**LVTO-AMC**

**Reference Model: LVTO-AMC**

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| **Version** | ***1*** |
| **Description:**  *Acceptable Means of Compliance (AMC) and Guidance Material (GM) related to Low Visibility Take-Off Procedures (LVTO) less than 400m, but not less than 150 m.* | |

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| **Number** | **Details** |
| **AMC SPA.LVO** | **Low Visibility Opererations (LVO) AMCs**  Acceptable Means of Compliance. |
| **AMC1 SPA.LVO.100** | **Low Visibility Take-Off Operations (LVTO) with aeroplanes**  For a low visibility take-off (LVTO) with an aeroplane the following provisions should apply:  (a) for an LVTO with a runway visual range (RVR) below 400 m but at least 150 m, the criteria specified in Table 1.A;  Table 1.A: LVTO – aeroplanes RVR vs. facilities  Facilities:  Day: runway edge lights and runway centre line markings  Night: runway edge lights and runway end lights or runway centre line lights and runway end lights  RVR m: 300 m.  Facilities:  Runway edge lights and runway centre line lights.  RVR m: 150 m.  Compliancy Note: See **LVTO.OPS.240 Visibility minima**. |
| **AMC2 SPA.LVO.100** | **Low Visibility Take-Off Operations (LVTO) with helicopters**  Compliancy Note: Not applicable. Only fixed wing aircraft are covered in **LVTO-OPS** Operations Manual. |
| **AMC3 SPA.LVO.100** | **LTS CAT 1 operations**  Compliancy Note: Not applicable to LVTO only requirements. |
| **AMC4 SPA.LVO.100** | **CAT II and OTS CAT II operations**  Compliancy Note: Not applicable to LVTO only requirements. |
| **AMC5 SPA.LVO.100** | **CAT III operations**  Compliancy Note: Not applicable to LVTO only requirements. |
| **AMC6 SPA.LVO.100** | **Operations using EVS**  Compliancy Note: Not applicable to LVTO only requirements. There are no rules set to the use of EVS systems in the take-off phase. In the currently published AMCs, it is mentioned that the use of EVS equipment is not covering at the moment the use of this equipment for the LVTO part. See subnote below original text in AMC1 SPA.LVO.125.b with reference to the use of EVS systems during LVTO operations: Background to EVS provisions, section (2): "Provisions for the use of EVS during take-off have not been developed. The systems evaluated did not perform well when the RVR was below 300 m. There may be some benefit for use of EVS during take-off with greater visibility and reduced light; however, such operations would need to be evaluated." Therefore, this part is not applicable to LVTO only operations. |
| **AMC7 SPA.LVO.100** | **Effect on landing minima of temporarily failed or downgraded equipment**  Compliancy Note: Not applicable to LVTO only requirements. |
| **AMC1 SPA.LVO.105** | **Operational demonstration - Aeroplanes**  Related to flight guidance systems, including HUDLS if appropriate, and procedures all applicable to CAT II/III procedures.  Compliancy Note: Not applicable to LVTO only requirements. |
| **AMC2 SPA.LVO.105** | **Operational demonstration - Helicopters**  Related to CAT II or CAT III operations in a helicopter type aircraft in the approach phase.  Compliancy Note: Not applicable to LVTO only requirements. |
| **AMC3 SPA.LVO.105** | **Continuous monitoring - All aircraft** |
| **AMC3 SPA.LVO.105.a** | **Continuous monitoring by operator**  After obtaining the initial approval, the operations should be continuously monitored by the operator to detect any undesirable trends before they become hazardous. Flight crew reports may be used to achieve this.  Compliancy Note: **LVTO.OPS.110** and **LVTO.TRN.400** Simulator training in previous 6 months. **LVTO-OPS.120** and **LVTO.OPS.610** Record keeping, **LVTO.TRN.110 Administrative**. |
| **AMC3 SPA.LVO.105.b** | **Information to be retained for 12-months period**  The following information should be retained for a period of 12 months:  (1) the total number of approaches, by aircraft type, where the airborne CAT II or III equipment was utilised to make satisfactory, actual or practice, approaches to the applicable CAT II or III minima; and  (2) reports of unsatisfactory approaches and/or automatic landings, by aerodrome and aircraft registration, in the following categories:  (i) airborne equipment faults;  (ii) ground facility difficulties;  (iii) missed approaches because of ATC instructions; or  (iv) other reasons.  Compliancy Note: **LVTO.TRN.110 Administrative** in the **LVTO-TRN Training Syllabus**. |
| **AMC3 SPA.LVO.105.c** | **Procedures to monitor performance of the automatic landing system or HUDLS**  The operator should establish a procedure to monitor the performance of the automatic landing system or HUDLS to touchdown performance, as appropriate, of each aircraft.  Compliancy Note: Not applicable to LVTO only requirements. The automatic landing system or HUDS system are not used during the take-off phase and thus there is no special equipment used during LVTO-only operations that needs its performance to be monitored. The standard equipment of the aircraft needs to work and be operational for normal IFR operations, which fall under the normal maintenance scheme. The monitoring of these instruments are covered in **LVTO.OPS.310 Working Instruments**. |
| **AMC4 SPA.LVO.105** | **Transitional periods for CAT II and CAT III operations**  Compliancy Note: Not applicable to LVTO-only operations as this article only relates to approach procedures. |
| **AMC5 SPA.LVO.105** | **Maintenance of CAT II, CAT III and LVTO equipment**  Maintenance instructions for the onboard guidance systems should be established by the operator, in liaison with the manufacturer, and included in the operator's aircraft maintenance programme in accordance with Annex I to Regulation (EC) No 2042/20031 (Part-M).  Compliancy Note: Not applicable to LVTO-only operations as this article only relates to approach procedures. The standard equipment of the aircraft needs to work and be operational for normal IFR operations, which fall under the normal maintenance scheme. The monitoring of these instruments are covered in **LVTO.OPS.310 Working Instruments**. |
| **AMC6 SPA.LVO.105** | **Eligible aerodromes and runways**  All related to LTS CAT I, CAT II or CAT III operations.  Compliancy Note: Not applicable to LVTO only requirements. |
| **AMC1 SPA.LVO.120** | **Flight crew training and qualifications** |
| **AMC1 SPA.LVO.120.a** | **General provisions**  The operator should ensure that flight crew member training programmes for LVO include structured courses of ground, FSTD and/or flight training.  (1) Flight crew members with no CAT II or CAT III experience should complete the full training programme prescribed in (b), (c), and (d) below.  (2) Flight crew members with CAT II or CAT III experience with a similar type of operation (auto-coupled/auto-land, HUDLS/hybrid HUDLS or EVS) or CAT II with manual land, if appropriate, with another EU operator may undertake an:  (i) abbreviated ground training course if operating a different type or class from that on which the previous CAT II or CAT III experience was gained;  (ii) abbreviated ground, FSTD and/or flight training course if operating the same type or class and variant of the same type or class on which the previous CAT II or CAT III experience was gained. The abbreviated course should include at least the provisions of (d)(1), (d)(2)(i) or (d)(2)(ii) as appropriate and (d)(3)(i). The operator may reduce the number of approaches/landings required by (d)(2)(i) if the type/class or the variant of the type or class has the same or similar:  (A) level of technology - flight control/guidance system (FGS);  (B) operating procedures;  (C) handling characteristics;  (D) use of HUDLS/hybrid HUDLS; and  (E) use of EVS,  as the previously operated type or class, otherwise the provisions of (d)(2)(i) should be met.  (3) Flight crew members with CAT II or CAT III experience with the operator may undertake an abbreviated ground, FSTD and/or flight training course.  (i) When changing aircraft type or class, the abbreviated course should include at least the provisions of (d)(1), (d)(2)(i) or (d)(2)(ii) as appropriate and (d)(3)(i).  (ii) When changing to a different variant of aircraft within the same type or class rating that has the same or similar:  (A) level of technology - FGS;  (B) operating procedures - integrity;  (C) handling characteristics;  (D) use of HUDLS/Hybrid HUDLS; and  (E) use of EVS,  as the previously operated type or class, a difference course or familiarisation appropriate to the change of variant should fulfil the abbreviated course provisions.  (iii) When changing to a different variant of aircraft within the same type or class rating that has a significantly different:  (A) level of technology - FGS;  (B) operating procedures - integrity;  (C) handling characteristics;  (D) use of HUDLS/Hybrid HUDLS; or  (E) use of EVS,  the provisions of (d)(1), (d)(2)(i) or (d)(2)(ii) as appropriate and (d)(3)(i) should be fulfilled.  (4) The operator should ensure when undertaking CAT II or CAT III operations with different variant(s) of aircraft within the same type or class rating that the differences and/or similarities of the aircraft concerned justify such operations, taking into account at least the following:  (i) the level of technology, including the:  (A) FGS and associated displays and controls;  (B) FMS and its integration or not with the FGS; and  (C) use of HUD/HUDLS with hybrid systems and/or EVS;  (ii) operating procedures, including:  (A) fail-passive / fail-operational, alert height;  (B) manual landing / automatic landing;  (C) no DH operations; and  (D) use of HUD/HUDLS with hybrid systems;  (iii) handling characteristics, including:  (A) manual landing from automatic HUDLS and/or EVS guided approach;  (B) manual missed approach procedure from automatic approach; and  (C) automatic/manual rollout.  Compliancy Note: Not applicable to LVTO only requirements. For LVTO training, see **LVTO-TRN Training Syllabus**. |
| **AMC1 SPA.LVO.120.b** | **Ground training**  The initial ground training course for LVO should include at least the following:  (1) characteristics and limitations of the ILS and/or MLS;  (2) characteristics of the visual aids;  (3) characteristics of fog;  (4) operational capabilities and limitations of the particular airborne system to include HUD symbology and EVS characteristics, if appropriate;  (5) effects of precipitation, ice accretion, low-level wind shear and turbulence;  (6) effect of specific aircraft/system malfunctions;  (7) use and limitations of RVR assessment systems;  (8) principles of obstacle clearance requirements;  (9) recognition of and action to be taken in the event of failure of ground equipment;  (10) procedures and precautions to be followed with regard to surface movement during operations when the RVR is 400 m or less and any additional procedures required for take-off in conditions below 150m (200m for category D aeroplanes);  (11) significance of DHs based upon radio altimeters and the effect of terrain profile in the approach area on radio altimeter readings and on the automatic approach/landing systems;  (12) importance and significance of alert height, if applicable, and the action in the event of any failure above and below the alert height;  (13) qualification requirements for pilots to obtain and retain approval to conduct LVOs; and  (14) importance of correct seating and eye position.  Compliancy Note: For most part not applicable to LVTO only requirements. For LVTO ground surface movements, see **LVTO.TRN.200 Ground Training** and **LVTO.OPS.400 Taxiing during LVO operations,** **LVTO.OPS.500 Low Visibility take-off (LVTO) operations** and **LVTO.OPS.240 Visibility minima, sub c** for LVO ground movements in RVR <150 m but not less than 125 m. |
| **AMC1 SPA.LVO.120.c** | **FSTD training and/or flight training**  1) FSTD and/or flight training for LVO should include at least:  (i) checks of satisfactory functioning of equipment, both on the ground and in flight;  (ii) effect on minima caused by changes in the installations;  (iii) monitoring of:  (A) automatic flight control systems and annunciators with emphasis on the action event of failures of such systems; and  (B) HUD/HUDLS/EVS guidance status and appropriate, to include head-down displays;  status of ground  auto-land status to be taken in the  annunciators as  (iv) actions to be taken in the event of failures such as engines, electrical systems, hydraulics or flight control systems;  (v) the effect of known unserviceabilities and use of MELs;  (vi) operating limitations resulting from airworthiness certification;  (vii) guidance on the visual cues required at DH together with information on maximum deviation allowed from glide path or localiser; and  (viii) the importance and significance of alert height if applicable and the action in the event of any failure above and below the alert height.  (2) Flight crew members should be trained to carry out their duties and instructed on the coordination required with other crew members. Maximum use should be made of suitably equipped FSTDs for this purpose.  (3) Training should be divided into phases covering normal operation with no aircraft or equipment failures but including all weather conditions that may be encountered and detailed scenarios of aircraft and equipment failure that could affect CAT II or III operations. If the aircraft system involves the use of hybrid or other special systems, such as HUD/HUDLS or enhanced vision equipment, then flight crew members should practise the use of these systems in normal and abnormal modes during the FSTD phase of training.  (4) Incapacitation procedures appropriate to LVTO, CAT II and CAT III operations should be practised.  (5) For aircraft with no FSTD available to represent that specific aircraft, operators should ensure that the flight training phase specific to the visual scenarios of CAT II operations is conducted in a specifically approved FSTD. Such training should include a minimum of four approaches. Thereafter, the training and procedures that are type specific should be practised in the aircraft.  (6) Initial CAT II and III training should include at least the following exercises:  (i) approach using the appropriate flight guidance, autopilots and control systems installed in the aircraft, to the appropriate DH and to include transition to visual flight and landing;  (ii) approach with all engines operating using the appropriate flight guidance systems, autopilots, HUDLS and/or EVS and control systems installed in the aircraft down to the appropriate DH followed by missed approach - all without external visual reference;  (iii) where appropriate, approaches utilising automatic flight systems to provide automatic flare, hover, landing and rollout; and  (iv) normal operation of the applicable system both with and without acquisition of visual cues at DH.  (7) Subsequent phases of training should include at least:  (i) approaches with engine failure at various stages on the approach;  (ii) approaches with critical equipment failures, such as electrical systems, auto flight systems, ground and/or airborne ILS, MLS systems and status monitors;  (iii) approaches where failures of auto flight equipment and/or HUD/HUDLS/EVS at low level require either:  (A) reversion to manual flight to control flare, hover, landing and rollout or missed approach; or  (B) reversion to manual flight or a downgraded automatic mode to control missed approaches from, at or below DH including those which may result in a touchdown on the runway;  (iv) failures of the systems that will result in excessive localiser and/or glideslope deviation, both above and below DH, in the minimum visual conditions specified for the operation. In addition, a continuation to a manual landing should be practise  Compliancy Note: Not applicable to LVTO only requirements. |
| **AMC1 SPA.LVO.120.d** | **Conversion training**  Flight crew members should complete the following low visibility procedures (LVPs) training if converting to a new type or class or variant of aircraft in which LVTO, LTS CAT I, OTS CAT II, approach operations utilising EVS with an RVR of 800 m or less and CAT II and CAT III operations will be conducted. Conditions for abbreviated courses are prescribed in (a)(2), (a)(3) and (a)(4).  (1) Ground training  The appropriate provisions are as prescribed in (b), taking into account the flight crew member's CAT II and CAT III training and experience.  Compliancy Note: Not applicable to LVTO only requirements.  2) FSTD training and/or flight training  (i) A minimum of six, respectively eight for HUDLS with or without EVS, approaches and/or landings in an FSTD. The provisions for eight HUDLS approaches may be reduced to six when conducting hybrid HUDLS operations.  (ii) Where no FSTD is available to represent that specific aircraft, a minimum of three, respectively five for HUDLS and/or EVS, approaches including at least one missed approach procedure is required on the aircraft. For hybrid HUDLS operations a minimum of three approaches is required, including at least one missed approach procedure.  (iii) Appropriate additional training if any special equipment is required such as head-up displays or enhanced vision equipment. When approach operations utilising EVS are conducted with an RVR of less than 800 m, a minimum of five approaches, including at least one missed approach procedure are required on the aircraft.  (3) Flight crew qualification  The flight crew qualification provisions are specific to the operator and the type of aircraft operated.  (i) The operator should ensure that each flight crew member completes a check before conducting CAT II or III operations.  (ii) The check specified in (d)(3)(i) may be replaced by successful completion of the FSTD and/or flight training specified in (d)(2).  (4) Line flying under supervision  Flight crew member should undergo the following line flying under supervision (LIFUS):  (i) For CAT II when a manual landing or a HUDLS approach to touchdown is required, a minimum of:  (A) three landings from autopilot disconnect; and  (B) four landings with HUDLS used to touchdown,  except that only one manual landing, respectively two using HUDLS, to touchdown is required when the training required in (d)(2) has been carried out in an FSTD qualified for zero flight time conversion.  (ii) For CAT III, a minimum of two auto-lands, except that:  (A) only one auto-land is required when the training required in (d)(2) has been carried out in an FSTD qualified for zero flight time conversion;  (B) no auto-land is required during LIFUS when the training required in (d)(2) has been carried out in an FSTD qualified for zero flight time (ZFT) conversion and the flight crew member successfully completed the ZFT type rating conversion course; and  (C) the flight crew member, trained and qualified in accordance with (B), is qualified to operate during the conduct of LIFUS to the lowest approved DA/H and RVR as stipulated in the operations manual.  (iii) For CAT III approaches using HUDLS to touchdown, a minimum of four approaches.  Compliancy Note: Not applicable to LVTO only requirements. |
| **AMC1 SPA.LVO.120.e** | **Type and command experience**  (1) Before commencing CAT II operations, the following additional provisions should be applicable to pilots-in-command/commanders, or pilots to whom conduct of the flight may be delegated, who are new to the aircraft type or class:  (i) 50 hours or 20 sectors on the type, including LIFUS; and  (ii) 100 m should be added to the applicable CAT II RVR minima when the operation requires a CAT II manual landing or use of HUDLS to touchdown until:  (A) a total of 100 hours or 40 sectors, including LIFUS, has been achieved on the type; or  (B) a total of 50 hours or 20 sectors, including LIFUS, has been achieved on the type where the flight crew member has been previously qualified for CAT II manual landing operations with an EU operator;  (C) for HUDLS operations the sector provisions in (e)(1) and (e)(2)(i) should always be applicable; the hours on type or class do not fulfil the provisions.  (2) Before commencing CAT III operations, the following additional provisions should be applicable to pilots-in-command/commanders, or pilots to whom conduct of the flight may be delegated, who are new to the aircraft type:  (i) 50 hours or 20 sectors on the type, including LIFUS; and  (ii) 100 m should be added to the applicable CAT II or CAT III RVR minima unless he/she has previously qualified for CAT II or III operations with an EU operator, until a total of 100 hours or 40 sectors, including LIFUS, has been achieved on the type. Compliancy Note: Not applicable to LVTO only requirements. |
| **AMC1 SPA.LVO.120.f** | **Recurrent training and checking - LVO**  (1) The operator should ensure that, in conjunction with the normal recurrent training and operator’s proficiency checks, the pilot's knowledge and ability to perform the tasks associated with the particular category of operation, for which the pilot is authorised by the operator, are checked. The required number of approaches to be undertaken in the FSTD within the validity period of the operator’s proficiency check should be a minimum of two, respectively four when HUDLS and/or EVS is utilised to touchdown, one of which should be a landing at the lowest approved RVR. In addition one, respectively two for HUDLS and/or operations utilising EVS, of these approaches may be substituted by an approach and landing in the aircraft using approved CAT II and CAT III procedures. One missed approach should be flown during the conduct of an operator proficiency check. If the operator is approved to conduct take-off with RVR less than 150 m, at least one LVTO to the lowest applicable minima should be flown during the conduct of the operator’s proficiency check.  Compliancy Note: See **LVTO.TRN.330 Proficiency check**.  (2) For CAT III operations the operator should use an FSTD approved for this purpose. Compliancy Note: Not applicable to LVTO only requirements.  (3) For CAT III operations on aircraft with a fail-passive flight control system, including HUDLS, a missed approach should be completed by each flight crew member at least once over the period of three consecutive operator proficiency checks as the result of an autopilot failure at or below DH when the last reported RVR was 300 m or less. Compliancy Note: Not applicable to LVTO only requirements. |
| **AMC1 SPA.LVO.120.g** | **LVTO operations with RVR less than 400 m**  (1) Prior to conducting take-offs in RVRs below 400 m, the flight crew should undergo the following training:  (i) normal take-off in minimum approved RVR conditions;  (ii) take-off in minimum approved RVR conditions with an engine failure:  (A) for aeroplanes between V1 and V2 (take-off safety speed), or as soon as safety considerations permit;  (B) for helicopters at or after take-off decision point (TDP); and  (iii) take-off in minimum approved RVR conditions with an engine failure:  (A) for aeroplanes before V1 resulting in a rejected take-off; and  (B) for helicopters before the TDP.  Compliancy Note: See **LVTO-TRN Training Syllabus**, **LVTO.TRN.310** and **LVTO.TRN.400** for normal, aborted and with engine failure training.  (2) The operator approved for LVTOs with an RVR below 150 m should ensure that the training specified by (g)(1) is carried out in an FSTD. This training should include the use of any special procedures and equipment. Compliancy Note: See **LVTO.TRN.200**.  (3) The operator should ensure that a flight crew member has completed a check before conducting LVTO in RVRs of less than 150 m. The check may be replaced by successful completion of the FSTD and/or flight training prescribed in (g)(1) on conversion to an aircraft type. Compliancy Note: See **LVTO.TRN.200**. |
| **AMC1 SPA.LVO.120.h** | **LTS CAT I, OTS CAT II, operations utilising EVS, additional training provisions**  (1) General  Operators conducting LTS CAT I operations, OTS CAT II operations and operations utilising EVS with RVR of 800 m or less should comply with the provisions applicable to CAT II operations and include the provisions applicable to HUDLS, if appropriate. The operator may combine these additional provisions where appropriate provided that the operational procedures are compatible.  Compliancy Note: Not applicable to LVTO only requirements.  (2) LTS CAT I  During conversion training the total number of approaches should not be additional to the requirements of Subpart FC of Annex III (ORO.FC) provided the training is conducted utilising the lowest applicable RVR. During recurrent training and checking the operator may also combine the separate requirements provided the above operational procedure provision is met and at least one approach using LTS CAT I minima is conducted at least once every 18 months. Compliancy Note: Not applicable to LVTO only requirements.  (3) OTS CAT II  During conversion training the total number of approaches should not be less than those to complete CAT II training utilising a HUD/HUDLS. During recurrent training and checking the operator may also combine the separate provisions provided the above operational procedure provision is met and at least one approach using OTS CAT II minima is conducted at least once every 18 months. Compliancy Note: Not applicable to LVTO only requirements.  (4) Operations utilising EVS with RVR of 800 m or less  During conversion training the total number of approaches required should not be less than that required to complete CAT II training utilising a HUD. During recurrent training and checking the operator may also combine the separate provisions provided the above operational procedure provision is met and at least one approach utilising EVS is conducted at least once every 12 months. Compliancy Note: Not applicable to LVTO only requirements. |
| **AMC1 SPA.LVO.125** | **Operating procedures** |
| **AMC1 SPA.LVO.125.a** | **General**  LVOs should include the following:  (1) manual take-off, with or without electronic guidance systems or HUDLS/hybrid HUD/HUDLS;  (2) approach flown with the use of a HUDLS/hybrid HUD/HUDLS and/or EVS;  (3) auto-coupled approach to below DH, with manual flare, hover, landing and rollout;  (4) auto-coupled approach followed by auto-flare, hover, auto-landing and manual rollout; and  (5) auto-coupled approach followed by auto-flare, hover, auto-landing and auto- rollout, when the applicable RVR is less than 400 m. Compliancy Note: Not applicable to LVTO only requirements for approach procedures. See **LVO-OPS** for manual take-off. |
| **AMC1 SPA.LVO.125.b** | **Procedures and instructions**  The operator should specify detailed operating procedures and instructions in the operations manual.  Compliancy Note: See **LVO-OPS Operations Manual**.  (1) The precise nature and scope of procedures and instructions given should depend upon the airborne equipment used and the flight deck procedures followed. The operator should clearly define flight crew member duties during take-off, approach, flare, hover, rollout and missed approach in the operations manual. Particular emphasis should be placed on flight crew responsibilities during transition from non-visual conditions to visual conditions, and on the procedures to be used in deteriorating visibility or when failures occur. Special attention should be paid to the distribution of flight deck duties so as to ensure that the workload of the pilot making the decision to land or execute a missed approach enables him/her to devote himself/herself to supervision and the decision-making process. Compliancy Note: Not applicable to LVTO only requirements.  (2) The instructions should be compatible with the limitations and mandatory procedures contained in the AFM and cover the following items in particular:  (i) checks for the satisfactory functioning of the aircraft equipment, both before departure and in flight; Compliancy Note: See **LVTO.OPS.130** **Working instruments**, **LVTO.OPS.560 Engine monit**oring and **LVTO.OPS.570** and **580**.  (ii) effect on minima caused by changes in the status of the ground installations and airborne equipment;  (iii) procedures for the take-off, approach, flare, hover, landing, rollout and missed approach; Compliancy Note: See **LVTO.OPS.500** **Low Visibility take-off (LVTO) operations**.  (iv) procedures to be followed in the event of failures, warnings to include HUD/HUDLS/EVS and other non-normal situations;  (v) the minimum visual reference required;  (vi) the importance of correct seating and eye position;  (vii) action that may be necessary arising from a deterioration of the visual reference;  (viii) allocation of crew duties in the carrying out of the procedures according to (b)(2)(i) to (iv) and (vi), to allow the pilot-in- command/commander to devote himself/herself mainly to supervision and decision making;  (ix) the rule for all height calls below 200 ft to be based on the radio altimeter and for one pilot to continue to monitor the aircraft instruments until the landing is completed;  (x) the rule for the localiser sensitive area to be protected;  (xi) the use of information relating to wind velocity, wind shear, turbulence, runway contamination and use of multiple RVR assessments;  (xii) procedures to be used for:  (A) LTS CAT I;  (B) OTS CAT II;  (C) approach operations utilising EVS; and  (D) practice approaches and landing on runways at which the full  CAT II or CAT III aerodrome procedures are not in force;  (xiii) operating limitations resulting from airworthiness certification; and  (xiv) information on the maximum deviation allowed from the ILS glide path and/or localiser.  Annex to ED Decision 2012/019/R Compliancy Note: Not applicable to LVTO only requirements. |
| **GM SPA.LVO** | **Low Visibility Opererations (LVO) GMs**  Guidance Material. |
| **GM1 SPA.LVO.100** | **Documents containing information related to low visibility oeprations**  The following documents provide further information to low visibility operations (LVO):  (a) ICAO Annex 2 Rules of the Air;  (b) ICAO Annex 6 Operation of Aircraft;  (c) ICAO Annex 10 Telecommunications Vol. 1;  (d) ICAO Annex 14 Aerodromes Vol. 1;  Page 29 of 109  (e) ICAO Doc 8168 PANS - OPS Aircraft Operations;  (f) ICAO Doc 9365 AWO Manual;  (g) ICAO Doc 9476 Manual of surface movement guidance and control systems (SMGCS);  (h) ICAO Doc 9157 Aerodrome Design Manual;  (i) ICAO Doc 9328 Manual of RVR Observing and Reporting Practices;  (j) ICAO EUR Doc 013: European Guidance Material on Aerodrome Operations under Limited Visibility Conditions;  (k) ECAC Doc 17, Issue 3; and  (l) CS-AWO All weather operations. |
| **GM2 SPA.LVO.100** | **ILS Classification**  Compliancy Note: Not applicable to LVTO only requirements. |
| **GM1 SPA.LVO.100.c,e** | **Establishment of minimum RVR for CAT II and CAT III operations**  Compliancy Note: Not applicable to LVTO only requirements. |
| **GM1 SPA.LVO.100.e** | **Crew actions in case of autopilot failure at or below DH in fail-passive CAT III operations**  Compliancy Note: Not applicable to LVTO only requirements. |
| **GM1 SPA.LVO.100.f** | **Operations utilising EVS**  Compliancy Note: Not applicable to LVTO only requirements.  See also in the part the text under Sub (b) Background to EVS provisions, section (2): "Provisions for the use of EVS during take-off have not been developed. The systems evaluated did not perform well when the RVR was below 300 m. There may be some benefit for use of EVS during take-off with greater visibility and reduced light; however, such operations would need to be evaluated." Therefore, this part is not applicable to LVTO only operations. |
| **GM5 SPA.LVO.105** | **Criteria for a successful CAT II, OTS CAT II, CAT III and automatic landing**  Compliancy Note: Not applicable to LVTO only requirements. |
| **GM1 SPA.LVO.100.c.4.i** | **Approved Vertical Flight Path Guidance Mode**  Compliancy Note: Not applicable to LVTO only requirements. |
| **GM1 SPA.LVO.120** | **Flight crew training and qualifications**  FLIGHT CREW TRAINING  The number of approaches referred to in AMC1 SPA.LVO.120 (g)(1) includes one approach and landing that may be conducted in the aircraft using approved CAT II/III procedures. This approach and landing may be conducted in normal line operation or as a training flight. Compliancy Note: Not applicable to LVTO only requirements. |