Annex III to ED Decision 2022/014/R

'AMC & GM to Annex V (Part-SPA) to Commission Regulation (EU) No 965/2012 — Issue 1, Amendment 13'

The text of the amendment is arranged to show deleted, new or amended text as shown below:

(a) deleted text is ~~struck through~~;

(b) new or amended text is highlighted in blue;

(c) an ellipsis '[...]' indicates that the rest of the text is unchanged.

Note to the reader

In amended, and in particular in existing (that is, unchanged) text, 'Agency' is used interchangeably with 'EASA'. The interchangeable use of these two terms is more apparent in the consolidated versions. Therefore, please note that both terms refer to the 'European Union Aviation Safety Agency (EASA)'.

The Annex to Decision N° 2012/019/Directorate R of 24 October 2012 of the Executive Director of the Agency is amended as follows:

AMC1 SPA.LVO.100(a) Low-visibility operations and operations with operational credits

LOW-VISIBILITY TAKE-OFF (LVTO) OPERATIONS — AEROPLANES IN AN RVR OF LESS THAN 400 M

[…]

(c) The minimum RVR value specified in Table 1 or 2 should be achieved for all reporting points representative of the parts of the runway from the point at which the aircraft commences the take-off until the calculated accelerate-stop distance from that point.

LVTO OPERATIONS — AEROPLANES IN AN RVR OF LESS THAN 125 M

(~~e~~d) For LVTO operations with an RVR of less than 125 m, the following additional elements should apply:

(1) The runway has centre line lights spaced at intervals of 15 m or less;

(2) If an ILS signal is used for lateral guidance, the ILS localiser signal meets the requirements for category III operations, unless otherwise stated in the AFM;

(3) If an ILS signal is to be used, low-visibility procedures (LVPs) include protection of the runway and, where an ILS localiser signal is used, it should include protection of the ILS-sensitive area unless otherwise stated in the AFM; and

(4) If a GLS signal is used for lateral guidance, the GLS performance type meets the requirements for category III operations (GAST D and to GBAS point to which guidance is required), unless otherwise stated in the AFM.

(~~f~~e) For LVTO operations with an RVR of less than 125 m, the reported RVR should be not less than the minimum specified in the AFM or, if no such minimum is specified, not less than 75 m.

(~~g~~f) The minimum required RVR should be achieved for all reporting points representative of the parts of the runway from the point at which the aircraft commences the take-off until the greater of the calculated take-off distance or accelerate-stop distance from that point.

(~~h~~g) The reported RVR value representative of the initial part of the take-off run can be replaced by pilot assessment.

AMC3 SPA.LVO.100(b) Low-visibility operations and operations with operational credits

INSTRUMENT APPROACH OPERATIONS IN LOW-VISIBILITY CONDITIONS — EFFECT ON LANDING MINIMA OF TEMPORARILY FAILED OR DOWNGRADED EQUIPMENT FOR APPROACH OPERATIONS WITH A DH BELOW 200 ft

(a) […]

(b) The following conditions should be applied to Table 6:

(1) multiple failures of runway/FATO lights other than those indicated in Table 6 are not acceptable;

(2) ~~deficiencies~~ failures of ~~both the~~ approach and runway/FATO lights are acceptable at the same time~~,~~ and the most demanding consequence should be applied;

[…]

Table 7

Failed or downgraded equipment —effect on landing minima
Operational credits

Failed or downgraded equipment		Effect on landing minima			
		SA CAT I	**SA CAT II**	**EFVS-A**	**EFVS-L**
Failed or downgraded equipment	Navaid stand-by transmitter	No effect			
	Outer marker (ILS)	No effect if replaced by height check at 1 000 ft			
	Middle marker (ILS)	No effect			
	RVR assessment systems	On runways equipped with two or more RVR assessment units, one may be inoperative			
	Approach lights	Not allowed	Not allowed	As per IAP	As per IAP
	Approach lights except the last 210 m	Not allowed	No effect	As per IAP	As per IAP
	Approach lights except the last 420 m	No effect	No effect	As per IAP	As per IAP
	Standby power for approach lights	No effect			
	Edge lights~~,~~ ~~Threshold lights~~	Day: No effect	**Day:** no effect	As per IAP	As per IAP
		Night: not allowed	**Night:** RVR 550 m	As per IAP	As per IAP
	Threshold lights	Day: No effect	**Day:** no effect	As per IAP	As per IAP
		Night: not allowed	**Night:** RVR 550 m	As per IAP	As per IAP
	Runway end lights	No effect if centre line lights are serviceable		As per IAP	
	Centre line lights	**Day:** RVR 400 m	**Day:** RVR 300 m	As per IAP	As per IAP
		Night: RVR 550 m	**Night:** RVR 400 m	As per IAP	As per IAP

Failed or downgraded equipment		Effect on landing minima			
		SA CAT I	SA CAT II	EFVS-A	EFVS-L
	Centre line lights spacing increased to 30 m	No effect	No effect	As per IAP	As per IAP
	TDZ lights	**Day:** no effect	**Day:** RVR 300 m	As per IAP	
		Night: no effect	**Night:** RVR 350 m	As per IAP	
	Taxiway light system	No effect			

GM3 SPA.LVO.110 Aerodrome-related requirements, including instrument flight procedures.

SUITABLE AERODROMES — ASSESSMENT — SUITABLE RUNWAY AND RUNWAY ENVIRONMENT CHARACTERISTICS

(a) […]

(b) […]

(c) […]

(d) There should be a radio altimeter operating area for runways intended to be used for EFVS-L, CAT III, CAT II, SA CAT II and SA CAT I operations. The ICAO aerodrome provisions detail that the radio altimeter operating area extends to at least 300 m from the runway threshold with a width of 60 metres on either side of the extended centre line of the runway. The width may be reduced to not less than ± 30 metres if such a reduction does not affect the safety of aircraft operations as assessed by the aerodrome operator in cooperation with affected stakeholders. Slope changes should be kept to a minimum.

[…]

GM4 SPA.LVO.110 Aerodrome-related requirements, including instrument flight procedures

SUITABLE AERODROMES — ASSESSMENT — PREVIOUS OPERATIONAL DATA PROVIDED BY THE STATE OF THE AERODROME

(a) As detailed in point (b)(1) of AMC1 SPA.LVO.110, the assessment of the suitability of an aerodrome, including instrument flight procedures, for the intended operations, may be made considering previous operational data for the particular aerodrome, runway and instrument flight procedures.

(b) The following guidance is provided for the assessment of suitability of aerodromes for LVOs or operations with operational credits.

(1) If a State provides data related to ~~a list of~~ airports or runways in its territory that are suitable for CAT II or CAT III operations with a specific aircraft model or group of aircraft models, those airports or runways may be considered suitable for the purpose of AMC2 SPA.LVO.110 for those specific aircraft model(s), airports or runways, and approach operations (e.g. the FAA may provide such a type of list). Note: A CAT II or CAT III approved runway does not necessarily mean that the airport is suitable for the purpose of AMC2 SPA.LVO as the aerodrome's provisions may not ensure that the requirements for certain aircraft models are fulfilled.

(2) If a State provides data related to ~~a list of~~ airports or runways in its territory that are found suitable for SA CAT I or SA CAT II, those airports or runways may be considered suitable for the purpose of AMC2 SPA.LVO.110. Note: In some States the concept of SA CAT I and SA CAT II may be different from the EU concept. The operator should consider these differences.

(3) If a State provides data related to ~~a list of~~ airports or runways in its territory that are approved for CAT II/III operations but are designated as restricted or non-standard or irregular, those designated runways should be considered not suitable. The remaining CAT II/III runways of that State may be considered regular.

(4) A competent authority may provide data related to ~~a list of~~ airports or runways that can be considered suitable for defined LVOs. The suitability statement could be credited by operators under the oversight of that authority.

GM8 SPA.LVO.110 Aerodrome-related requirements, including instrument flight procedures.

SUITABLE AERODROMES — OPERATIONAL ASSESSMENT — PROCESS TO DETERMINE THE NUMBER OF APPROACHES AND LANDINGS — AEROPLANES

[…]

Figure 0~~1~~: *Typical example of 'very complex' with greater than 6 m 'sea wall' at 300 m (Asturias, LEAS 29 dated 2007) that after suitability assessment and due to the presence ~~present~~ of ARAS, ~~it~~ may be changed to **'moderate'**.*

[…]

— Deviation from mean LSAA slope: greatest elevation difference between any runway elevation inside LSAA and mean LSAA slope.

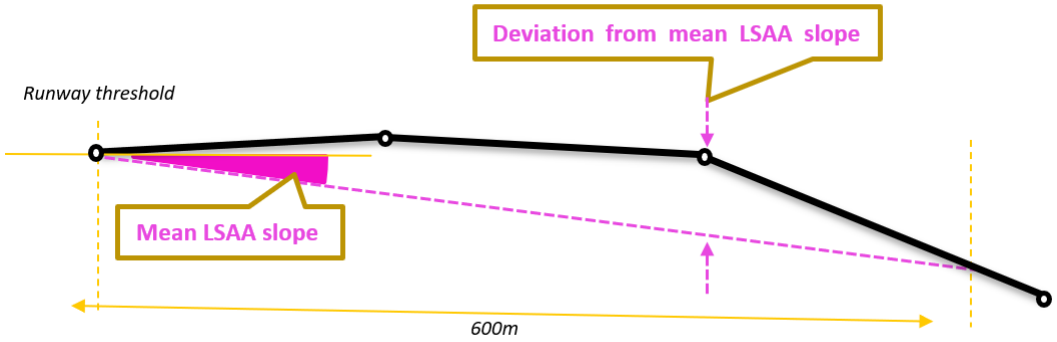

Figure 1: Mean LSAA slope & Deviation from mean LSAA slope

Note: Published runway profiles usually contain the position and elevation of each significant runway longitudinal slope change. Elevation at other location can be interpolated assuming straight slope between each published elevation. The highest / lowest elevation of the LSAA might not be the one where the deviation from mean LSAA slope is the greatest.

(i) Simple

(A) Approximately ± 0.4 % mean LSAA slope and less than 1 m (3 ft) variation around mean LSAA slope; or

(B) previous experience in more constraining touch down condition in the same aircraft type or variant.

(ii) Moderate

Approximately ± 0.8 % mean LSAA slope and less than 2 m (~~3~~6 ft) variation around mean LSAA slope.

(iii) Complex

Approximately ± 1.0 % mean LSAA slope and less than 4 m (~~6~~12 ft) variation around mean LSAA slope.

(iv) Very complex

Outside any of the limits defined above.

[…]

AMC4 SPA.LVO.120(b) Flight crew competence

RECURRENT CHECKING FOR LVTO, SA CAT I, CAT II, SA CAT II AND CAT III APPROACH OPERATIONS

(a) The operator should ensure that the pilots' competence to perform LVOs for which they are authorised is checked by completing at least the following exercises:

(1) One or more low-visibility rejected take-off at minimum approved RVR at least once over the period between two operator proficiency checks or once at every periodic

demonstration of competence or, for an ATQP operator, at each required operator proficiency check or alternatively at each required LOE.

(2) Pilots authorised for LVTO operations in an RVR of less than 150 m should additionally conduct at least one LVTO in the minimum approved visibility at each required operator proficiency check or periodic demonstration of competence.

(3) One or more low-visibility approaches in simulated instrument flight conditions down to a point between 500 ft AGL and the threshold (e.g. applicable DH), followed by go-around, ~~at DH~~ at each required operator proficiency check or periodic demonstration of competence; and

(4) One or more low-visibility approach and landings with visual reference established at the DH at each required operator proficiency check or periodic demonstration of competence.

(b) Pilots authorised to conduct CAT III operations on aircraft with a fail-passive autoland system, or HUDLS or equivalent, should complete a missed approach at least once over the period of three consecutive operator proficiency checks or demonstrations of competence as the result of an equipment failure at or below the DH when the last reported RVR was less than 300 m. For ATQP operators, pilots authorised to conduct CAT III operations on aircraft with a fail-passive autoland system, or HUDLS or equivalent, should complete a missed approach at least once every two OPCs or LOE (a period of about 2 years).

(c) CAT III approach operations should be conducted in an FSTD. Other exercises may be conducted in an FSTD or aircraft.