



Non-commercial operations of complex motor-powered aircraft

EASA OPS Workshop
Cologne, 6 November 2008



AGENDA

1. The Basic Regulation and Essential Requirements
 2. The OPS.001 subgroup
 3. Part-OPS.GEN and OPS.SPA
 4. Part-OR.GEN, OR.MS and OR.OPS
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1. The Basic Regulation and Essential Requirements



The Basic Regulation

Art 3 Definitions

- (i) '**commercial operation**' shall mean any operation of an aircraft, in return for remuneration or other valuable consideration, which is available to the public or, when not made available to the public, which is performed under a contract between an operator and a customer, where the latter has no control over the operator
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The Basic Regulation

- (j) **'complex motor-powered aircraft'** shall mean:
- (i) an aeroplane:
 - with a maximum certificated take-off mass exceeding 5 700 kg, or
 - certificated for a maximum passenger seating configuration of more than nineteen, or
 - certificated for operation with a minimum crew of at least two pilots, or
 - equipped with (a) turbojet engine(s) or more than one turboprop engine, or
 - (ii) a helicopter certificated:
 - for a maximum take-off mass exceeding 3 175 kg, or
 - for a maximum passenger seating configuration of more than nine, or
 - for operation with a minimum crew of at least two pilots, or
 - (iii) a tilt rotor aircraft
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The Basic Regulation

Art 8 Air operations

3. Unless otherwise determined in the implementing rules, operators engaged in the non-commercial operation of complex motor-powered aircraft shall declare their capability and means of discharging the responsibilities associated with the operation of that aircraft.

5.(d) conditions and procedures for the declaration by, and for the oversight of, operators referred to in paragraph 3 and the conditions under which a declaration shall be replaced by a demonstration of capability and means to discharge the responsibilities associated with the privileges of the operator recognised by the issuance of a certificate;



Essential Requirements

- **BR Annex IV Chapter 8 contains additional requirements for non-commercial operators of complex motor-powered aircraft**
 - ✦ **Organisation requirements and management system**
 - ✦ **Operator training**
 - ✦ **Minimum Equipment List (MEL)**
 - ✦ **Operations Manual**
 - ✦ **Security Programme**
 - ✦ **Flight Time Limitations and Rest Requirements**
 - **the proposed IRs had to be based on these ERs**
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Implementing Rules

As a consequence of the framework set by the BR:

- non-commercial operations are regulated by the complexity of aircraft used and not the type of operation
 - complex motor-powered aircraft share the same operating environment as aircraft used for commercial air transport thus possibly posing a risk to public air transport. Furthermore, their complexity and size necessitate logistics that are closer to those of commercial air transport. Hence, in order to mitigate the risk and to adapt the operation to the logistics involved, a comparable set of implementing rules has been developed
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Implementing Rules

Fractional ownership:

- While admitting that such activities present many of the characteristics of commercial air transport it has to be recognised that passengers of aircraft used under fractional ownership contracts define themselves the conditions of their transportation and employ their operator through a management contract
 - Fractional owners retain certain responsibilities
 - there is no difference for aircraft managed by an organisation on behalf of the owner
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2. The OPS.001 subgroup



OPS.001 subgroup

Objective of the subgroup on non-commercial operations with complex motor-powered aircraft:

- develop requirements and related AMC/GM for those kind of operations, based as much as possible on existing material such as draft JAR-OPS 0 and 2 as well as considering the standards and recommended practices of ICAO Annex 6 Part II.
 - The subgroup liaised with rulemaking group FCL.001 so as to clarify operators and personnel responsibilities as regards qualification and training requirements as well as MDM.032 on non-commercial operations of non-complex motor-powered aircraft and the other subgroups of OPS.001
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3. Part-OPS.GEN and Part-OPS.SPA



General Principles

BASIS:

ICAO Annex 6 Part II
draft JAR-OPS 0 & 2



Essential
Requirements
Annex IV



Part
OPS.GEN
OPS.SPA



Part
OR.GEN
OR.MS
OR.OPS



Part-OPS.GEN

Additional requirements for complex motor-powered aircraft are contained within the paragraphs of Part-OPS.GEN:

Section I General requirements

OPS.GEN.005 Competent authority

For the purpose of this subpart, the competent authority shall be:

- (a) ...
 - (b) for the oversight of commercial operations and non-commercial operations of complex motor-powered aircraft, the authority designated by the Member State **where the operator has its principle place of business.**
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Part-OPS.GEN

Section II Operational procedures

OPS.GEN.130 Smoking on board

➤ to take account of the larger aircraft types as well as the supply with supplemental oxygen



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Part-OPS.GEN

Section III Aircraft performance and operating limitations

OPS.GEN.305 Weighing

- an aircraft must be weighed every 4 years
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Part-OPS.GEN

Section III Aircraft performance and operating limitations

OPS.GEN.310 Mass and Balance System

➤ Operators' system to establish the appropriate masses, load distribution and CG position for each flight



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Part-OPS.GEN

Section III Aircraft performance and operating limitations

OPS.GEN.325/330/335 Performance - Take-off / Critical engine inoperative / Landing

➤ General performance requirements based on ICAO Annex 6II



Part-OPS.GEN

Section IV Instruments, data and equipment

OPS.GEN.480 Seat belts and harnesses

- Cabin crew seats to be fitted with safety harness
 - Helicopter passenger seats: safety belt with diagonal shoulder strap or safety harness
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Part-OPS.GEN

Section IV Instruments, data and equipment

OPS.GEN.515 Microphones

- Flight crew communication through microphones when flying below transition level/altitude
 - Helicopters: flight crew to wear headset
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Part-OPS.GEN

Section IV Instruments, data and equipment

OPS.GEN.540.A Electronic navigation data management

➤ Integrity standards



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Part-OPS.GEN

Section V Manuals, Logs and Records

OPS.GEN.605 Additional document carriage requirements

➤ OM, MEL, declaration, NOTAMs, wx info, etc.



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Part-OPS.GEN

Some requirements are linked to the
airspace used or type of operation, e.g.
IFR flights



Part-OPS.SPA

This subpart contains requirements for specific operations or in certain pieces of airspace

Section I General requirements

OPS.SPA.005.GEN Competent authority

The competent authority for non-commercial operators is

- the State of Registry for PBN/MNPS, RVSM
 - the State of Operator for DG, LVO, NVIS
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Part-OPS.SPA

Section I General requirements

The other requirements within OPS.SPA.GEN contain the application for an approval, privileges, changes and continued validity



Part-OPS.SPA

- Section II – Operations in areas with specified navigation performance (OPS.SPA.001.SNP)
- Section III – Operations in airspace with reduced vertical separation minima (OPS.SPA.001.RVSM)
- Section IV – Low visibility operations (OPS.SPA.001.LVO)
- Section V – Transport of dangerous goods (OPS.SPA.001.DG)
- Section VI – Helicopter operations without an assured safe forced landing capability (OPS.SPA.001.SFL)
- Section VII – Helicopter operations with night vision imaging systems (OPS.SPA.001.NVIS)

as explained in the presentation yesterday...



4. Part-OR.GEN, OR.MS and OR.OPS



General Principles

BASIS:

ICAO Annex 6 Part II
draft JAR-OPS 0 & 2



Essential
Requirements
Annex IV



Part
OPS.GEN
OPS.SPA



Part
OR.GEN
OR.MS
OR.OPS



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OR.GEN and OR.MS

➤ Published as NPA 2008-22c



Subpart OR.GEN content

- Subpart OR.GEN is applicable to all organisations
 - ✦ **Designation of the competent authority**
 - ✦ **General requirements for organisations declaring**
 - ✦ **Findings**
 - ✦ **Acceptable Means of Compliance**
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Subpart OR.MS content

- Subpart OR.MS is applicable to all organisations
 - ★ **Requirements of integrated management system consisting of**
 - ➔ Safety Management System
 - ➔ Compliance Monitoring System
 - ★ **Objective: to enable the organisation to fit all its different management systems into one (EASA only regulates safety)**
 - ★ **Management system appropriate to the size, nature and complexity of the activities, and the hazards and associated risks inherent in these activities**
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Subpart OR.MS content

- Other generic organisation requirements such as:
 - ★ **Contracting or purchasing of services or products – responsibility of the contracting organisation**
 - ★ **Personnel requirements, e.g. accountable manager**
 - ★ **Facility requirements, e.g. appropriate for the tasks to be carried out**
 - ★ **Record-keeping**
 - Several AMCs catering for organisations of a different “size”
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Subpart OR.OPS Content

- Subpart OR.OPS contains additional and specific operator requirements for:
 - ★ **Non-commercial operators of complex motor-powered aircraft**
 - ★ **All commercial operators**
 - They apply in addition to the common organisation requirements in OR.GEN and OR.MS
 - These requirements correspond to chapter 8 of Annex IV of the BR Essential requirements for air operations
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Subpart OR.OPS Content

Section I General Requirements

OR.OPS.105.GEN

Aircraft used in commercial and non-commercial operations

When an aircraft is operating in commercial and non-commercial operations, the commercial operations specifications shall contain an endorsement for non-commercial operations and the operations manual shall contain a supplement with the operating procedures to be followed in the case of non-commercial operations.



Subpart OR.OPS Content

Section II Manuals, Logs and Records OR.OPS.MLR

- Operations Manual
 - ★ aligned with ICAO Annex 6II
 - ★ simplified AMC for the content
 - MEL (approved)
 - Record-keeping
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Subpart OR.OPS Content

Section III Air Operator Declaration OR.OPS.DEC

- Declaration shall be submitted prior to commencing operations
 - Specification of responsibilities in case a management organisation manages the operation on behalf of the owner
 - Content of the declaration...
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Subpart OR.OPS Content

Section III Air Operator Declaration OR.OPS.DEC

- (a) The declaration shall be made in a form and manner established by the competent authority. Such declaration shall contain:
- (1) the name and address of the operator;
 - (2) the name and address of the approved continuing airworthiness management organisation(s),
 - (3) the main base(s) of aircraft operation;
 - (4) the type of operation;
 - (5) types of aircraft operated and registration;
 - (6) the intended starting date of the operation, or, in the case of changes, applicability date of the change;
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Subpart OR.OPS Content

Section III Air Operator Declaration OR.OPS.DEC

- (7) details of any approvals held;
 - (8) description of the management system, including organisational structure;
 - (9) name of the accountable manager or person responsible for the operation;
 - (10) a statement that the operator has a management system in accordance with this Part;
 - (11) a statement that the operations manual as required by this Part reflects the applicable requirements set out in this Part and Part-OPS and that all flights will be carried out in accordance with that operations manual;
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Subpart OR.OPS Content

Section III Air Operator Declaration OR.OPS.DEC

- (12) a statement that all aircraft operated
 - (i) hold a valid certificate of airworthiness in accordance with Part-21; or
 - (ii) in the case aircraft are registered in third countries, hold a valid certificate of airworthiness in accordance with ICAO Annex 8 issued by a State that has proven effective regulatory oversight and are of a type that has been certificated by the Agency;
 - (13) a statement that all flight and cabin crew members are trained in accordance with this Part;
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Subpart OR.OPS Content

Section III Air Operator Declaration OR.OPS.DEC

- (14) if the operator has implemented and demonstrated conformance to an officially recognised industry standard, the name of the standard and the date of the last audit of their conformance;
 - (15) a statement that any change in the operation that affects the information disclosed in the declaration will require a new declaration to be provided to the competent authority; and
 - (16) a statement, signed by the accountable manager, confirming that the information disclosed in the declaration is correct.
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Subpart OR.OPS Content

Section V Flight Crew OR.OPS.FC

- requirements applicable to the composition, qualifications and training of flight crew
 - 3 Chapters
 - ★ general requirements, applicable to all operators
 - ★ additional requirements applicable to commercial air transport
 - ★ additional requirements applicable to commercial operations other than commercial air transport
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Subpart OR.OPS Content

Section V Flight Crew

OR.OPS.FC

- This Section was developed on the basis of Subpart N of EU-OPS / JAR-OPS 3
 - The FCL.001 group participated in the development of the requirements
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Subpart OR.OPS Content

Section V Flight Crew OR.OPS.FC

- Some requirements of Subpart N were included in Part-FCL instead of remaining in operational rules on the basis of:
 - ★ **whether a certain requirement restricted the privileges of the licence, based on which, the following paragraphs were transferred**
 - ➔ EU-OPS 1.960 / JAR-OPS 3.960 Commanders holding CPL (now FCL.305.A and FCL.305.H)
 - ➔ EU-OPS 1.970 / JAR-OPS 3.970 Recent experience (now FCL.060)
 - ★ **whether a certain requirement was type rating related or operator specific, based on which, part of the requirements in EU-OPS 1.945, related to Zero Flight Time Training (ZFTT) was transferred**
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Subpart OR.OPS Content

Section V Flight Crew

OR.OPS.FC

- OR.OPS.015.FC Composition of flight crew
 - OR.OPS.020.FC Crew resource management (CRM) training
 - OR.OPS.025.FC Conversion training
 - OR.OPS.030.FC Differences training and familiarisation training
 - Based on EU-OPS 1.940 / JAR-OPS 3.940 to EU-OPS 1.950/JAR-OPS 3.950, and respective Appendices.
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Subpart OR.OPS Content

Section V Flight Crew

OR.OPS.FC

- OR.OPS.035.FC Nomination as pilot-in-command
 - Based on:
 - ★ EU-OPS 1.955 / JAR-OPS 3.955
 - ★ EU-OPS 1.975 / JAR-OPS 3.975
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Subpart OR.OPS Content

Section V Flight Crew OR.OPS.FC

➤ Here:

- ✦ **the expression 'Commander' has been replaced by pilot-in-command.**
 - ✦ **Regarding EU-OPS 1.975 / JAR-OPS 3.975:**
 - ➔ included in the paragraph related to the nomination as pilot-in-command
 - ➔ change in terminology, since the expression 'qualification' disappears
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Subpart OR.OPS Content

Section V Flight Crew OR.OPS.FC

- OR.OPS.040.FC Recurrent training
 - OR.OPS.045.FC Pilot qualification to operate in either pilot's seat
 - OR.OPS.050.FC Operations on more than one type or variant
 - OR.OPS.055.FC System panel operator
 - OR.OPS.060.FC Training records
 - Based on:
 - ✦ EU-OPS/JAR-OPS 1.965/3.965
 - ✦ EU-OPS/JAR-OPS 1.980/3.980
 - ✦ EU-OPS/JAR-OPS 1.195/3.985
 - ✦ EU-OPS 1.940, for the system panel operator
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Subpart OR.OPS Content

Section IX Security OR.OPS.SEC

OR.OPS.005.SEC Security Programme

- The security programme shall:
 - (1) comply with the relevant requirements of the national civil aviation security programme of the competent authority in the State of the operator;
 - (2) include a process to manage the security risks proportional to the threat;
 - (3) include security training programmes regarding disruptive passengers and acts of unlawful interference;
 - Appropriate details of the security programme shall be included in the operations manual. The operator shall ensure that crew members have knowledge of and competence in all relevant elements of the security programme.
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Subpart OR.OPS Content

Section IX Security OR.OPS.SEC

OR.OPS.010.SEC Security training programme

- to ensure that crew members act in the most appropriate manner to prevent acts of unlawful interference, and to minimise the consequences of such events should they occur
 - The training programme shall be consistent with the security programme of the operator.
 - The operator shall ensure that crew members have knowledge of and competence in all relevant elements of the security training programme.
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Subpart OR.OPS Content

Section IX Security OR.OPS.SEC

OR.OPS.015.SEC Aircraft search procedure checklist

- onboard a checklist containing the procedures to be followed in searching for a bomb or improvised explosive device (IED) in case of suspected sabotage, and for inspecting aircraft for concealed weapons, explosives or other dangerous devices when a well-founded suspicion exists that the aircraft may be the object of an act of unlawful interference.
 - The checklist shall be supported by procedures providing guidance on the appropriate course of action to be taken should a bomb or suspicious object be found and, if provided by the type-certificate holder, information on the least-risk bomb location specific to the aircraft
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Subpart OR.OPS Content

Section IX Security

OR.OPS.SEC

OR.OPS.020.SEC Cockpit security - aeroplanes

- Aeroplanes equipped with a cockpit door: this door shall be capable of being locked, and means shall be provided by which the cabin crew can discreetly notify the flight crew in the event of suspicious activity or security breaches in the cabin
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Disclaimer

During the ongoing internal consultation (part of the EASA rulemaking process) additional comments have been received that may lead to an amendment of the text or minor change in the numbering of paragraphs. Therefore, the information given in this presentation may deviate slightly from the text that will finally be published with the NPA.
