

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N 8900.143

National Policy

Effective Date:
12/7/10

Cancellation Date:
12/7/11

SUBJ: OpSpec/MSpec/LOA C052—Straight-In Non-Precision, APV, and Category I Precision Approach and Landing Minima

1. Purpose of this Notice. This notice provides revised guidance for Federal Aviation Administration (FAA) certificate-holding district offices (CHDO) and principal operations inspectors (POI) assigned to operators conducting airplane operations under Title 14 of the Code of Federal Regulations (14 CFR) parts 91 subpart K (part 91K), 121, 125 (including the Letter of Deviation Authority (LODA) 125M operators), 129, and 135. This notice amends and clarifies the authorization (C052) for straight-in non-precision approach procedures with vertical guidance (APV) and Category (CAT) I precision approach and landing minima. It also incorporates the authorization of C053, which authorized straight-in Nonprecision Approach (NPA) procedures, introduces Ground Based Augmentation System (GBAS) procedures as a selectable in Table 1, and incorporates authorization C074, which authorized straight-in CAT I precision approach procedures. This notice decommissions all C053 and C074 templates, and amends all C052 templates; i.e., operations specification (OpSpec) C052, management specification (MSpec) C052, and letter of authorization (LOA) C052 for operators conducting airplane operations under parts 91K, 121, 125 (including the LODA 125M operators), 129, and 135. This is a mandatory change to C052.

2. Audience. The primary audience for this notice is FAA CHDOs and POIs assigned to operators conducting airplane operations under parts 91K, 121, 125 (including the LODA 125M operators), 129, and 135. The secondary audience includes Flight Standards divisions and branches in the regions and in headquarters (HQ).

3. Where You Can Find this Notice. You can find this notice on the MyFAA employee Web site at https://employees.faa.gov/tool_resources/orders_notices. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at <http://fsims.avs.faa.gov>. Operators may find this information on the FAA's Web site at <http://fsims.faa.gov>.

4. Background. Paragraphs C052, C053, and C074 authorize and list the requirements and limitations for approach and landing operations using straight-in instrument approach procedures (IAP), including non-precision, CAT I precision, and APV. To clarify the current authorizations, simplify the current paragraph, and reduce inspector workload for this and future revisions, these paragraphs are being combined to create a single authorization. In addition to combining C052, C053, and C074, the following major changes have been made:

- The introduction of Global Positioning System (GPS) Landing System (GLS) procedures as a selectable in Table 1.
- The tables which depicted the lowest minimums for each type of instrument approach in previous versions of C053 and C074 have been deleted and replaced with a list of acceptable instrument procedure criteria applicable to all operators for both domestic operations and operations at foreign airports.
- New selectable text for Special Authorization CAT I instrument landing system (ILS) to a radar altimeter decision height (DH) as low as 150 feet, and a visibility minimum as low as 1400 Runway Visual Range (RVR) for CAT II or III operators using a head-up display (HUD) to DH.
- Table 2 from the previous version of paragraph C074, which authorized special IAPs as low as RVR 1800, has been removed. Any approaches which were authorized in Table 2 do not have to be authorized in the new C052, since those runways must already be authorized in paragraph C081, Special Non-14 CFR Part 97 Instrument Approach or Departure Procedures.
- The limitations and provisions for IAPs at foreign airports has been amended and clarified.

5. Guidance. The Flight Technologies and Procedures Division, AFS-400, (in cooperation with the Air Transportation Division, AFS-200, the General Aviation and Commercial Division, AFS-800, and industry members of the Operations Specifications Working Group (OSWG)) developed this notice. This notice contains the following:

- The sample OpSpec C052 template in Appendix A applies to part 121.
- The sample OpSpec C052 template in Appendix B applies to part 125.
- The sample OpSpec C052 template in Appendix C applies to part 135.
- The sample OpSpec C052 template in Appendix D applies to part 121/135.
- The sample MSPEC MC052 template in Appendix E applies to part 91K.
- The sample LOA C052 template in Appendix F applies to part 125 (LODA 125M).
- The sample OpSpec C052 template in Appendix G applies to part 129.

6. Action. POIs should review the revised guidance for the issuance of the paragraph contained in this notice. POIs should provide this notice to the operators for whom they are responsible, alerting them to updated operating procedures as well as required pilot knowledge and training. This authorization is mandatory, with a compliance date of 90 days from the date of this notice.

7. Disposition. We will permanently incorporate the information in this notice in FSIMS before this notice expires. Direct questions regarding this notice to the Flight Operations Branch, AFS-410, at 202-385-4625.

for



John M. Allen
Director, Flight Standards Service

**Appendix A. Sample OpSpec Paragraph C052, Straight-In Non-Precision, APV,
and Category I Precision Approach and Landing Minima—All Airports:
14 CFR Part 121**

- a. Authorization. The certificate holder is authorized to conduct operations using the types of IAPs listed in Table 1 below, and shall not conduct operations using any other types.

Table 1, Authorized Instrument Approach Procedures

Nonprecision Approach Procedures Without Vertical Guidance	Approaches with Vertical Guidance (APV)	Precision Approach Procedures (ILS, MLS, & GLS)
TABL01	TABL02	TABL03

- b. Conditions and Limitations.

(1) Unless otherwise authorized by these operations specifications, the certificate holder shall not use any IFR IAP at any U.S. civil, military, or joint-use airport unless:

(a) It is promulgated under 14 CFR part 97,

(b) The procedure has been constructed using FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS), or other special criteria approved by the headquarters Flight Technologies and Procedures Division (AFS-400), or

(c) The procedure has been prescribed by the U.S. military agency operating the U.S. military airport.

(2) RVR: TDZ RVR reports, when available for a particular runway, are controlling for all approaches to and landings on that runway.

(a) The mid-RVR and rollout RVR reports (if available) provide advisory information to pilots.

(b) Visibility values below one-half a statute mile are not authorized and shall not be used.

(c) The mid-RVR report may be substituted for the TDZ RVR report if the TDZ RVR report is not available.

(3) The certificate holder may not use DA(H) in lieu of MDA(H) unless paragraph C073 is authorized.

(4) Unless otherwise authorized by these operations specifications, the certificate holder may not conduct any RNP special aircraft and aircrew authorization required (SAAAR) operations.

(The following language is selectable text that may be authorized by the POI, not template language.)

(5) Approach procedures using GPS or GPS wide area augmentation system (WAAS). The certificate holder is authorized to conduct GPS and/or GPS WAAS instrument approach operations using the approved GPS and/or GPS WAAS equipment listed in paragraph B034 if "... or GPS," GPS, or RNAV (GPS) or RNAV (GNSS) is listed in Table 1 above. This authorization to conduct approaches using GPS and/or GPS WAAS is subject to the following limitations and conditions:

(a) The airborne GPS and/or GPS WAAS navigation equipment to be used must be approved for IFR operations, certified for the intended operation (LPV, LNAV/VNAV, LP, or LNAV) and must contain current navigation data.

(b) Both the GPS constellation and the required airborne equipment must be providing the levels of availability, accuracy, continuity of function, and integrity required for the operation.

c. Reduced Precision CAT I Landing Minima.

(1) Reduced Landing Minima—200 Feet DH and 1800 RVR. The certificate holder is authorized precision CAT I landing minima as low as 1800 RVR to approved runways without TDZ lights and/or runway centerline (RCL) lights, including runways with installed but inoperative TDZ lights and/or RCL lights, in accordance with the following requirements:

(a) The authorized airplane(s) must be equipped with an approved FD, AP, or HUD approved for at least CAT I operations that provides guidance to DA. The flightcrew must be required to engage the FD, AP, or HUD in approach mode (e.g., tracking the localizer and glideslope) and use it to DA or initiation of missed approach unless adequate visual references with the runway environment are established that allow the safe continuation to a landing. Single-pilot operators are prohibited from using the FD to reduced CAT I landing minima without the accompanying use of an AP or HUD.

(b) Should the FD, AP, or HUD malfunction or be disengaged during the approach, the flightcrew must execute a missed approach unless the approach can be continued with the use of an operational FD, AP, or HUD, or visual reference to the runway environment has been established and the aircraft is in a position to allow the safe continuation to a landing.

(c) The flightcrew must demonstrate proficiency in ILS approaches to minimums using the FD, AP, or HUD as applicable.

(d) The part 97 SIAP must have an 1800 RVR minimum.

(The following language is selectable text that may be authorized by the POI, not template language.)

(2) Special Authorization CAT I (SA CAT I). The certificate holder is authorized SA CAT I with a DH as low as 150 feet and landing minima as low as 1400 RVR to approved runways without TDZ, RCL, and/or ALSF-2 lights, in accordance with the following requirements:

(a) Only airplanes approved for CAT II operations are eligible for these operations. Those airplanes and equipment must be listed in Table 2 of operations specification C059. The authorized airplane(s) must be equipped with an HUD that is approved for CAT II or CAT III operations.

(b) The flightcrew must be current and qualified for CAT II operations. The flightcrew must demonstrate proficiency in ILS approaches and landings to this minimum or lower using the HUD.

(c) The flightcrew must use the HUD to DH in a mode used for CAT II or CAT III operations.

(d) The flightcrew must use the HUD to DH, or to the initiation of a missed approach, unless adequate visual references with the runway environment are established that allow safe continuation to a landing.

(e) Should the HUD malfunction during the approach, the flightcrew must execute a missed approach unless visual reference to the runway environment has been established and the aircraft is in a position to allow safe continuation to a landing.

(f) The crosswind component on the landing runway must be 15 knots or less unless the airplane flight manual's crosswind limitations are more restrictive.

(g) The part 97 SIAP must have a published SA CAT I minimum.

(h) TDZ RVR reports are controlling. The mid-RVR report may NOT be substituted for the TDZ RVR report in SA CAT I operations.

d. Limitations and Provisions for IAPs at Foreign Airports.

(1) Unless otherwise authorized by these operations specifications, the certificate holder shall not use any IFR IAP at any foreign airport unless:

(a) The procedure has been constructed using criteria based on FAA Order 8260.3, or other special criteria approved by the headquarters AFS-400, or the procedure has been constructed using criteria prescribed by the ICAO Doc 8168, Procedures for Air Navigation Services;

(b) The visibility, RVR, or converted meteorological visibility (CMV) is based on TERPS (including subparagraph c), or the applicable European Union (EU) or European Aviation Safety Agency (EASA) regulation or ICAO Doc 9365, Manual of All Weather Operations, Third Edition; and

(c) The DH/MDA shall not be below 200 feet HATH unless authorized by these operations specifications.

(2) The certificate holder may not conduct operations using RNP-AR or "RNP-Like" foreign procedures unless the certificate holder is authorized nonstandard paragraph C384 or paragraph C358, respectively, and the procedures are selectable from within the applicable paragraph.

(3) Foreign approach lighting systems compliant with the ICAO Annex 14 Standards and Recommended Practices (SARPS) or equivalent to U.S. standards are authorized for nonprecision, APV, and precision instrument approaches. Sequenced flashing lights are not required when determining the equivalence of a foreign approach lighting system to U.S. standards.

(4) For straight-in landing minima at foreign airports where an MDA(H) or DA(H) is not provided, the lowest authorized MDA(H) or DA(H) shall be obtained as follows:

(a) When an Obstruction Clearance Limit (OCL) is specified, the authorized MDA(H) or DA(H) is the sum of the OCL and the airport elevation. The MDA(H) may be rounded to the next higher 10-foot increment.

(b) When an Obstacle Clearance Altitude (OCA)/Obstacle Clearance Height (OCH) is specified, the authorized MDA(H) or DA(H) is equal to the OCA/OCH as adjusted by any operational requirement to increase the altitude/height. For nonprecision approaches, the authorized MDA(H) may be expressed in intervals of 10 feet.

(5) When conducting an IAP outside the United States, the certificate holder shall not operate an aircraft below the prescribed MDA(H) or continue an approach below the DA(H), unless the aircraft is in a position from which a normal approach to the runway of intended landing can be made and at least one of the following visual references is clearly visible to the pilot:

(a) Runway, runway markings, or runway lights.

(b) Approach light system (in accordance with 14 CFR part 91, § 91.175(c)(3)(i)).

(c) Threshold, threshold markings, or threshold lights.

(d) TDZ, TDZ markings, or TDZ lights.

(e) Visual glidepath indicator (such as VASI, PAPI).

(f) Runway end identifier lights.

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Appendix A

(6) Approaches to runways with published minima as low as 1800 RVR (550m) without installed RCL and/or TDZ lighting or with inoperative RCL and/or TDZ lighting are authorized as long as the requirements of paragraph c(1)(a)–(c) of this operations specification are met.

TEXT99

Appendix B. Sample OpSpec Paragraph C052, Straight-In Non-Precision, APV, and Category I Precision Approach and Landing Minima—All Airports: 14 CFR Part 125

a. Authorization. The certificate holder is authorized to conduct operations using the types of IAPs listed in Table 1 below, and shall not conduct operations using any other types.

Table 1, Authorized Instrument Approach Procedures

Nonprecision Approach Procedures Without Vertical Guidance	Approaches With Vertical Guidance (APV)	Precision Approach Procedures (ILS, MLS, & GLS)
TABL01	TABL02	TABL03

b. Conditions and Limitations.

(1) Unless otherwise authorized by these operations specifications, the certificate holder shall not use any IFR IAP at any U.S. civil, military, or joint-use airport unless:

(a) It is promulgated under 14 CFR part 97,

(b) The procedure has been constructed using FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS), or other special criteria approved by the headquarters Flight Technologies and Procedures Division (AFS-400), or

(c) The procedure has been prescribed by the U.S. military agency operating the U.S. military airport.

(2) RVR: TDZ RVR reports, when available for a particular runway, are controlling for all approaches to and landings on that runway.

(a) The mid-RVR and rollout RVR reports (if available) provide advisory information to pilots.

(b) Visibility values below one-half a statute mile are not authorized and shall not be used.

(c) The mid-RVR report may be substituted for the TDZ RVR report if the TDZ RVR report is not available.

(3) The certificate holder may not use DA(H) in lieu of MDA(H) unless paragraph C073 is authorized.

(4) Unless otherwise authorized by these operations specifications, the certificate holder may not conduct any RNP special aircraft and aircrew authorization required (SAAAR) operations.

(The following language is selectable text that may be authorized by the POI, not template language.)

(5) Approach procedures using GPS or GPS wide area augmentation system (WAAS). The certificate holder is authorized to conduct GPS and/or GPS WAAS instrument approach operations using the approved GPS and/or GPS WAAS equipment listed in paragraph B034 if "... or GPS," GPS, or RNAV (GPS) or RNAV (GNSS) is listed in Table 1 above. This authorization to conduct approaches using GPS and/or GPS WAAS is subject to the following limitations and conditions:

(a) The airborne GPS and/or GPS WAAS navigation equipment to be used must be approved for IFR operations, certified for the intended operation (LPV, LNAV/VNAV, LP, or LNAV), and must contain current navigation data.

(b) Both the GPS constellation and the required airborne equipment must be providing the levels of availability, accuracy, continuity of function, and integrity required for the operation.

c. Reduced Precision CAT I Landing Minima.

(1) Reduced Landing Minima—200 Feet DH and 1800 RVR. The certificate holder is authorized precision CAT I landing minima as low as 1800 RVR to approved runways without TDZ lights and/or runway centerline (RCL) lights, including runways with installed but inoperative TDZ lights and/or RCL lights, in accordance with the following requirements:

(a) The authorized airplane(s) must be equipped with an approved FD, AP, or HUD approved for at least CAT I operations that provides guidance to DA. The flightcrew must be required to engage the FD, AP, or HUD in approach mode (e.g., tracking the localizer and glideslope) as applicable and use it to DA or initiation of missed approach unless adequate visual references with the runway environment are established that allow safe continuation to a landing. Single-pilot operators are prohibited from using the FD to reduced CAT I landing minima without accompanying use of an AP or HUD.

(b) Should the FD, AP, or HUD malfunction or be disengaged during the approach, the flightcrew must execute a missed approach unless the approach can be continued with the use of an operational FD, AP, or HUD, or visual reference to the runway environment has been established.

(c) The flightcrew must demonstrate proficiency in ILS approaches to minimums using the FD, AP, or HUD as applicable.

(d) The part 97 SIAP must have an 1800 RVR minimum.

(The following language is selectable text that may be authorized by the POI, not template language.)

(2) Special Authorization CAT I (SA CAT I). The certificate holder is authorized SA CAT I with a DH as low as 150 feet and landing minima as low as 1400 RVR to approved runways without TDZ, RCL, and/or ALSF-2 lights, in accordance with the following requirements:

(a) Only airplanes approved for CAT II operations are eligible for these operations. Those airplanes and equipment must be listed in Table 2 of operations specification C059. The authorized airplane(s) must be equipped with an HUD that is approved for CAT II or CAT III operations.

(b) The flightcrew must be current and qualified for CAT II operations. The flightcrew must demonstrate proficiency in ILS approaches and landings to this minimum or lower using the HUD.

(c) The flightcrew must use the HUD to DH in a mode used for CAT II or CAT III operations.

(d) The flightcrew must use the HUD to DH, or to the initiation of missed approach, unless adequate visual references with the runway environment are established that allow safe continuation to a landing.

(e) Should the HUD malfunction during the approach, the flightcrew must execute a missed approach unless visual reference to the runway environment has been established.

(f) The crosswind component on the landing runway must be 15 knots or less unless the airplane flight manual's crosswind limitations are more restrictive.

(g) The part 97 SIAP must have a published CAT I minimum.

(h) TDZ RVR reports are controlling. The mid-RVR report may NOT be substituted for the TDZ RVR report in SA CAT I operations.

d. Limitations and Provisions for IAPs at Foreign Airports.

(1) Unless otherwise authorized by these operations specifications, the certificate holder shall not use any IFR IAP at any foreign airport unless:

(a) The procedure has been constructed using criteria based on FAA Order 8260.3, or other special criteria approved by the headquarters AFS-400, or the procedure has been constructed using criteria prescribed by the ICAO Doc 8168, Procedures for Air Navigation Services;

(b) The visibility, RVR, or converted meteorological visibility (CMV) is based on TERPS (including subparagraph c), or the applicable European Union (EU) or European Aviation Safety Agency (EASA) regulation or ICAO Doc 9365, Manual of All Weather Operations, Third Edition; and

(c) The DH/MDA shall not be below 200 feet HATh unless authorized by these operations specifications.

(2) The certificate holder may not conduct operations using RNP-AR or “RNP-Like” foreign procedures unless the certificate holder is authorized nonstandard paragraph C384 or paragraph C358, respectively, and the procedures are selectable from within the applicable paragraph.

(3) Foreign approach lighting systems compliant with the ICAO Annex 14 Standards and Recommended Practices (SARPS) or equivalent to U.S. standards are authorized for nonprecision, APV, and precision instrument approaches. Sequenced flashing lights are not required when determining the equivalence of a foreign approach lighting system to U.S. standards.

(4) For straight-in landing minima at foreign airports where an MDA(H) or DA(H) is not provided, the lowest authorized MDA(H) or DA(H) shall be obtained as follows:

(a) When an Obstruction Clearance Limit (OCL) is specified, the authorized MDA(H) or DA(H) is the sum of the OCL and the airport elevation. The MDA(H) may be rounded to the next higher 10-foot increment.

(b) When an Obstacle Clearance Altitude (OCA)/Obstacle Clearance Height (OCH) is specified, the authorized MDA(H) or DA(H) is equal to the OCA/OCH as adjusted by any operational requirement to increase the altitude/height. For nonprecision approaches, the authorized MDA(H) may be expressed in intervals of 10 feet.

(5) When conducting an IAP outside the United States, the certificate holder shall not operate an aircraft below the prescribed MDA(H) or continue an approach below the DA(H), unless the aircraft is in a position from which a normal approach to the runway of intended landing can be made and at least one of the following visual references is clearly visible to the pilot:

(a) Runway, runway markings, or runway lights.

(b) Approach light system (in accordance with 14 CFR part 91, § 91.175(c)(3)(i)).

(c) Threshold, threshold markings, or threshold lights.

(d) TDZ, TDZ markings, or TDZ lights.

(e) Visual glidepath indicator (such as VASI, PAPI).

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Appendix B

(f) Runway end identifier lights.

(6) Approaches to runways with published minima as low as 1800 RVR (550m) without installed RCL and/or TDZ lighting or with inoperative RCL and/or TDZ lighting are authorized as long as the requirements of paragraph c(1)(a)–(c) of this operations specification are met.

TEXT99

**Appendix C. Sample OpSpec Paragraph C052, Straight-In Non-Precision, APV,
and Category I Precision Approach and Landing Minima—All Airports:
14 CFR Part 135**

- a. Authorization. The certificate holder is authorized to conduct operations using the types of IAPs listed in Table 1 below, and shall not conduct operations using any other types.

Table 1, Authorized Instrument Approach Procedures

Nonprecision Approach Procedures Without Vertical Guidance	Approaches With Vertical Guidance (APV)	Precision Approach Procedures (ILS, MLS, & GLS)
TABL01	TABL02	TABL03

- b. Conditions and Limitations.

(1) Unless otherwise authorized by these operations specifications, the certificate holder shall not use any IFR IAP at any U.S. civil, military, or joint-use airport unless:

(a) It is promulgated under 14 CFR part 97,

(b) The procedure has been constructed using FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS), or other special criteria approved by the headquarters Flight Technologies and Procedures Division (AFS-400), or

(c) The procedure has been prescribed by the U.S. military agency operating the U.S. military airport.

(2) RVR: TDZ RVR reports, when available for a particular runway, are controlling for all approaches to and landings on that runway.

(a) The mid-RVR and rollout RVR reports (if available) provide advisory information to pilots.

(b) Visibility values below one-half a statute mile are not authorized and shall not be used.

(c) The mid-RVR report may be substituted for the TDZ RVR report if the TDZ RVR report is not available.

(3) The certificate holder may not use DA(H) in lieu of MDA(H) unless paragraph C073 is authorized.

(4) Unless otherwise authorized by these operations specifications, the certificate holder may not conduct any RNP special aircraft and aircrew authorization required (SAAAR) operations.

(The following language is selectable text that may be authorized by the POI, not template language.)

(5) Approach procedures using GPS or GPS wide area augmentation system (WAAS). The certificate holder is authorized to conduct GPS and/or GPS WAAS instrument approach operations using the approved GPS and/or GPS WAAS equipment listed in paragraph B034 if "... or GPS," GPS, or RNAV (GPS) or RNAV (GNSS) is listed in Table 1 above. This authorization to conduct approaches using GPS and/or GPS WAAS is subject to the following limitations and conditions:

(a) The airborne GPS and/or GPS WAAS navigation equipment to be used must be approved for instrument flight rules (IFR) operations, certified for the intended operation (LPV, LNAV/VNAV, LP, or LNAV), and must contain current navigation data.

(b) Both the GPS constellation and the required airborne equipment must be providing the levels of availability, accuracy, continuity of function, and integrity required for the operation.

c. Reduced Precision CAT I Landing Minima.

(1) Reduced Landing Minima—200 Feet DH and 1800 RVR. The certificate holder is authorized precision CAT I landing minima as low as 1800 RVR to approved runways without TDZ lights and/or runway centerline (RCL) lights, including runways with installed but inoperative TDZ lights and/or RCL lights, in accordance with the following requirements:

(a) The authorized airplane(s) must be equipped with an approved FD, AP, or HUD approved for at least CAT I operations that provides guidance to DA. The flightcrew must be required to engage the FD, AP, or HUD as applicable and use it to DA or initiation of missed approach unless adequate visual references with the runway environment are established that allow safe continuation to a landing. Single-pilot operators are prohibited from using the FD to reduced CAT I landing minima without the accompanying use of an AP or HUD.

(b) Should the FD, AP, or HUD malfunction or be disengaged during the approach, the flightcrew must execute a missed approach unless the approach can be continued with the use of an operational FD, AP, or HUD, or visual reference to the runway environment has been established.

(c) The flightcrew must demonstrate proficiency in ILS approaches to minimums using the FD, AP, or HUD as applicable.

(d) The part 97 SIAP must have an 1800 RVR minimum.

(The following language is selectable text that may be authorized by the POI, not template language.)

(2) Special Authorization CAT I (SA CAT I). The certificate holder is authorized SA CAT I with a DH as low as 150 feet and landing minima as low as 1400 RVR to approved runways without TDZ, RCL, and/or ALSF-2 lights, in accordance with the following requirements:

(a) Only airplanes approved for CAT II operations are eligible for these operations. Those airplanes and equipment must be listed in Table 2 of operations specification C059. The authorized airplane(s) must be equipped with an HUD that is approved for CAT II or CAT III operations.

(b) The flightcrew must be current and qualified for CAT II operations. The flightcrew must demonstrate proficiency in ILS approaches and landings to this minimum or lower using the HUD.

(c) The flightcrew must use the HUD to DH in a mode used for CAT II or CAT III operations.

(d) The flightcrew must use the HUD to DH, or to the initiation of missed approach, unless adequate visual references with the runway environment are established that allow safe continuation to a landing.

(e) Should the HUD malfunction during the approach, the flightcrew must execute a missed approach unless visual reference to the runway environment has been established.

(f) The crosswind component on the landing runway must be less than the AFM's crosswind limitations, or 15 knots or less, whichever is more restrictive.

(g) The part 97 SIAP must have a published SA CAT I minimum.

(h) TDZ RVR reports are controlling. The mid-RVR report may NOT be substituted for the TDZ RVR report in SA CAT I operations.

d. Limitations and Provisions for IAPs at Foreign Airports.

(1) Unless otherwise authorized by these operations specifications, the certificate holder shall not use any IFR IAP at any foreign airport unless:

(a) The procedure has been constructed using criteria based on FAA Order 8260.3, or other special criteria approved by the headquarters AFS-400, or the procedure has been constructed using criteria prescribed by the ICAO Doc 8168, Procedures for Air Navigation Services;

(b) The visibility, RVR, or converted meteorological visibility (CMV) is based on TERPS (including subparagraph c), or the applicable European Union (EU) or European Aviation Safety Agency (EASA) regulation or ICAO Doc 9365, Manual of All Weather Operations, Third Edition; and

(c) The DH/MDA shall not be below 200 feet HATh unless authorized by these operations specifications.

(2) The certificate holder may not conduct operations using RNP-AR or "RNP-Like" foreign procedures unless the certificate holder is authorized nonstandard paragraph C384 or paragraph C358, respectively, and the procedures are selectable from within the applicable paragraph.

(3) Foreign approach lighting systems compliant with the ICAO Annex 14 Standards and Recommended Practices (SARPS) or equivalent to U.S. standards are authorized for nonprecision, APV, and precision instrument approaches. Sequenced flashing lights are not required when determining the equivalence of a foreign approach lighting system to U.S. standards.

(4) For straight-in landing minima at foreign airports where an MDA(H) or DA(H) is not provided, the lowest authorized MDA(H) or DA(H) shall be obtained as follows:

(a) When an Obstruction Clearance Limit (OCL) is specified, the authorized MDA(H) or DA(H) is the sum of the OCL and the airport elevation. The MDA(H) may be rounded to the next higher 10-foot increment.

(b) When an Obstacle Clearance Altitude (OCA)/Obstacle Clearance Height (OCH) is specified, the authorized MDA(H) or DA(H) is equal to the OCA/OCH as adjusted by any operational requirement to increase the altitude/height. For nonprecision approaches, the authorized MDA(H) may be expressed in intervals of 10 feet.

(5) When conducting an IAP outside the United States, the certificate holder shall not operate an aircraft below the prescribed MDA(H) or continue an approach below the DA(H), unless the aircraft is in a position from which a normal approach to the runway of intended landing can be made and at least one of the following visual references is clearly visible to the pilot:

(a) Runway, runway markings, or runway lights.

(b) Approach light system (in accordance with 14 CFR part 91, § 91.175(c)(3)(i)).

(c) Threshold, threshold markings, or threshold lights.

(d) TDZ, TDZ markings, or TDZ lights.

(e) Visual glidepath indicator (such as VASI, PAPI).

(f) Runway end identifier lights.

(6) Approaches to runways with published minima as low as 1800 RVR (550m) without installed CL and/or TDZ lighting or with inoperative CL and/or TDZ lighting are authorized as long as the requirements of paragraph c(1)(a)–(c) of this operations specification are met.

TEXT99

**Appendix D. Sample OpSpec Paragraph C052, Straight-In Non-Precision, APV,
and Category I Precision Approach and Landing Minima—All Airports:
14 CFR Part 121/135**

- a. Authorization. The certificate holder is authorized to conduct operations using the types of IAPs listed in Table 1 below, and shall not conduct operations using any other types.

Table 1, Authorized Instrument Approach Procedures

Nonprecision Approach Procedures Without Vertical Guidance	Approaches With Vertical Guidance (APV)	Precision Approach Procedures (ILS, MLS, & GLS)
TABL01	TABL02	TABL03

- b. Conditions and Limitations.

(1) Unless otherwise authorized by these operations specifications, the certificate holder shall not use any IFR IAP at any U.S. civil, military, or joint-use airport unless:

(a) It is promulgated under 14 CFR part 97,

(b) The procedure has been constructed using FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS), or other special criteria approved by the headquarters Flight Technologies and Procedures Division (AFS-400), or

(c) The procedure has been prescribed by the U.S. military agency operating the U.S. military airport.

(2) RVR: TDZ RVR reports, when available for a particular runway, are controlling for all approaches to and landings on that runway.

(a) The mid-RVR and rollout RVR reports (if available) provide advisory information to pilots.

(b) Visibility values below one-half a statute mile are not authorized and shall not be used.

(c) The mid-RVR report may be substituted for the TDZ RVR report if the TDZ RVR report is not available.

(3) The certificate holder may not use VNAV and DA(H) in lieu of MDA(H) unless paragraph C073 is authorized.

(4) Unless otherwise authorized by these operations specifications, the certificate holder may not conduct any RNP special aircraft and aircrew authorization required (SAAAR) operations.

(The following language is selectable text that may be authorized by the POI, not template language.)

(5) Approach procedures using GPS or GPS wide area augmentation system (WAAS). The certificate holder is authorized to conduct GPS and/or GPS WAAS instrument approach operations using the approved GPS and/or GPS WAAS equipment listed in paragraph B034 if "... or GPS," GPS, or RNAV (GPS) or RNAV (GNSS) is listed in Table 1 above. This authorization to conduct approaches using GPS and/or GPS WAAS is subject to the following limitations and conditions:

(a) The airborne GPS and/or GPS WAAS navigation equipment to be used must be approved for IFR operations, certified for the intended operation (LPV, LNAV/VNAV, LP, or LNAV), and must contain current navigation data.

(b) Both the GPS constellation and the required airborne equipment must be providing the levels of availability, accuracy, continuity of function, and integrity required for the operation.

c. Reduced Precision CAT I Landing Minima.

(1) Reduced Landing Minima—200 Feet DH and 1800 RVR. The certificate holder is authorized precision CAT I landing minima as low as 1800 RVR to approved runways without TDZ lights and/or runway centerline (RCL) lights, including runways with installed but inoperative TDZ lights and/or RCL lights, in accordance with the following requirements:

(a) The authorized airplane(s) must be equipped with an approved FD, AP, or HUD approved for at least CAT I operations that provides guidance to DA. The flightcrew must be required to engage the FD, AP, or HUD in approach mode (e.g., tracking the localizer and glideslope) and use it to DA or initiation of missed approach unless adequate visual references with the runway environment are established that allow safe continuation to a landing. Single-pilot operators are prohibited from using the FD to reduced CAT I landing minima without accompanying use of an AP or HUD.

(b) Should the FD, AP, or HUD malfunction or be disengaged during the approach, the flightcrew must execute a missed approach unless the approach can be continued with the use of an operational FD, AP, or HUD, or visual reference to the runway environment has been established.

(c) The flightcrew must demonstrate proficiency in ILS approaches to minimums using the FD, AP, or HUD as applicable.

(d) The part 97 SIAP must have an 1800 RVR minimum.

(The following language is selectable text that may be authorized by the POI, not template language.)

(2) Special Authorization CAT I (SA CAT I). The certificate holder is authorized SA CAT I with a DH as low as 150 feet and landing minima as low as 1400 RVR to approved runways without TDZ, RCL, and/or ALSP-2 lights, in accordance with the following requirements:

(a) Only airplanes approved for CAT II operations are eligible for these operations. Those airplanes and equipment must be listed in Table 2 of operations specification C059. The authorized airplane(s) must be equipped with an HUD that is approved for CAT II or CAT III operations.

(b) The flightcrew must be current and qualified for CAT II operations. The flightcrew must demonstrate proficiency in ILS approaches and landings to this minimum or lower using the HUD.

(c) The flightcrew must use the HUD to DH in a mode used for CAT II or CAT III operations.

(d) The flightcrew must use the HUD to DH, or to the initiation of missed approach, unless adequate visual references with the runway environment are established that allow safe continuation to a landing.

(e) Should the HUD malfunction during the approach, the flightcrew must execute a missed approach unless visual reference to the runway environment has been established.

(f) The crosswind component on the landing runway must be 15 knots or less unless the airplane flight manual's crosswind limitations are more restrictive.

(g) The part 97 SIAP must have a published SA CAT I minimum.

(h) TDZ RVR reports are controlling. The mid-RVR report may NOT be substituted for the TDZ RVR report in SA CAT I operations.

d. Limitations and Provisions for IAPs at Foreign Airports.

(1) Unless otherwise authorized by these operations specifications, the certificate holder shall not use any IFR IAP at any foreign airport unless:

(a) The procedure has been constructed using criteria based on FAA Order 8260.3, or other special criteria approved by the headquarters AFS-400, or the procedure has been constructed using criteria prescribed by the ICAO Doc 8168, Procedures for Air Navigation Services;

(b) The visibility, RVR, or converted meteorological visibility (CMV) is based on TERPS (including subparagraph c), or the applicable European Union (EU) or European Aviation Safety Agency (EASA) regulation or ICAO Doc 9365, Manual of All Weather Operations, Third Edition and

(c) The DH/MDA shall not be below 200 feet HATH unless authorized by these operations specifications.

(2) The certificate holder may not conduct operations using RNP-AR or "RNP-Like" foreign procedures unless the certificate holder is authorized nonstandard paragraph C384 or paragraph C358, respectively, and the procedures are selectable from within the applicable paragraph.

(3) Foreign approach lighting systems compliant with the ICAO Annex 14 Standards and Recommended Practices (SARPS) or equivalent to U.S. standards are authorized for nonprecision, APV, and precision instrument approaches. Sequenced flashing lights are not required when determining the equivalence of a foreign approach lighting system to U.S. standards.

(4) For straight-in landing minima at foreign airports where an MDA(H) or DA(H) is not provided, the lowest authorized MDA(H) or DA(H) shall be obtained as follows:

(a) When an Obstruction Clearance Limit (OCL) is specified, the authorized MDA(H) or DA(H) is the sum of the OCL and the airport elevation. The MDA(H) may be rounded to the next higher 10-foot increment.

(b) When an Obstacle Clearance Altitude (OCA)/Obstacle Clearance Height (OCH) is specified, the authorized MDA(H) or DA(H) is equal to the OCA/OCH as adjusted by any operational requirement to increase the altitude/height. For nonprecision approaches, the authorized MDA(H) may be expressed in intervals of 10 feet.

(5) When conducting an IAP outside the United States, the certificate holder shall not operate an aircraft below the prescribed MDA(H) or continue an approach below the DA(H), unless the aircraft is in a position from which a normal approach to the runway of intended landing can be made and at least one of the following visual references is clearly visible to the pilot:

(a) Runway, runway markings, or runway lights.

(b) Approach light system (in accordance with 14 CFR part 91, § 91.175(c)(3)(i)).

(c) Threshold, threshold markings, or threshold lights.

- (d) TDZ, TDZ markings, or TDZ lights.
 - (e) Visual glidepath indicator (such as VASI, PAPI).
 - (f) Runway end identifier lights.
- (6) Approaches to runways with published minima as low as 1800 RVR (550m) without installed RCL and/or TDZ lighting or with inoperative RCL and/or TDZ lighting are authorized as long as the requirements of paragraph c(1)(a)–(c) of this operations specification are met.

TEXT99

Appendix E. Sample MSpec MC052, Straight-In Non-Precision, APV, and Category I Precision Approach and Landing Minima—All Airports: 14 CFR Part 91 Subpart K

a. Authorization. The program manager is authorized to conduct operations using the types of IAPs listed in Table 1 below, and shall not conduct operations using any other types.

Table 1, Authorized Instrument Approach Procedures

Nonprecision Approach Procedures Without Vertical Guidance	Approaches With Vertical Guidance (APV)	Precision Approach Procedures (ILS, MLS, & GLS)
TABL01	TABL02	TABL03

b. Conditions and Limitations.

(1) Unless otherwise authorized by these management specifications, the program manager shall not use any IFR IAP at any U.S. civil, military, or joint-use airport unless:

(a) It is promulgated under 14 CFR part 97,

(b) The procedure has been constructed using FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS), or other special criteria approved by the headquarters Flight Technologies and Procedures Division (AFS-400), or

(c) The procedure has been prescribed by the U.S. military agency operating the U.S. military airport.

(2) RVR: TDZ RVR reports, when available for a particular runway, are controlling for all landings on that runway.

(a) The mid-RVR and rollout RVR reports (if available) provide advisory information to pilots.

(b) Visibility values below one-half a statute mile are not authorized and shall not be used.

(c) The mid-RVR report may be substituted for the TDZ RVR report if the TDZ RVR report is not available.

(3) The program manager may not use DA(H) in lieu of MDA(H) unless paragraph MC073 is authorized.

(4) Unless otherwise authorized by these management specifications, the program manager may not conduct any RNP special aircraft and aircrew authorization required (SAAAR) operations.

(The following language is selectable text that may be authorized by the POI, not template language.)

(5) Approach procedures using GPS or GPS wide area augmentation system (WAAS). The program manager is authorized to conduct GPS and/or GPS WAAS instrument approach operations using the approved GPS and/or GPS WAAS equipment listed in paragraph B034 if "... or GPS," GPS, or RNAV (GPS) or RNAV (GNSS) is listed in Table 1 above. This authorization to conduct approaches using GPS and/or GPS WAAS is subject to the following limitations and conditions:

(a) The airborne GPS and/or GPS WAAS navigation equipment to be used must be approved for IFR operations, certified for the intended operation (LPV, LNAV/VNAV, LP, or LNAV), and must contain current navigation data.

(b) Both the GPS constellation and the required airborne equipment must be providing the levels of availability, accuracy, continuity of function, and integrity required for the operation.

c. Reduced Precision CAT I Landing Minima.

(1) Reduced Landing Minima—200 Feet DH and 1800 RVR. The program manager is authorized precision CAT I landing minima as low as 1800 RVR to approved runways without TDZ lights and/or runway centerline (RCL) lights, including runways with installed but inoperative TDZ lights and/or RCL lights, in accordance with the following requirements:

(a) The authorized airplane(s) must be equipped with an approved FD, AP, or HUD approved for at least CAT I operations that provides guidance to DA. The flightcrew must be required to engage the FD, AP, or HUD in approach mode (e.g., tracking the localizer and glideslope) as applicable and use it to DA or initiation of missed approach unless adequate visual references with the runway environment are established that allow safe continuation to a landing. Single-pilot operators are prohibited from using the FD to reduced CAT I landing minima without accompanying use of an AP or HUD.

(b) Should the FD, AP, or HUD malfunction or be disengaged during the approach, the flightcrew must execute a missed approach unless the approach can be continued with the use of an operational FD, AP, or HUD, or visual reference to the runway environment has been established.

(c) The flightcrew must demonstrate proficiency in ILS approaches to minimums using the FD, AP, or HUD as applicable.

(d) The part 97 SIAP must have an 1800 RVR minimum.

(The following language is selectable text that may be authorized by the POI, not template language.)

(2) Special Authorization CAT I (SA CAT I). The program manager is authorized SA CAT I with a DH as low as 150 feet and landing minima as low as 1400 RVR to approved runways without TDZ, RCL, and/or ALSF-2 lights, in accordance with the following requirements:

(a) Only airplanes approved for CAT II operations are eligible for these operations. Those airplanes and equipment must be listed in Table 2 of management specification MC059. The authorized airplane(s) must be equipped with an HUD that is approved for CAT II or CAT III operations.

(b) The flightcrew must be current and qualified for CAT II operations. The flightcrew must demonstrate proficiency in ILS approaches and landings to this minimum or lower using the HUD.

(c) The flightcrew must use the HUD to DH in a mode used for CAT II or CAT III operations.

(d) The flightcrew must use the HUD to DH, or to the initiation of missed approach, unless adequate visual references with the runway environment are established that allow safe continuation to a landing.

(e) Should the HUD malfunction during the approach, the flightcrew must execute a missed approach unless visual reference to the runway environment has been established.

(f) The crosswind component on the landing runway must be 15 knots or less unless the AFM's crosswind limitations are more restrictive.

(g) The part 97 SIAP must have a published SA CAT I minimum.

(h) TDZ RVR reports are controlling. The mid-RVR report may NOT be substituted for the TDZ RVR report in SA CAT I operations.

d. Limitations and Provisions for IAPs at Foreign Airports.

(1) Unless otherwise authorized by these management specifications, the program manager shall not use any IFR IAP at any foreign airport unless:

(a) The procedure has been constructed using criteria based on FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS) (current edition), or other special criteria approved by the headquarters AFS-400, or the procedure has been constructed using criteria prescribed by the ICAO Doc 8168, Procedures for Air Navigation Services;

(b) The visibility, RVR, or converted meteorological visibility (CMV) is based on TERPS (including subparagraph c), or the applicable European Union (EU) or European Aviation Safety Agency (EASA) regulation or ICAO Doc 9365, Manual of All Weather Operations, Third Edition; and

(c) The DH/MDA shall not be below 200 feet HATh unless authorized by these management specifications.

(2) The program manager may not conduct operations using RNP-AR or “RNP-Like” foreign procedures unless the program manager is authorized nonstandard paragraph C384 or paragraph C358, respectively, and the procedures are selectable from within the applicable paragraph.

(3) Foreign approach lighting systems compliant with the ICAO Annex 14 Standards and Recommended Practices (SARPS) or equivalent to U.S. standards are authorized for nonprecision, APV, and precision instrument approaches. Sequenced flashing lights are not required when determining the equivalence of a foreign approach lighting system to U.S. standards.

(4) For straight-in landing minima at foreign airports where an MDA(H) or DA(H) is not provided, the lowest authorized MDA(H) or DA(H) shall be obtained as follows:

(a) When an Obstruction Clearance Limit (OCL) is specified, the authorized MDA(H) or DA(H) is the sum of the OCL and the airport elevation. The MDA(H) may be rounded to the next higher 10-foot increment.

(b) When an Obstacle Clearance Altitude (OCA)/Obstacle Clearance Height (OCH) is specified, the authorized MDA(H) or DA(H) is equal to the OCA/OCH as adjusted by any operational requirement to increase the altitude/height. For nonprecision approaches, the authorized MDA(H) may be expressed in intervals of 10 feet.

(5) When conducting an IAP outside the United States, the program manager shall not operate an aircraft below the prescribed MDA(H) or continue an approach below the DA(H), unless the aircraft is in a position from which a normal approach to the runway of intended landing can be made and at least one of the following visual references is clearly visible to the pilot:

(a) Runway, runway markings, or runway lights.

(b) Approach light system (in accordance with 14 CFR part 91, § 91.175(c)(3)(i)).

(c) Threshold, threshold markings, or threshold lights.

(d) TDZ, TDZ markings, or TDZ lights.

(e) Visual glidepath indicator (such as VASI, PAPI).

(f) Runway end identifier lights.

(6) Approaches to runways with published minima as low as 1800 RVR (550m) without installed RCL and/or TDZ lighting or with inoperative RCL and/or TDZ lighting are authorized as long as the requirements of paragraph e(1)(a)–(c) of this management specification are met.

TEXT99

**Appendix F. Sample LOA C052, Straight-In Non-Precision, APV, and Category I
Precision Approach and Landing Minima—All Airports: 14 CFR Part 125
(LODA A125)**

**Letter of Authorization
Straight-in Category I Approach and Landing Minima**

1. Authorization. The Operator/Company, authorized to conduct operations in accordance with the Letter of Deviation Authority (LODA A125), is authorized to conduct operations using the types of IAPs listed in Table 1 below, and shall not conduct operations using any other types.

Table 1, Authorized Instrument Approach Procedures

Nonprecision Approach Procedures Without Vertical Guidance	Approaches With Vertical Guidance (APV)	Precision Approach Procedures (ILS, MLS, & GLS)
TABL01	TABL02	TABL03

2. Conditions and Limitations.

a. Unless otherwise authorized by letter of authorization, the Operator/Company shall not use any IFR IAP at any U.S. civil, military, or joint-use airport unless:

(1) It is promulgated under 14 CFR part 97,

(2) The procedure has been constructed using FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS), or other special criteria approved by the headquarters Flight Technologies and Procedures Division (AFS-400), or

(3) The procedure has been prescribed by the U.S. military agency operating the U.S. military airport.

b. RVR: TDZ RVR reports, when available for a particular runway, are controlling for all approaches to and landings on that runway.

(1) The mid-RVR and rollout RVR reports (if available) provide advisory information to pilots.

(2) Visibility values below one-half a statute mile are not authorized and shall not be used.

(3) The mid-RVR report may be substituted for the TDZ RVR report if the TDZ RVR report is not available.

c. The Operator/Company may not use DA(H) in lieu of MDA(H) unless paragraph C073 is authorized.

d. Unless otherwise authorized by a letter of authorization, the Operator/Company may not conduct any RNP Special Aircraft and Aircrew Authorization Required (SAAAR) operations.

(The following language is selectable text that may be authorized by the POI, not temple language.)

e. Approach procedures using GPS or GPS wide area augmentation system (WAAS). The Operator/Company is authorized to conduct GPS and/or GPS WAAS instrument approach operations using the approved GPS and/or GPS WAAS equipment listed in paragraph B034 if "... or GPS," GPS, or RNAV (GPS) or RNAV (GNSS) is listed

in Table 1 above. This authorization to conduct approaches using GPS and/or GPS WAAS is subject to the following limitations and conditions:

(1) The airborne GPS and/or GPS WAAS navigation equipment to be used must be approved for IFR operations, certified for the intended operation (LPV, LNAV/VNAV, LP, or LNAV), and must contain current navigation data.

(2) Both the GPS constellation and the required airborne equipment must be providing the levels of availability, accuracy, continuity of function, and integrity required for the operation.

3. Reduced Precision CAT I Landing Minima.

a. Reduced Landing Minima—200 Feet DH and 1800 RVR. The Operator/Company is authorized precision CAT I landing minima as low as 1800 RVR to approved runways without TDZ lights and/or runway centerline (RCL) lights, including runways with installed but inoperative TDZ lights and/or RCL lights, in accordance with the following requirements:

(1) The authorized airplane(s) must be equipped with an approved FD, AP, or HUD approved for at least CAT I operations which provides guidance to DA. The flightcrew must be required to engage the FD, AP, or HUD in approach mode (e.g., tracking the localizer and glideslope) and use it to DA or initiation of missed approach unless adequate visual references with the runway environment are established that allow safe continuation to a landing. Single-pilot operators are prohibited from using the FD to reduced CAT I landing minima without accompanying use of an AP or HUD.

(2) Should the FD, AP, or HUD malfunction or be disengaged during the approach, the flightcrew must execute a missed approach unless the approach can be continued with the use of an operational FD, AP, or HUD, or a visual reference to the runway environment has been established.

(3) The flightcrew must demonstrate proficiency in ILS approaches to minimums using the FD, AP, or HUD as applicable.

(4) The part 97 SIAP must have an 1800 RVR minimum.

(The following language is selectable text that may be authorized by the POI, not template language.)

b. Special Authorization CAT I (SA CAT I). The Operator/Company is authorized SA CAT I with a DH as low as 150 feet and landing minima as low as 1400 RVR to approved runways without TDZ, RCL, and/or ALSP-2 lights, in accordance with the following requirements:

(1) Only airplanes approved for CAT II operations are eligible for these operations. Those airplanes and equipment must be listed in Table 2 of letter of authorization C059. The authorized airplane(s) must be equipped with an HUD that is approved for CAT II or CAT III operations.

(2) The flightcrew must be current and qualified for CAT II operations. The flightcrew must demonstrate proficiency in ILS approaches and landings to this minimum or lower using the HUD.

(3) The flightcrew must use the HUD to DH in a mode used for CAT II or CAT III operations.

(4) The flightcrew must use the HUD to DH, or to the initiation of missed approach, unless adequate visual references with the runway environment are established that allow safe continuation to a landing.

(5) Should the HUD malfunction during the approach, the flightcrew must execute a missed approach unless visual reference to the runway environment has been established.

(6) The crosswind component on the landing runway must be 15 knots or less unless the airplane flight manual's crosswind limitations are more restrictive.

(7) The part 97 SIAP must have a published SA CAT I minimum.

(8) TDZ RVR reports are controlling. The mid-RVR report may NOT be substituted for the TDZ RVR report in SA CAT I operations.

4. Limitations and Provisions for IAPs at Foreign Airports.

a. Unless otherwise authorized by letter of authorization, the Operator/Company shall not use any IFR IAP at any foreign airport unless:

(1) The procedure has been constructed using criteria based on FAA Order 8260.3, or other special criteria approved by the headquarters AFS-400, or the procedure has been constructed using criteria prescribed by the ICAO Doc 8168, Procedures for Air Navigation Services;

(2) The visibility, RVR, or converted meteorological visibility (CMV) is based on TERPS (including subparagraph c), or the applicable European Union (EU) or European Aviation Safety Agency (EASA) regulation or ICAO Doc 9365, Manual of All Weather Operations, Third Edition; and

(3) The DH/MDA shall not be below 200 feet HATh unless authorized by letter of authorization.

b. The Operator/Company may not conduct operations using RNP-AR or "RNP-Like" foreign procedures unless the Operator/Company is authorized nonstandard paragraph C384 or paragraph C358, respectively, and the procedures are selectable from within the applicable paragraph.

c. Foreign approach lighting systems compliant with the ICAO Annex 14 Standards and Recommended Practices (SARPS) or equivalent to U.S. standards are authorized for nonprecision, APV, and precision instrument approaches. Sequenced flashing lights are not required when determining the equivalence of a foreign approach lighting system to U.S. standards.

d. For straight-in landing minima at foreign airports where an MDA(H) or DA(H) is not provided, the lowest authorized MDA(H) or DA(H) shall be obtained as follows:

(1) When an Obstruction Clearance Limit (OCL) is specified, the authorized MDA(H) or DA(H) is the sum of the OCL and the airport elevation. The MDA(H) may be rounded to the next higher 10-foot increment.

(2) When an Obstacle Clearance Altitude (OCA)/Obstacle Clearance Height (OCH) is specified, the authorized MDA(H) or DA(H) is equal to the OCA/OCH as adjusted by any operational requirement to increase the altitude/height. For nonprecision approaches, the authorized MDA(H) may be expressed in intervals of 10 feet.

e. When conducting an IAP outside the United States, the Operator/Company shall not operate an aircraft below the prescribed MDA(H) or continue an approach below the DA(H), unless the aircraft is in a position from which a normal approach to the runway of intended landing can be made and at least one of the following visual references is clearly visible to the pilot:

(1) Runway, runway markings, or runway lights.

- (2) Approach light system (in accordance with 14 CFR part 91, § 91.175(c)(3)(i)).
- (3) Threshold, threshold markings, or threshold lights.
- (4) TDZ, TDZ markings, or TDZ lights.
- (5) Visual glidepath indicator (such as VASI, PAPI).
- (6) Runway end identifier lights.

f. Approaches to runways with published minima as low as 1800 RVR (550m) without installed RCL and/or TDZ lighting or with inoperative RCL and/or TDZ lighting are authorized as long as the requirements of paragraph e(1)(a)–(c) of this letter of authorization are met.

TEXT99

**Appendix G. Sample OpSpec Paragraph C052, Straight-In Non-Precision, APV,
and Category I Precision Approach and Landing Minima—All U.S. Airports:
14 CFR Part 129**

- a. Authorization. The foreign air carrier is authorized to conduct operations using the types of IAPs listed in Table 1 below, and shall not conduct operations using any other types.

Table 1, Authorized Instrument Approach Procedures

Nonprecision Approach Procedures Without Vertical Guidance	Approaches With Vertical Guidance (APV)	Precision Approach Procedures (ILS, MLS, & GLS)
TABL01	TABL02	TABL03

- b. Conditions and Limitations.

(1) Unless otherwise authorized by these operations specifications, the foreign air carrier shall not use any IFR IAP at any U.S. civil, military, or joint-use airport unless:

(a) It is promulgated under 14 CFR part 97,

(b) The procedure has been constructed using FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS), or other special criteria approved by the headquarters Flight Technologies and Procedures Division (AFS-400), or

(c) The procedure has been prescribed by the U.S. military agency operating the U.S. military airport.

(2) RVR: TDZ RVR reports, when available for a particular runway, are controlling for all approaches to and landings on that runway.

(a) The mid-RVR and rollout RVR reports (if available) provide advisory information to pilots.

(b) Visibility values below one-half of a statute mile are not authorized and shall not be used.

(c) The mid-RVR report may be substituted for the TDZ RVR report if the TDZ RVR report is not available.

(3) Unless otherwise authorized by these operations specifications, the foreign air carrier may not conduct any RNP special aircraft and aircrew authorization required (SAAAR) operations.

(The following language is selectable text that may be authorized by the POI, not template language.)

(4) Approach procedures using GPS or GPS wide area augmentation system (WAAS). The foreign air carrier is authorized to conduct GPS and/or GPS WAAS instrument approach operations using the approved GPS and/or GPS WAAS equipment listed in paragraph B034 if "... or GPS," GPS, or RNAV (GPS) or RNAV (GNSS) is listed in Table 1 above. This authorization to conduct approaches using GPS and/or GPS WAAS is subject to the following limitations and conditions:

(a) The airborne GPS and/or GPS WAAS navigation equipment to be used must be approved for IFR operations, certified for the intended operation (LPV, LNAV/VNAV, LP, or LNAV), and must contain current navigation data.

(b) Both the GPS constellation and the required airborne equipment must be providing the levels of availability, accuracy, continuity of function, and integrity required for the operation.

c. Reduced Precision CAT I Landing Minima.

(1) Reduced Landing Minima—200 Feet DH and 1800 RVR. The foreign air carrier is authorized precision CAT I landing minima as low as 1800 RVR to approved runways without TDZ lights and/or runway centerline (RCL) lights, including runways with installed but inoperative TDZ lights and/or RCL lights, in accordance with the following requirements:

(a) The authorized airplane(s) must be equipped with an approved FD, AP, or HUD approved for at least CAT I operations which provides guidance to DA. The flightcrew must be required to engage the FD, AP, or HUD in approach mode (e.g., tracking the localizer and glideslope) as applicable and use it to DA or initiation of missed approach unless adequate visual references with the runway environment are established that allow safe continuation to a landing. Single-pilot operators are prohibited from using the FD to reduced CAT I landing minima without accompanying use of an AP or HUD.

(b) Should the FD, AP, or HUD malfunction or be disengaged during the approach, the flightcrew must execute a missed approach unless the approach can be continued with the use of an operational FD, AP, or HUD, or visual reference to the runway environment has been established.

(c) The flightcrew must demonstrate proficiency in ILS approaches to minimums using the FD, AP, or HUD as applicable, in accordance with their State of Operator approved training program.

(d) The part 97 SIAP must have an 1800 RVR minimum.

(The following language is selectable text that may be authorized by the POI, not template language.)

(2) Special Authorization CAT I (SA CAT I). The foreign air carrier is authorized SA CAT I with a DH as low as 150 feet and landing minima as low as 1400 RVR to approved runways without TDZ, RCL, and/or ALSF-2 lights, in accordance with the following requirements:

(a) Only airplanes approved for CAT II operations are eligible for these operations. Those airplanes and equipment must be listed in Table 2 of operations specification C059. The authorized airplane(s) must be equipped with an HUD that is approved for CAT II or CAT III operations.

(b) The flightcrew must be current and qualified for CAT II operations. The flightcrew must demonstrate proficiency in ILS approaches and landings to this minimum or lower using the HUD in accordance with their State of Operator-approved training program.

(c) The flightcrew must use the HUD to DH in a mode used for CAT II or CAT III operations.

(d) The flightcrew must use the HUD to DH, or to the initiation of missed approach, unless adequate visual references with the runway environment are established that allow safe continuation to a landing.

(e) Should the HUD malfunction during the approach, the flightcrew must execute a missed approach unless visual reference to the runway environment has been established.

(f) The crosswind component on the landing runway must be 15 knots or less unless the airplane flight manual's crosswind limitations are more restrictive.

(g) The part 97 SIAP must have a published CAT I minimum that is less than RVR 1800.

(h) TDZ RVR reports are controlling. The mid-RVR report may *not* be substituted for the TDZ RVR report in SA CAT I operations.

TEXT99