

## **OPINION NO 02/2012**

## OF THE EUROPEAN AVIATION SAFETY AGENCY

# of 16 April 2012

for a Commission Regulation establishing the Implementing Rules for air operations

'Air Operations - OPS (Part-SPO)'

# **Table of Contents**

Execu	tive Summary	3
Introduction		4
I.	General	4
II.	Scope of the Opinion	4
III.	Consultation	5
IV.	Rule numbering convention	7
Cover	Regulation on Air Operations	9
I.	Scope	9
II.	Overview of reactions	9
III.	Explanations	9
Annex	viii - Part-SPO	10
I.	Scope	10
II.	From Aerial Work to Specialised Operations	12
III.	Activities covered by Part-SPO	12
IV.	The specific nature of Specialised Operations	14
٧.	Specific reactions and main changes	16

## **Executive Summary**

This Opinion contains the following documents:

- Amendment to Cover Regulation on Air operations including amendments to Annex I –
   Definitions;
- Annex VIII Part-SPO, technical requirements for specialised operations (commercial and non-commercial) with aeroplanes, helicopters, sailplanes, balloons;

The development of these requirements was based on the following objectives:

- maintain a high level of safety;
- ensure proportionate rules;
- quarantee flexibility and efficiency for operators and authorities.

This Opinion is the result of an extensive consultation process involving authorities, associations, operators and aviation experts.

The Opinion for the remaining Sections of Annex IV – Part CAT for sailplanes and balloons as well as A-to-A flights with aeroplanes and helicopters will be published at a later stage.

### Introduction

#### I. General

- 1. Regulation (EC) No 216/2008¹ of the European Parliament and of the Council (hereinafter referred to as the 'Basic Regulation') as amended by Regulation (EC) No 1108/2009² establishes an appropriate and comprehensive framework for the definition and implementation of common technical requirements and administrative procedures in the field of civil aviation.
- 2. The purpose of this Opinion is to assist the European Commission in laying down Implementing Rules for air operations.
- 3. The Opinion has been adopted, following the procedure specified by the European Aviation Safety Agency's (the Agency) Management Board<sup>3</sup>, in accordance with the provisions of Article 19 of the Basic Regulation.

## II. Scope of the Opinion

- 4. This Opinion consists of the following documents:
  - Amendment to Cover Regulation on Air operations including amendments to Annex I Definitions;
  - Annex VIII Part-SPO, technical requirements for specialised operations (commercial and non-commercial) with aeroplanes, helicopters, sailplanes, balloons;
- 5. The documents of this Opinion are based on the revised rule structure as proposed by the European Commission and the Agency in April 2011. The following table provides an overview of the Annexes under the Regulation for Air operations.

Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC. *OJ L 79, 19.03.2008, p. 1-49.* 

Regulation (EC) No 1108/2009 of the European Parliament and of the Council of 21 October 2009 amending Regulation (EC) No 216/2008 in the field of aerodromes, air traffic management and air navigation services and repealing Directive 2006/33/EC. *OJ L* 309, 24.11.2009, pp. 51-70.

Decision of the Management Board concerning the procedure to be applied by the Agency for the issuing of Opinions, Certifications Specifications and Guidance Material (Rulemaking Procedure). EASA MB 08-2007, 13.06.2007.

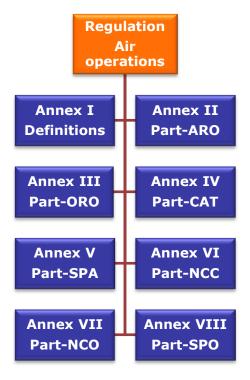


Figure 1: Annexes of the Regulation for Air operations

#### III. Consultation

- 6. This Opinion is based on NPA 2009-02 containing draft proposals for IR and related AMC and GM for air operations.
  - NPA consultation phase
- 7. NPA 2009-02 was published on the EASA website (http://www.easa.europa.eu) on 30 January 2009. The consultation period ended on 31 July 2009. The Agency had received in total 13 775 comments, of which around 350 comments related to the scope of this Opinion.
  - CRD (Comment Response Document) consultation phase
- 8. Comment summaries, related responses to summarised comments and the proposed revised rule text were discussed in detail with the following four rulemaking review groups (RGs):
  - RG01 (CAT), focusing on the rules for commercial air transport operations;
  - RG02 (SPO), focusing on the rules for specialised operations;
  - RG03 (NCC), focusing on the rules for non-commercial operations of complex motor-powered aircraft; and
  - RG04 (NCO), focusing on the rules for non-commercial operations of other-than-complex motor-powered aircraft.
- 9. The draft CRD text of Part-SPO was reviewed by RG02.
- 10. The Agency also made a consistency check with other Parts (Part-CAT and Part-NCC and NCO) before publishing the CRD.

- 11. Based on extensive consultation with authorities, associations and operators, the Agency published the CRD OPS III on 27 September 2011. The reaction period ended on 31 January 2012.
  - Meeting with Review Group members and web conference
- 12. During the consultation phase, the Agency organised, on 23-24 November 2011, an additional meeting with the RG02 (SPO) members to discuss the published CRD text. This meeting allowed to improve the CRD text and a general consensus was found. The main items discussed were the performance criteria for helicopters and the two SOPs on HESLO and HEC.
- 13. Additionally to the meeting with the RG members, the Agency held a public web conference on 29 November 2011 in order to present the CRD and to exchange discussions and information on Part-SPO. The feedback received was positive.
  - Reactions on CRD
- 14. The Agency received reactions to the CRD from 43 entities including National authorities, manufacturers, associations and individuals. The total number of comments is approximately 560, of which 15% are duplicates.

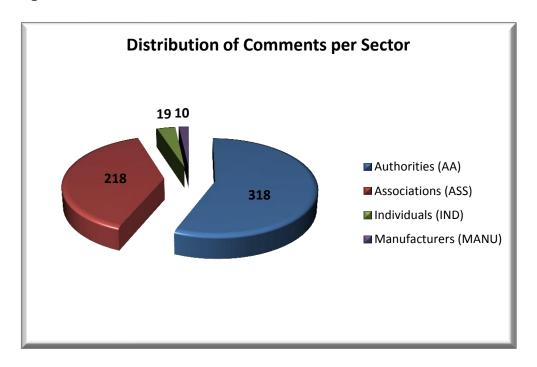
The following figures provide an overview of such reactions.

Distribution of Commenters per Sector

Authorities (AA)
Associations (ASS)
Individuals (IND)
Manufacturers (MANU)

Figure 2: Overview of commenters providing reactions

Figure 3: Overview of comments received



15. All reactions have been assessed and responded and were taken into account when drafting the amendment to Annex VIII of this Opinion.

## IV. Rule numbering convention

16. In line with the Agency's rulemaking drafting guidelines, the following rule numbering convention was applied to the IRs:

<Part>.<Subpart>.<Section>.<N>

## Explanation:

<Part>: mandatory - up to four letters or digits

examples: SPO

<Subpart>: mandatory - up to four letters or digits

examples: GEN, OP, POL, IDE, SPEC

<Section>: mandatory - up to five letters or digits

examples: SPO.SPEC.HESLO

<N>: mandatory - rule number - three digits, starting at 100, following

numbers generally numbered in increments of 5.

## **Cover Regulation on Air Operations**

## I. Scope

17. The Cover Regulation on 'Air operations' defines the general applicability of the Parts it covers and proposes transition measures in the form of opt-outs<sup>4</sup>. It is prepared as an amending Regulation and is based on the initial OPS Cover Regulation as voted by the EASA Committee for the CAT package (Opinion 04/2011).

#### II. Overview of reactions

18. Reactions received on the OPS Cover Regulation focused on consistency issues, transition provisions, certification or not for all commercial operators, the scope and definition of specialised operations and the definition of task specialist.

## III. Explanations

- 19. Article 1(1)-(4) of the amending Regulation establishes the scope of the Regulation addressing commercial and non-commercial specialised operations. Commercial specialised operators will be subject to a certificate while non-commercial specialised operators of complex motor-powered aeroplanes and helicopters will have to declare their activity to the competent authority. The related provisions on certification, declaration and organisation requirements (Part-ORO) were already published with the EASA Opinion 04/2011.
- 20. Article 1(5) includes a definition of commercial and non-commercial specialised operations as well as task specialist. Further explanation is provided in chapters III and IV below.
- 21. A new Annex VIII Part-SPO is added containing the technical requirements on operational procedures, performance, equipment and some general requirements for all specialised operations (Article 1(11)). The related applicability is established in Article 1(8). In addition, whenever operating within defined airspace, conducting operations to lower minima or transporting dangerous goods, both commercial and non-commercial specialised operators are required to hold a specific approval. The provisions related to such activities and approvals are contained in Part-SPA (operations requiring specific approvals), which was published with Opinion 04/2011. This requires no change to the cover regulation.
- 22. Article 1(9) contains clarifications as regards the applicable FTL requirements. For the time being, for specialised operations national provisions continue to apply. The related Implementing Rules (IRs) will be proposed at a later stage.
- 23. Article 1(10) of the amending Regulation contains the opt-out provisions. Taking into account that no harmonised provisions are established in the area of specialised operations and that some operators require to be certified a general opt-out of 3 years is proposed.
- 24. Finally, Article 2 includes the entry into force requirements of the amending Regulation.

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<sup>&</sup>lt;sup>4</sup> An opt-out is a type of transition measure that leaves to the Member States the choice to postpone the implementation date of a certain provision, up to a certain time limit defined by law.

### **Annex VIII - Part-SPO**

### I. Scope

- 25. Part-SPO should be read together with:
  - the Cover Regulation on Air Operations in particular concerning applicability dates and transition periods;
  - Annex I Definitions for terms used in Annexes II to VIII;
  - Annex II Part-ARO containing, among others, authority requirements for SPO operators relating to oversight responsibilities and certification;
  - Annex III Part-ORO containing organisation requirements for SPO operators conducting commercial specialised operations and non-commercial specialised operations with complex motor-powered aircraft; and
  - Annex V Part-SPA, which contains the requirements for operations requiring a specific approval.
- 26. Part-SPO contains the technical requirements for commercial and non-commercial specialised operations.
- 27. This Part consists of five Subparts. Subpart D, SPO.IDE and Subpart E, SPO.SPEC are further broken down into Sections containing aircraft-specific rules and specific operations.
- 28. The structure of the Subparts is comparable to the structure of the Essential Requirements in Annex IV of the Basic Regulation.
- 29. The rule structure, and in particular the Sections, have been designed in such a way that requirements for additional aircraft categories, or specific operations, could be added in the future without the need to make changes to the existing rule text or the existing structure.
- 30. Figures 4 and 5 provide an overview of the structure of Part-SPO. Subpart E is specific to Part-SPO and is explained in more detail below.

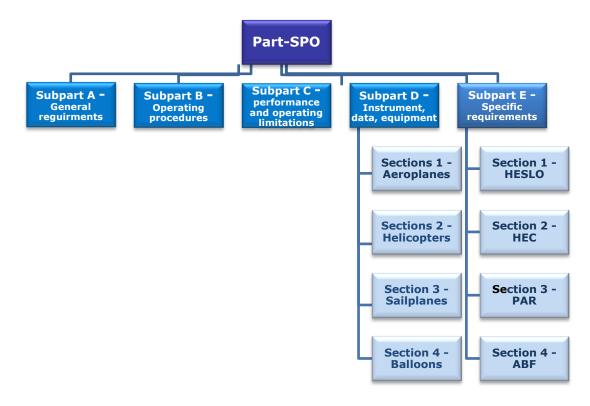
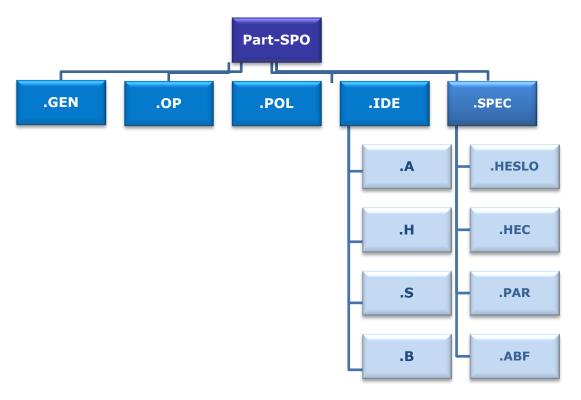


Figure 4: Structure of Part-SPO – rule title headings

Figure 5: Structure of Part-SPO – rule identifiers



### II. From Aerial Work to Specialised Operations

- 31. Until now, the only reference to any work conducted in the area of aerial work was done under the JAA umbrella and the development of the draft JAR-OPS4. In many European Member States today, aerial work activities are regulated under the general aviation rules and based on ICAO Annex 6 Part II. There are no ICAO SARPs that specifically cover aerial work.
- 32. In 2006, the EASA Sub-group III of OPS.001 rulemaking group was established to develop rules for aerial work, using, as appropriate, the draft JAR-OPS 0 and 4 and also taking into account the national standards in that field. The OPS.001 rulemaking group proposed draft rules and published in 2009 the NPA on air operations, which also covered the work done by Sub-group III on aerial work.
- 33. The NPA 2009-02b laid down requirements for commercial operations other than commercial air transport in Subpart C. This Subpart had to be read in conjunction with Subpart A (GEN) which laid down requirements based on ICAO Annex 6 Part II. As a result of the public consultation phases, and in agreement with the European Commission, the Agency revised its rule structure and decided to separate the rules in different parts. Annex VIII now covers aerial work activities and is largely based on Subpart A and Subpart C of the NPA 2009-02b. The EASA review group established to prepare the CRD revised the NPA text, taking into account the new rules structure and, in agreement with the members of this review group, it was decided to name this part Part-SPO.
- 34. While Part-SPO mainly covers aerial work activities now, the scope of Part-SPO is understood to be wider than what is generally considered as aerial work. Indeed, other types of flights or operations may also be included in this Part in the future: however, they do not fall under the category of aerial work as such.
- 35. An important change to the NPA is that Part-SPO now covers specialised operations conducted also non-commercially. The Agency decided to extend the scope of Part-SPO to non-commercial operators. Indeed, many activities falling under specialised operations are done non-commercially while the safety risks remain the same as for specialised operations conducted commercially. As a consequence, it would have seemed prejudicial not to regulate a category of operators that are effectively conducting the same operations as other operators only based on the fact that they are performing the flight outside a commercial context. Moreover, alleviations or additional requirements are applicable and required for any specific aerial work operation. Their inclusion in other parts, such as Part-NCC and -NCO, would have had a detrimental effect on the readability of those parts thus making them more complex.

## III. Activities covered by Part-SPO

- 36. In 2006, the Sub-group III of OPS.001 rulemaking group identified a number of activities considered as being aerial work activities. Since that time the Agency has identified more activities that can be considered to fall under the list proposed by this rulemaking group.
- 37. Two points concerning the scope of Part-SPO were largely commented.
  - The activities listed in the scope.
- 38. The main reaction on this aspect was that some of the activities should not be regarded as specialised operations, in particular 'competition flights' and 'glider towing'. According

to some stakeholders, these activities are normal operations that fall under the general aviation rules and therefore should not be regulated under this Part.

- The nature of the list of activities.
- 39. General comments, in particular from national authorities, stated that the non-exhaustive character of the list of activities proposed does not provide reliability on what activities are covered by this part and which ones are not.
- 40. Consequently, the Opinion now proposes a definition of specialised operation in the cover regulation which includes general criteria directed at the purpose of the flight. This is complemented by a list of 19 categories of activities considered as being specialised operations. These activities are currently known by the Agency to take place in European Member States today.
- 41. The activities covered under Part-SPO are the following: helicopter external loads operations, human external cargo operations, helicopter survey operations, parachute operations and skydiving, agricultural flights, aerial photography flights, glider towing, aerial advertising flights, calibration flights, construction work flights, including stringing power line operations, clearing saw operations, oil spill work, avalanche mining operations, survey operations, including aerial mapping operations, pollution control activity, news media flights, television and movie flights, special events flights, including flying display and competition flights, animal herding and rescue flights, veterinary dropping flights, maritime funeral operations, scientific research flights (other than those under Annex II of Regulation No 216/2008), cloud seeding.
- 42. Owing to the multitude of aerial activities that are conducted in Europe today, it is not possible to establish an exhaustive list<sup>5</sup>. Furthermore, in the future, new activities could emerge that would fall under specialised operations. The Agency can thus not limit the activities to those that are listed under SPO.GEN.005. Therefore, it is clarified that any activity, other than those already listed, and meeting one of the criteria of the definition, shall be regulated under Part-SPO. The Agency considers that the list of activities together with the definition including general criteria will allow stakeholders to identify if an aerial activity falls under Part-SPO or not.
- 43. Concerning competition flights and glider towing, the issue was not so much the rule itself but the term 'specialised' and the fear that additional requirements may be introduced in the future. Competitions are carried out based on specific rules established by the organiser of the event. Aircraft may fly very close to each other or to the surface or specific tasks need to be carried out. Also, the stress of winning the race can influence the way the flight is conducted and therefore increase the risks. In the case of glider towing, the aircraft is required to be specifically equipped and the pilot to have an additional rating. Other precautionary measures need to be taken compared to a normal pleasure or transportation flight. Both activities necessitate a specific risk assessment before conducting the flight and proper procedures to mitigate the risks. This is why they have been included in Part-SPO.

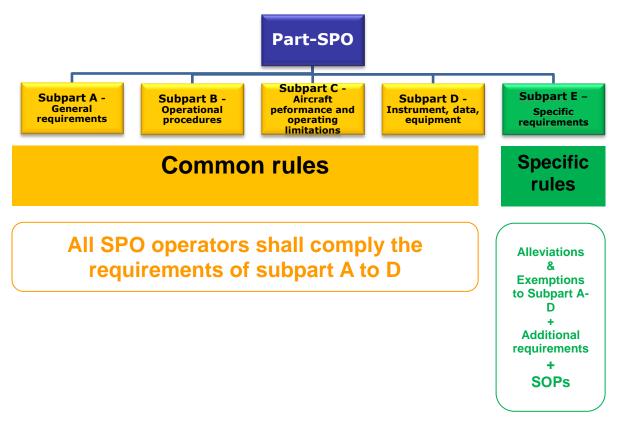
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A definition of aerial work capturing all aerial work activities doesn't exist. Also the ICAO definition limits itself to listing examples. Other authorities either use the term aerial work, specify certain activities (e.g. the US) or name it (miscellaneous) special flight operations and special aviation events (Canada).

### IV. The specific nature of Specialised Operations

- 44. Part-SPO addresses rules for activities that are very different in nature. It contains a complete set of rules to encompass specialised operations with complex motor-powered aircraft and other than complex motor-powered aircraft.
- 45. The operations captured by Part-SPO have specific characteristics:
  - the aircraft is being used to carry out a specific task, which basically excludes 'normal' pleasure or transportation flights;
  - the specific tasks pose specific risks thus requiring specific mitigating measures since, for example, the aircraft is flown very low, the flight is carried out by applying unusual manoeuvres, lifting or towing external loads/goods is performed, persons may enter or leave the aircraft during flight, substance are released from the aircraft or special equipment is necessary to fulfil the mission of the flight; and
  - the operation may involve other persons than the pilot i.e. task specialists.
- 46. Furthermore, Part-SPO introduces the concept of 'task specialist'. A task specialist is a person assigned by the operator or a third party, or acting as an undertaking, and who performs tasks on the ground directly associated with a specialised task or performs specialised tasks on board or from the aircraft. The definition is included in the cover regulation since the term is used there.
- 47. The use of the denomination 'task specialist' was strongly advocated and requested by the rulemaking group as well as the aerial work community commenting the NPA and CRD. The reasons presented and adopted by the Agency were that these persons require a special briefing or training regardless by whom they are nominated and are required to conduct an aerial work mission. The denomination 'passenger' was considered confusing in this regard.
- 48. From a legal point of view, task specialists are either crew members or passengers. In accordance with the definition of crew member contained in Annex I, a "crew member means a person assigned by an operator to perform duties on board an aircraft". If not assigned by the operator, a task specialist is a passenger.
- 49. Subpart E Specific requirements
- 50. The Agency takes note of all the positive comments received during the CRD consultation on the introduction of this Subpart, which is highly welcomed by the aerial work community and the national authorities.
- 51. Part-SPO is divided into 5 Subparts. Subparts A to D contain the common rules for all SPO operators. Subpart E has been introduced in order to fulfil the following 3 specific objectives:
  - Objective 1: to propose additional requirements if needed. Due to the very different kind of activities that fall under Part-SPO, additional requirements for a specific activity are sometimes needed and therefore are covered under this Subpart because they cannot be applied to all SPO operators. For instance, helicopter operators performing sling load operations need to have additional equipment to those required under Subpart D (IDE) because the nature of the mission implies to install or to have specific equipment which for other activities is not needed.

- Objective 2: to allow for the necessary exemptions or alleviations to the common rules. Some rules contained in Subpart A to D may not fit for all the different types of specialised operations or would even be an obstacle to fulfil the mission in a safe way if these rules were to be followed. It is therefore necessary to ensure flexibility and proportionality of the rules.
- Objective 3: to contain detailed specifications which serve as basis for the operator SOPs. This Subpart contains 2 detailed specifications, which have been developed by operators and reviewed by the Agency in consultation with experts of the review group. They are laid down in AMCs to allow for the necessary flexibility needed for specialised operations. While SPO operators will have to comply with high level requirements, it is important to give them the maximum flexibility to effectively implement these requirements to ensure that they can perform the specialised task and conduct the operations with a high level of safety.



- 52. Currently, 4 specialised operations have been introduced in this Subpart. Section 1 (Helicopter external sling load operations) and section 2 (Human external cargo) include the detailed specifications mentioned above. Section 3 (Parachute operations) and section 4 (Aerobatic flights) contain necessary alleviations or exemptions. More detailed specifications may be developed by means of a separate rulemaking task.
- 53. Subpart E is divided as follows:
  - Section 1 Helicopter external sling load operations (HESLO) are activities that are performed for the purpose of transporting external loads by different means (e.g. under slung, external pods or racks). Some equipment requirements have been added as they are seen necessary for the accomplishment of any HESLO flight. This

- Section contains specifications in AMC which has been extensively commented. They will be available with the EASA Decision.
- Section 2 Human external cargo (HEC) are activities that are performed for the purpose of transporting humans as external loads from/to aerodromes and/or operating sites. They exclude sea pilot transfer or hoist operations conducted under helicopter emergency medical services which are both commercial air transport activity falling under SPA.HHO. As for HESLO, additional equipment requirements have been added for safety reasons. The specifications in AMC will be made available with the EASA Decision, taking into account the reactions received during the CRD consultation.
- Section 3 Parachute operations (PAR) contains several alleviations to the rules of Subpart A-D in order for the jumpers (in the rule referred to as task specialists) to perform their task. For instance, they need to be able to jump out of the aircraft and therefore the requirement to be restrained is not be applicable for them. Also, task specialists performing displays with smoke train devices do not need to comply (under certain conditions) with the requirement forbidding the release of dangerous goods over congested areas, otherwise they would not be able to perform their task. Also, alleviation is introduced with regard to oxygen requirements and an exemption was identified to avoid unfeasible equipment requirements. Finally, an additional requirement to determine the carriage of an ELT by the pilot-in-command has been inserted for balloon operations over water where more than 6 persons can be carried.
- Section 4 Aerobatic flights (ABF) contains the necessary exemptions in order to avoid imposing too many unnecessary requirements for this type of operation. Exemptions are introduced to avoid carrying first-aid kits or hand-fire extinguisher.

#### V. Specific reactions and main changes

#### SPO.GEN.106 Task specialist responsibilities

54. A new provision has been drafted to clearly identify the task specialist responsibilities. As mentioned above, task specialists may sometimes be considered as crew member - whose responsibilities are defined in SPO.GEN.105 - and sometimes be considered as a passenger. In order to clearly define the responsibilities in both cases, SPO.GEN.106 provides duties and obligations for task specialists who do not act as crew member.

## SPO.GEN.155 Transport of dangerous goods

55. The transportation of Dangerous Goods must be carried out in accordance with the ICAO Technical Instructions. This paragraph specifies the cases under which dangerous goods may be carried without holding a specific approval in accordance with SPA.DG. This applies for example when dangerous goods are transported on board the aircraft for specialised purposes. The ICAO Technical Instructions list the relevant cases. A further alleviation is foreseen in Subpart E for HESLO when operators transport dangerous goods to or from unmanned sites or remote locations. Applying the full relevant provisions of the Technical Instructions was not considered being practicable. The exemption must be approved by the competent authority.

## SPO.OP.130/131 Fuel and oil supply - aeroplanes/helicopters

56. For VFR flights, the pilot-in-command must only commence a flight if he/she is certain that the helicopter has sufficient fuel and oil to fly to the aerodrome or operating site of intended landing and after that to carry fuel and oil for 20 min. Many stakeholders requested that an alleviation be introduced because many aerial work flights of short duration need to be as light as possible to allow performance of the task. Following this request, the Agency allows now for operators to carry fuel and oil for 10 min only provided that the flight remains within 25 NM of the aerodrome/operating site of departure.

## SPO.OP.135 Safety briefing

57. The safety briefing is adapted to the specific nature of specialised operations and required to be more thorough than normal passenger briefing. It may be replaced by a training programme.

### SPO.OP.185 Simulated abnormal situations in flight

58. In line with the general rules, this requirement forbids the pilot-in-command to perform simulations (abnormal or emergency situations) when carrying task specialists except for the purpose of training.

#### SPO.OP.200 Ground proximity detection

59. This requirement contains a very general safety rule stating that when undue proximity to the ground is detected by a flight crew member or by a ground proximity warning system, the pilot must take immediate corrective action in order to establish safe flight conditions. However, for some specialised operations, such as agricultural flights (for which the flight needs to be taken within a distance from the ground below that which would trigger the GPWS), it was considered necessary to provide some flexibility in allowing the pilot to disable it.

# SPO.OP.205 Airborne collision avoidance system (ACAS) – complex motor-powered aeroplanes and helicopters

60. This requirement obliges the operator to establish procedures to ensure that when ACAS II is installed and serviceable, it shall be used in accordance with Regulation (EU) No 1332/2011. In the case it is installed and serviceable, the same principle as for the ground proximity warning system must apply. This alleviation concern activities such as competition or aerobatic flights where aircraft may fly very close to each other.

#### SPO.POL.146 Performance criteria - Helicopters

61. This provision contains the performance category requirements for helicopters operating over congested areas. This requirement has been extensively commented, in particular SPO.POL.146(a). Helicopter operators have strongly opposed to the obligation to be solely certificated in category A in order to operate in these areas. They argue that they would not be able to operate anymore as most of them, today, only operate with

performance category B helicopters, even in congested areas. The Agency has taken this situation into consideration. The requirement has been modified to allow performance category B helicopters to fly over congested areas but under two conditions: safety measures have to be taken to prevent undue hazard to person or property on the ground and once these safety measures are established, the operation needs to be approved by the competent authority.

### Carriage and use of supplemental oxygen

- 62. The following rules on oxygen equipment for other-than complex aeroplanes and helicopters were extensively commented on and discussed:
  - SPO.OP.195 Use of supplemental oxygen, and
  - SPO.IDE.A/H.175 Supplemental oxygen non-pressurised aeroplanes/ helicopters.
- 63. It is generally requested to alleviate these rules for SPO, based on current operational practice in some Member States.
- 64. The Agency when reviewing the comments and material received on this subject pointed out the following:
  - Requirements for pressurised helicopters have been deleted since there are no pressurised helicopters operated in the EU.
  - The current text for aeroplanes has been kept aligned with NCC.IDE and NCO.IDE requirements considering that the risk of hypoxia of the pilot could lead to dangerous situations putting an unacceptable risk to third parties.
  - The Agency took in particular into account that human physiology is not different depending on the nature of operations conducted or the complexity of the aircraft.
  - The Agency also acknowledges the assessments carried out by ICAO on this subject, available in Doc 8984 Manual of Civil Aviation Medicine in the last amended version of 2008. This document contains in particular a description of the effects of hypoxia at different altitudes and substantiates the necessity of the requirement.
  - The following is however recognised:
  - Certain SPO activities would be heavily impacted or impaired by the requirements of carriage and use of supplemental oxygen.
  - The overall experience in operations at high altitudes without oxygen of certain SPO operators
  - Pilots and task specialists with a long established flying experience in certain mountainous regions may be physiologically adapted to these altitudes.
  - Criteria mitigating the risk and limiting the exposure time at high altitudes without oxygen may be defined and implemented in the SOPs.
  - Therefore although maintaining the general requirement on the carriage and use of supplemental oxygen, the Agency took into account the specific nature of certain SPO activities and considered to alleviate such requirement under certain conditions with the prior approval of the competent authority,

## Crash mitigation equipment

65. The requirement has been deleted further to comments received highlighting the difficulty to enforce it in a proportionate manner taking into consideration design aspects and implementation time. The agency will re-consider it in the future with a dedicated rulemaking task.

## SPO.IDE.A.130 Terrain awareness warning system (TAWS)

66. The text has been revised to clarify the applicability of the requirement and alleviations are added in Subpart E.

# SPO.IDE.H.195 Flight over water – other than complex motor-powered helicopters & SPO.IDE.H.197 Life-jackets – complex motor-powered helicopters

- 67. The requirement for electric illumination for life-jackets has been maintained for helicopters, consistently with Part NCC and NCO. Furthermore, following comments received, it has been clarified that life jackets are not necessarily to be stowed in certain locations readily available for use but may be also directly worn by the persons for whose use they are provided.
- 68. Conditions are also added to consider the case of twin-engined helicopter types which are classified as 'other than complex helicopters'

### SPO.IDE.B.140 Miscellaneous equipment

69. The applicability of certain items included in the miscellaneous equipment for balloons, such as protective gloves or knife, has been revised in terms of balloon category further to comments and advice of experts.

Cologne, 16 April 2012

P. GOUDOU Executive Director