	↓		All flights between TEMPO and DONNARD shall file a flight plan, maintain two-way radio contact with Amswell ACC and report positions as instructed to eliminate or reduce the need for interception.
△ RAINBY NDB (RNB) 553854N 0310400W	196°/016° 289.4 KM					
▲ DONNARD NDB (DON) 530218N 0320906W	194°/014° 76.5 KM					
▲ BOORSPIJK VOR/DME (BOR) 552206N 0322230W	195°/015° 57.1 KM					
▲ ROBINE NDB (ROB) 515900N 0323300W	199°/017° 509.0 KM					
▲ ROCKBY NDB (ROK) 473500N 0342942W	199°/019° 561.8 KM					
▲ WOBAN VOR (WOB) 424036N 0361024W				↑		
						For continuation, see AIP (specify).
1. RNP = required navigation performance; RNAV = area navigation specification. 2. RNP 4 represents aircraft and operating requirements, including a 7.4 KM (4 NM) lateral performance, with on-board performance monitoring and alerting that are detailed in the <i>Performance-based Navigation (PBN) Manual</i> (Doc 9613).						

ENR 3.3 AREA NAVIGATION (RNAV) ROUTES

Route designator (RNP/RNAV ¹) Name of significant points Coordinates	Way-point IDENT of VOR/DME BRG & DIST ELEV DME Antenna	Geodesic DIST NM	Upper limit Lower limit Airspace classification	Direction of cruising levels		Remarks Controlling unit channel Logon address
				Odd	Even	
1	2	3	4	5		6
UL 123 (RNP 4)² ▲ FIR BDRY (SANOK) 412448N 0300306W ▲ ULENI 442348N 0332942W Δ ABOLA 454236N 0351012W ▲ FIR BDRY (ILURU) 500112N 0413648W						For continuation, see AIP (specify).
	NIL	434.3	FL 460 FL 245		↓	Amswell ACC channel: 120.300
	WOB 050° 286.3 NM 150 M	195.6				
	WOB 15° 336.7 NM 150 M					
	NIL					
						For continuation, see AIP (specify).

1. RNP = required navigation performance; RNAV = area navigation specification.

2. RNP 4 represents aircraft and operating requirements, including a 7.4 KM (4 NM) lateral performance, with on-board performance monitoring and alerting that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).

ENR 3.4 HELICOPTER ROUTES

Route designator (RNP/RNAV ¹) Name of significant points Coordinates	Track MAG ↓/↑ VOR RDL DIST (COP)	<u>Upper limit</u> <u>Lower limit</u> Airspace classification	Minimum flight altitude	Remarks Controlling unit channel
1	2	3	4	5
HK 123 (RNP 4) ²				
△ RICHMAAST/Richmaast Heliport 555006N 0263412E	021°/201° 9.8 NM			
▲ Richmaast NDB RIC 555918N 0262830W	016°/195° 41.2 NM	<u>FL 85</u> GND Class C	300 M MSL	Amswell ACC channel: 121.100
▲ OLNEV 563921N 0261133W	259°/077° 57.8 NM			
▲ BONDA 562524N 0275242W				
△ RICHMAAST/Richmaast Heliport 555006N 0263412E	130°/311° 56.4 NM			
1. RNP = required navigation performance; RNAV = area navigation specification. 2. RNP 4 represents aircraft and operating requirements, including a 7.4 KM (4 NM) lateral performance, with on-board performance monitoring and alerting that are detailed in the <i>Performance-based Navigation (PBN) Manual</i> (Doc 9613).				

ENR 3.5 OTHER ROUTES

Route designator (RNP/RNAV ¹) Name of significant points Coordinates	Way-point IDENT of VOR/DME BRG & DIST ELEV DME Antenna	Great circle DIST NM	<div>Upper limit Lower limit</div> Airspace classification	Direction of cruising levels		Remarks Controlling unit channel
				Odd	Even	
1	2	3	4	5		6
<div>Note.— To be used for other routes as appropriate. If no other routes are available, insert “NIL”.</div>						

1. RNP = required navigation performance; RNAV = area navigation specification.

ENR 3.6 EN-ROUTE HOLDING

<i>HLDG ID/FIX/WPT Coordinates</i>	<i>INBD TR (°MAG)</i>	<i>Direction of PTN</i>	<i>MAX IAS (KT)</i>	<i>MNM-MAX HLDG LVL FL/FT (MSL)</i>	<i>TIME (MIN) or DIST OUBD</i>	<i>Controlling unit and Frequency</i>
1	2	3	4	5	6	7
BOORSPIJK/BOR	090	Right	230	3 500 FT-FL 140	1	Amswell ACC
Boorspijk VOR/DME	090	Right	240	FL 150-FL 200	1½	120.300 MHZ
522206N 0322230W	090	Right	265	FL 210-FL 340	1½	
	090	Right	Mach 0.83	FL 350-FL 460	1½	
JUSTINE/JUS	329	Left	230	3 500 FT-FL 140	1	Amswell ACC
Justine VOR						120.300 MHZ
511648N 0310930W						
WOODBANK/WOB	015	Right	230	3 500 FT-FL 140	1	Woodbank APP
Woodbank	015	Right	240	FL 150-FL 200	1½	Amswell
VOR/DME	015	Right	265	FL 210-FL 340	1½	ACC
424324N 0361148W	015	Right	Mach 0.83	FL 350-FL 460	1½	120.300 MHZ
EKCOMBE/EKO	340	Right	230	3 500 FT-FL 140	1	Amswell ACC
Ekcombe VOR	340	Right	240	FL 150-FL 200	1½	120.300 MHZ
470854N 0284000W	340	Right	265	FL 210-FL 340	1½	
	340	Right	Mach 0.83	FL 350-FL 460	1½	
WIJKARD/WIK	287	Right	230	3 500 FT-FL 140	1	Amswell FIC
Wijkard NDB	287	Right	240	FL 150-FL 200	1½	121.100 MHZ
513200N 0274006W	287	Right	265	FL 210-FL 340	1½	
	287	Right	Mach 0.83	FL 350-FL 460	1½	

The en-route holdings may be used only when indicated as CLEARANCE LIMIT or after permission from ATC.

ENR 4. RADIO NAVIGATION AIDS/SYSTEMS**ENR 4.1 RADIO NAVIGATION AIDS — EN-ROUTE**

<i>Name of station (VAR) (VOR: Declination)</i>	<i>ID</i>	<i>FREQ (CH)</i>	<i>Hours of operation</i>	<i>Coordinates</i>	<i>ELEV DME antenna</i>	<i>Remarks</i>
1	2	3	4	5	6	7
BOORSPIJK VOR/DME (7°W)	BOR	115.500 MHZ (CH 102X)	H24	522206N 0322230W	30 M	Coverage 350 KM
DONLON VOR/DME (7°W)	DON	116.400 MHZ (CH 111X)	H24	522636N 0320003W	60 M	Coverage 250 KM
EKCOMBE NDB (7°W)	EKO	334 KHZ	H24	470812N 0283830E	—	Coverage 45 KM

ENR 4.2 SPECIAL NAVIGATION SYSTEMS

<i>Name of station (ID) or chain</i>	<i>Type of SVC</i>	<i>Frequency</i>	<i>Hours of operation</i>	<i>Coordinates TRANS STN</i>	<i>Remarks</i>
1	2	3	4	5	6
DECCA					
MANGERN CHAIN					
Feldmad	Master	85.720 KHZ	H24	522630N 0234245W	Coverage: APRX 500 KM by day, 300 KM by night
Kyllstad	Red Slave	114.2928 KHZ	H24*	512155N 0213204W	* At night monitored by automatic equipment only.
Venze	Green Slave	128.5794 KHZ	H24*	541708N 0241610W	
Lauterber	Purple Slave	71.433 KHZ	H24*	511925N 0255921W	
LORAN					
NW OCEAN CHAIN					
Dalfrederiks (Sakna) Landgreen/IL 4	LORAN Master	1 950 KHZ	H24	595805N 0293714W	
Lebatt/IL 4	LORAN Slave	1 950 KHZ	H24	521453N 0403621W	
Vistabona/IL 3	LORAN Master	1 950 KHZ	H24	484146N 0380518W	
Lebatt/IL 3	LORAN Slave	1 950 KHZ	H24	521453N 0403621W	
CONSOL					
UGO/LG	CONSOL position lines	2 850 KHZ Transmission Cycle 5.0" LG 2.5" Break 30.0" Dots/Dashes 2.5" Break 17.5" Non-directional 2.5" Break Total 60.0" seconds	H24	431500N 0362900W Central Mast	Distance and GEO BRG from Central Mast to N Mast — 2 500 M-355°30' to S Mast — 2 600 M-184°30'

ENR 4.3 GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS)

<i>Name of GNSS element</i>	<i>Frequency</i>	<i>Coordinates</i>	<i>Remarks</i>
		<i>Nominal SVC area</i> <i>Coverage area</i>	
1	2	3	4
GPS	1 575.42 MHz	Statewide	En-route, terminal and non-precision approaches (NPA). No GPS NOTAM has been published.
WAAS	1 575.42 MHz	Statewide to approximately N600	Subject to availability of at least one WASS satellite.

ENR 4.4 NAME-CODE DESIGNATORS FOR SIGNIFICANT POINTS

<i>Name-code designator</i>	<i>Coordinates</i>	<i>ATS route or other route</i>	<i>Name-code designator</i>	<i>Coordinates</i>	<i>ATS route or other route</i>
1	2	3	1	2	3
ABOLA	454236N 0351012W	UL 123	ODMUS	492130N 0200900W	UA 345
ATLIM	544306N 0470000W	G 456	SANOK	412448N 0300306W	UL 123
BARIM	423006N 0370006W	A4/UA4	TEMPO	565024N 0295136W	A6/UA6
EBOTO	423006N 0260054W	A 876	UKORO	405524N 0364848W	A 123
ILURU	500112N 0413648W	UL 123	VEGAT	492130N 0210800W	A4/UA4

ENR 4.5 AERONAUTICAL GROUND LIGHTS — EN-ROUTE

<i>Name IDENT (coordinates)</i>	<i>Type and intensity (1 000 Candelas)</i>	<i>Characteristics</i>	<i>Operating hours</i>	<i>Remarks</i>
1	2	3	4	5
Atura 552200N 0335900W	Marine W 500	GP FLG (3) W EV 10 SEC	HN	
Ceta 431200N 0332200W	Marine G 150	GP FLG (3) G EV 12 SEC	HN	
Rock Islands 571900N 0262500W	Marine W 500	GP FLG (4) W EV 30 SEC	HN	
SIBY 475300N 0285400W	AWY BCN W 1 600/R 240	GP FLG (2) W/R EV 10 SEC	HN	

ENR 5. NAVIGATION WARNINGS**ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS**

<i>Identification, name and lateral limits</i>	<i>Upper limit</i>	<i>Remarks (time of activity, type of restriction, nature of hazard, risk of interception)</i>
	<i>Lower limit</i>	
1	2	3
PROHIBITED AREAS		
EAP2 Vaardnor A circle, 15 NM radius centred at 522200N 0220600W	<u>UNL</u> GND	Nuclear Energy Plant.
RESTRICTED AREAS		
EAR1 Bravo Sector of an arc, 25 NM radius centred at 551400N 0361000W, from 270° GEO clockwise to 137° GEO.	<u>1 525 M</u> GND	Gunfiring.
EAR3 Burgenvalk 502800N 0382800W – 502600N 0340000W – 484800N 0340000W – 490000N 0382800W to point of origin.	<u>FL 360</u> FL 230	Air-to-air firing. Penetration possible after prior permission from Wichnor TWR.
EAR5 Winswuk 472000N 0394000W – 434000N 0363000W – 430000N 0380000W – along the FIR/State boundary to 470000N 0410000W – to point of origin.	<u>FL 360</u> GND	Risk of interception in the event of inadvertent penetration. Flight within the area after special permission from the Civil Aviation Authority only.
DANGER AREAS		
EAD4 Horsham A circle, 20 KM radius centred at 453006N 0290025W.	<u>FL 360</u> GND	Bombing exercise. Active: MON–FRI 0700–1700 (0600–1600).
EAD6 Donlon A circle, 8 KM radius centred at 522300N 0311300W.	<u>FL 360</u> GND	Air-to-air firing. Active: MON–FRI 0700–1600 (0600–1500).

**ENR 5.2 MILITARY EXERCISE AND TRAINING AREAS AND
AIR DEFENCE IDENTIFICATION ZONE**

<i>Name Lateral limits</i>	<i>Upper/lower limits and system/ means of activation announcement INFO for CIV FLT</i>	<i>Remarks Time of ACT Risk of interception (ADIZ)</i>
1	2	3
TRAINING AREAS		
NORTH EAST I	<u>FL450</u> 700 M GND	ACT: MON–THU 0700–1600 FRI 0700–1500
534052N 0291042W – 534052N 0250532W – 522056N 0250532W – 522056N 0291042W – 534052N 0291042W	Rules of the air not always complied with. Controlled FLT separated from training flights by ACC Amswell.	
NORTH EAST II	Non-controlled flights call Amswell information on 121.100 MHZ for information on ACT.	
534052N 0250532W – 534052N 0210805W – 523315N 0210805W – 522056N 0250532W – 534052N 0250532W		
SOUTH EAST III		
464447N 0264521W – 464447N 0210805W – 461233N 0210805W – 452942N 0264521W – 464447N 0264521W		
EXERCISE AREAS		
BLUE ANGEL SOUTH	Information on activation including upper and lower limits and contact authority provided by NOTAM.	SAR exercise/operations in VMC only.
In Amswell FIR and Broxby FIR/CTA in the North Alma Sea BTN 15°W and 30°W and 40°N and 45°N	Non-exercise ACFT should avoid areas.	Dates and times promulgated by NOTAM ten days in advance.
BLUE ANGEL NORTH	If area cannot be avoided, detailed INFO on actual activities can be obtained from Amswell ACC or Denham FIC.	
In Amswell FIR and Denham FIR in the Caybis Sea north of 56°N and up to 60°N		
AIR DEFENCE IDENTIFICATION ZONE (ADIZ)		
ADIZ SOUTH	<u>UNL</u> <u>SFC</u>	H24
4331N 02108W – 4124N 03003W – 4044N 03711W – 4220N 03700W – Along the coastline to – 4505N 02115W – 4331N 02108W	Provide identification 10 MIN BFR entry.	Unidentified ACFT will be intercepted.

ENR 5.3 OTHER ACTIVITIES OF A DANGEROUS NATURE AND OTHER POTENTIAL HAZARDS**ENR 5.3.1 Other activities of a dangerous nature**

<i>Lateral limits coordinates</i>	<i>Vertical limits</i>	<i>Advisory measures</i>	<i>Authority respon- sible for INFO</i>	<i>Remarks Time of ACT</i>
1	2	3	4	5
CAYBIS HELICOPTER TRAFFIC ZONE				
581000N 0400000W – 581000N 0370000W – 564000N 0374500W – 564000N 0401000W – 581000N 0400000W	<u>3 000 M</u> SFC	Avoid flying below 3 000 M	Radio Station “Platform Charlie” FREQ 123.45 MHZ.	Obtain TFC INFO from Radio Station “Platform Charlie” 0400–2300 UTC.
FIELD ALPHA Circle with radius of 15 NM centred on 574000N 0384000W	<u>700 M</u> SFC	Cold flaring. Large amounts of explosive gas mixture in atmosphere.	Radio station “Platform Charlie” FREQ 123.45 MHZ.	Obtain INFO on activities from Radio Station “Platform Charlie” H24.
FIELD BRAVO Circle with radius of 15 NM centred on 574000N 0382000W		Avoid area below 700 M.		
FIELD CHARLIE Circle with radius 15 NM centred on 570000N 0383000W				

5.3.2 Other potential hazards

<i>Lateral limits coordinates</i>	<i>Vertical limits</i>	<i>Advisory measures</i>	<i>Authority responsible for INFO</i>	<i>Remarks</i>
1	2	3	4	5
DONLON 522318N 0315658W	Up to 31 000 M MSL	Radiosonde/Upperwind radio observations MAX LEN 30 M MAX WT 2.3 KG MAX ROC 1 400 FT/MIN	Meteorological Bureau 101 West Avenue Donlon 4 Tel: 0123 695 3333	Daily 0500–0545 1030–1100 1700–1745 2230–2300 EET 80 MIN Subject to ATC clearance
VOLCANO TAMALS 502530N 0301525W	In eruptions risk of volcanic ash up to 10 000 M	Avoid flying below 11 000 M	State Volcanological Agency 123 East Avenue Donlon 6 Tel: 0123 865 2266	TAMALS last erupted August 2000 and is considered active.

ENR 5.4 AIR NAVIGATION OBSTACLES — AREA 1
(Height 100 m AGL or higher)

<i>OBST ID or designation</i>	<i>OBST type</i>	<i>OBST position</i>	<i>ELEV/HGT (M)</i>	<i>OBST LGT Type/Colour</i>	<i>Remarks</i>
1	2	3	4	5	6
Justine	Mast	510136N 0311932W	277/163	OBST/R	Obstacle data sets are available (see GEN 3.1.6)
Rainby	Chimney	553208N 0310225W	178/136	OBST/R	
Kipol	Antenna mast	462021N 0250000W	505/454	Hazard light/ FLG W	
Woodbank	Bridge tower	425015N 0364952W	170/110	Illuminated (flood light)	

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES

<i>Designation and lateral limits</i>	<i>Vertical limits</i>	<i>Operator/User Tel Nr.</i>	<i>Remarks and time of ACT</i>
1	2	3	4
GLIDING AREAS			
Area G1 550000N 0242700W – 545100N 0233600W – 542100N 0221800W – 540800N 0235000W to point of origin	FL 80* <u>3 500 FT MSL</u>	Tomar Flying Club TEL 062 535 7373	* The area will not be allocated for altitudes above cloud base (base for CU-clouds). Daily SR–SS.
Area G2 505300N 0230400W – 505300N 0210502W – 502100N 0210400W – 501300N 0220000W to point of origin	FL 70* <u>3 000 FT MSL</u>	Winbord Flying Club TEL 064 795 4231	
Area G3 482700N 0263600W – 481800N 0251300W – 474700N 0245500W – 475100N 0262700W to point of origin	FL 60* <u>2 500 FT MSL</u>	Nistock Flying Club TEL 036 481 3113	
Area G4 452600N 0340000W – 452100N 0322700W – 444500N 0321800W – 444000N 0330400W to point of origin	FL 70* <u>2 500 FT MSL</u>	Uleni Aero Club TEL 029 496 4695	Allocation of the area may take place only after 1100 (1000).
HANG GLIDING AREAS			
Tomar Circle with radius of 10 NM centred on 541008N 0234503W	<u>1 000 M</u> GND	Tomar Flying Club TEL 062 535 7373	SAT and SUN: SR–SS
Uleni Circle with radius of 15 NM centred on 452115N 0322503W	<u>1 000 M</u> GND	Uleni Aero Club TEL 029 496 4695	SAT and SUN: SR–SS
PARACHUTE JUMPING AREAS			
Donburg Circle with radius of 2 NM centred on 515202N 0340015W	<u>2 000 M</u> GND	Donburg Aero Club TEL 053 130 2546	SAT: 0600–SS SUN: 0900–1600

Note.— Other activities which may be listed under this heading are microlight flying, manned balloon launching, high flying kites, etc.

**ENR 5.6 BIRD MIGRATION AND
AREAS WITH SENSITIVE FAUNA****1. Bird migration**

1.1 Bird migration occurs during the whole year but culminates in the periods ultimo March to medio May (spring migration) and primo September to medio November (autumn migration). Bird densities are measured by radar and the scale 0 to 8 is used as follows:

0 = No birds observed

8 = Bird density very high.

1.2 Spring migration

Spring migration culminates in the period ultimo March to medio May, and peak numbers for most species occur in April with densities very frequently above 5. The most important factors inducing heavy migration are a rise in temperature, light winds and southerly winds.

Migration patterns and altitudes

During the night, migration is generally on a broad front covering the whole country and its surrounding waters, with general direction from N to NE. During the day, migration tends to concentrate along coastlines. Generally night migration is higher than day migration. During the night, the average altitude is APRX 1 000–1 500 m; during the day, APRX 300–1 000 m.

1.3 Autumn migration

Autumn migration culminates in the period primo September to medio November, and peak numbers for most species occur in October with densities frequently above 5. The most important factor inducing heavy migration is a fall in temperature. High densities are also correlated with winds from N to NE, light winds, little cloud cover and high pressure.

Migration patterns and altitudes

During the night, migration is on a broad front covering the whole country and its surrounding waters, with general direction south. During the day, migration tends to concentrate in the central part of (specify) and along coastlines. Generally night migration is higher than day migration. During the night, the average altitude is APRX 1 000–1 500 m; during the day, APRX 300–1 000 m.

1.4 Number of birds

At least 100 million birds pass over (specify) and the surrounding waters during autumn. Smaller passerines are dominating, and several species occur in great densities and are very hazardous to aircraft, e.g.: starlings, thrushes and finches. Crowbirds, ducks, gulls, waders, pigeons and birds of prey are also hazardous and very numerous (tens of thousands to several million).

1.5 Information on densities

On weekdays, MON–FRI at 0700, 0930 and 1130 UTC, the flight information service will issue information if the bird density is 5 or more. Such information will be available at the briefing office at Donlon, comprising the following:

- a) bird risk warning
- b) issuing station
- c) DTG
- d) GEOREF squares and intensity
- e) heightband (AGL)
- f) validity.

1.6 Caution note

When an intensity of 5 or more is reported, it is recommended that aircraft fly at heights above 1 000 m AGL by day and above 1 500 m AGL by night.

1.7 Reporting of bird strike*General*

To achieve more comprehensive statistics of bird strikes, the Civil Aviation Administration is collecting information. All pilots on flights within Amswell FIR are therefore requested to report to the Civil Aviation Administration all cases of bird strike or incidents where a risk of bird strike has been present.

Reporting

To facilitate the reporting of incidents, a Bird Strike Reporting Form has been produced and may be obtained at

airport offices at public aerodromes or from the Civil Aviation Administration. In connection with incidents on or near an aerodrome, pilots are requested to collect the bird, or as much of the remnants as possible, and forward it to:

Dr. Phil. H. Lind
Institute of Population Biology
University Park
Donlon.

Any supplementary information on the circumstances under which the incident took place should also be added.

The index chart on page ENR 6-8 shows the main bird migration routes, with an indication of the migration periods and heights above ground level.

The index chart on page ENR 6-9 shows the bird concentration for the period JAN–APR.

2. Areas with sensitive fauna

2.1 Many species of birds as well as mammals are sensitive to noise from aircraft and overflying their breeding and resting places may be critical. In accordance with the Regulations for Civil Aviation (specify), overflying of such areas at heights below 1 000 ft (300 m) shall be avoided.

2.2 The areas are shown on the index charts on pages ENR 6-9 to ENR 6-..... (specify) and at Aeronautical Chart — ICAO 1:500 000 (specify name of chart).

ENR 6. EN-ROUTE CHARTS

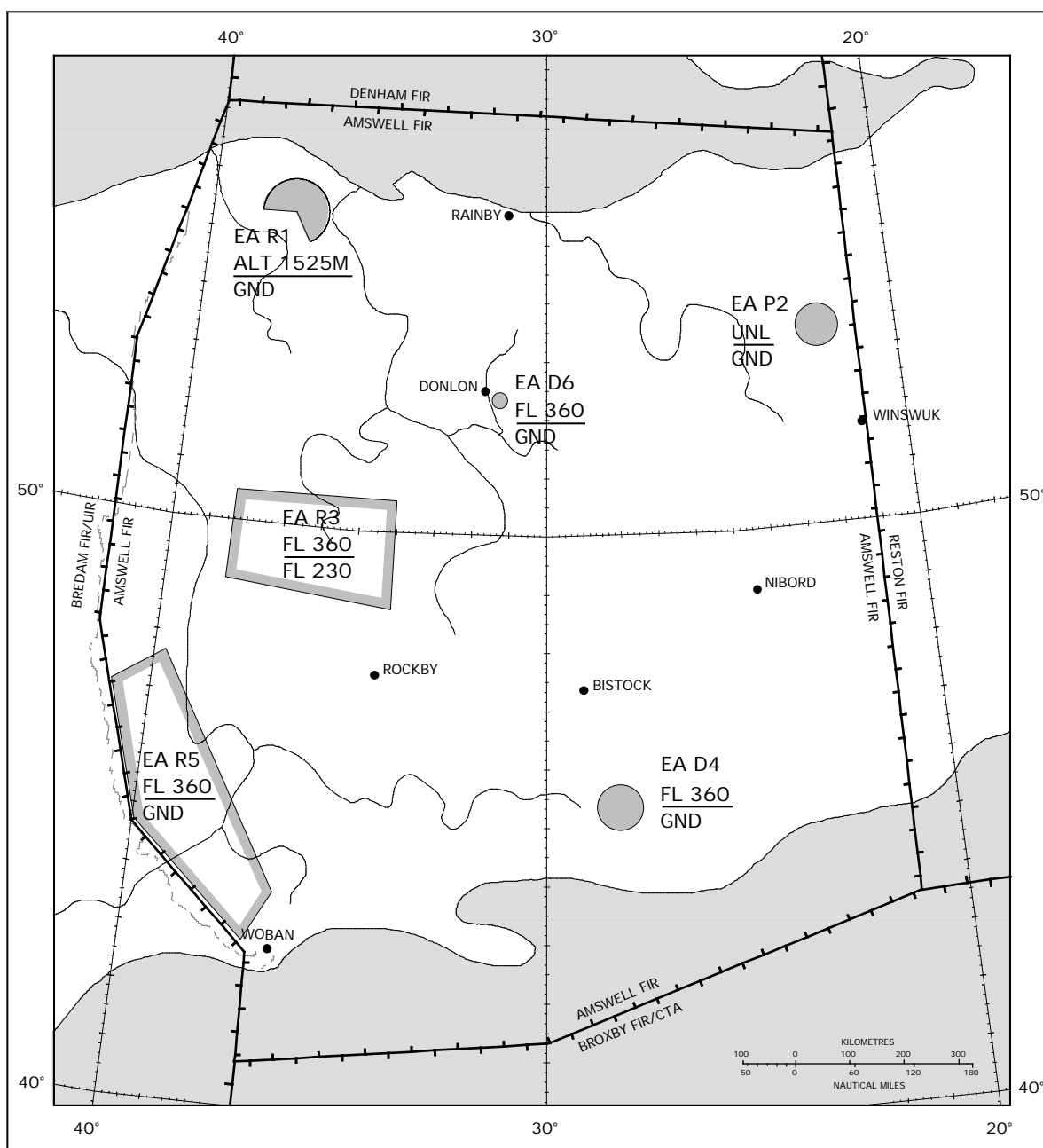
(including index charts)

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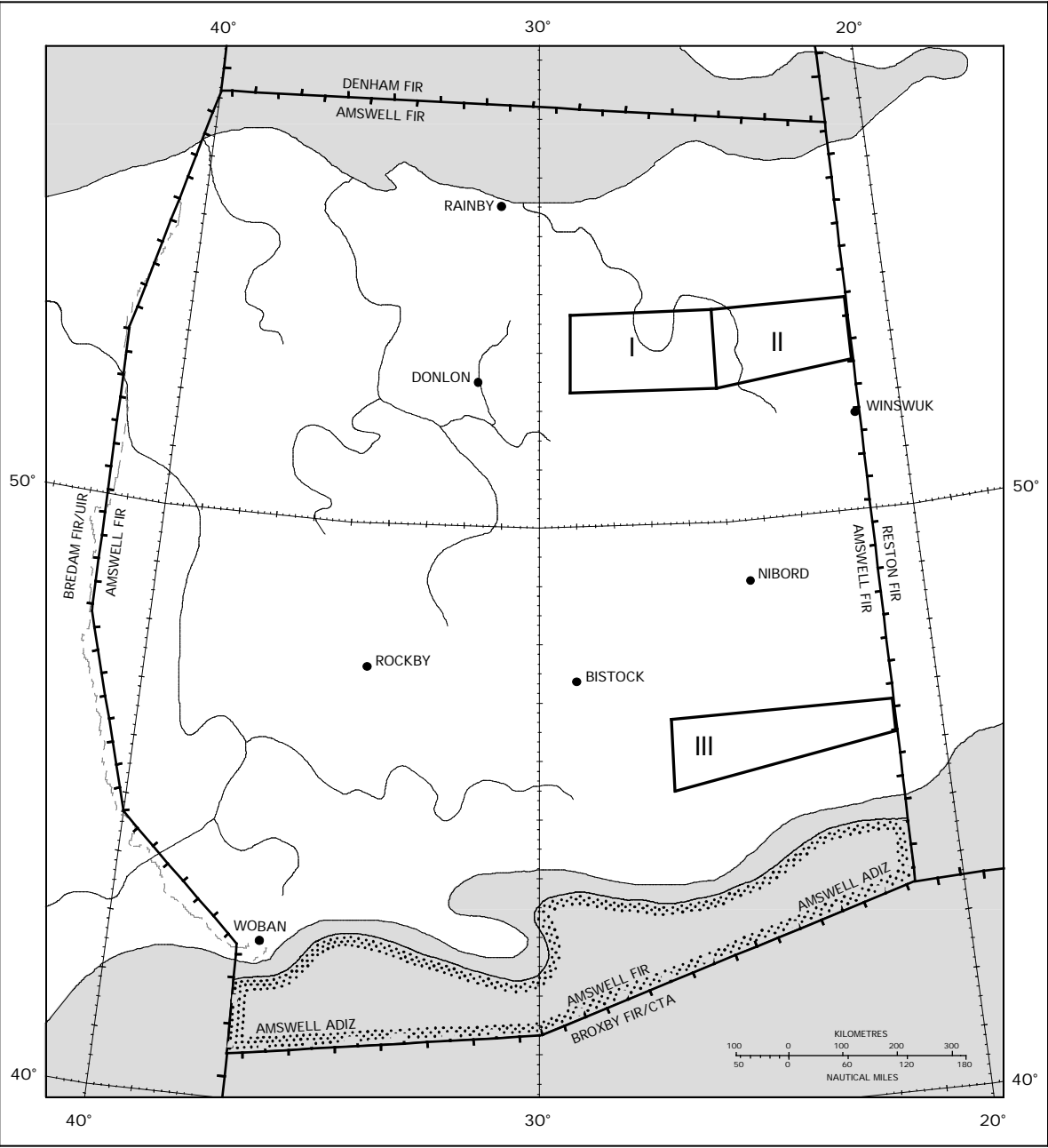
AIR TRAFFIC SERVICES AIRSPACE - INDEX CHART

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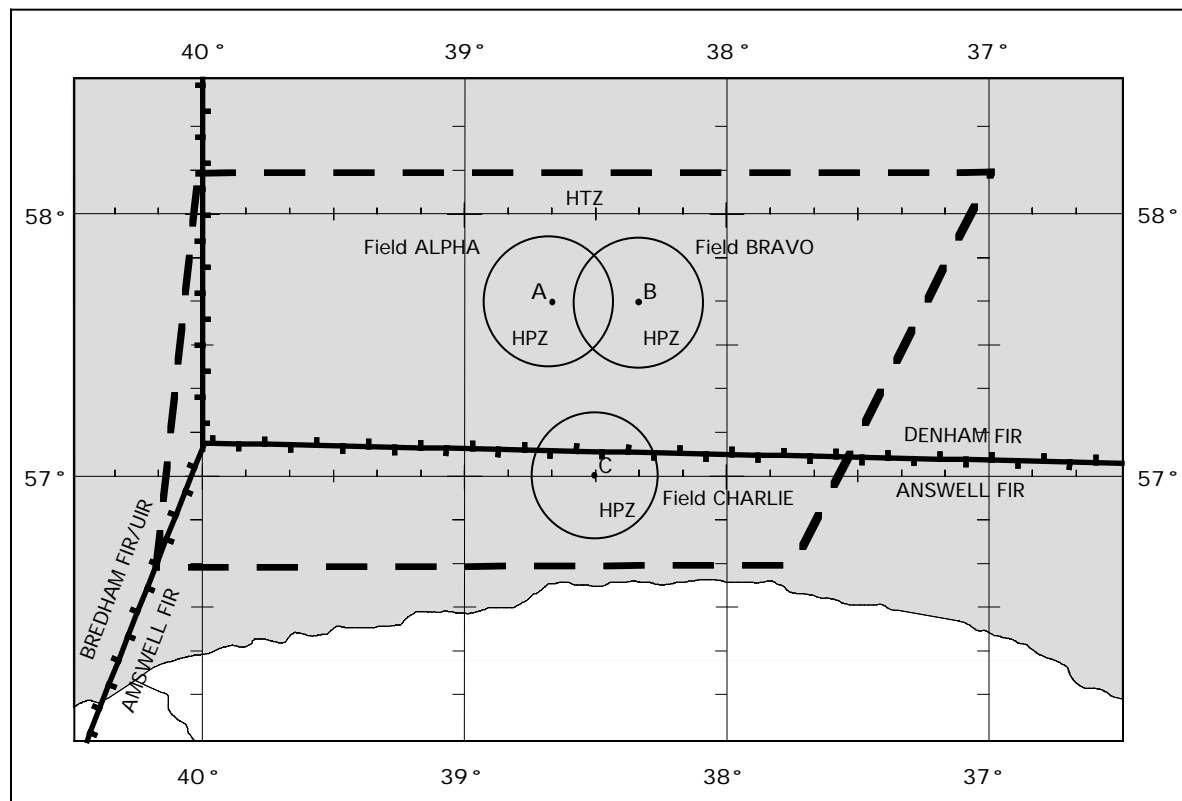
PROHIBITED, RESTRICTED AND DANGER AREAS - INDEX CHART



MILITARY EXERCISE TRAINING AREAS AND ADIZ - INDEX CHART

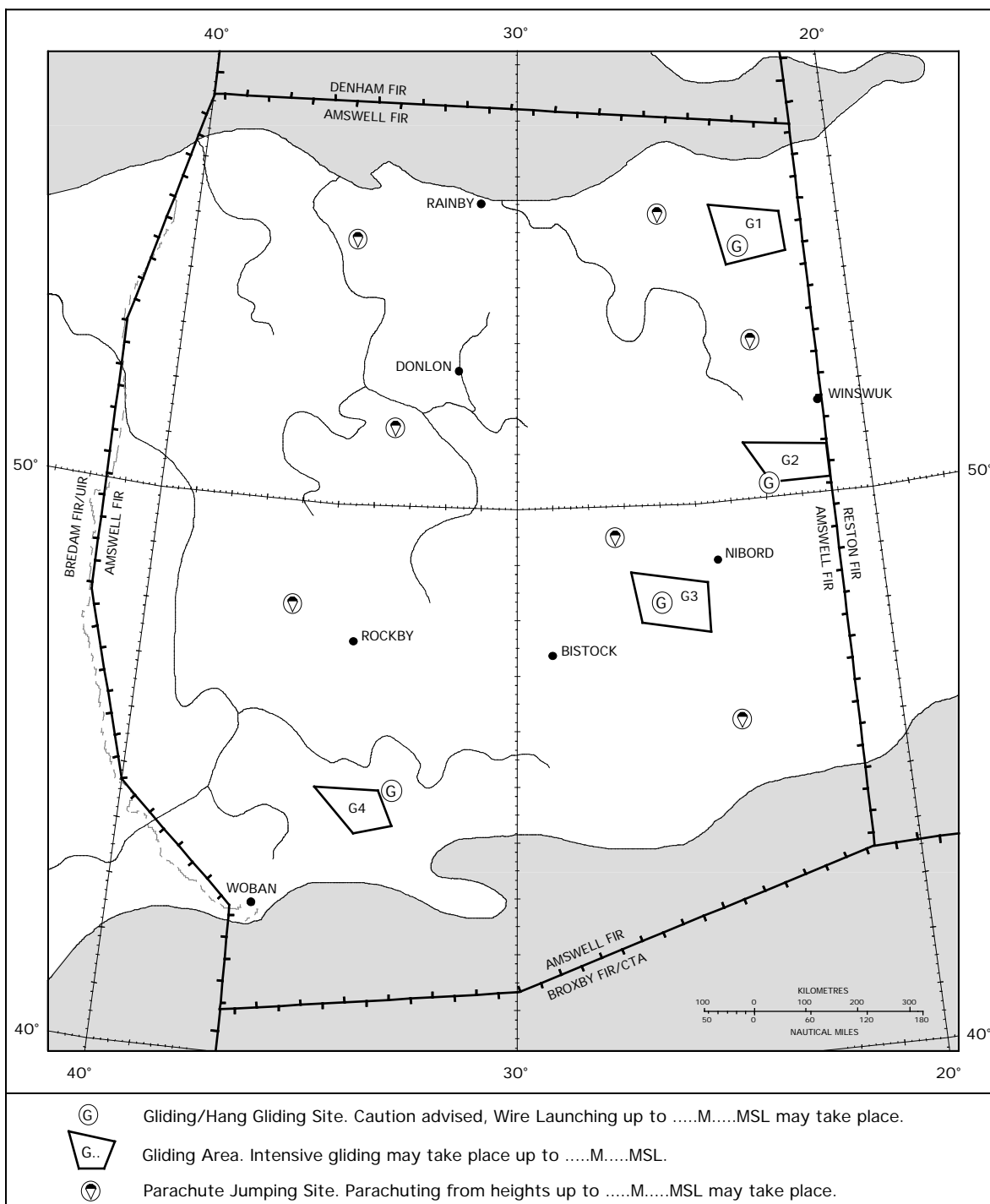


OTHER ACTIVITIES OF A DANGEROUS NATURE - INDEX CHART



HTZ = Helicopter traffic zone
HPZ = Helicopter platform zone

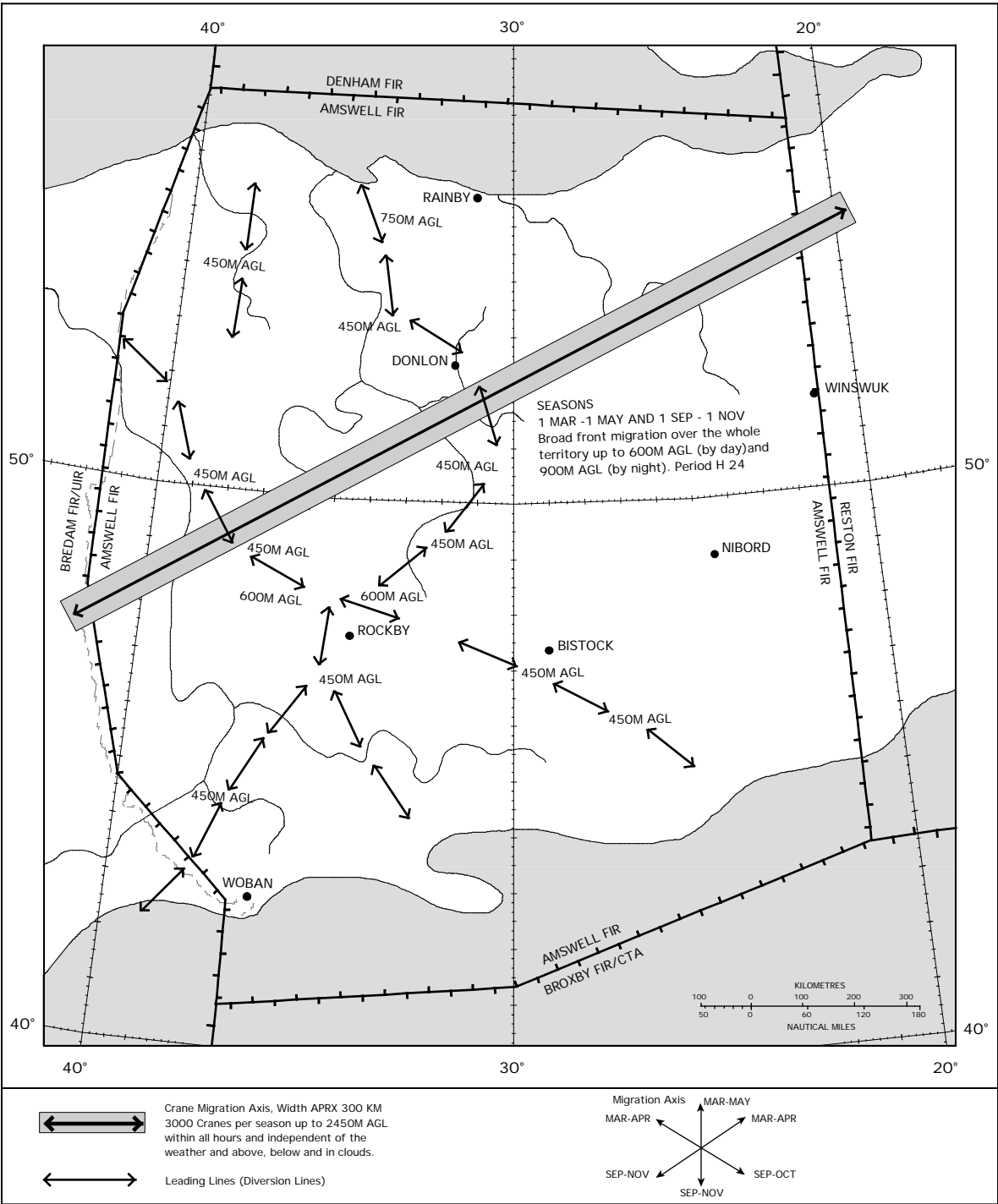
AERIAL SPORTING AND RECREATIONAL ACTIVITIES - INDEX CHART



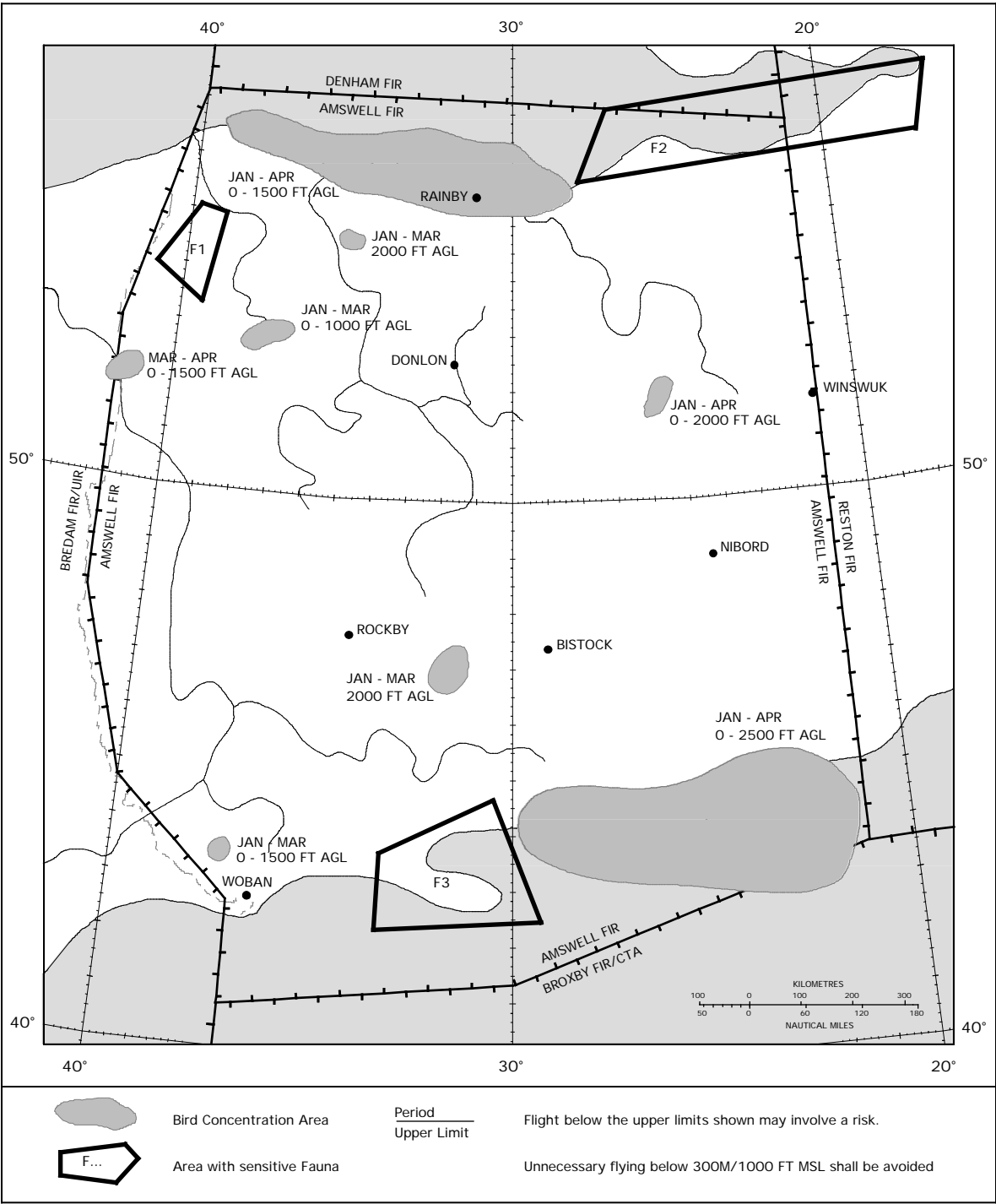
RADIO FACILITY - INDEX CHART

TO BE DEVELOPED

BIRD MIGRATION ROUTES - INDEX CHART



BIRD CONCENTRATIONS AND AREAS WITH SENSITIVE FAUNA (JAN-APR) - INDEX CHART



AIP
AERONAUTICAL INFORMATION PUBLICATION

(Name of State)

PART 3
AERODROMES (AD)

VOLUME NR
(If more than one volume)

AIP
AERONAUTICAL INFORMATION PUBLICATION

(Name of State)

PART 3
AERODROMES (AD)

VOLUME NR
(If more than one volume)

PART 3 — AERODROMES (AD)**AD 0.**

- AD 0.1** **PREFACE — Not applicable**
AD 0.2 **RECORD OF AIP AMENDMENTS — Not applicable**
AD 0.3 **RECORD OF AIP SUPPLEMENTS — Not applicable**
AD 0.4 **CHECKLIST OF AIP PAGES — Not applicable**
AD 0.5 **LIST OF HAND AMENDMENTS TO THE AIP — Not applicable**

AD 0.6 TABLE OF CONTENTS TO PART 3

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AD 1. AERODROMES/HELIPORTS — INTRODUCTION

AD 1.1 AERODROME/HELIPORT AVAILABILITY

1. General conditions under which aerodromes/heliports and associated facilities are available for use

Commercial flights are not permitted to take off from or land at any aerodrome/heliport not listed in this AIP except in cases of real emergency or when special permission has been obtained from the Civil Aviation Administration.

In addition to the aerodromes/heliports available for public use listed in this AIP, a number of other aerodromes/airfields are located throughout the country. These aerodromes/airfields are available only for private flights and are subject to permission for use by the owner. Details about these aerodromes/airfields can be obtained through the Aero Club at the following address.

..... Aero Club
..... Airfield
Falcon Road
.....

Landings made other than at an international aerodrome/heliport or a designated alternate aerodrome/heliport

If a landing is made other than at an international aerodrome/heliport or a designated alternate aerodrome/heliport, the pilot-in-command shall report the landing as soon as practicable to the health, customs and immigration authorities at the international aerodrome/heliport at which the landing was scheduled to take place. This notification may be made through any available communication link.

The pilot-in-command shall be responsible for ensuring that:

- a) if pratique has not been granted to the aircraft at the previous landing, contact between other persons on the one hand and passengers and crew on the other is avoided;
- b) cargo, baggage and mail are not removed from the aircraft except as provided below;

- c) any foodstuff of overseas origin or any plant material is not removed from the aircraft except where local food is unobtainable. All food refuse including peelings, cores, stones of fruit, etc. must be collected and returned to the galley refuse container, the contents of which should not be removed from the aircraft except for hygiene reasons; in that circumstance the contents must be destroyed either by burning or by deep burial.

Traffic of persons and vehicles on aerodromes

Demarcation of zones

The grounds of each aerodrome are divided into two zones:

- a) a public zone comprising the part of the aerodrome open to the public; and
- b) a restricted zone comprising the rest of the aerodrome/heliport.

Movement of persons

Access to the restricted zone is authorized only under the conditions prescribed by the special rules governing the aerodrome/heliport. The customs, police, and health inspection offices and the premises assigned to transit traffic are normally accessible only to passengers, to staff of the public authorities and airlines and to authorized persons in pursuit of their duty. The movement of persons having access to the restricted zone of the aerodrome/heliport is subject to the conditions prescribed by the air navigation regulations and by the special rules laid down by the aerodrome administration.

Movement of vehicles

The movement of vehicles in the restricted zone is strictly limited to vehicles driven or used by persons carrying a traffic permit or an official card of admittance. Drivers of vehicles, of whatever type, operating within the confines of the aerodrome/heliport must respect the direction of the traffic, the traffic signs and the posted speed limits and

generally comply with the provisions of the highway code and with the instructions given by the competent authorities.

Policing

Care and protection of aircraft, vehicles, equipment and goods used at the aerodrome/heliport are not the responsibility of the State or any concessionaire; they cannot be held responsible for loss or damage which is not incurred through action by them or their agents.

Use of the heliports

Unless other permission has been granted by the Civil Aviation Administration, the heliports may be used only for flights in accordance with Visual Flight Rules (VFR).

The direction of TKOF zones at the individual heliport refers only to zones, which for flight with helicopters of the type (specify) are determined to be free of obstructions. Pilots shall, before using a heliport, ensure that a clear approach and departure can be carried out and, in case of an emergency, that suitable landing sites are available along the planned track, taking into consideration the performance of the helicopter.

Landing, parking and storage of aircraft on aerodromes/heliports under the control of the Civil Aviation Administration

The conditions under which aircraft may land and be parked, housed or otherwise dealt with at any of the aerodromes/heliports under the control of the Civil Aviation Administration are as follows:

- a) The fees and charges for the landing, parking or housing of aircraft shall be those published from time to time by the Civil Aviation Administration (hereinafter referred to as "CAA") in the AIP or AIC.

The fees or charges for any supplies or services which may be furnished to aircraft by or on behalf of the CAA at any aerodrome/heliport under the control of the CAA shall, unless otherwise agreed before such fees or charges are incurred, be such reasonable fees and charges as may from time to time be determined by the CAA for that aerodrome/heliport. The fees and charges referred to shall accrue from day to day and shall be payable to the CAA on demand.

- b) The CAA shall have a lien on the aircraft, its parts and accessories, for such fees and charges as aforesaid.
- c) If payment of such fees and charges is not made to the CAA within 14 days after a letter demanding payment thereof has been sent by post addressed to the registered owner of the aircraft, the CAA shall be entitled to sell, destroy or otherwise dispose of the aircraft and any of its parts and accessories and to apply the proceeds from so doing to the payment of such fees and charges.
- d) Neither the CAA nor any servant or agent of the government shall be liable for loss or damage to the aircraft, its parts or accessories or any property contained in the aircraft, howsoever such loss and damage may arise, occurring while the aircraft is on any aerodrome/heliport under the control of the CAA or is in the course of landing at or taking off from any such aerodrome/heliport.

2. Applicable ICAO documents

The Standards and Recommended Practices of Annex 14, Volumes I and II, are applied without differences.

3. Civil use of military air bases

General

Use of military air bases in (State) by other than State-registered aircraft may be made solely when prior permission has been obtained. The use of military air bases as alternate aerodromes may likewise be made solely when prior permission thereto has been obtained. (specify) Air Base is not affected by these regulations. Permission to use (specify) and (specify) Air Bases will be granted unless special conditions apply. Permission may at any time be withdrawn with immediate effect, should circumstances so require.

Submission of application

Application in writing for permission to use a military air base shall be submitted directly to the air base concerned

well in advance of the date of flight. The addresses are as follows:

..... Air Base
20 Highland Road
..... UJ1 WT2
Tel: 0123 6930304
Telefax: 0123 6930314
Telex: 99 5757
AFS: NIL

Rules and conditions

Operations on the air base must be carried out in accordance with the rules and conditions stated below with due regard to such other conditions as may have been stipulated for each individual permission.

- a) A flight plan shall be submitted for each flight. During flight in controlled air space and during operations on the manoeuvring area, the pilot-in-command shall closely observe the directions given.
- b) The Commander of the air base establishes the rules which are to be observed by flight crew members and passengers concerning security measures, traffic and stays at the air base.

As regards the air bases (specify) and (specify), photographing from the air as well as on the ground is prohibited. At the remaining air bases, the local ban on photography will apply as posted. Flight crew members and ground personnel shall immediately report any violations.

- c) The Defence Forces shall not be liable for the theft of and fire-, water- or other damage to aircraft, their equipment, flight crew members, passengers, cargo, etc. caused during stays at the air base.

The Defence Forces reserve the right to claim compensation for damage caused by civil aircraft, flight crew members or passengers to Air Force material, buildings and personnel within the area of an air base.

- d) Landing and other charges will be collected in accordance with the provisions of the current "Tariff Regulations applying to Public State-operated Airports", approved by the Ministry of Transport.

4. CAT II/III operations at aerodromes

Promulgation of an aerodrome as available for Category II or Category III operations means that it is suitably equipped and that procedures appropriate to such operations have been determined and are applied when relevant.

Promulgation implies that at least the following facilities are available:

ILS	— certificated to relevant performance category.
Lighting	— suitable for category promulgated.
RVR system	— may be automatic or manned system for Category II; will be automatic system for Category III.

Special procedures and safeguards will be applied during Category II and III operations. In general, these are intended to provide protection for aircraft operating in low visibilities and to avoid disturbance of the ILS signals.

Protection of ILS signals during Category II or III operations may dictate that pre-take-off holding positions be more distant from the runway than the holding positions used in good weather. Such holding positions will be appropriately marked and will display signs conforming to the specifications in Annex 14, Volume I, on one or both sides of the taxiway; there may also be a stop bar of red lights. For aircraft taxiing off the runway during Category III operations, exit taxiway centre line lights are colour-coded to facilitate notification of runway vacation; the colour coding ends at the boundary of the ILS critical/sensitive area. Pilots are required to make a "Runway Vacated" call on RTF when the aircraft has reached the colour code of part of the exit taxiway centre line lights, due allowance being made for aircraft size to ensure that the entire aircraft is clear of the ILS critical/sensitive area.

In actual Category II or III weather conditions, pilots will be informed by ATC of any unserviceabilities in the promulgated facilities so that they can amend their minima, if necessary, according to their operations manual. Pilots who wish to carry out a practice Category II or Category III approach are to request Practice Category II (or Category III) Approach on initial contact with Approach Control. For practice approaches there is no guarantee that the full safeguarding procedures will be applied and pilots should anticipate the possibility of a resultant ILS signal disturbance.

5. Friction measuring device used and friction level below which the runway is declared slippery when it is wet

slippery when wet, no measuring will take place, and the runway will be reported as being "WET".

For the friction measuring devices used, see AD 1.2. Where only water is present on a runway and periodic measurements indicate that the runway will not become

6. Other information

NIL.

AD 1.2 RESCUE AND FIRE FIGHTING SERVICES AND SNOW PLAN**1. Rescue and fire fighting services**

At aerodromes approved for scheduled and/or non-scheduled traffic with aeroplanes carrying passengers, Rescue and Fire Fighting Services and, in some cases, also Sea Rescue Services are established in accordance with the regulations for civil aviation.

Note.— For heliports, special rules will apply.

Information about whether there is service and what the extent of that service is, is given on the relevant page for each aerodrome.

Scheduled or non-scheduled traffic with aeroplanes carrying passengers is not allowed to use aerodromes without Rescue and Fire Fighting Services.

Each individual service is categorized according to the table shown below. Temporary changes will be published by NOTAM.

<i>Rescue and fire fighting services</i>	
<i>Aerodrome category</i>	<i>Amount of water in litres for production of performance level A foam</i>
3	1 800
4	3 600
5	8 100
6	11 800
7	18 200
8	27 300
9	36 400

(Category 1 and 2 are not used in (State)).

2. Snow plan**2.1 Organization of winter service**

During the winter period from approximately 1 November to approximately 1 April, the Aerodrome Operational Service at the aerodromes listed below will conduct the following duties:

- a) Surveillance of the manoeuvring area and apron with a view to noting the presence of ice, snow or slush.

- b) Measurement of the friction coefficient or estimate of the braking action when ice, snow and/or slush are present on more than 10% of the total area of the runway in question, and as far as possible at taxiways and aprons.
- c) Implementation of measures to maintain the usability of the runway, etc.
- d) Reporting of the conditions mentioned in a) to c) above.

Winter service is established at the following aerodromes:

Akvin	Siby
Dengron	Wichnor
Donlon	Yanmore

2.2 Surveillance of movement areas

The Aerodrome Operational Service monitors the condition of the manoeuvring area and the apron within the published aerodrome hours of service.

2.3 Measuring methods and measurements taken

2.3.1 The depth of a layer of snow or slush is measured by an ordinary measuring rod. Measurements will be taken at a large number of places and a representative mean value calculated. On a runway, the mean value will be calculated for each third of the runway. For removal of ice and compacted snow which cannot be removed with mechanical equipment, chemicals are used.

2.3.2 Friction coefficients

2.3.2.1 Whenever information on braking action promulgated in accordance with this snow plan in terms of friction coefficients is used as a basis for assessing the stopping and manoeuvring capability of an aircraft, it is of utmost importance to keep in mind that these friction coefficients pertain to a measuring device and therefore, as objective parameters, are valid for that specific device only.

2.3.2.2 The following methods of measurement will apply:

- a) Continuous method whereby the friction coefficient is recorded continuously by means of special

devices (MU-meter (MUM) and surface friction tester (SFT))

- b) Retardation measurements with the use of an instrument that only indicates the peak value of the retardation reached during each braking (Tapley meter (TAP)).

All measurements and calibrations are accomplished in accordance with the instructions given by the manufacturer for the proper use of the instruments. Measurements are taken, approximately 4 m apart, on each side of the centre line of the runway.

2.3.2.2.1 An SFT is used at Akvin, Dengron and Donlon Aerodromes. An MUM is used at Siby Aerodrome and at military air bases. A TAP is used at the remaining aerodromes listed in 2.1. Some aerodromes have reserve instruments. If a reserve instrument of a type other than the primary is used, it will be announced by ATS and by ATIS where this is available.

2.3.2.2.2 Braking action will be estimated if the friction coefficient cannot be measured due to lack of equipment or for other reasons.

2.3.2.2.3 When ice, snow or slush is present on 10% or less of the total area of a runway, the friction coefficient will not be measured and braking action will not be estimated. If in such a situation water is present, the runway will be reported WET. Where only water is present on a runway and periodic measurements so indicate, the runway will be reported as "WET".

2.4 *Actions taken to maintain the usability of movement areas*

2.4.1 Snow clearance and measures to improve braking action will be implemented and maintained as long as conditions at the movement area impede the safety and regularity of air traffic.

2.4.2 Snow clearance, etc. will normally be carried out in the following order:

1. Runway in use and access road from the fire station.
2. Taxiway(s) to runway in use.
3. Apron.
4. Other runways and areas.

Measures will be taken to clear the runways to full width but in special cases conditions may dictate that wide runways be opened temporarily for traffic even if cleared to a width of 30 m only. Snow clearance will not be considered completed until the runway is cleared to full width.

2.4.3 Measures to improve braking action will be implemented when the friction coefficient on runways and taxiways is below the maintenance planning level shown in Annex 14, Volume I, Attachment A, Section 7.

The following chemicals have been approved by the Civil Aviation Administration:

For spraying: UCAR and a mixture of pure ethylene glycol and isopropyl alcohol.

For spreading: UREA ($\text{CO}(\text{NH}_2)_2$).

Chemical de-icing of runways will be carried out to a width of not less than 15 m on each side of the centre line of the runway.

2.4.3.1 Improvement of the braking action by spreading sand with a grain size of not less than 1 mm and not exceeding 5 mm will take place. The sand will be spread out to a width of not less than 15 m on each side of the runway centre line.

2.5 *System and means of reporting*

2.5.1 The Aerodrome Operational Service will use the SNOWTAM form for the reporting which will be delivered to the Aerodrome Reporting Office/Air Traffic Service unit for further dissemination.

2.5.1.1 When ice, snow or slush no longer prevail and chemicals are no longer used, the reporting will cease after the issuance of a cancellation SNOWTAM. A new SNOWTAM will not be issued until winter conditions appear again.

2.5.2 The following definitions have been adopted:

Slush. Water-saturated snow which with a heel-and-toe slap-down motion against the ground will be displaced with a splatter; specific gravity: 0.5 up to 0.8.

Note.— Combinations of ice, snow and/or standing water may, especially when rain, rain and snow, or snow is falling, produce substances with specific gravities in excess of 0.8. These substances, due to their high water/ice

content, will have a transparent rather than a cloudy appearance and, at the higher specific gravities, will be readily distinguishable from slush.

Snow (on the ground).

- a) *Dry snow.* Snow which can be blown if loose or, if compacted by hand, will fall apart again upon release; specific gravity: up to but not including 0.35.
- b) *Wet snow.* Snow which, if compacted by hand, will stick together and tend to or form a snowball; specific gravity: 0.35 up to but not including 0.5.
- c) *Compacted snow.* Snow which has been compressed into a solid mass that resists further compression and will hold together or break up into lumps if picked up; specific gravity: 0.5 and over.

2.5.3 The extent of ice, snow and/or slush on a runway is reported on the basis of an estimate of the covered area and given in percentage of the total area of the runway, in accordance with the following:

10%	10% or less is covered
25%	11–25% of the runway is covered
50%	26–50% of the runway is covered
100%	more than 50% of the runway is covered

2.5.4 Information on braking action will be given in terms of friction numbers (friction coefficients indicated with two digits, 0 and decimal symbol being omitted) when based on measurements. In addition, the kind of measuring device used will be reported. When braking action is estimated, plain language will be used.

In MOTNE transmissions, a special code will be used.

<i>Measured friction coefficient</i>	<i>Estimated braking action</i>	<i>Code</i>
0.40 and above	good	5
0.39–0.36	good to medium	4
0.35–0.30	medium	3
0.29–0.26	medium to poor	2
0.25 or below	poor	1
9 – unreliable	unreliable	9

“Unreliable” will be reported when more than 10% of a runway surface is covered by wet ice, wet snow and/or slush. Measuring results and estimates are considered absolutely unrealistic in such situations. In reports “Unreliable” will be followed by either the friction number given by the instrument used or the estimated braking action. In the MOTNE code, the code figure “99” will be used.

In situations depicted in 2.3.2.2.3, “not available” will be reported in SNOWTAM item H and “/” will be reported in the MOTNE code for B_RB_R.

2.5.5 Snow banks will be reported when their height, within a distance of 15 m from the runway or taxiway, exceeds 60 cm.

2.5.6 When information on runway conditions is given section-wise, it is given in the order in which the conditions in question are encountered at take-off or in landing in the runway direction which is indicated by the runway number. In instructions to landing and departing aircraft, the order of section-wise information of the runway in use will thus always be in accordance with the order in which the conditions in question are encountered during take-off and landing.

2.6 *Cases of runway closure*

In cases where a postponement of clearance operations would involve a definite risk of the situation developing into a crisis, e.g. when a fall in temperature causes water or slush to become solid ice, the snow clearance service is authorized to demand that sections of the movement areas be closed to traffic.

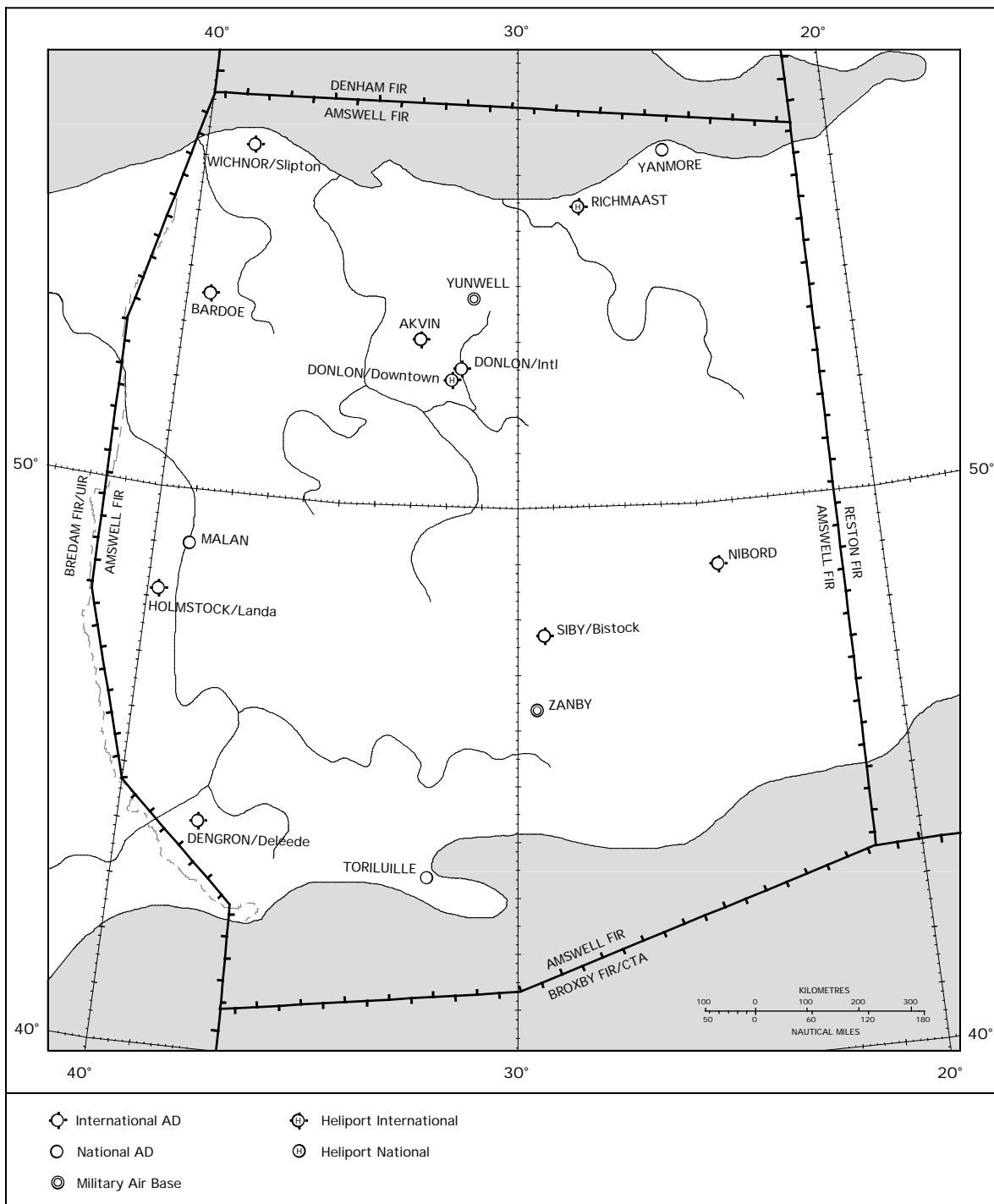
2.7 *Distribution of information about snow conditions*

Information on snow conditions at Akvin, Dengron, Donlon, Siby and Wichnor Aerodromes will be distributed directly from the individual aerodrome in a separate series of NOTAM (SNOWTAM). SNOWTAM will be prepared in accordance with Annex 15, Appendix 2. Information on snow conditions at aerodromes other than those mentioned above can be obtained at the aerodrome concerned or will be available at the Briefing Office at Donlon Aerodrome.

AD 1.3 INDEX TO AERODROMES AND HELIPORTS

Aerodrome/heliport name Location indicator	Type of traffic permitted to use the aerodrome/heliport			Reference to AD Section and remarks
	International – National (INTL-NTL)	IFR-VFR	S =Scheduled NS =Non-scheduled P =Private	
1	2	3	4	5
Aerodromes				
AKVIN/Akvin EADA	INTL-NTL	IFR-VFR	P	AD 2-EADA
DENGRON/Deleede EADE	INTL-NTL	VFR	NS – P	AD 2-EADE
DONLON/Intl. EADD	INTL-NTL	IFR-VFR	S – NS – P	AD 2-EADD 1
HOLMSTOCK/Landa EADS	INTL-NTL	IFR-VFR	S – NS – P	AD 2-EADS
MALAN/Malan EADM	NTL	IFR-VFR	NS – P	AD 2-EADM
NIBORD/Nibord EADN	INTL-NTL	VFR	NS – P	AD 2-EADN
SIBY/Bistock EADB	INTL-NTL	IFR-VFR	S – NS – P	AD 2-EADB
TORILUILLE/Toriluille *EADU	NTL	VFR	NS – P	AD 2-EADU
WICHNOR/Slipton EADW	INTL-NTL	IFR-VFR	NS – P	AD 2-EADW
YANMORE/Yanmore *EADR	NTL	VFR	NS – P	AD 2-EADR
YUNWELL (MIL AD) EADY	NTL	IFR-VFR	NS – P	AD 2-EADY
ZANBY (MIL AD) EADZ	NTL	IFR-VFR	S – NS – P	AD 2-EADZ
Heliports				
BARDOE EADO	NTL	VFR	NS – P	AD 3-EADO
DONLON DOWNTOWN HELIPORT EADH	INTL-NTL	IFR-VFR	S – NS – P	AD 3-EADH
RICHMAAST EADT	INTL-NTL	IFR-VFR	S – NS – P	AD 3-EADT
* The location indicators marked with an asterisk (*) cannot be used in the address component of AFS messages.				

AERODROMES AND HELIPORTS - INDEX CHART



AD 1.4 GROUPING OF AERODROMES/HELIPORTS

The criteria applied by (State) in grouping aerodromes/heliports for the provision of information in this AIP are as follows:

**Primary/major international
aerodrome/heliport**

The aerodrome/heliport of entry and departure for international air traffic, where all formalities concerning customs, immigration, health, animal and plant quarantine and similar procedures are carried out and where air traffic services are available on a regular basis.

**Secondary/other international
aerodrome/heliport**

Another aerodrome/heliport available for the entry or departure of international air traffic, where the formalities concerning customs, immigration, health and similar procedures and air traffic services are made available, on a restricted basis, to flights with prior approval only.

National aerodrome/heliport

An aerodrome/heliport available only for domestic air traffic, including those military aerodromes/heliports where civil air traffic is allowed under certain conditions.

AD 1.5 STATUS OF CERTIFICATION OF AERODROMES

<i>Aerodrome name Location indicator</i>	<i>Date of certification</i>	<i>Validity of certification</i>	<i>Remark</i>
1	2	3 ¹	4
AKVIN/Akvin EADA	26 NOV 2000	1 year	Certified by CAA
DENGRON/Deleede EADE	26 NOV 2000	2 years	Certified by CASA
DONLON/Intl. EADD	24 NOV 2000	3 years	Certified by DCA
HOLMSTOCK/Landa EADS	24 NOV 2000	1 JAN 2002	Certified by CAA
MALAN/Malan EADM	Not certified		
NIBORD/Nibord EADN	26 NOV 2000	5 years	Certified by CASA
SIBY/Bistock EADB	26 NOV 2000	—	Certified by CASA
TORILUILLE/Toriluille *EADU	26 NOV 2000	—	
WICHNOR/Slipton EADW	26 NOV 2000	—	
YANMORE/Yanmore *EADR	26 NOV 2000	—	Certified by CASA
YUNWELL (MIL AD) EADY	26 NOV 2000	—	Joint civil/military operation
ZANBY (MIL AD) EADZ	Not certified		
1. In column 3, the dash (—) indicates that the certificate does not have an end of validity; the certificate is perpetual. * The location indicators marked with an asterisk (*) cannot be used in the address component of AFS messages.			

AD 2. AERODROMES**EADD AD 2.1 AERODROME LOCATION INDICATOR AND NAME**

EADD — DONLON/International

EADD AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	<i>ARP coordinates and site at AD</i>	522318N 0315658W 258°/1 075 M from THR 09L
2	<i>Direction and distance from (city)</i>	045°, 9 KM from Donlon
3	<i>Elevation/Reference temperature</i>	30 M/21°C
4	<i>Geoid undulation at AD ELEV PSN</i>	12 M
5	<i>MAG VAR/Annual change</i>	3°W (1990)/0.03° decreasing
6	<i>AD Administration, address, telephone, telefax, telex, AFS</i>	Civil Aviation Administration Donlon Airport Donlon 4 W Tel: 01238282 Telefax: 01238292 Telex: 996666 AFS: EADDYDYX
7	<i>Types of traffic permitted (IFR/VFR)</i>	IFR/VFR
8	<i>Remarks</i>	Nil

EADD AD 2.3 OPERATIONAL HOURS

1	<i>AD Administration</i>	MON–FRI: 0600–2000 (0500–1900) SAT, SUN + HOL: 0700–2000 (0600–1900)
2	<i>Customs and immigration</i>	MON–FRI: 0900–1800 (0800–1700) SAT, SUN + HOL: 1000–1700 (0900–1600)
3	<i>Health and sanitation</i>	Available within AD hours. 2 HR PN to AD required.
4	<i>AIS Briefing Office</i>	As AD Administration.
5	<i>ATS Reporting Office (ARO)</i>	As AD Administration.
6	<i>MET Briefing Office</i>	As AD Administration.
7	<i>ATS</i>	As AD Administration.
8	<i>Fuelling</i>	As AD Administration.
9	<i>Handling</i>	As AD Administration.
10	<i>Security</i>	As AD Administration.
11	<i>De-icing</i>	As AD Administration.
12	<i>Remarks</i>	Outside these hours, services are available O/R. Request to be submitted to the AD not later than 1500 (1400) UTC.

EADD AD 2.4 HANDLING SERVICES AND FACILITIES

1	<i>Cargo-handling facilities</i>	Trucks 1.5–3.5 tonnes. Up to 10 tonnes handling possible.
2	<i>Fuel/oil types</i>	Jet A1, AVTUR, AVGAS 100 LL, oil, all types normally available.
3	<i>Fuelling facilities/capacity</i>	1 truck 45 000 litres, 50 litres/sec.
4	<i>De-icing facilities</i>	Available. See AD chart for location.
5	<i>Hangar space for visiting aircraft</i>	Limited, by prior arrangement only.
6	<i>Repair facilities for visiting aircraft</i>	Available for aircraft up to 5 700 KG. Major repairs by arrangement.
7	<i>Remarks</i>	Handling services available within AD HR or by arrangement with the AD.

EADD AD 2.5 PASSENGER FACILITIES

1	<i>Hotels</i>	Near the AD and in the city.
2	<i>Restaurants</i>	At AD and in the city.
3	<i>Transportation</i>	Buses, taxis and car hire from the AD. Trains to and from the city.
4	<i>Medical facilities</i>	First aid at AD. Hospitals in the city.
5	<i>Bank and Post Office</i>	At AD. Open within AD HR.
6	<i>Tourist Office</i>	Office in the city. Tel: Donlon 0123 4863559 Telefax: 0123 4863569
7	<i>Remarks</i>	Nil

EADD AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	<i>AD category for fire fighting</i>	Within AD HR: CAT 7
2	<i>Rescue equipment</i>	Yes, 2 boats of 40 persons
3	<i>Capability for removal of disabled aircraft</i>	Lifting bags and hydraulic jacks available
4	<i>Remarks</i>	Outside AD HR, fire fighting service to be requested. Request to be submitted not later than 1500 (1400) UTC.

EADD AD 2.7 SEASONAL AVAILABILITY — CLEARING

1	<i>Types of clearing equipment</i>	1 Snow Blower; 2 Snow Ploughs; 2 Scrapers; 1 Sand Spreader
2	<i>Clearance priorities</i>	1. RWY 09L/27R and associated TWY to Apron 2. RWY 09R/27L and TWY to Apron 3. Other TWY and ACFT stands
3	<i>Remarks</i>	Information on snow clearance published from November–April in NOTAM (SNOWTAM). See also the snow plan in section AD 1.2.2.

EADD AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	<i>Apron surface and strength</i>	Surface: Concrete Strength: PCN 80/R/B/W/T
2	<i>Taxiway width, surface and strength</i>	Width: 23 M Surface: Concrete/Asphalt Strength: PCN 80/R/B/W/T
3	<i>Altimeter checkpoint location and elevation</i>	Location: At Apron Elevation: 28 M
4	<i>VOR checkpoints</i>	VOR: See AD Chart
5	<i>INS checkpoints</i>	INS: See AD Chart
6	<i>Remarks</i>	Nil

EADD AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	<i>Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands</i>	Taxiing guidance signs at all intersections with TWY and RWY and at all holding positions. Guide lines at apron. Nose-in guidance at aircraft stands.
2	<i>RWY and TWY markings and LGT</i>	RWY: Designation, THR, TDZ, centre line, edge runway end as appropriate, marked and lighted. TWY: Centre line, holding positions at all TWY/RWY intersections, marked and lighted.
3	<i>Stop bars</i>	Stop bars where appropriate.
4	<i>Remarks</i>	See also page (specify) for taxiing to and from stands.

EADD AD 2.10 AERODROME OBSTACLES

<i>In Area 2</i>					
<i>OBST ID/ Designation</i>	<i>OBST type</i>	<i>OBST position</i>	<i>ELEV/HGT</i>	<i>Markings/ Type, colour</i>	<i>Remarks</i>
a	b	c	d	e	f
EADDOB001	Antenna	522142.17N 0320215.24W	93/60 M	MARKED/FLS W	Obstacle data sets are available (see GEN 3.1.6)
EADDOB002	Power line	522151.82N 0315845.12W	65/15 M	MARKED	
EADDOB003	Tower	522203.36N 0315457.22W	40/12 M	LGTD	
EADDOB004	Mobile OBST	522243.85N 0315455.58W	28/3 M	NIL	

<i>In Area 3</i>					
<i>OBST ID/ Designation</i>	<i>OBST type</i>	<i>OBST position</i>	<i>ELEV/HGT</i>	<i>Markings/ Type, colour</i>	<i>Remarks</i>
a	b	c	d	e	f
EADDOB005	Terminal building	522124.86N 0315452.18W	31.5/15 M	MARKED/HI R	Obstacle data sets are available (see GEN 3.1.6)
EADDOB006	Hangar	522115.34N 0315532.17W	55/20 M	LGTD	
EADDOB007	Antenna	522138.15N 0315425.48W	37/4 M	LGTD	

EADD AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	<i>Associated MET Office</i>	DONLON
2	<i>Hours of service</i> <i>MET Office outside hours</i>	H24 —
3	<i>Office responsible for TAF preparation</i> <i>Periods of validity</i>	DONLON 9,18 HR
4	<i>Trend forecast</i> <i>Interval of issuance</i>	TREND 1 HR
5	<i>Briefing/consultation provided</i>	Personal consultation, closed circuit television
6	<i>Flight documentation</i> <i>Language(s) used</i>	Charts, abbreviated plain language text English
7	<i>Charts and other information available for briefing or consultation</i>	S, U ₈₅ , U ₇₀ , U ₅₀ , U ₃₀ , U ₂₀ , P ₈₅ , P ₇₀ , P ₅₀ , P ₄₀ , P ₃₀ P ₂₀ , SWH, SWM, T
8	<i>Supplementary equipment available for providing information</i>	Telefax; self-briefing terminal; weather radar; satellite receiver
9	<i>ATS units provided with information</i>	Donlon TWR; Donlon APP
10	<i>Additional information (limitation of service, etc.)</i>	Nil

EADD AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

<i>Designations RWY NR</i>	<i>TRUE BRG</i>	<i>Dimensions of RWY (M)</i>	<i>Strength (PCN) and surface of RWY and SWY</i>	<i>THR coordinates RWY end coordinates THR geoid undulation</i>	<i>THR elevation and highest elevation of TDZ of precision APP RWY</i>
1	2	3	4	5	6
09L	085.23°	2 800 × 45	80/R/B/W/T Concrete	522232.15N 0315751.35W — GUND 11.5 M	THR 30 M/99 FT
27R	265.23°	2 800 × 45	80/R/B/W/T Concrete	522241.48N 0315518.65W — GUND 11.5 M	THR 16.5 M/53 FT TDZ 20.5 M/66 FT
09R	085.29°	2 600 × 45	50/F/A/Y/U Asphalt/Concrete	522155.82N 0315754.03W — GUND 11.5 M	THR 14 M/46 FT
27L	265.29°	2 600 × 45	50/F/A/Y/U Asphalt/Concrete	522205.71N 0315532.14N — GUND 11.5 M	THR 20 M/66 FT
<i>Slope of RWY-SWY</i>	<i>SWY dimensions (M)</i>	<i>CWY dimensions (M)</i>	<i>Strip dimensions (M)</i>	<i>OFZ</i>	<i>Remarks</i>
7	8	9	10	11	12
0.5%	Nil	Nil	2 920 × 300	Nil	Nil
0.5%	Nil	Nil	2 920 × 300	Nil	Nil
+1%/−1% (1 600 M) (1 000 M)	200 × 45	Nil	2 920 × 300	Nil	Nil
+1%/−1% (1 000 M) (1 600 M)	200 × 45	400 × 150	2 920 × 150	Nil	Nil

EADD AD 2.13 DECLARED DISTANCES

<i>RWY Designator</i>	<i>TORA (M)</i>	<i>TODA (M)</i>	<i>ASDA (M)</i>	<i>LDA (M)</i>	<i>Remarks</i>
1	2	3	4	5	6
09L	2 800	2 800	2 800	2 800	Nil
27R	2 800	2 800	2 800	2 800	Nil
09R	2 600	2 600	2 600	2 600	Nil
27L	2 600	3 000	2 800	2 600	Nil

EADD AD 2.14 APPROACH AND RUNWAY LIGHTING

<i>RWY Designator</i>	<i>APCH LGT type LEN INTST</i>	<i>THR LGT colour WBAR</i>	<i>VASIS (MEHT) PAPI</i>	<i>TDZ, LGT LEN</i>	<i>RWY Centre Line LGT Length, spacing, colour, INTST</i>	<i>RWY edge LGT LEN, spacing colour INTST</i>	<i>RWY End LGT colour WBAR</i>	<i>SWY LGT LEN (M) colour</i>	<i>Remarks</i>
1	2	3	4	5	6	7	8	9	10
09L	SIAL 600 M LIM	Green –	PAPI Left/3° (30 FT)	Nil	2 800 M, 30 M White, LIH	2 800 M, 50 M White, LIH	Red –	Nil	Nil
27R	CAT II 900 M LIH	Green –	PAPI Left/3° (69 FT)	900 M	2 800 M, 7.5 M White; FM 1 900 M– 2 500 M Red/White; FM 2 500 M Red; LIH	2 800 M, 50 M White, LIH	Red –	Nil	Nil
09R	NIL	Green –	PAPI 3.75° (28 FT)	Nil	Nil	2 600 M, 50 M White, LIM	Red –	200 M Red	Nil
27L	Nil	Green –	T-VASIS 2.75° (40 FT)	Nil	Nil	2 600 M, 50 M White, LIM	Red –	200 M Red	Nil

EADD AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	<i>ABN/IBN location, characteristics and hours of operation</i>	ABN: At Tower Building, FLG W EV 2 SEC/IBN: NIL H24
2	<i>LDI location and LGT Anemometer location and LGT</i>	LDI: 800 M W of ARP, lighted Anemometer: 300 M from THR 09L, not lighted
3	<i>TWY edge and centre line lighting</i>	Edge: All TWY Centre line: TWY A, B, C, D, E
4	<i>Secondary power supply/switch-over time</i>	Secondary power supply to all lighting at AD. Switch-over time: 1 SEC
5	<i>Remarks</i>	Nil

EADD AD 2.16 HELICOPTER LANDING AREA

1	<i>Coordinates TLOF or THR of FATO Geoid undulation</i>	522226.98N 0315636.61W 12.5 M/41.5 FT
2	<i>TLOF and/or FATO elevation M/FT</i>	33 M/109 FT
3	<i>TLOF and FATO area dimensions, surface, strength, marking</i>	Rectangle 30 x 30 M, asphalt, 10 tonnes, white edges and white letter H
4	<i>True BRG of FATO</i>	123.25/303.25° Direction of TKOF zones: 124° GEO 304° GEO
5	<i>Declared distance available</i>	Nil
6	<i>APP and FATO lighting</i>	FATO area edge, air TWY to apron
7	<i>Remarks</i>	Nil

EADD AD 2.17 ATS AIRSPACE

1	<i>Designation and lateral limits</i>	DONLON CTR A circle, radius 35 KM centred at 522318N 0315658W (ARP)
2	<i>Vertical limits</i>	SFC to 3 000 FT MSL
3	<i>Airspace classification</i>	D
4	<i>ATS unit call sign Language(s)</i>	Donlon Tower English
5	<i>Transition altitude</i>	3 500 FT MSL
6	<i>Remarks</i>	Nil

EADD AD 2.18 ATS COMMUNICATION FACILITIES

<i>Service designation</i>	<i>Call sign</i>	<i>Channel</i>	<i>Hours of operation</i>	<i>Remarks</i>
1	2	3	4	5
APP	Donlon Approach	119.100 121.500	H24 H24	Primary frequency, VDF available. Emergency frequency
TWR	Donlon Tower	118.100 117.900 119.900	As AD HO HO	Primary frequency Military aircraft
SRE	Donlon Director	123.700 118.100	0700–2100 (0600–2000) O/R	Primary frequency
PAR	Donlon Precision	119.900	O/R 0700–2100 (0600–2000)	For RWY 27R. Primary frequency
ATIS (ARR)	Donlon Arrival Information	122.750	0600–2200 (0500–2100)	
ATIS (DEP)	Donlon Departure Information	122.850	0600–2200 (0500–2100)	
ATIS (INF)	Donlon Information	122.750	2200–0600 (2100–0500)	

EADD AD 2.19 RADIO NAVIGATION AND LANDING AIDS

<i>Type of aid, MAG VAR, Type of supported OPS (for VOR/ILS/MLS, give declination)</i>	<i>ID</i>	<i>Frequency</i>	<i>Hours of operation</i>	<i>Position of transmitting antenna coordinates</i>	<i>Elevation of DME transmitting antenna</i>	<i>Remarks</i>
1	2	3	4	5	6	7
VOR/DME (3°W/1990)	BOR	116.900 MHz	H24	522206.2N 0322230.8W	60 M	Nil
VOR/DME (3°W/1990)	CAA	114.300 MHz	H24	522254.4N 0314436.1W	30 M	
VOR/DME (3°W/1990)	KAV	115.000 MHz CH 97X	H24	523218.3N 0315512.6W	30 M	
L	KL	411 KHz	H24	522301.2N 0315102.3W		087° MAG/5.7 KM to RWY 27R. Coverage 45 KM
LLZ 27R (3°W/1990) ILS CAT II (3°W or 357°)	OXS	109.100 MHz	H24	522232.1N 0315754.8W		
GP 27	Dots/Dashes	331.400 MHz	H24	522242.4N 0315536.4W		2.75°, RDH 51 FT
MM 27	Dashes	75 KHz	H24	522246.8N 0315422.8W		087° MAG/1.1 KM to RWY 27R
OM 27	OM 27	75 KHz	H24	522301.2N 0315102.3W		087° MAG/5.7 KM to RWY 27R
GPS NPA	N/A	1575.42 MHz	H24	N/A	N/A	Transmitting antennas are satellite based
WAAS LPV	N/A	1575.42 MHz	H24	N/A	N/A	Transmitting antennas are satellite based
GBAS CAT I	ERWN	133.000 MHz	H24	522244.4N 0315536.4W	N/A	

EADD AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

At Donlon Airport a number of local regulations apply. The regulations are collected in a manual which is available at the AIS Briefing Office and at the Terminal Building. This manual includes, among other subjects, the following:

- a) the meaning of markings and signs;
- b) information about aircraft stands including visual docking guidance systems;
- c) information about taxiing from aircraft stands including taxi clearance;
- d) limitations in the operation of large aircraft including limitations in the use of the aircraft's own power for taxiing;
- e) helicopter operations;
- f) marshaller assistance and towing assistance;
- g) use of engine power exceeding idle power;
- h) engine start-up and use of APU;
- i) fuel spillage; and
- j) precautions during extreme weather conditions.

Marshaller assistance can be requested and further information about the regulations can be obtained from the TWR or surface movement control (SMC).

When a local regulation is of importance for the safe operation of aircraft on the apron, the information will be given to each aircraft by the TWR or SMC.

"Local Regulations" may be requested, in writing, from:

Donlon Airport
Airport Office
Donlon 4 W

2. Taxiing to and from stands

Arriving aircraft will be allocated a stand number by the TWR or SMC. General aviation aircraft will have to use the general aviation parking area.

Assistance from the "FOLLOW ME" vehicle can be requested via the TWR or SMC. General aviation aircraft will always be guided by the "FOLLOW ME" vehicle.

Departing IFR flights shall contact the TWR to obtain ATC clearance before commencing taxiing. Request for ATC clearance may take place at the earliest 10 minutes prior to engine start-up. Frequency 119.90 MHz is to be used in the period 0600–2200 (0500–2100) and 118.10 MHz in the period 2200–0600 (2100–0500). Departing aircraft shall obtain push-back clearance and taxi instruction from DONLON APRON on 121.900 MHz.

3. Parking area for small aircraft (General aviation)

General aviation aircraft shall be guided by marshalls to the parking area for small aircraft.

4. Parking area for helicopters

The parking area for helicopters consists of two marked stands (H-80 and H-81). Helicopters will always be guided by a marshaller on the stand.

5. Apron — taxiing during winter conditions

Certain taxiways in the apron area are not equipped with centre line lights. The taxi guide lines may not be visible due to snow. Assistance from the "FOLLOW ME" vehicle can be requested via the TWR or SMC.

6. Taxiing — limitations

Insufficient safety distances restrict large aircraft's use of certain taxiways when using their own power. Further information will be given to each aircraft from the TWR or SMC.

**7. School and training flights —
technical test flights — use of runways**

School and training flights must only be made after permission has been obtained from ATS. Permission will not be granted for such flights within the following periods:

1800–0600 (1700–0500) and on Sundays and legal holidays.

For school and training flights and such technical test flights necessary for the purpose of ascertaining the airworthiness of an aircraft during flight, use of the runway system at the aerodrome is restricted as follows:

RWY 09L and 27L may be used for take-off and landing;
RWY 09R may be used for take-off only;¹
RWY 27R may be used for landing only.

See also AD 2.21 — Noise Abatement Procedures.

-
1. For technical test flights, runway 09R may be used for landing, if necessary, provided the test flight has proved the aircraft to be airworthy.

8. Helicopter traffic — limitation

Non-scheduled public air traffic with helicopters is permitted only after prior approval from the Donlon Aerodrome Administration. Any contact concerning the above shall be made via the handling company or directly to the Airport Office during the hours of service and, if possible, not later than the day before the flight is to be carried out.

Any request for approval of traffic shall contain the following information:

- a) Owner/operator
- b) Type of helicopter, registration/call sign
- c) Date, arrival time/departure time, destination(s).

Furthermore, other details relevant to the evaluation of the request shall be given as required.

**9. Removal of disabled aircraft
from runways**

When an aircraft is wrecked on a runway, it is the duty of the owner or user of such aircraft to have it removed as soon as possible. If a wrecked aircraft is not removed from the runway as quickly as possible by the owner or user, the aircraft will be removed by the aerodrome authority at the owner's or user's expense.

EADD AD 2.21 NOISE ABATEMENT PROCEDURES

The provisions are divided into three parts:

- I. Noise abatement procedures for jet aeroplanes irrespective of weight, and for propeller and turboprop aeroplanes with MTOM of or above 11 000 kg.
- II. Noise abatement procedures for propeller and turboprop aeroplanes with MTOM below 11 000 kg.
- III. Noise abatement procedures for helicopters.

As regards engine run-ups and the use of APU, see Local Regulations for Donlon Airport.

Part I

Noise abatement procedures for jet aeroplanes irrespective of weight, and for propeller and turboprop aeroplanes with MTOM of or above 11 000 kg

1. General provisions

1.1 In connection with approach to landing, the following minimum heights over Greater Donlon shall be observed:

- a) Propeller and turboprop aeroplanes: 1 500 ft
- b) Jet aeroplanes: 2 500 ft

As regards altitude restrictions for approach to RWY 09L, 4.2.1 refers.

1.2 RWY 09L and 27R are preferential runways.

1.3 In case of special meteorological conditions such as CBs, significant wind variations, etc. in the approach and take-off sectors, the ATC can, at its discretion or on request from the pilot-in-command, deviate from the provisions in sections 2 and 4 below, if deemed necessary for safety reasons.

2. Use of the runway system during the day period [0600–2200 (0500–2100)]

2.1 The preferential runways shall be used to the greatest extent possible.

2.2 When, in the periods 2200–2300 and 0600–0700 local time, the runway in use is RWY 27L/R, RWY 27L shall be used for take-off.

2.2.1 RWY 27R may, however, be used for take-off in the period 2200–2300 and 0600–0700 local time when:

- a) RWY 27L cannot be used for take-off due to snow clearance, disabled aircraft on the runway, work on the runway or bad runway conditions.
- b) an extraordinary traffic situation causes delays of more than one hour.

2.3 If a preferential runway is not the runway in use due to the crosswind component exceeding 15 kt, a request to use a preferential runway will be complied with if the handling of the other traffic so permits.

2.4 A request for permission to deviate from a clearance will be complied with if the pilot-in-command claims safety reasons.

3. Use of the runway system during the night period [2200–0600 (2100–0500)]

3.1 When the runway in use is RWY 27R, RWY 27L shall be used for take-off.

3.1.1 RWY 27R may, however, be used for take-off when:

- a) RWY 27L cannot be used for take-off due to snow clearance, disabled aircraft, work on the runway or adverse runway conditions.
- b) an extraordinary traffic situation causes delays of more than one hour.

3.2 Limitations in the maximum A-weighted sound pressure level

3.2.1 Take-off and landing shall be so arranged that the maximum A-weighted sound pressure level does not exceed 85 dB in six measuring positions in the surrounding residential areas.

3.2.2 Take-off may take place only if an advance approval has been issued by the Donlon Airport Authority.

- a) Advance approval may be obtained for periods of approximately 6 months, provided that the aeroplane used is noise certificated according to Annex 16, Chapter 2, 3 or 5, or provided the applicant has demonstrated that take-off can be carried out in such a way that the provisions in 3.2.1 can be observed.
- b) If no advance approval exists, take-off may exceptionally take place if the operator obtains a permit from the Aerodrome Office based either on documentation stating that the aeroplane is noise certificated or on the fact that the Donlon Airport Authority is aware that corresponding aeroplanes have the ability to comply with the provisions in 3.2.1.
- c) In the period 2300–0100 (2200–0000) no advance approval is required if the take-off takes place in the said interval as a result of delay.

3.2.3 No advance approval is required for landing.

4. Restrictions

4.1 Take-off restrictions

4.1.1 RWY 27L:

- a) Take-off shall be commenced from position A.
- b) Turn must not be commenced until having passed 2 NM southwest of (specify) VOR/DME.

4.1.2 RWY 27R:

Turn must not be commenced until having passed 2 NM southwest of (specify) VOR/DME.

4.1.3 RWY 09L:

- a) Take-off shall be commenced:
 - for jet aeroplanes from position B.
 - for propeller and turboprop aeroplanes from positions A and B.
- b) Turn must not be commenced until (specify) VOR has been passed.

4.1.4 RWY 09R:

- a) Take-off shall be commenced from positions A and B.
- b) Take-off with jet aeroplanes shall be so arranged that the maximum sound pressure level does not exceed 110 PNdB approximately 3 500 m from the beginning of RWY 09R.
- c) If a take-off planned on RWY 09L/R, RWY 27L/R from position B cannot be carried out due to changes in weather conditions or runway conditions occurring no more than one hour prior to the planned take-off time, take-off in the period 0700–2200 (0600–2100) irrespective that the maximum sound pressure level exceeds 110 PNdB is acceptable.
- d) Turn must not be commenced until (specify) VOR has been passed.

4.2 Landing restrictions

4.2.1 RWY 09L:

During instrument as well as visual approach, flying below the ILS glide path angle is not allowed.

4.2.2 Reverse thrust:

Use of reverse thrust (idle reverse excepted) must take place only for safety reasons.

5. Reporting

5.1 The reporting of Air Traffic Control Donlon to the Civil Aviation Administration, Aviation Inspection Department

5.1.1 The ATC Donlon shall notify the Aviation Inspection Department of every operation deviating from the above-mentioned provisions.

5.1.2 The ATC Donlon shall notify the Aviation Inspection Department of every clearance according to the provisions in 1.3, 2.2.1, 2.4, 3.1.1 and 3.2.1.

5.1.3 The Aviation Inspection Department will make further investigations based on reports from the ATC.

5.2 The reporting of the Donlon Airport Authority to the Civil Aviation Administration, Aviation Inspection Department

5.2.1 The Donlon Airport Authority shall notify the Aviation Inspection Department if an aeroplane causes a noise level above that allowed, cf. 3.2.1 or 4.1.4.

5.2.2 The Donlon Airport Authority shall notify the Aviation Inspection Department if an aeroplane takes off within the night period without having the necessary advance approval, cf. 3.2.2.

5.2.3 The Donlon Airport Authority shall notify the Aviation Inspection Department if an aeroplane has been observed using reverse thrust that exceeds idle reverse, cf. 4.2.2.

5.2.4 The Aviation Inspection Department will make further investigations based on reports from the Donlon Airport Authority.

Part II

Noise abatement procedures for propeller and turboprop aeroplanes with MTOM below 11 000 kg

1. Use of the runway system during the day period [0600–2300 (0500–2200)]

No restrictions.

2. Use of the runway system during the night period [2300–0600 (2200–0500)]

2.1 Limitations in the maximum A-weighted sound pressure level

2.1.1 Take-off and landing shall be so arranged that the maximum A-weighted sound pressure level does not exceed 85 dB in six measuring positions in the surrounding residential areas.

2.1.2 Take-off may take place only if an advance approval has been issued by the Donlon Airport Authority.

- a) Advance approval may be obtained for periods of approximately 6 months, provided that the aeroplane used is noise certificated according to Annex 16, Chapter 5 or 6, or provided the applicant

has demonstrated that take-off can be carried out in such a way that the provisions in 2.2.1 can be observed.

- b) If no advance approval exists, take-off may take place if the operator obtains a permit from the Airport Authority based either on documentation stating that the aeroplane is noise certificated or on the fact that the Donlon Airport Authority is aware that corresponding aeroplanes have the ability to comply with the provisions in 2.2.1.

- c) In the period 2300–0100 (2200–0000) no advance approval is required if the take-off takes place in the said interval as a result of delay.

2.1.3 No advance approval is required for landing.

3. Reporting

3.1 The reporting of Air Traffic Control Donlon to the Civil Aviation Administration, Aviation Inspection Department

3.1.1 The ATC Donlon shall notify the Aviation Inspection Department of every operation deviating from the above-mentioned provisions.

3.1.2 The ATC Donlon shall notify the Aviation Inspection Department of every clearance according to the provisions in 2.1 and 2.1.1.

3.1.3 The Aviation Inspection Department will make further investigations based on reports from the ATC.

3.2 The reporting of the Donlon Airport Authority to the Civil Aviation Administration, Aviation Inspection Department

3.2.1 The Donlon Airport Authority shall notify the Aviation Inspection Department if an aeroplane causes a noise level above that allowed, cf. 2.2.1.

3.2.2 The Donlon Airport Authority shall notify the Aviation Inspection Department if an aeroplane takes off within the night period without having the necessary advance approval, cf. 3.2.2.

3.2.3 The Aviation Inspection Department will make further investigations based on reports from the Donlon Airport Authority.

Part III**Noise abatement procedures for helicopters****1. General provisions**

1.1 In case of special meteorological conditions such as CBs, significant wind variations, etc. in the approach and take-off sectors, the ATS can, at its discretion or on request from the pilot-in-command, deviate from the provisions in section 2 below, if deemed necessary for safety reasons.

1.2 Deviations from the provisions in sections 2 and 3 below are permitted in connection with:

- a) take-off and landing for vital flights, such as ambulance and transplantation flights, and the like.
- b) take-off and landing in connection with rescue operations.
- c) take-off and landing in connection with security control of the airport area.
- d) landing in such cases where the aircraft during flight has experienced reduced airworthiness, and the pilot-in-command judges it necessary to land.
- e) landing where the pilot-in-command declares an emergency situation.

1.3 Approach and departure respectively, carried out using VFR, will normally be cleared via HOLDING, VFR-route or VFR-route with the limitations stated in 2.3.

1.4 Departure, carried out using IFR, will be cleared in the direction of RWY 04 or RWY 12 with the limitations stated in 2.3.

2. Use of the runway system during the day period [0600–2300 (0500–2200)]

2.1 In the periods 0600–0700 (0500–0600) and 2200–2300 (2100–2200), the airport is closed for helicopter traffic.

2.2 Take-off and landing shall take place from/at THR 27L or 27R.

2.3 From the threshold used:

- a) departure shall take place on tracks between 030° and 130°;
- b) arrival shall take place on tracks between 210° and 310°.

2.4 Hover-taxiing is not permitted with helicopters equipped with wheels.

2.5 Taxiing to and from 27R shall be executed via TWY (specify).

2.5.1 When 27R is the runway in use and there is traffic on TWY (specify), taxiing from THR (specify) will be permitted via RWY 27R and TWY (specify).

3. Use of the runway system during the night period (2300–0600 local time)

3.1 In the period 2300–0600 local time, the airport is closed for helicopter traffic.

4. Reporting**4.1 The reporting of Air Traffic Control Donlon to the Civil Aviation Administration, Aviation Inspection Department**

4.1.1 The ATC Donlon shall notify the Aviation Inspection Department of every operation deviating from the above-mentioned provisions.

4.1.2 The ATC Donlon shall notify the Aviation Inspection Department of every clearance according to the provisions in 1.1 and 1.2.

4.1.3 The Aviation Inspection Department will make further investigations based on reports from the ATS.

EADD AD 2.22 FLIGHT PROCEDURES

General

Unless special permission has been obtained from Donlon Approach or Donlon Tower as appropriate, flight within Donlon TMA and Donlon CTR shall be in accordance with the Instrument Flight Rules.

Procedures for IFR flights within Donlon TMA

The inbound, transit and outbound routes shown on the charts may be varied at the discretion of ATS. If necessary, in case of congestion, inbound aircraft may also be instructed to hold at one of the designated airways, reporting points.

ATC surveillance procedures within Donlon TMA

Radar vectoring and sequencing

Normally, aircraft will be vectored and sequenced from DONNORD and DONNEST NDBs and JUSTIN, ROBIN and OSTO reporting points to the appropriate final approach track (ILS, PAR, VOR/DME), so as to ensure an expeditious flow of traffic. Radar vectors and flight levels/altitudes will be issued, as required, for spacing and separating the aircraft so that correct landing intervals are maintained, taking into account aircraft characteristics.

Radar vectoring charts are not published since the instrument approach procedures and altitudes ensure that adequate terrain clearance exists at all times until the point where the pilot will resume navigation on final approach or in the circuit.

Surveillance radar approaches

Surveillance radar approaches will be carried out for runways 27L, 09L and 09R, as step down commencing descent from 10 km at an altitude of 600 m. Surveillance radar final approaches will be terminated at 3.5 km from touchdown.

At each nautical mile and until 3 NM from touchdown, the pilot will be given the precomputed check altitude so that the nominal glide path can be maintained.

Missed approach procedures to be followed in the absence of other ATS instructions are as detailed on the Instrument Approach Chart.

Precision radar approach

Precision radar approach is available for RWY 27R only. It will be terminated at approximately 1 km from touchdown on RWY 27R. In the event of a pilot requesting radar assistance to carry out an emergency precision radar approach and landing, the PAR controller will continue the approach to the point of touchdown or until the aircraft is known to have the runway in sight. A pilot may request a practice emergency radar approach in weather conditions equal to or better than a visibility of 1.8 km and a cloud ceiling of 150 m. In addition, ATC may request a pilot to carry out this procedure for ATC training purposes.

Communication failure

In the event of communication failure, the pilot shall act in accordance with the communication failure procedures in Annex 2. For the Donlon TMA, information concerning the associated navigation aids and the routing is given on page (specify).

Low visibility procedures

RWY 27R, equipped with ILS approved for CAT II, will be used under RVR below 800 m to 350 m. In order to provide adequate protection of the ILS system, no vehicle or aircraft shall infringe the ILS sensitive areas when an arriving aircraft is within 2 NM of touchdown and has not completed its landing run. When RVR at TDZ falls below 400 m, a follow-me car is available on standby to assist pilots during taxi upon request. Pilots will be informed by ATIS or ATC when LVP are in progress. The ATIS message will contain the phrase "LOW VISIBILITY PROCEDURES IN PROGRESS" and will also provide details of any unavailability of equipment relevant to LVP. Pilots will be informed by ATC when LVP are terminated.

The preparation phase will start when visibility falls below 1 500 m and/or the ceiling is at or below 300 ft, and CAT II operations are expected. The operations phase will start when RVR falls below 800 m or ceiling is at or below 200 ft. LVP will be terminated when RVR is greater than 800 m and the ceiling is higher than 200 ft, and a continuing improvement in these conditions is expected. CAT II approach during normal operations is allowed, but due to high traffic intensity, the protection of the ILS sensitive area cannot be guaranteed and fluctuations in the ILS signal may occur in periods outside of the low visibility procedures.

Procedures for VFR flights within Donlon TMA

Provided traffic conditions so permit, ATC clearance for VFR flights will be given under the conditions described below:

- a) A flight plan requesting ATC clearance, containing items 7 to 18 and indicating the purpose of the flight, shall be submitted.
- b) ATC clearance shall be obtained immediately before the aircraft enters the area concerned.
- c) Position reports shall be submitted in accordance with 3.6.3 of Annex 2.
- d) Deviation from the ATC clearance may only be made when prior permission has been obtained.
- e) The flight shall be conducted with vertical visual reference to the ground unless the flight can be conducted in accordance with the Instrument Flight Rules.
- f) Two-way radio communication shall be maintained on the frequency prescribed. Information about the appropriate frequency can be obtained from Donlon Information.
- g) The pilot-in-command shall be the holder of an International VHF Licence.
- h) The aircraft shall be equipped with SSR transponder with 4 096 Codes in Mode A/3. Flights performed in

connection with parachute jumps shall, in addition, be equipped with Mode C with automatic transmission of pressure altitude information (cf. Annex 10, Volume I). Exemption from this requirement may be granted by Donlon Control.

Note.— ATC clearance is intended only to provide separation between IFR and VFR flights.

Procedures for VFR flights within Donlon CTR

- a) Flight plan shall be filed for the flight concerned.
- b) ATC clearance shall be obtained from the Control Tower.
- c) Deviation from ATC clearance may only be made when prior permission has been obtained.
- d) The flight shall be conducted with vertical visual reference to the ground.
- e) Two-way radio communication shall be established on the frequency prescribed before flight takes place in the Control Zone.

VFR routes within Donlon CTR

Arrival and departure routes for VFR traffic are established as depicted on the Visual Approach Chart.

EADD AD 2.23 ADDITIONAL INFORMATION**Bird concentrations
in the vicinity of the airport**

Intense activity of flocks of (type of bird) takes place daily from one to two hours after sunrise when birds fly from resting area (1 300 m, QDR 090° from threshold of RWY 27L) across approach of runway 27R to their feeding area near the river NE of the airport. Height varies from 0–2 000 ft (0–600 m) AGL. From one to two hours before sunset the same activity as described above takes place in reverse when the birds return to their area.

As far as practicable, Aerodrome Control will inform pilots of this bird activity and the estimated heights AGL.

During the above periods pilots of aircraft are advised, where the design limitations of aircraft installations permit, to operate landing lights in flight, within the terminal area and during take-off, approach-to-land and climb and descent procedures.

Dispersal activities include occasional playing back of distress calls from tape together with the firing of shell crackers, supplemented by the use of live ammunition and trapping. Modifications of the environment are under way to reduce, if not eliminate, the hazard. They comprise better methods of garbage disposal and drainage, elimination of hedge and ground cover and cessation of farming activity.

EADD AD 2.24 CHARTS RELATED TO AN AERODROME

	<i>Page</i>
Aerodrome/Heliport Chart — ICAO	AD 2-19
Aircraft Parking/Docking Chart — ICAO	AD 2-21
Aerodrome Ground Movement Chart — ICAO	AD 2-23
Aerodrome Obstacle Chart — ICAO Type A (for each runway).	AD 2-25
Precision Approach Terrain Chart — ICAO (precision approach Cat II and III runways).	AD 2-27
Area Chart — ICAO (departure and transit routes)	AD 2-29
Standard Departure Chart — Instrument — ICAO	AD 2-31
Area Chart — ICAO (arrival and transit routes)	AD 2-33
Standard Arrival Chart — Instrument — ICAO	AD 2-35
ATC Surveillance Minimum Altitude Chart — ICAO	AD 2-37
Instrument Approach Chart — ICAO (for each runway and procedure type).	AD 2-39
Visual Approach Chart — ICAO	AD 2-41
Bird concentrations in the vicinity of aerodromes	AD 2-43

AIP

AD 2-19
27 NOV 03

AERODROME/HELIPORT CHART - ICAO

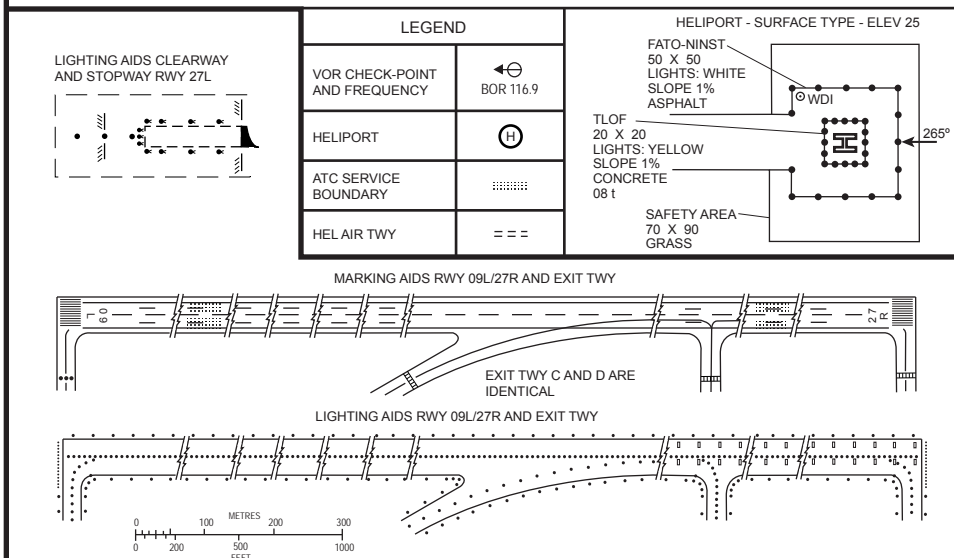
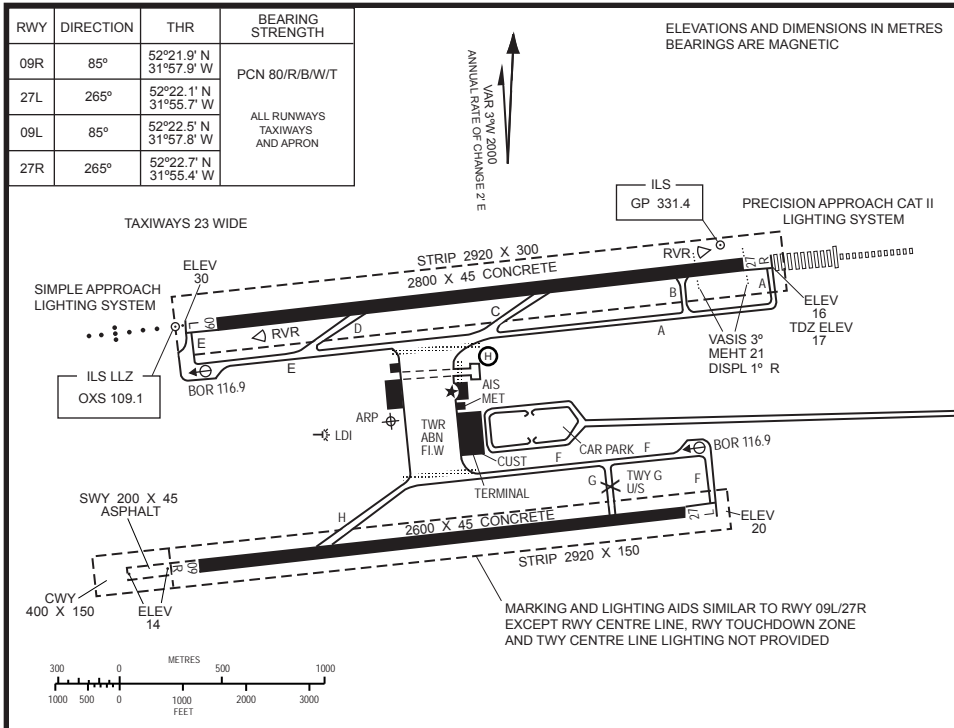
52°22'18"N
31°56'58"W

ELEV 30 m

TWR	118.1
APRON	121.6

CITY/
AERODROME

RWY	DIRECTION	THR	BEARING STRENGTH
09R	85°	52°21.9' N 31°57.9' W	PCN 80/R/B/W/T ALL RUNWAYS TAXIWAYS AND APRON
27L	265°	52°22.1' N 31°55.7' W	
09L	85°	52°22.5' N 31°57.8' W	
27R	265°	52°22.7' N 31°55.4' W	



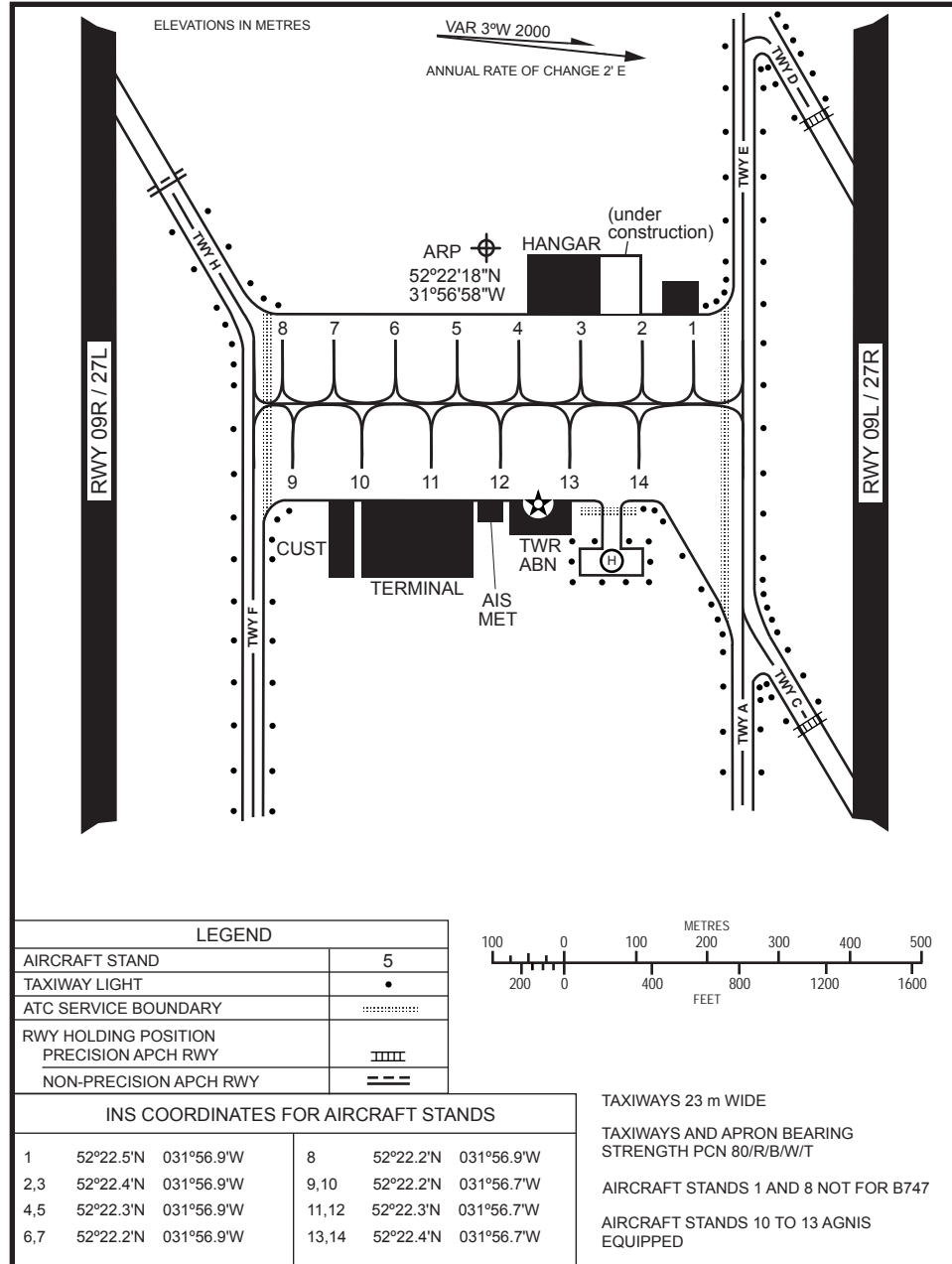
(Name of Publishing Authority)

(Amendment Number)

AIP

AD 2-21
27 NOV 03AIRCRAFT PARKING/
DOCKING CHART - ICAOAPRON ELEV
28 m

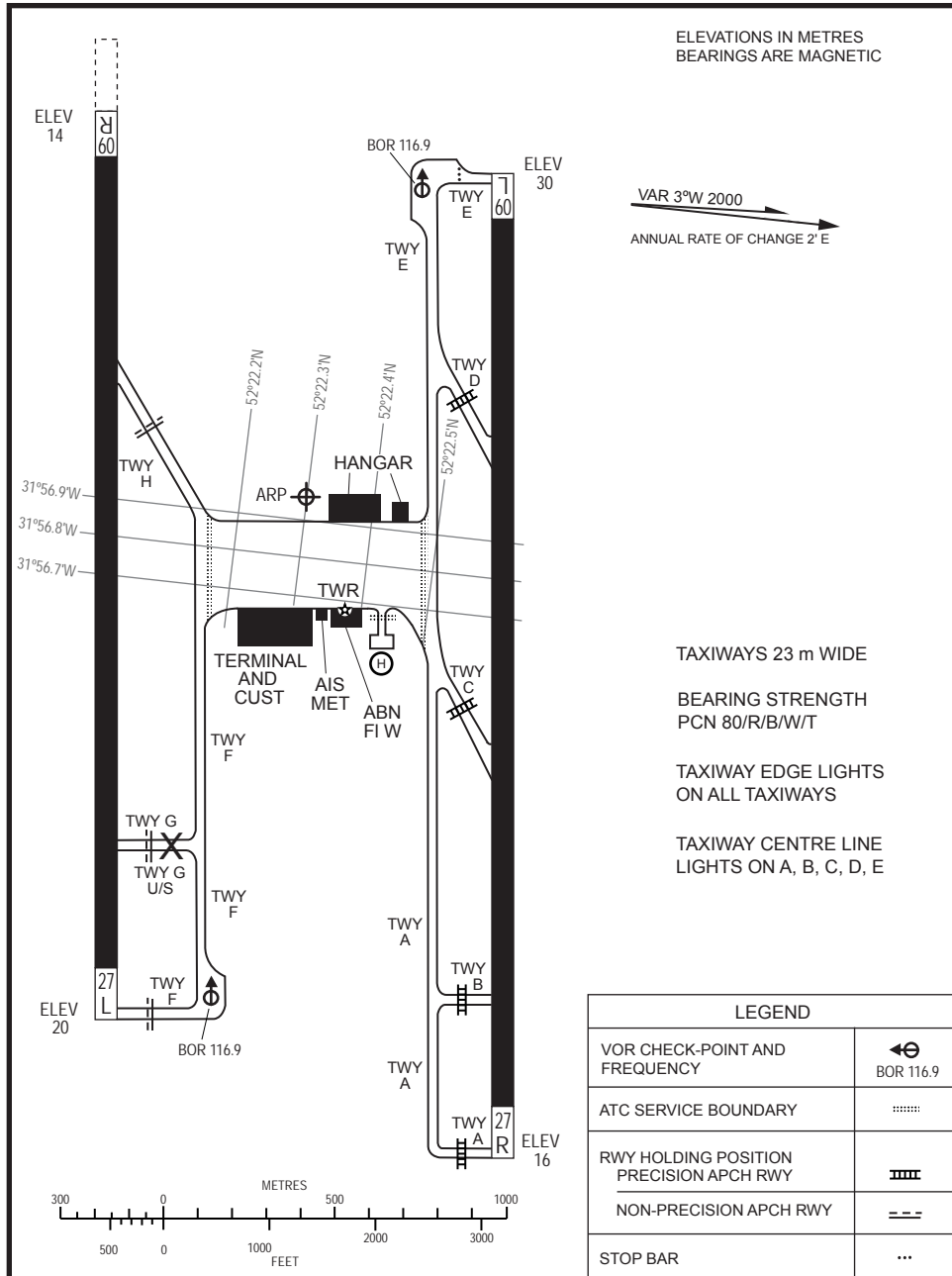
TWR	118.1
APRON	121.6

CITY/
AERODROME

(Name of Publishing Authority)

(Amendment Number)

AIP

AD 2-23
27 NOV 03AERODROME GROUND
MOVEMENT CHART - ICAOAPRON ELEV
28 mTWR 118.1
APRON 121.6CITY/
AERODROME

(Name of Publishing Authority)

(Amendment Number)

DIMENSIONS AND ELEVATIONS IN METRES

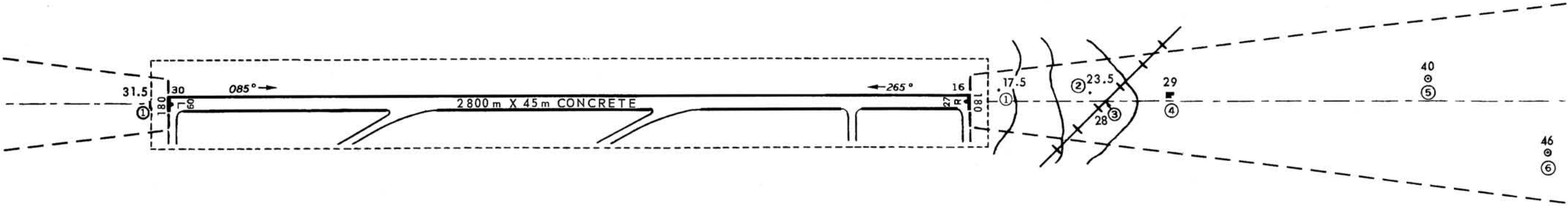
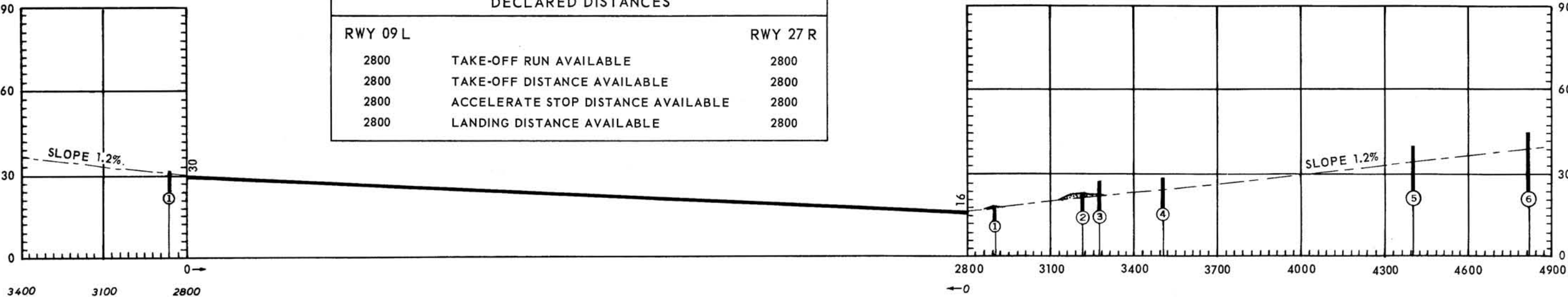
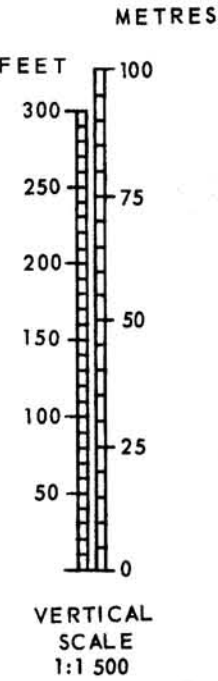
AERODROME OBSTACLE CHART - ICAO
TYPE A (OPERATING LIMITATIONS)

DONLON/International,.....

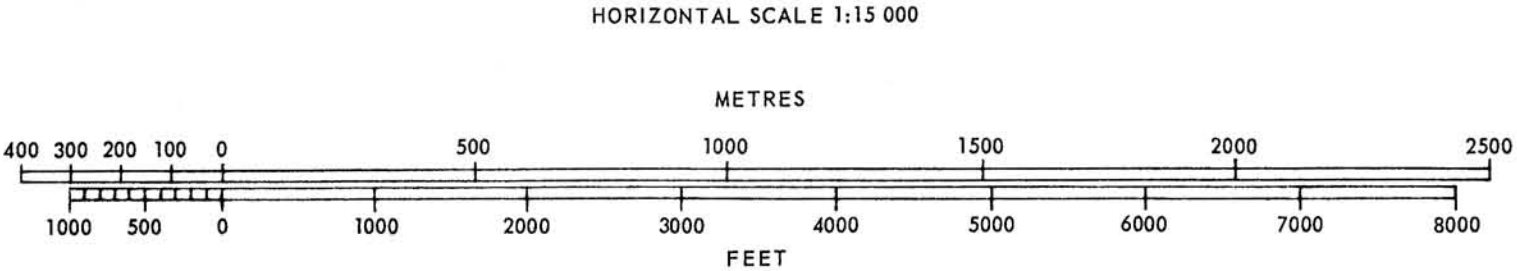
MAGNETIC VARIATION 3°W - JAN 1990

RWY 27 R/09 L

DECLARED DISTANCES			
RWY 09 L		RWY 27 R	
2800	TAKE-OFF RUN AVAILABLE	2800	
2800	TAKE-OFF DISTANCE AVAILABLE	2800	
2800	ACCELERATE STOP DISTANCE AVAILABLE	2800	
2800	LANDING DISTANCE AVAILABLE	2800	



LEGEND	
IDENTIFICATION NUMBER	①
POLE, TOWER, SPIRE, ANTENNA, ETC.	⊙
BUILDING OR LARGE STRUCTURE	■
RAILROAD	—+—+—+—
TERRAIN CONTOUR	~
TERRAIN PENETRATING OBSTACLE PLANE	—



ORDER OF ACCURACY
HORIZONTAL 00m.
VERTICAL 00m.

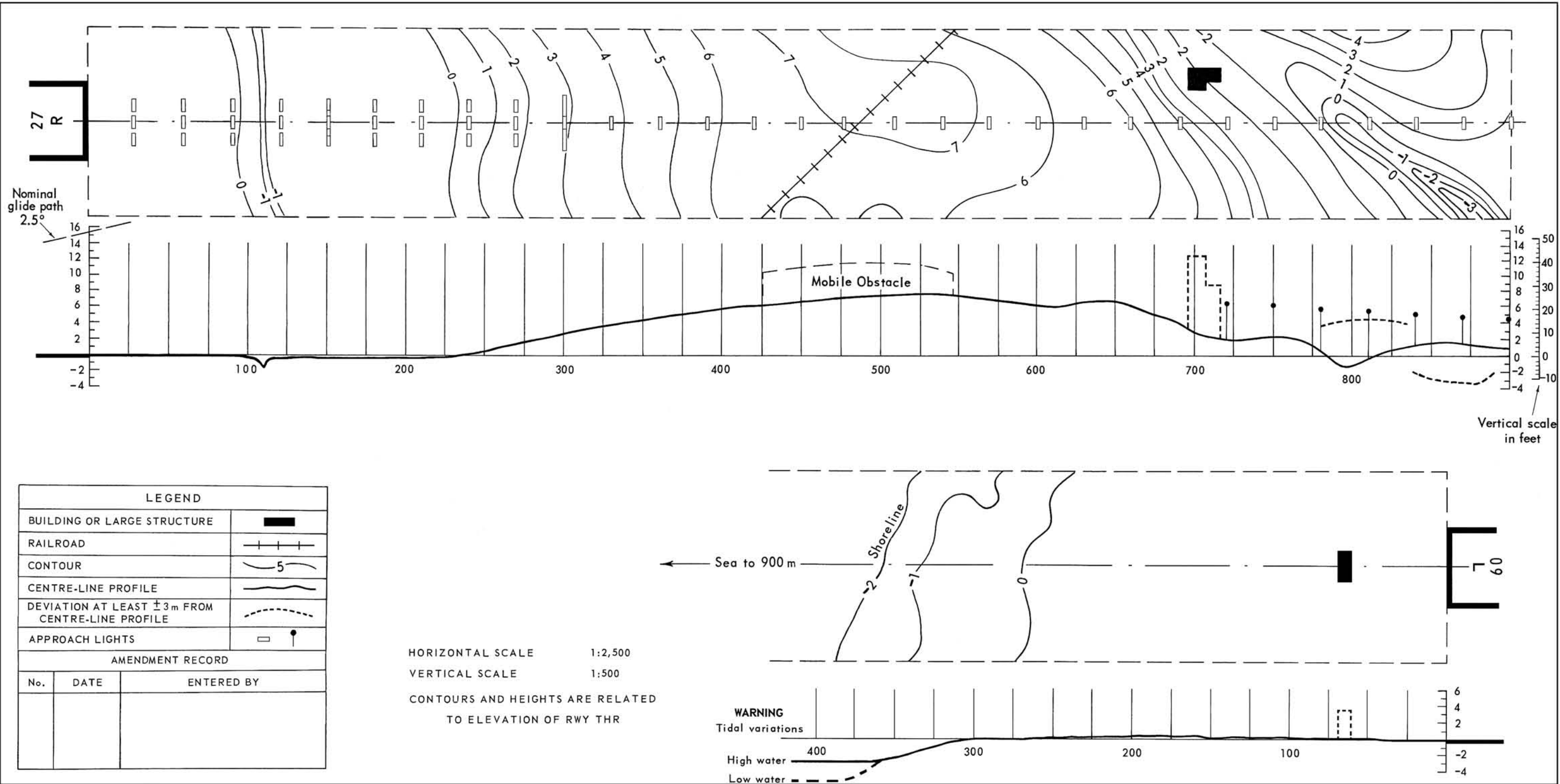
AMENDMENT RECORD		
No.	DATE	ENTERED BY

PRECISION APPROACH TERRAIN CHART - ICAO

CITY/AERODROME

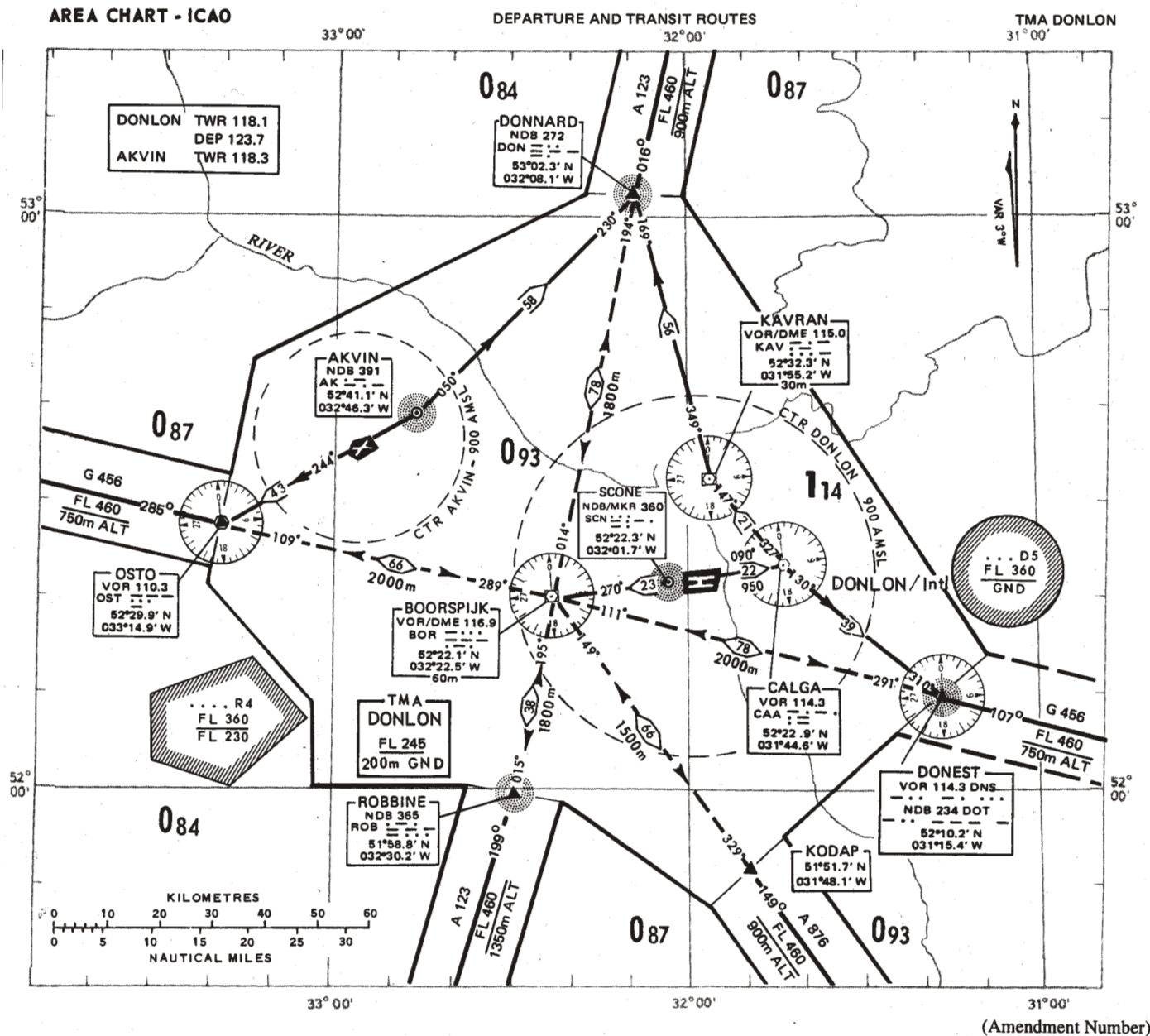
RWY 27 R/09 L

DISTANCES AND HEIGHTS IN METRES



COMMUNICATION FAILURE

ASSOCIATED NAVIGATIONAL AIDS:
AKVIN AERODROME - NDB AK 391 kHz
DONLON AERODROME - NDB SCN 360 kHz

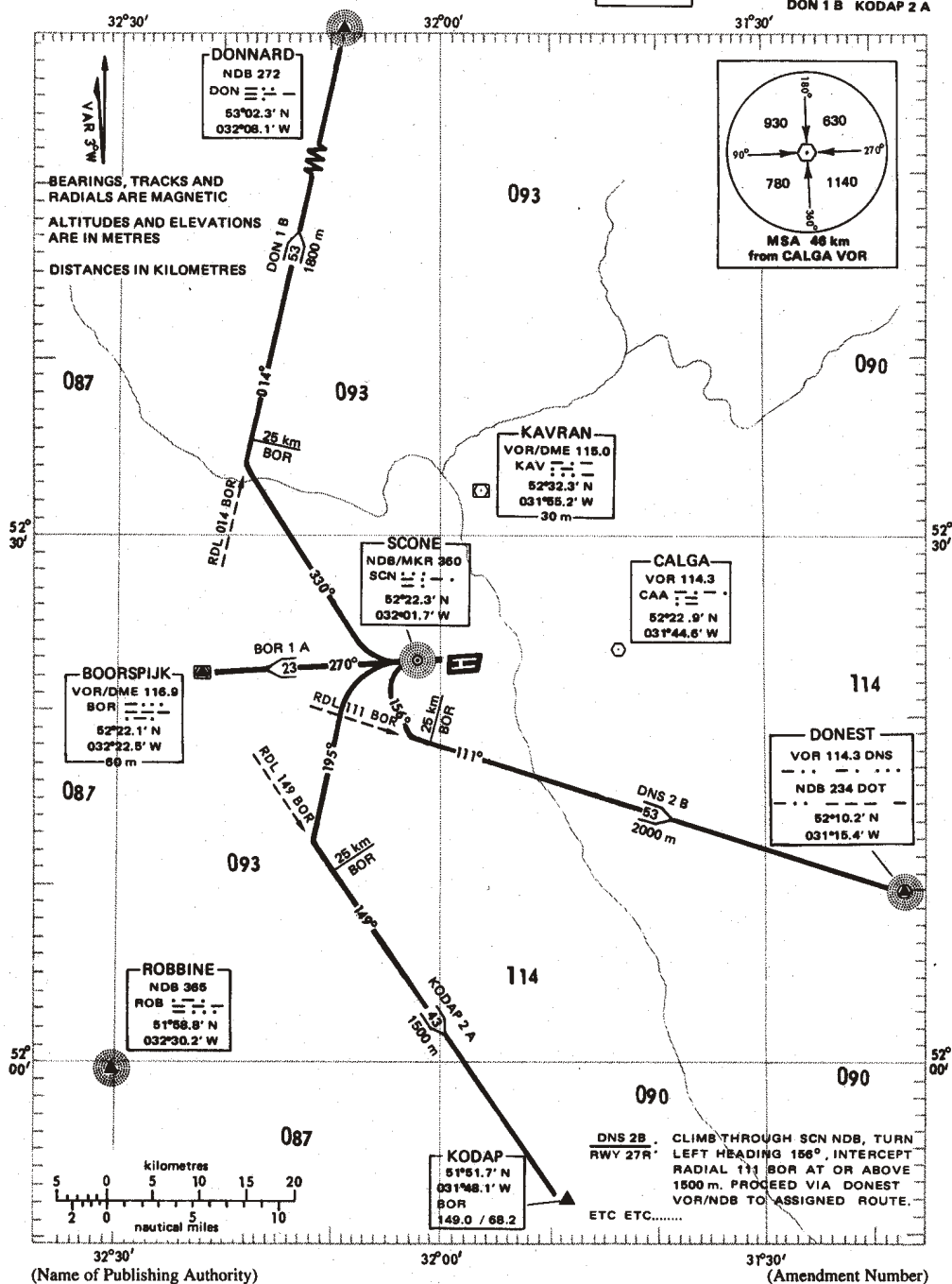


STANDARD DEPARTURE CHART INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
1310 m

TWR	118.1
APP	119.1
ACC	120.3

DONLON/International
RWY 27R
BOR 1 A DNS 2 B
DON 1 B KODAP 2 A

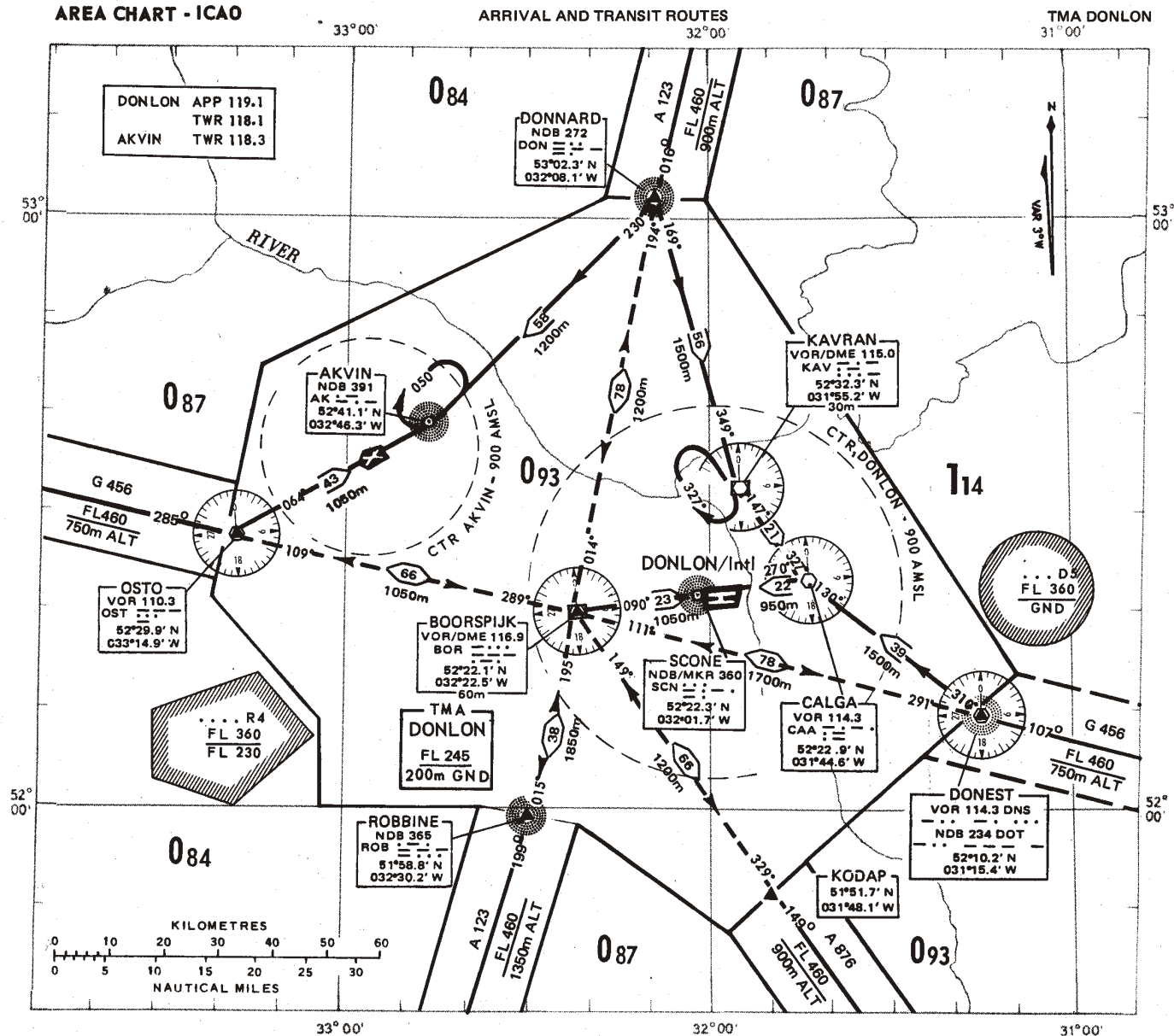


ARRIVAL AND TRANSIT ROUTES

TMA DONLON
31° 00'

COMMUNICATION FAILURE

ASSOCIATED NAVIGATIONAL AIDS:
AKVIN AERODROME - NDB AK 391 kHz
DONLON AERODROME - NDB SCN 360 kHz

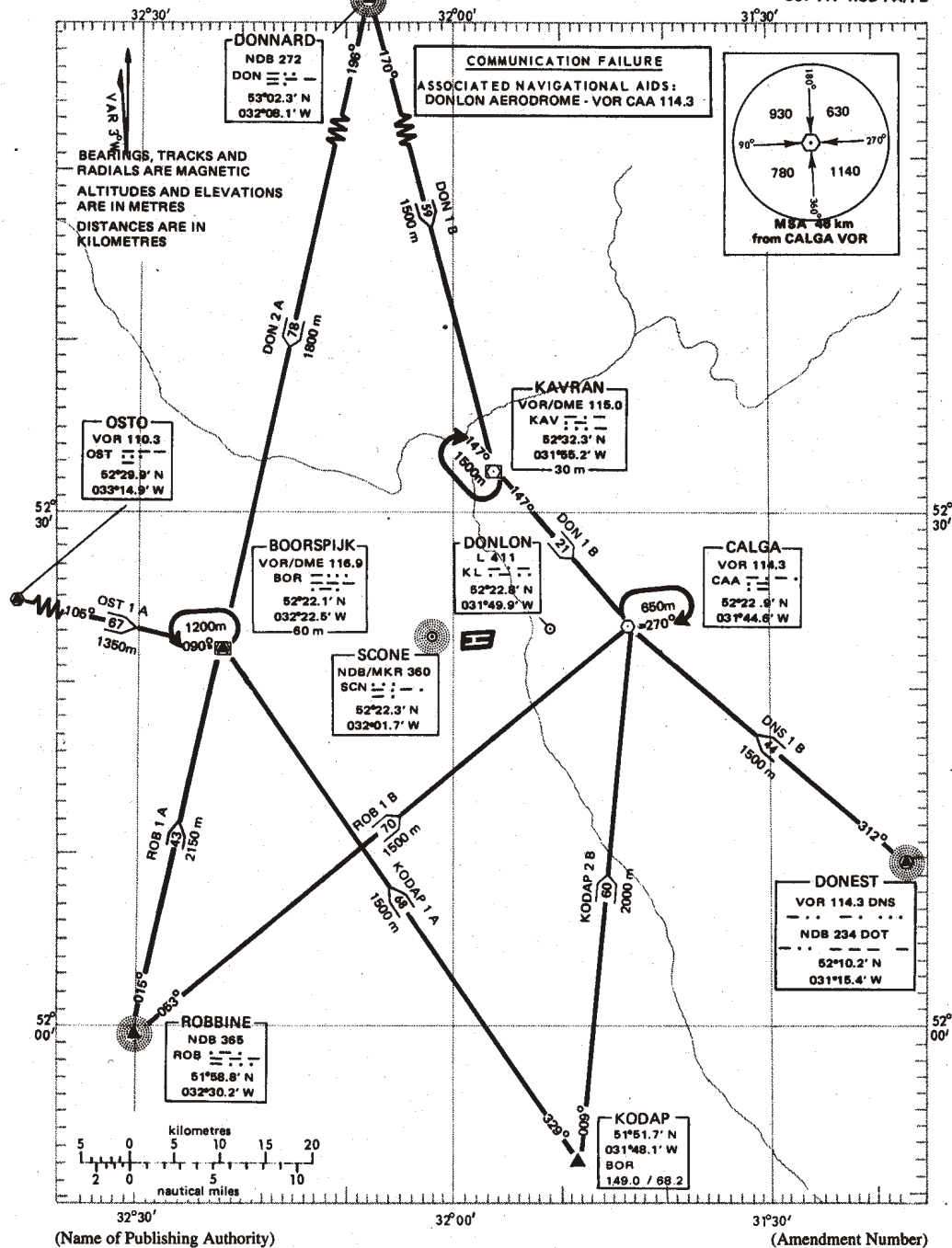


(Amendment Number)

TRANSITION ALTITUDE
1310 m

APP	119.1
TWR	118.1

DONLON/International
RWY 09L/27R
DNS 1 B DON 1 B/2 A
KODAP 1 A/2 B
OST 1 A ROB 1 A/1 B



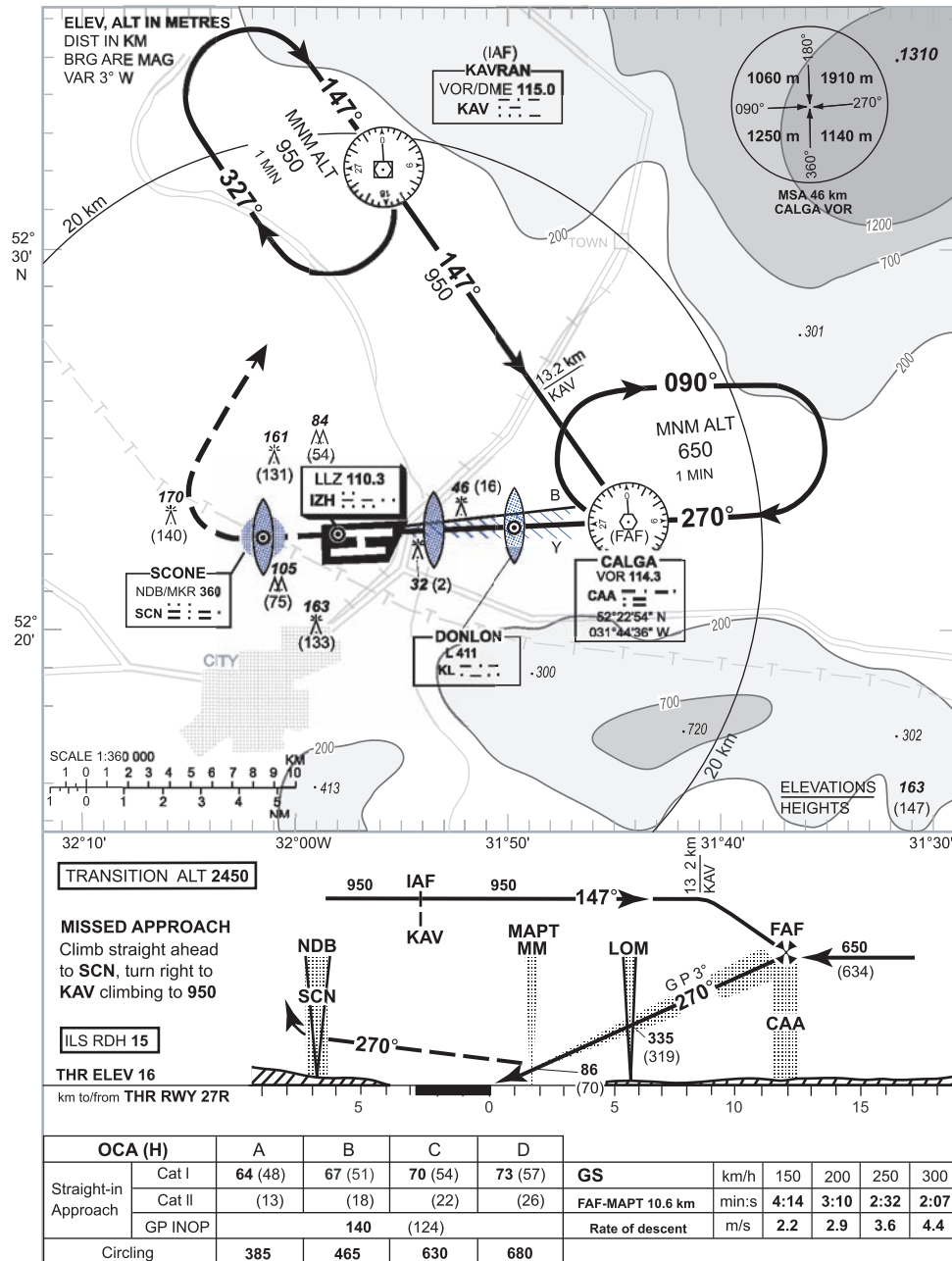
.....
RADAR MINIMUM
ALTITUDE
CHART - ICAO

DONLON/Intl (EADD)

TO BE DEVELOPED

(Name of Publishing Authority)

(Amendment Number)

**INSTRUMENT
APPROACH
CHART - ICAO****AERODROME ELEV 30m**
HEIGHTS RELATED TO
THR RWY 27 R - ELEV 16mAPP 119.1
TWR 118.1**DONLON/Intl (EADD)****ILS RWY 27R**

(Name of Publishing Authority)

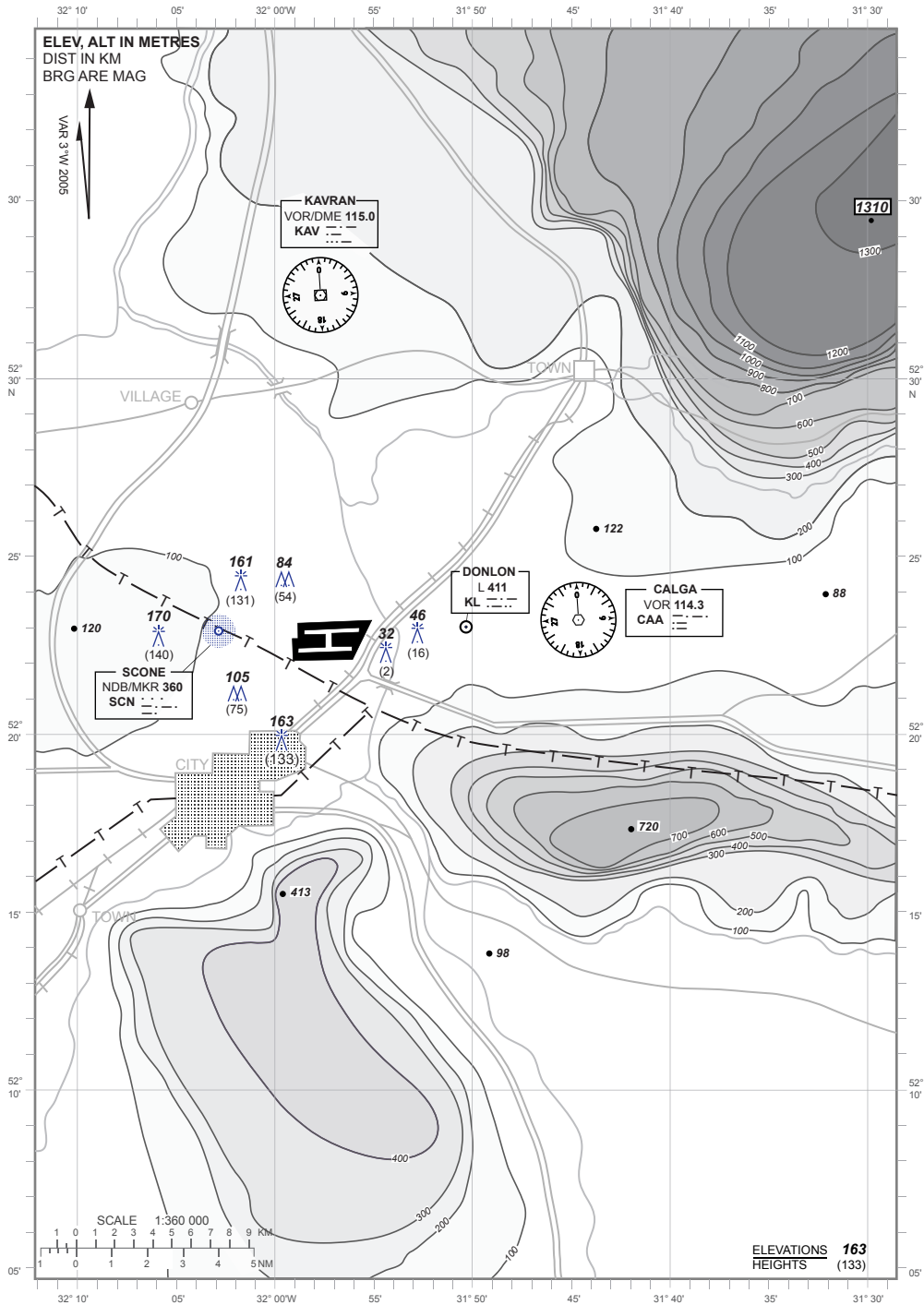
(Amendment Number)

VISUAL
APPROACH
CHART - ICAO

AERODROME ELEV 30m
HEIGHTS RELATED TO AD ELEV

APP 119.1
TWR 118.1

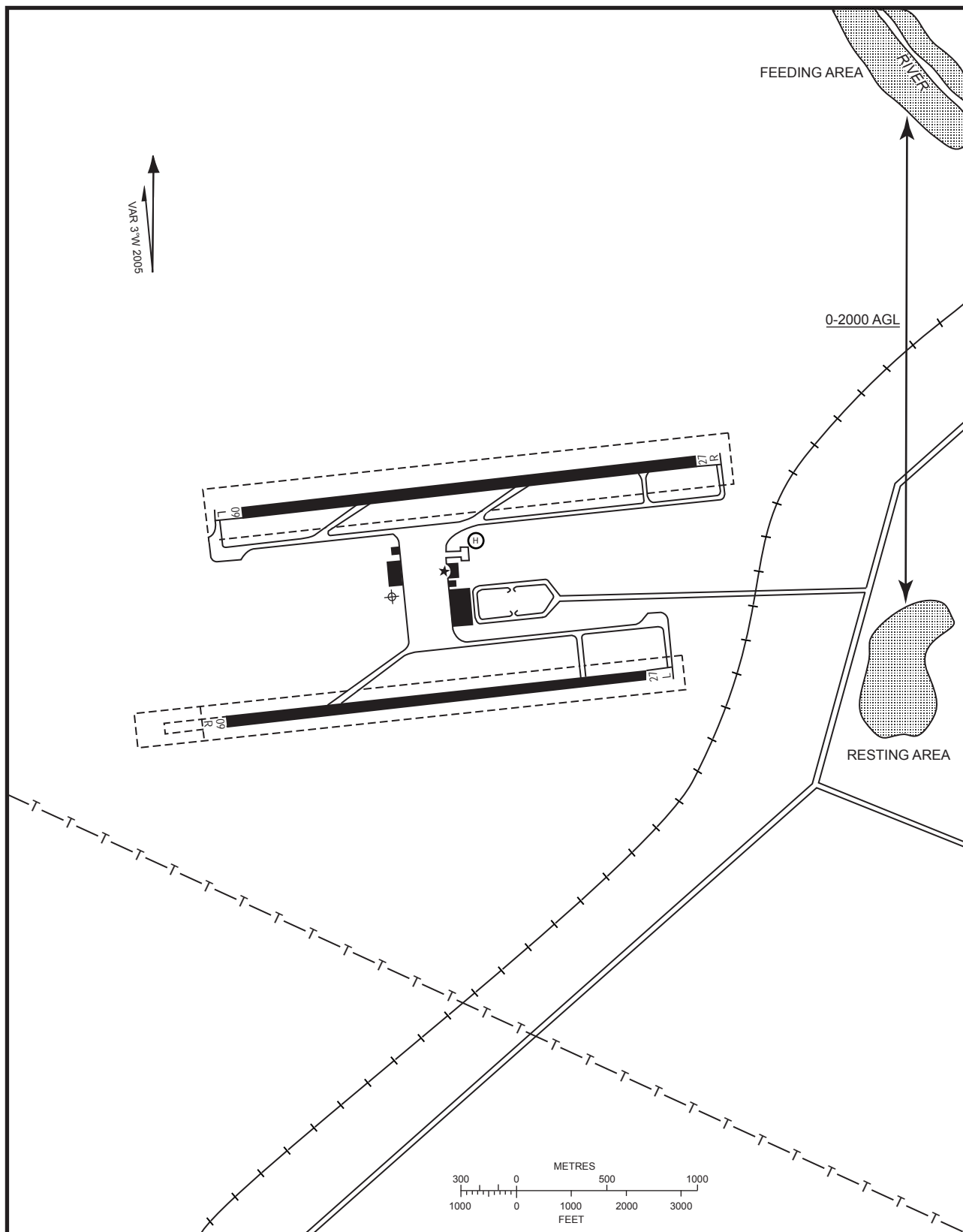
DONLON/Intl (EADD)



(Name of Publishing Authority)

(Amendment Number)

BIRD CONCENTRATIONS - DONLON INTERNATIONAL



(Name of Publishing Authority)

(Amendment Number)

AD 3. HELIPORTS**EADH AD 3.1 HELIPORT LOCATION INDICATOR AND NAME**

EADH — DONLON/Downtown Heliport

EADH AD 3.2 HELIPORT GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	<i>Heliport reference point coordinates and site at heliport</i>	521720N 0320206W, geometric centre of TLOF
2	<i>Direction and distance from (city)</i>	Donlon downtown, east shore of Donlon river
3	<i>Elevation/Reference temperature</i>	18 M/21°C
4	<i>Geoid undulation at ELEV PSN</i>	9 M
5	<i>MAG VAR/Annual change</i>	3°W (1990)/0.03° decreasing
6	<i>Heliport Administration, address, telephone, telefax, telex, AFS</i>	Civil Aviation Administration Donlon Heliport Authority 924 Riverside St. Donlon Tel: 06958238 Telefax: 06958239 Telex: 74265 AFS: EADHYDYX
7	<i>Types of traffic permitted (IFR/VFR)</i>	VFR
8	<i>Remarks</i>	Nil

EADH AD 3.3 OPERATIONAL HOURS

1	<i>Heliport Administration</i>	MON–FRI: 0600–2000 (0500–1900) SAT, SUN + HOL: 0700–2000 (0600–1900)
2	<i>Customs and immigration</i>	O/R. 2 HR PN to Heliport Authority required.
3	<i>Health and sanitation</i>	O/R. 2 HR PN to Heliport Authority required.
4	<i>AIS Briefing Office</i>	As Heliport Administration 1).
5	<i>ATS Reporting Office (ARO)</i>	As Heliport Administration 2).
6	<i>MET Briefing Office</i>	As Heliport Administration.
7	<i>ATS</i>	As Heliport Administration.
8	<i>Fuelling</i>	As Heliport Administration.
9	<i>Handling</i>	As Heliport Administration.
10	<i>Security</i>	O/R. 2 HR PN to heliport required.
11	<i>De-icing</i>	Nil
12	<i>Remarks</i>	1) Self-briefing office. Direct tel. to AIS DONLON/International. 2) Direct tel. to ARO DONLON/International.

EADH AD 3.4 HANDLING SERVICES AND FACILITIES

1	<i>Cargo-handling facilities</i>	1 truck 1.5 tonnes available.
2	<i>Fuel/oil types</i>	AVTUR 1GTA-1, AVCAT oil, all types normally available.
3	<i>Fuelling facilities/capacity</i>	1 truck 15 000 litres, 100 litres/min.
4	<i>De-icing facilities</i>	Nil
5	<i>Hangar space for visiting helicopter</i>	Nil
6	<i>Repair facilities for visiting helicopter</i>	Nil
7	<i>Remarks</i>	Nil

EADH AD 3.5 PASSENGER FACILITIES

1	<i>Hotels</i>	In the city.
2	<i>Restaurants</i>	Coffee shop at heliport, restaurants in the city.
3	<i>Transportation</i>	Buses and taxis.
4	<i>Medical facilities</i>	First aid at heliport. Hospitals in the city.
5	<i>Bank and Post Office</i>	Banking machine at heliport. Banks and post office in the city.
6	<i>Tourist Office</i>	Office in the city. Tel: Donlon 0123 4863559 Telefax: 0123 4863569
7	<i>Remarks</i>	Nil

EADH AD 3.6 RESCUE AND FIRE FIGHTING SERVICES

1	<i>Heliport category for fire fighting</i>	H1
2	<i>Rescue equipment</i>	Nil
3	<i>Capability for removal of disabled helicopter</i>	Hydraulic jacks available
4	<i>Remarks</i>	Nil

EADH AD 3.7 SEASONAL AVAILABILITY — CLEARING

1	<i>Types of clearing equipment</i>	1 snow plough available
2	<i>Clearance priorities</i>	1. TLOF and FATO 2. TWY and Apron
3	<i>Remarks</i>	Nil

EADH AD 3.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	<i>Apron/helicopter stands surface and strength</i>	Dimensions: 10 × 20 M Surface: Asphalt/concrete Strength: 8 tonnes
2	<i>Ground taxiway width, surface and designation</i>	Width: 23 M Surface: Asphalt Designation: Nil
3	<i>Air taxiway width and designation</i>	Nil
4	<i>Altimeter checkpoint location and elevation</i>	Location: Nil Elevation: Nil
5	<i>VOR checkpoints</i>	Nil
6	<i>INS checkpoints</i>	See heliport chart
7	<i>Remarks</i>	Nil

EADH AD 3.9 MARKINGS AND MARKERS

1	<i>Final approach and take-off markings</i>	Heliport identification, FATO edge, TLOF edge
2	<i>TWY, air TWY, air transit route markers</i>	TWY CL HLDG PSN
3	<i>Remarks</i>	Nil

EADH AD 3.10 HELIPORT OBSTACLES

<i>In Area 2</i>					
<i>OBST ID/ Designation</i>	<i>OBST type</i>	<i>OBST position</i>	<i>ELEV/HGT</i>	<i>Markings/ Type, colour</i>	<i>Remarks</i>
a	b	c	d	e	f
EADDOB001	Antenna	522142.17N 0320215.24W	93/60 M	MARKED/FLS W	Obstacle data sets are available (see GEN 3.1.6)
EADDOB002	Power line	522151.82N 0315845.12W	65/15 M	MARKED	
EADDOB003	Tower	522203.36N 0315457.22W	40/12 M	LGTD	
EADDOB004	Mobile OBST	522243.85N 0315455.58W	28/3 M	NIL	

<i>In Area 3</i>					
<i>OBST ID/ Designation</i>	<i>OBST type</i>	<i>OBST position</i>	<i>ELEV/HGT</i>	<i>Markings/ Type, colour</i>	<i>Remarks</i>
a	b	c	d	e	f
EADDOB005	Terminal building	522124.86N 0315452.18W	31.5/15 M	MARKED/HI R	Obstacle data sets are available (see GEN 3.1.6)
EADDOB006	Hangar	522115.34N 0315532.17W	55/20 M	LGTD	
EADDOB007	Antenna	522138.15N 0315425.48W	37/4 M	LGTD	

EADH AD 3.11 METEOROLOGICAL INFORMATION PROVIDED

1	<i>Associated MET Office</i>	DONLON
2	<i>Hours of service MET Office outside hours</i>	H24 —
3	<i>Office responsible for TAF preparation Periods of validity</i>	DONLON 9 HR
4	<i>Trend forecast Interval of issuance</i>	Nil
5	<i>Briefing/consultation provided</i>	D = Self-briefing display
6	<i>Flight documentation Language(s) used</i>	Charts and plain language text English
7	<i>Charts and other information available for briefing or consultation</i>	S, U ₈₅ , P ₈₅ , SWL Other information: Nil
8	<i>Supplementary equipment available for providing information</i>	Telefax; weather radar
9	<i>ATS units provided with information</i>	Donlon TWR Donlon Heliport FIS
10	<i>Additional information (limitation of service etc.)</i>	Nil

EADH AD 3.12 HELIPORT DATA

1	<i>Heliport type</i>	Surface level
2	<i>TLOF dimensions</i>	20 × 20 M
3	<i>FATO, GEO bearings</i>	027.33°/207.33° GEO
4	<i>FATO dimensions and SFC type</i>	50 × 50 M, asphalt
5	<i>TLOF, SFC and BRG strength</i>	Concrete, 8 tonnes
6	<i>Coordinates of geometric centre TLOF or THR of FATO and geoid undulation</i>	TLOF: 521720.17N 0320206.31W Geoid: 9 M
7	<i>TLOF/FATO, elevation and slope</i>	Non-precision: 18 M, slope 1% / 18 M, slope 1% Precision: Nil
8	<i>Safety area dimensions</i>	70 × 90 M
9	<i>HEL CWY dimensions</i>	Nil
10	<i>Obstacle-free sector</i>	Nil
11	<i>Remarks</i>	Nil

EADH AD 3.13 DECLARED DISTANCES

	<i>TODAH (M)</i>	<i>RTODAH (M)</i>	<i>LDAH (M)</i>	<i>Remarks</i>
	1	2	3	4
FATO 03:	70 M	50 M	50 M	Nil
FATO 21:	70 M	50 M	50 M	Nil

EADH AD 3.14 APPROACH AND FATO LIGHTING

1	<i>APP LGT system type, LEN, INTST</i>	Nil
2	<i>Type of visual approach slope indicator system</i>	Nil
3	<i>FATO area LGT characteristics and location</i>	White omnidirectional edge lights at intervals of 12.5 M
4	<i>Aiming point LGT characteristics and location</i>	Nil
5	<i>TLOF LGT system characteristics and location</i>	Yellow floodlights at the edge of TLOF at intervals of 5 M
6	<i>Remarks</i>	Nil

EADH AD 3.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	<i>Heliport BCN location and characteristics</i> <i>Hours of operation</i>	Nil
2	<i>WDI location and LGT</i>	NE corner of FATO LGTD
3	<i>TWY edge and centre line lighting</i>	Nil
4	<i>Secondary power supply/switch-over time</i>	Nil
5	<i>Remarks</i>	Nil

EADH AD 3.16 ATS AIRSPACE

1	<i>Designation and lateral limits</i>	DONLON Heliport ATZ. A circle, radius 1 KM centred at 521720N 0320206W (ARP)
2	<i>Vertical limits</i>	150 M MSL
3	<i>Airspace classification</i>	D
4	<i>ATS unit call sign</i> <i>Language(s)</i>	Donlon heliport information English
5	<i>Transition altitude</i>	3 500 FT MSL
6	<i>Remarks</i>	Nil

EADH AD 3.17 ATS COMMUNICATION FACILITIES

<i>Service designation</i>	<i>Call sign</i>	<i>Frequency</i>	<i>Hours of operation</i>	<i>Remarks</i>
1	2	3	4	5
APP	Donlon Approach	119.100 MHZ 121.500 MHZ	H24 H24	Primary frequency, VDF available Emergency frequency
TWR	Donlon Tower	118.100 MHZ 117.900 MHZ	As AD HO	Primary frequency Military aircraft
FIS	Donlon Heliport Information	118.300 MHZ	As Heliport Administration	

EADH AD 3.18 RADIO NAVIGATION AND LANDING AIDS

1	Type of aid, MAG VAR (for VOR, give declination), Type of OP	VOR/DME (3°W/1990) Declination: 3°W or 357°
2	ID	BOR
3	Frequency	116.9 MHZ CH 116X
4	Hours of operation	H24
5	Position of transmitting antenna coordinates	522106.2N 0322230.8W
6	Elevation of DME transmitting antenna	60 M/198 FT
7	Remarks	Nil

EADH AD 3.19 LOCAL TRAFFIC REGULATIONS

Taxiing is limited to ground taxiing only. During the night hours marshaller guidance to and from apron is provided.

**EADH AD 3.20 NOISE ABATEMENT
PROCEDURES**

3.20.1 No traffic is permitted during the night period 2200–0600 (2100–0500).

3.20.2 This heliport is located within a noise-sensitive area. Pilots approaching/departing should avoid overflying residential areas located to the north-east and south of the heliport as well as the hospital complex located on the west shore of the Donlon River, west of the heliport.

EADH AD 3.21 FLIGHT PROCEDURES

All approaches and departures are to be over the Donlon River to the south or to the north. All helicopters must maintain two-way RTF contact with the Donlon Tower on 118.000 MHz while flying outside the Donlon Heliport ATZ or with Donlon Heliport Information on 118.300 MHz while flying within the Donlon Heliport ATZ.

EADH AD 3.22 ADDITIONAL INFORMATION

Intensive activity of flocks of seagulls takes place in the vicinity of the heliport. Dispersal activities include the occasional playing back of distress calls from tape together with the firing of shell crackers.

EADH AD 3.23 CHARTS RELATED TO A HELIPORT

1. DONLON/Downtown Heliport — Heliport Chart — EADH (specify).

TO BE DEVELOPED

