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European Aviation Safety Agency

RMT.0379 – All-weather-operation Changes to Air OPS Part CAT- Part SPA

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09 November 2016

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TE.GEN.00409-001



RMT.0379 – All-weather-operation – Changes to Air OPS

➤ Definitions:

- Operational credit definition
- New ICAO approach classification introduced:
 - Type A & B
 - 3D and 2D
- Update of some definitions already existing:
 - Eg. Low visibility take off
 - See more examples in the draft opinion.



RMT.0379 – All-weather-operation – Changes to Air OPS

➤ Part ARO (authority)

➤ Changes in Appendix II: OPERATIONS SPECIFICATIONS

➤ New box: operational credits

Low-visibility operations			CAT ¹⁰
Take-off	<input type="checkbox"/>	<input type="checkbox"/>	RVR ¹¹ : m
Approach and landing	<input type="checkbox"/>	<input type="checkbox"/>	DA/H: ft, RVR: m
Operational credits	<input type="checkbox"/>	<input type="checkbox"/>	DA/H: ft, RVR: m

➤ Further oversight AMC/GM (if needed) to:

➤ SPA.GEN.105 and/or ARO.OPS.200

➤ ARO.GEN.300 & 305



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- Part – CAT (AOCs)
- Generally speaking: amendments are for consistency reason to accommodate the AWO concept.
- CAT.OP.MPA.185 *“this rule is also addressed by RMT.0573 ‘Fuel planning and management’. The amendments proposed by this RMT are not shown in this version since the AWO Project work will be finalised ahead of RMT.0573, which will ensure consistency with the deliverables of the AWO Project. “*



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➤ Part – SPA

- Subpart GEN – Hook for Third Country Operator (TCO)
- Subpart LVO: Complete re-drafting of SPA.LVO
- Introduced the concept described in Description of Operations.
 - Operational credits – SPA.LVO.100
 - General Req for the SPA.LVO approval - SPA.LVO.105
 - Old SPA.LVO.105 + 110– Removal requirement of 2 pilots.
 - ATM/ANS hook – SPA.LVO.110
 - Training requirements – SPA.LVO.120



RMT.0379 – All-weather-operation – Changes to Air OPS

❑ General aviation

➤ Changes to Part NCC and Part NCO.

➤ Allow LVO for GA directly in SPA.GEN.100

➤ Removed the old NCC.OP.110 (a)(2)

➤ New ICAO classification:

➤ 2D&3D

➤ Type A & Type B

❑ Part – SPO - Specialised-operations

➤ Alignment with Part NCC for consistency reasons.



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RMT.0379 – All-weather-operation Changes to Part-FCL

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- Annex I (Part-FCL) of Regulation (EU) No 1178/2011 (**current version**):
 - **FCL.605 (b)**: Specific training for IR privileges for decisions heights lower than 200 feet (60 m) at an ATO, followed by a skill test (Part-FCL Appendix 9 Section 6) in multi-pilot aircraft.
 - **Part-FCL Appendix 9**: Section 6 of skill test programme for aeroplanes, powered-lift aircraft and airships with CAT II/III exercises.
 - **Learning Objectives (LOs)** with AWO-related items:
 - ATPL(A), ATPL(H)/IR, IR;
 - CB-IR, EIR;
 - Additional theoretical knowledge for high-performance aeroplanes.



RMT.0379 – All-weather-operation – Changes to Part-FCL

- Annex I (Part-FCL) of Regulation (EU) No 1178/2011 (**revised by RMT.0379**):
 - **FCL.605 (b)**: IR privileges for decisions heights lower than 200 feet (60 m) and for operations in accordance with Annex V (Part-SPA) of Regulation (EU) No 965/2012 to **be obtained in accordance with that Regulation**.
 - **Part-FCL Appendix 9**: Section 6 of skill test programme for aeroplanes, powered-lift aircraft and airships with CAT II/III exercises **is deleted (content moved to AMC for Part-SPA)**.
 - **Learning Objectives (LOs)** with AWO-related items **are kept** in order to provide basic knowledge on AWO to be amplified during operator training in accordance with Part-SPA.



RMT.0379 – All-weather-operation – Changes to Part-FCL

- Annex I (Part-FCL) of Regulation (EU) No 1178/2011 (**revised by RMT.0379**):
 - **FCL.605 (b)**: AWO privileges to be recorded by the operator in accordance with SPA.LVO.120 (c).
 - No endorsement on the Part-FCL licence.
 - Records on AWO privileges for every individual pilot by the operator.



► Annex I (Part-FCL) of Regulation (EU) No 1178/2011 (**revised by RMT.0379**):

‘FCL.605 IR — Privileges

[...]

- (b) Privileges for decision heights lower than 200 ft (60 m), as well as for acting as pilot during operations in accordance with Annex V (Part-SPA) Subpart E of Commission Regulation (EU) No 965/2012, may be obtained in accordance with the requirements of that Regulation. Such privileges shall be recorded by the operator in accordance with SPA.LVO.120(c) of Annex V (Part-SPA) to that Regulation.

[...]



- Annex I (Part-FCL) of Regulation (EU) No 1178/2011 (**revised by RMT.0379**):
 - AWO training moved from Part-FCL to Part-SPA;
 - Training, testing and checking under the sole responsibility of the operator approved in accordance with Part-SPA (no ATO involvement required);
 - Programme for testing and checking will be AMC to Part-SPA (SPA.LVO.120).
 - No ATO required.
 - No endorsement on the Part-FCL licence but records to be established and kept by the operator.



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Questions / Discussion

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AMC/GM Concepts & Discussion

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➤ Introduction to 3 Groups of AMCs for training:

Proposal:

1 – Training requirement baseline – SPA.LVO.120

2 - Competency based training organisations

➤ Approach clustering – RMT0599 Competency and Evidence base training - Workshop 01.02.2017

3 - Alternative training means

➤ Concept paper 1Q2017 RMT0599 – Workshop 01.02.2017



Training approach to AMCs – SPA.LVO.120

➤ Group 1 of AMCs



- Existing approach in SPA.LVO.120
 - ▶ improvement of the text – Action?
- New operations credit

➤ Proposed Structure of the group A of AMCs

- Same structured as ORO.FC
 - AMC1 initial training -ORO.FC.220
 - AMC 2 recurrent training and checking – ORO.FC.230
 - AMC 3 difference training – ORO.FC.240
 - AMC 4? command? – ORO.FC.205



Ops concept for AMC & GM

- Maintain the current concept for old approaches: CAT II, CAT III, LTS CAT1? and OTS CATII?
- Improve readability when ever possible.
 - Action for some one of the group.
 - For example: type of aircraft or aircraft type, same type means same licence endorsement or aircraft type certificate? AMC1 SPA.LVO.105 (a)(2), demonstration AMC4 SPA.LVO.105
- Operational credits



Lower than standard CAT I (LTS CAT I);

Operational Credit	System Element(s) providing Enhanced performance	Applies to (classification of operation)	Credit to (instrument or visual segment)		
				DA/H	RVR
LTS CAT I	Enhanced Performance of Approach Aid Aircraft Flight Guidance System (e.g. HUD, SVS, Autoland)	CAT I approach	Instrument	200	450

As per current rules AMC3 SPA.LVO.100 Low visibility operations

Ensure the exercised of the operational credit. (eg. Australia)



Special Approval CAT I (SA CAT I);



NEW

Operational Credit	System Element(s) providing Enhanced performance	Applies to (classification of operation)	Credit to (instrument or visual segment)		
				DA/H	RVR
SA CAT I	Aircraft Flight Guidance System (e.g. HUD, SVS, Autoland)	CAT I approach	Instrument	150	400

- Auto-land, or HUD manually flown. Allow coupled approach with a manually HUD on the visual segment. Use HUD or equivalent display to foreseen the future.
- FAA alignment.
- CAT II training? FAA discussion
- Normal autoland (including touch down)
- Single pilot/ multi-crew It will depend pretty much on the certification of the equipment. (eg CATII single pilot)
- If the operator is already approved for CAT III autoland. It will automatically credit the requirement for autoland in SA CAT I?



Other than standard CAT II (OTS CAT II);

Operational Credit	System Element(s) providing Enhanced performance	Applies to (classification of operation)	Credit to (instrument or visual segment)		
				DA/H	RVR
OTS CAT II	Autoland or approved HUD to touchdown	CAT II approach with reduced lighting	Visual	100	350

- Correct table 4 AMC4 SPA.LVO.100 Low visibility operations CAT II AND OTS CAT II OPERATIONS
- Combine OTS CAT II and SA CAT II
- Consider AMC7 SPA.LVO.100. Table of Unserviceable runway light should be considered. (this table is for short exposure) while SA CAT II is permanent exposure.



Special Approval CAT II (SA CAT II);



NEW

Operational Credit	System Element(s) providing Enhanced performance	Applies to (classification of operation)	Credit to (instrument or visual segment)		
				DA/H	RVR
SA CAT II	Aircraft Flight Guidance System (e.g. HUD, SVS, Autoland)	CAT II approach with reduced lighting	Visual	150	350*

- * 1200ft in FAA regs



Definition: remark it should be aligned with ICAO

‘enhanced vision system (EVS)’ is an electronic means to provide the flight crew with a real-time sensor-derived or enhanced display of the external scene topography (...) through the use of imaging sensors; an EVS does not have an integrated flight guidance system.

Enhanced flight vision system: an EFVS is integrated with a flight guidance system and is implemented on a head-up display (or an equivalent display) on which the imagery and symbology is visible to the pilot flying in his or her normal position with the line of vision looking forward along the flight path;



Definition:

‘combined vision system (CVS)’ combines a real-time imaging sensor and display with a synthetic image generated using a terrain and obstacle database utilising a precision navigation position. CVS can include either; an EFVS or EVS and a SVGS or SVS;





Enhanced Flight Vision Systems / Combined Vision Systems

Operational Credit	System Element(s) providing Enhanced performance	Applies to (classification of operation)	Credit to (instrument or visual segment)		
				DA/H	RVR
EFVS/CVS	EFVS/CVS on HUD or equivalent system	3D instrument approach	Visual	No credit	credit

- Question: why the EFVS/CVS is only for 3D. Why not giving credits to CDFA?.
- FAA allows the use in 2D and 3D. The only limitation is when operating to “touch-down” it must be a 3D operation.
- Below 200 ft the reference must be to the Radio alt or equivalent.