Federal Office of Civil Aviation FOCA Safety Division - Flight Operations

Swiss Confederation

FOCA GM/INFO

Guidance Material / Information

Standard Operating Procedures (SOP) for Helicopter Operations



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Purpose	Guidance / Information	

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List of Abbreviations LoA ISS 1/REV 0/31.05.2016

The following abbreviations are within this GM/INFO:

Abbreviation	Definition	
AFM	Aircraft Flight Manual	
AOC	Air Operators Certificate	
CAA	Civil Aviation Authority	
EASA	European Aviation Safety Agency	
EC	European Commission	
EHEST	European Helicopter Safety Team	
EU	European Union	
FOCA	Federal Office of Civil Aviation	
GM/INFO	Guidance Material / Information	
ICAO	International Civil Aviation Organisation	
LLD	Load Lifting Devices	
NAA	National Aviation Authority	
PAR	Parachute operations	
PRA	Proposed Revision Amendment	
SHA	Swiss Helicopter Association	
SOP	Standard Operating Procedures	
SPO	Specialised Operations	

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0 Introduction

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After 21 April 2017 and in accordance with Regulation (EU) 379/2014 amending Regulation (EU) No 965/2012 on Air Operations, Annex VIII (Part-SPO) will be applicable to specialised operations for helicopters. This means operations as for example: aerial photography flights; helicopter external loads operations; human external cargo operations; parachute operations, skydiving; etc.

The development of **Standard Operating Procedures (SOPs)** is required for commercial and noncommercial specialised operations. Based on a risk assessment, the operator shall establish SOPs appropriate to the specialised activity and aircraft used.

For further informations regarding the implementation of EASA Part-SPO in Switzerland refer to FOCA's web page: www.bazl.admin.ch/spo.

0.1 Legal References

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This GM/INFO is based on the legal references listed below:

Legal References	Issue	Subject
Basic Regulation (EC) No 216/2008	20.02.2008	Common rules in the field of civil aviation and establishing an European Aviation Safety Agency
Commission Regulation (EU) No 965/2012	05.10.2012	Technical requirements and administrative procedures related to air operations Annex I: DEF; Annex II: Part-ARO; Annex III: Part-ORO; Annex IV: Part-CAT; Annex V: Part-SPA; Annex VI: Part-NCC; Annex VII: Part-SPO
Commission Regulation (EU) No 748/2012	03.08.2012	Laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances
Commission Regulation (EU) 379/2014	07.04.2014	Air OPS Regulation - Annex VIII - Part-SPO (Specialised Operations), CAT operations of sailplanes and balloons, and CAT A-to-A operations
Bundesgesetz vom 20. März 1981 Loi fédérale du 20 mars 1981 Legge federale del 20 marzo 1981	01.01.2013	Bundesgesetz über die Unfallversicherung (UVG) Loi fédérale sur l'assurance-accidents (LAA) Legge federale sull'assicurazione contro gli infortuni (LAINF)
Verordnung vom 19. Dezember 1983 Ordonnance du 19 décembre 1983 Ordinanza del 19 dicembre 1983	01.01.2016	Verordnung über die Unfallverhütung (VUV) Ordonnance sur la prévention des accidents (OPA) Ordinanza sulla prevenzione degli infortuni (OPI)
EKAS Richtlinien 6508		Richtlinie über den Beizug von Arbeitsärzten und anderen Spezialisten der Arbeitssicherheit (ASARichtlinie)
Directives CFST 6508	January 2007	Directive relative à l'appel à des médecins du travail et autres spécialistes de la sécurité au travail Direttiva concernente il ricorso ai medici del lavoro e
Direttive CFSL 6508		agli altri specialisti della sicurezza sul lavoro
Bundesgesetz vom 12. Juni 2009 Loi fédérale du 12 juin 2009 Legge federale del 12 giugno 2009	01.07.2010	Bundesgesetz über die Produktsicherheit (PRSG) Loi fédérale sur la sécurité des produits (LSPro) Legge federale sulla sicurezza dei prodotti (LSPro)
DETEC Ordinance on Special Category Aircraft (OSCA)	15.07.2015	Special Category Aircraft

Verordnung vom 2. April 2008		Verordnung über die Sicherheit von Maschinen (Maschinenverordnung, MaschV)
Ordonnance du 2 avril 2008	15.12.2011	Ordonnance sur la sécurité des machines (Ordonnance sur les machines, OMach)
Ordinanza del 2 aprile 2008		Ordinanza concernente la sicurrezza delle macchine (Ordinanza sulle macchine, OMacch)

0.2 Purpose of this GM/INFO

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The purpose of this GM/INFO is to guide operators in developing SOPs for their specialised operations (SPO) with helicopters (e.g. external load operations, avalanche mining, etc.). It further explains the process leading to a SOP review/approval , where such is required, and it provides a self-assessment tool for organisations to verify the compliance with the relevant requirements. The SPO regulation and its AMCs/GMs do not provide training instructions/syllabi for the different types of SPO (e.g. HESLO) nor it's levels.

The requirements for the development and the content of SOPs are laid down in article SPO.OP.230 of the Air Operations Regulation and the related AMCs/GMs. Different organisations (EASA, EHEST, and SHA) have already developed very useful GM, tools and SOPs. For this reason, this GM/INFO complements only the existing material by:

- referencing to the relevant parts of the SPO regulation and the information providers,
- publishing some additional information to assist operators in administrative matters,
- providing a self-assessment tool (checklist).

0.3 Scope

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This GM/INFO, the EHEST/SHA SOP development guidance manual and the procedures therein comply and refer to the applicable EU Regulation and its related AMCs and GMs, in particular:

- SPO.OP.230 standard operating procedures
- SPO.SPEC.HESLO.100 standard operating procedures
- SPO.SPEC.HEC standard operating procedures
- SPO.SPEC.PAR standard operating procedures

0.4 Terms and Conditions

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When used throughout the GM/INFO the following terms shall have the meaning as defined below:

Term	Meaning	Reference
shall, must, will	These terms express an obligation, a positive command.	EC English Style Guide: Ch. 7.19
may	This term expresses a positive permission.	EC English Style Guide: Ch. 7.21
shall not, will not	These terms express an obligation, a negative command.	EC English Style Guide: Ch. 7.20
may not, must not	These terms express a prohibition.	EC English Style Guide: Ch. 7.20
need not	This term expresses a negative permission.	EC English Style Guide: Ch. 7.22
should	This term expresses an obligation when an acceptable means of compliance should be applied .	EASA Acceptable Means of Compliance publications FOCA policies and requirements
could	This term expresses a possibility.	http://oxforddictionaries.com/ definition/english/could
ideally	This term expresses a best possible means of compliance and/or best experienced industry practice.	FOCA recommendation

Note: To highlight information or an editorial note a specific note box is used.

The use of the male gender should be understood to include male and female persons.

0.5 Organisation / Operator Responsibilities Ch. 0.5 ISS 1 / REV 0 / 31.05.2016

Before commencing a specialised operation, the operator shall conduct a risk assessment, taking into account the complexity of the activity planned to determine the hazards and associated risks and establish mitigating measures. These mitigation measures will have to be integrated in the associated SOP to be established. The SOP shall also take into account the requirements of SPO.SPEC, subpart E, «Specific Requirements» (Regulation (EU) 965/2012 on Air Operations).

The SOPs shall be part of the operations manual or a separate document. The appropriate manuals and checklists should be revised to include information/guidance on standard operating procedures. SOPs shall be regularly reviewed and updated, as appropriate. The operator shall ensure that specialised operations are performed in accordance with the SOPs.

1 Standard Operating Procedures

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Standard operating procedures (SOPs) are written instructions to achieve uniformity of the aircraft performance, maximum safety, compliance and efficiency of an operation. SOPs are developed to standardise all operating procedures used by an operator.

1.1 High Risk Commercial Specialised Operations

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Certain commercial SPO operations are classified as «high risk». For such high risk operations the SPO operator needs to apply for to the competent authority for an authorization before the operation(s) may be started.

The application shall contain and explain the associated SOPs and the relevant risk assessment(s) for the planned operation(s). FOCA will review those and, when satisfied, issue a so called «Authorisation of high risk commercial specialised operations» for the planned operation(s):

- Operations considered as high risk in Switzerland
- How to apply for a commercial high risk operation

Note: See FOCA's <u>website</u> for more information.

1.2 SOPs Effectiveness and Reliability

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The SOP and its related risk management must be reviewed for effectiveness and reliability:

- on a regular basis,
- based on feedback from operations, and
- when conditions change in the operations (change of area of operation, helicopters, etc.).

1.3 SOPs Review and Verification of Compliance

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SOPs (incl. the risk assessments) of the following operations need a FOCA review/prior-approval:

- high risk commercial specialised operations according ARO.OPS.150 and FOCA's additional definition as published on FOCA's website (see above)
- reduced reserve fuel according AMC1 SPO.OP.131(a)(1)(ii)

For the purpose of verifying the operator's standard operating procedures (SOPs), FOCA may

- conduct an audit at the operator's facilities or
- require the conduct of one or more demonstration flights operated as if they were high-risk commercial specialised operations.

1.4 Cross-border High Risk Commercial Specialised Operation

If the SPO operator intents to perform a specialised operation extending over the Swiss border, or the operation would be completely in another EASA member state's (MS) territoriy, the operator will have to seek that MS' definition of hish risk commercial specialised operation (EASA MS are bound to publish this definition). If the operation is considered high risk, the application process to FOCA remains the same for the operator (applying to FOCA). FOCA will then, in cooperation with the concerned MS' Authority, review the application and be the issuing Authority of the authorisation.

1.5 Changes

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Any change affecting the scope of the authorisation or the authorised operations shall require prior approval of the FOCA. Any change not covered by the initial risk assessment, shall require the submission of an amended risk assessment and SOP to the FOCA (ORO.SPO.115).

For SPO authorisation holders, any amendment associated with the authorised SOPs, prior approval shall be obtained before the amendment becomes effective (ORO.MLR.100).

Note: Without prejudice to any additional enforcement measures, when the operator implements changes without having submitted an amended risk assessment and SOP, FOCA shall suspend, limit or revoke the authorisation (ARO.OPS.150).

1.6 Crew Responsibilities

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Crew duties, including those of task specialists', shall be specified in the SOPs and, where appropriate, in the operations manual.

1.7 Documents, Manuals and Information to be Carried

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The current parts of the operations manual and/or SOP or AFM that are relevant to the duties of crew members and task specialists, shall be carried (SPO.GEN.140).

2 Development of Standard Operating Procedures and Templates

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2.1 Different Ways and Sources for the Development of SOPs

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SOPs should be developed to a standard format in accordance with AMC2 SPO.OP.230 (SOP template) and taking into account the results of the risk assessment process.

EASA, EHEST and SHA offer SOP templates and examples for the establishment of systematic risk assessments. The data and the assessments within this documents are examples. Operators may use the data, but must adapt the content to their activities and must perform their own risk assessments suitable for the specific operations and operating environment.

Note: FOCA recommends to use the risk assessment process which shall be already described in the operators Management System (OMM).

2.2 SOPs Development Providers and Sources

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EHEST Safety Management Toolkit, SOP: European Helicopter Safety Team

SHA has developed SOPs, available to the public, for most specialised operations. For information and conditions, please contact: www.sha-swiss.ch.

2.3 Self-assessment Toolkit - Checklists

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The self-assessement for operators is based on questions to check compliance with the relevant rules. The checklists are structured according to the kind of SPO operation:

- Operational approval checklist (except HESLO, HEC, PAR),
- Operational approval checklist HESLO,
- Operational approval checklist HEC,
- Operational approval checklist PAR.

Note: The Form including all checklists is available under bazl.admin.ch/spo

3 Aircraft and Equipment

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Aircraft shall have a certificate of airworthiness (CofA) in accordance with Regulation (EU) No 748/2012.

When an airworthiness approval involving a modification of the aircraft for specialised operations is required, the operator shall apply for this approval. The form is available on the FOCA Portal for Specialists.

The SOP shall specify the equipment to be carried, including its operation limitations and appropriate entries in the MEL, as applicable. All additional equipment used, e.g. ropes, cables, mechanical hooks, swivel hooks, nets, buckets, baskets, containers, should be manufactured according to applicable rules or recognised standards. The operator should be responsible for maintaining the serviceability of this equipment.

4 Evaluation Process – Phases

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Upon receiving an application for the issue of a high risk commercial specialised operations authorisation, FOCA reviews the operator's risk assessment documentation and standard operating procedures (SOP) related to one or more planned operations.

When satisfied with the risk assessment and SOP, FOCA issues the authorisation. The authorisation may be issued for a limited or an unlimited duration. The conditions under which an operator is authorised to conduct one or more high risk commercial specialised operations will be specified in the authorisation.