VOLUME 12 INTERNATIONAL AVIATION

CHAPTER 4 TITLE 14 CFR PART 129 OPERATIONS

Section 4 Title 14 CFR Part 129 Part C Operations Specifications—Airplane Terminal Instrument Procedures and Airport Authorizations and Limitations

Source Basis:

- **Title 14 CFR § 129.5, Operations Specifications.**
- **Title 14 CFR § 129.7, Application, Issuance, or Denial of Operations Specifications.**
- **Title 14 CFR § 129.9, Contents of Operations Specifications.**
- **Title 14 CFR § 129.11, Amendment, Suspension and Termination of Operations Specifications.**
- **Title 14 CFR § 129.17, Aircraft Communication and Navigation Equipment for Operations Under IFR or Over the Top.**
- **Administrative.**

4.1 GENERAL.

4.1.1 Purpose. This section provides the Federal Aviation Administration (FAA) policy requirements and aviation safety inspector (ASI) guidance associated with the standard Part C (Airplane Terminal Instrument Procedures and Airport Authorizations and Limitations) operations specifications (OpSpec) paragraphs and their templates available for issuance to each foreign air carrier or foreign person operating under Title 14 of the Code of Federal Regulations (14 CFR) part 129.

4.1.2 Scope. This section is applicable to all FAA Flight Standards Service (FS) personnel and International Field Offices (IFO) having responsibilities associated with 14 CFR part 129 foreign air carrier activities and international aviation operations.

Note: Advisory circulars (AC) referenced throughout this section provide guidance for compliance with specific regulations. They define acceptable means, but not the only means, of accomplishing or showing compliance with regulations.

4.1.3 Safety Assurance System (SAS) Activity Recording (AR) Codes.

a) Operations: 1326, 1327, 1430.

b) Maintenance: 3315, 3316.

c) Avionics: 5315, 5316.

4.1.4 Regulatory References. All regulatory references in this section are found in 14 CFR unless otherwise indicated.

4.2 **DEFINITIONS.** See Volume 12, Chapter 1, Section 1, Definitions, Abbreviations, and Acronyms, for information associated with this section.

4.3 **PART C OPSPEC PARAGRAPHS.** The FAA issues Part C OpSpec paragraphs to foreign air carriers who conduct airplane operations under 14 CFR part 129.

a) The FAA does not issue Part C OpSpec paragraphs to foreign air carriers who conduct only rotorcraft operations. Instrument flight rules (IFR) 14 CFR part 129 rotorcraft operators are issued Part H OpSpec paragraphs.

b) The FAA does not usually issue Part C OpSpec paragraphs to 14 CFR part 129 on-demand foreign operators who are restricted to visual flight rules (VFR)-only operations.

Note: FAA policy associated with part 129 Part C OpSpec paragraphs may be immediately accessed by clicking on the appropriate following paragraph number: C048, C051, C052, C055, C056, C059, C060, C063, C065, C067, C068, C075, C077, C080, C081, C083, C091, C384.

OPSPEC C048—ENHANCED FLIGHT VISION SYSTEM (EFVS) OPERATIONS.

a) Purpose and Applicability. This section provides references, information, and guidance for principal inspectors (PI) and supporting ASIs to perform an evaluation of a foreign air carrier's application for the initial issuance of or an amendment to OpSpec C048. An application is required for each foreign air carrier under part 129 seeking authorization to conduct EFVS operations under part 91, § 91.176.

b) Background. Regulations permit pilots to descend below decision altitude (DA)/decision height (DH) or minimum descent altitude (MDA) using a certified EFVS to conduct an EFVS operation on certain instrument approach procedures (IAP). EFVS operations require FAA authorization, which begins with an FAA evaluation as described in this section. Additional provisions provided through the authorization allow foreign air carriers operating under part 129 to begin the Final Approach Segment (FAS) when the current reported visibility is below the visibility minimums prescribed in the IAP.

c) General. The following describes the roles and responsibilities of FAA personnel and lists the references that must be used to complete a thorough evaluation.

1) Responsibilities.

a. Principal Operations Inspectors (POI). POIs assigned to evaluate an EFVS application are responsible for managing the evaluation process, coordinating the review and evaluation of the submitted EFVS application with other assigned PIs and ASIs, initiating FAA internal coordination when required, and issuing the authorization.

b. The Flight Technologies and Procedures Division (AFS-400). AFS-400 is responsible for providing the technical and policy support and consultation to the ASIs conducting the application evaluation and coordinating with other FAA divisions, as applicable.

c. IFOs.

1. IFOs must initiate coordination with AFS-400's EFVS Focal Point when an applicant presents a means to obtain EFVS authorization that is not described in AC 90-106, Enhanced Flight Vision System Operations.

2. IFOs must ensure that all information and documentation recommended in AC 90-106 are addressed in the foreign air carrier's submission.

2) Resources. The following are the primary references for ASIs conducting an EFVS application evaluation:

a. AC 90-106. AC 90-106 describes EFVS operations, information, and documentation. ASIs must use the AC as the primary reference to help determine if foreign air carriers have met FAA expectations during the evaluation of an application.

b. International Civil Aviation Organization (ICAO) Annex 6, Part I, Chapter 6, Paragraph 6.24, Aeroplanes Equipped With Automatic Landing Systems, a Head-Up Display (HUD) or Equivalent Displays, Enhanced Vision Systems (EVS), Synthetic Vision Systems (SVS) and/or Combined Vision Systems (CVS). The paragraph contains ICAO guidance for EFVS.

c. Airplane Flight Manual (AFM) or AFM Supplement (AFMS). The AFM(S) contains information pertaining to the certification of an EFVS.

d. AFS-400 EFVS Focal Point. This is the policy division for EFVS and foreign air carrier authorizations. ASIs should contact the EFVS Focal Point listed on the following Flight Operations Group (AFS-410) web page for technical support or when directed by guidance: https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afx/afs/afs400/afs410/efvs/.

d) Introduction. In order to obtain C048, authorization to conduct EFVS operations, a foreign air carrier must show evidence of approval to conduct EFVS operations by the State of the Operator and that each airplane to be authorized is equipped with an EFVS that meets the appropriate airworthiness certification requirements. In addition, the EFVS-equipped airplane must meet all of the requirements in § 91.176, including equipment requirements, in order to be used in EFVS operations in the United States. This requirement is consistent with ICAO standards. Article 11 of the Convention on International Civil Aviation requires airplanes subject to its provisions and operating within the territory of a Contracting State to comply with the applicable laws and regulations enacted by that State.

e) Application Components. The responsible IFO is responsible for authorizing foreign air carriers to conduct EFVS operations in the United States. This bases C048 authorization primarily on an EFVS authorization from the State of the Operator. Documentation may include foreign-issued OpSpecs or an official letter from the State of the Operator's Civil Aviation Authority (CAA) stating that the foreign air carrier is approved for EFVS in accordance with XXXX (e.g., ICAO Doc XXX). For an initial issuance or revision to C048, the foreign air carrier must submit the following documentation to the responsible IFO:

1) A request for C048.

2) A description of airplanes and equipment proposed to be used for EFVS operations.

3) Documentation containing a description of the aircraft and equipment proposed to be used for EFVS operations. AFM excerpts or supplements are acceptable documentation. The documentation must reflect an appropriate level of EFVS capability that meets the display, features, and requirements of § 91.176.

4) For U.S.-registered aircraft, minimum equipment list (MEL) approval with any EFVS provisions. For EFVS operations, the foreign air carrier should take the EFVS and components into consideration during MEL submission, review, and approval, if the foreign operator is seeking MEL relief for EFVS.

5) EFVS operational approval issued by the CAA of the State of the Operator.

6) For U.S.-registered aircraft, maintenance program approval, including EFVS provisions. An FAA-approved maintenance program is required for U.S.-registered aircraft, per part 129, § 129.14(a). This maintenance program should contain maintenance provisions for EFVS equipment.

7) For EFVS Operation to Touchdown and Rollout, § 91.176(a), inspectors must instruct the foreign air carrier to submit documentation verifying that all airplanes requesting EFVS to touchdown and rollout are 5G C-Band radio altimeter tolerant airplanes. A "radio altimeter tolerant airplane" (also known within industry as a Group 4 airplane) is one for which the radio altimeter, as installed, demonstrates tolerance to radio altimeter interference at or above specific power levels. Foreign air carriers may submit documentation showing that their CAA has adopted the FAA Airworthiness Directive (AD) requirements. AFM excerpts, supplements, or other manufacturer documentation showing the aircraft is 5G C-Band radio altimeter tolerant are also acceptable.

Note: The FAA has determined that non-radio altimeter tolerant airplanes do not meet an acceptable level of safety for EFVS operation to touchdown and rollout. EFVS operation to 100 feet above the touchdown zone elevation (TDZE) is not prohibited for non-radio altimeter tolerant airplanes. See subparagraph f)8)a for instructions regarding how to document if certain aircraft from a particular make, model, and series (M/M/S) fleet are non-radio altimeter tolerant.

f) Instructions for Table 1 (see Figure 4-4A, Sample C048 Table 1 – Authorized Airplanes, Equipment, and EFVS Operations). The following are instructions to ASIs for populating Table 1 in C048:

1) Authorization. The foreign air carrier is authorized to conduct the EFVS operations under § 91.176 specified in C048.

2) Authorized Airplanes, Equipment, and EFVS Operations. The foreign air carrier is authorized to conduct the EFVS operations specified under § 91.176 using the airplanes listed in C048 Table 1. The foreign air carrier's airplane must be equipped with an EFVS that has either an FAA type design approval or, for a foreign-registered airplane, the EFVS complies with all of the EFVS requirements of § 91.176(a)(1) or (b)(1) applicable to the operation to be conducted and is approved by the State of the Operator.

Figure 4-4A. Sample C048 Table 1 – Authorized Airplanes, Equipment, and EFVS Operations

Airplane (M/M/S)	EFVS Equipment	EFVS Operation(s)	EFVS Operational Credit
[With sublist attribute]	[Dropdown List]	[Dropdown List]	[Dropdown List]

3) Airplane (M/M/S). Select the M/M/S of the EFVS-equipped airplane(s) that the applicant is expecting to use to conduct EFVS operations. List airplane M/M/Ss with different EFVS installations in separate rows.

Note: Only airplanes from a foreign air carrier's aircraft list in the Web-based Operations Safety System (WebOPSS) assigned an EFVS authorization will populate the dropdown list provided in the "Airplane (M/M/S)" column in Table 1. To add the EFVS authorization to an airplane, go to "CHDO" – "Maintain Operator Data" – "Aircraft," select the foreign air carrier's airplane to edit, and add "EFVS" to the "Authorizations" section.

4) EFVS Equipment. Select the EFVS equipment installed on the airplane. If the AFM does not identify the installed equipment, the applicant should consult the Operational Suitability Report (OSR). The OSR specifies airplane M/M/S and EFVS equipment, and the operational credit recommended by AFS-400. If the OSR does not identify the equipment, determine this through coordination with AFS-400's EFVS Focal Point. The OSR is located in the Dynamic Regulatory System (DRS) (https://drs.faa.gov) and on AFS-400's website (https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afx/afs/afs400/), under "Flight Operations Group" – "Useful Links" – "Enhanced Flight Vision Systems (EFVS)."

5) EFVS Operation(s). Select the EFVS operation(s) authorized (one or both, as applicable):

- EFVS Operation to Touchdown and Rollout, § 91.176(a). If certain aircraft registration numbers of a particular M/M/S are not 5G C-Band radio altimeter tolerant, they must be listed as specified in subparagraph f)8)a below.
- EFVS Operation to 100 Feet Above the TDZE, § 91.176(b).

6) EFVS Operational Credit. These selections are performance-based operational credits available to reduce visibilities for the purpose of a foreign air carrier to begin the FAS, or continue an IAP past the final approach fix (FAF), at an airport. The demonstrated performance of the EFVS determines the maximum operational credit. AFS-400 must be consulted before selecting a choice other than "Not authorized" in this column.

7) Provisions: Minimum Visibility for Use with EFVS. This paragraph is a selectable paragraph with two alternatives. A foreign air carrier may request to use a performance-based operational credit in Table 1 (Minimum Visibility for Use With EFVS) to begin the FAS, or continue the IAP past the FAF, at an airport. To authorize this, select the paragraph containing the provisional text and Table 2A, Determining IAP Visibility Minimums With EFVS (RVR), and Table 2B, Determining IAP Visibility Minimums With EFVS (Statute Mile). The alternative paragraph states that the certificate holder (CH) is not authorized to reduce visibilities for the purpose of initiating an approach.

8) Conditions and Limitations.

a. If airplanes are not 5G C-Band radio altimeter tolerant, the airplanes must be listed by registration number in this field. Inspectors must add text stating, "The following airplanes are not 5G C-band radio altimeter tolerant and not authorized for EFVS to touchdown and rollout under § 91.176(a):" followed by the registration numbers.

b. This text field allows AFS-400 flexibility to accommodate other unique authorizations. Other use of this text field is not authorized without coordinating with the International Operations Branch (AFS-52) and AFS-400.

OPSPEC C051—TERMINAL INSTRUMENT PROCEDURES (REQUIRED FOR ALL AIR CARRIERS CONDUCTING IFR OPERATIONS).

a) Purpose. The FAA issues OpSpec C051 to all foreign air carriers who operate airplanes and conduct any flight operations under IFR. C051 provides direction and guidance on acceptance of U.S. Terminal Instrument Procedures (TERPS). It also provides additional guidance to the foreign air carrier for:

1) Converting any takeoff and landing minimum expressed in the metric linear measurement system to the U.S. standard linear measurement system; and

2) Identifying the source of approved weather in the United States.

b) Continuing an Instrument Approach. The following minimum ICAO standards apply to continuing an instrument approach:

1) For airplanes, refer to Annex 6, Part I, Chapter 4, 4.4.1.2 and 4.4.1.3.

2) For helicopters, refer to Annex 6, Part III, Section II, Chapter 2, 2.4.1.2 and 2.4.1.3 and Section III, Chapter 2, 2.6.3.2 and 2.6.3.3.

Note: Each foreign air carrier operating within the United States in common carriage must ensure they are in compliance with all U.S. regulatory requirements, including more restrictive foreign air carrier operating requirements levied by the State of the Operator.

OPSPEC C052—STRAIGHT-IN NON-PRECISION, APV, AND CATEGORY I PRECISION APPROACH AND LANDING MINIMA—ALL U.S. AIRPORTS (REQUIRED FOR ALL AIR CARRIERS CONDUCTING IFR OPERATIONS).

a) Applicability. OpSpec C052 specifies the types of instrument approaches the foreign air carrier is authorized to conduct, prohibits the use of other types of instrument approaches, and authorizes the lowest straight-in nonprecision approach procedures with vertical guidance (APV), and Category (CAT) I precision approach and landing minima.

1) Before authorizing a type of IAP, the POI must ensure the foreign air carrier has established the aircraft system eligibility and that its manual, which the State of the Operator must have approved/accepted, includes both flightcrew training and procedures, as applicable, for the types of approaches authorized.

2) All of the approaches authorized by C052 must be published in accordance with part 97.

Note: Direct all questions regarding the issuance of C052 to the International Program Division (AFS-50) or AFS-400.

b) Types of Instrument Approaches Authorized. In C052, Table 1 specifies the types of instrument approaches the foreign air carrier is authorized to conduct under IFR and prohibits the use of other types of instrument approaches (see Figure 4-4B, Sample C052 Table 1 – Authorized Instrument Approach Procedures). In WebOPSS, the POI will select the approaches that apply to the foreign air carrier. Refer to the Aeronautical Information Manual (AIM) for a detailed description of each approach.

1) Refer to AC 120-118, Criteria for Approval/Authorization of All Weather Operations (AWO) for Takeoff, Landing, and Rollout, for applicable training and qualification recommendations.

2) All the approaches approved by C052 must be published in accordance with part 97.

3) If the foreign air carrier is authorized to conduct Global Positioning System (GPS) procedures as listed in C052, Table 1, the aircraft and equipment must also be listed in OpSpec B035, Table 1.

4) Required Navigation Performance (RNP) Approaches (APCH)—Area Navigation (RNAV) (RNP) approaches are different from RNAV (GPS) approaches in that a specific

performance requirement is defined for the navigation system, and onboard performance monitoring and alerting is required.

a. An RNP APCH typically addresses only the requirement for the lateral navigation (LNAV) aspect (2D navigation) along straight segments. RNP APCHs that contain a curved segment (Radius to Fix (RF) leg), FAS specifying less than 0.3 nautical miles (NM) accuracy, or a Missed Approach Segment (MAS) that specifies less than 1.0 NM accuracy, require more rigorous equipment qualification and training so Special Authorization (SA) is required. These are referred to as RNAV RNP IAP with Authorization Required (AR) or RNP AR approaches.

b. C052 does not authorize RNP AR operations. Authorization for RNAV RNP AR approaches is through nonstandard OpSpec C384 (refer to AC 90-101, Approval Guidance for RNP Procedures with AR).

5) Three groups of IAPs may be authorized in Table 1 of C052:

a. Column One: Nonprecision Approach Procedures Without Vertical Guidance. Foreign air carriers must ensure the aircraft will not go below the MDA without the required visual references specified in § 91.175.

1. The ICAO term for an airport surveillance radar (ASR) approach is "surveillance radar approach (SRA)."

2. Belgium labels these approaches as "SRE." Select "ASR/SRA/SRE" in column one to authorize these approaches.

b. Column Two: Approaches with Vertical Guidance (APV). Column two provides for the authorization of APV. These approaches provide vertical guidance, but do not meet the same standards as precision approach systems (e.g., instrument landing systems (ILS) and Ground Based Augmentation Systems (GBAS)). APVs are trained using an approved method that allows descent to a published DA.

1. APV approaches may contain localizer performance with vertical guidance (LPV) minima requiring wide area augmentation system (WAAS) and LNAV/vertical navigation (VNAV) minima. The approaches may be flown with either barometric vertical navigation (baro-VNAV) or WAAS-based VNAV (refer to C052 subparagraph c to determine applicable lines of minima). The AIM and the approach chart legend also have this information.

2. Aircraft accomplishing RNP APCHs (RNAV (GPS)) are required to monitor lateral and, if approved for operational credit, vertical guidance deviations. For baro-VNAV approach operations on an RNP APCH using the LNAV/VNAV minima, the current vertical deviation limits are +100/-50 feet (ft). Aircraft qualified using the deviation display requirements for navigation in AC 20-138, Airworthiness Approval of Positioning and Navigation Systems, may use a vertical deviation limit of ±75 ft (or a smaller value). This information must be published in the AFM or a Supplemental Type Certificate (STC), or verified by the Aircraft Evaluation Group (AEG).

3. To authorize RNAV APVs, select “RNAV (GPS)” (for part 97 approaches) from the dropdown list in column two of the OpSpec C052 template Table 1.

c. Column Three: Precision Approach Procedures (ILS & GLS). Column three provides for the authorization of CAT I precision IAPs from an electronic glideslope (GS) (ILS or GBAS Landing System (GLS)). “RNAV/ILS” in column three may be selected only if the foreign air carrier meets the requirements in OpSpec C063.

Figure 4-4B. Sample C052 Table 1 – Authorized Instrument Approach Procedures

Nonprecision Approaches Without Vertical Guidance	Approaches With Vertical Guidance (APV)	Precision Approach Procedures (ILS & GLS)
ASR/SRA/SRE	LDA with glideslope	GLS
GPS	RNAV (GPS)	ILS
LDA		ILS/DME
LDA/DME		PAR
LOC		RNAV/ILS
LOC BC		
LOC/DME		
LOC/BC/DME		
NDB		
NDB/DME		
RNAV (GPS)		
SDF		
TACAN		
VOR		
VOR/DME		
VOR/DME/LOC		

c) WAAS. The WAAS was developed to improve the accuracy, integrity, and availability of GPS signals. WAAS receivers support all basic GPS approach functions and provide additional capabilities. One of the major improvements provided by the WAAS is the ability to generate an electronic glidepath, independent of ground equipment or barometric aiding. There are differences in the capabilities of the WAAS receivers.

1) Some approach-certified receivers will only support a glidepath with performance similar to baro-VNAV, and are authorized to fly the LNAV/VNAV line of minima on the RNAV (GPS) approach charts.

2) Receivers with additional capability, such as update rate and integrity limits, are authorized to fly the LPV or Localizer Performance (LP) line of minima. WAAS approach procedures may provide LPV, LNAV/VNAV, LP, and LNAV minimums and are charted as RNAV (GPS) RWY [Number] (e.g., RNAV (GPS) RWY 24). For further guidance, please refer to the AIM or contact AFS-400.

3) Some WAAS installations do not support approaches at all, while some do not support LPV or LP lines of minima.

d) Local Area Augmentation System (LAAS). An additional augmentation system, the LAAS was developed to provide precision approaches similar to ILS at airfields. These precise approaches are based on GPS signals augmented by ground equipment. The international term for LAAS is GBAS and the approaches which use the equipment are referred to as GBAS Landing System (GLS) or GNSS Landing System (GLS) approaches. LAAS equipment consists of a GBAS Ground Facility (GGF) supported by a minimum of four accurately surveyed reference stations and an uplink antenna called the very high frequency (VHF) Data Broadcast (VDB) antenna, as well as an aircraft LAAS receiver. The GGF can support multiple runway ends or landing areas served by procedures that are within the service coverage.

Note: Throughout this section, reference to a GLS approach indicates the use of a GBAS or GNSS Landing System, unless otherwise indicated.

1) Similar to LPV and ILS approaches, GLS provides lateral and vertical guidance. By design, LAAS was developed as an “ILS look-alike” system from the pilot perspective. Unlike WAAS, LAAS may support approaches to CAT III minimums in the future due to its nearly identical performance standards to ILS in terms of accuracy, integrity, availability, and continuity. Portions of the GLS approach prior to and after the FAS may be based on RNAV or RNP segments. Therefore, a switch transition between RNAV or RNP and GLS modes may be required. In the future, the GGF may be able to support portions of the procedure outside the FAS.

2) There are differences from LPV, GLS, and ILS approaches in terms of charting, procedure selection, and identification. The LAAS procedure is titled “GLS RWY XX” on the approach chart. In the aircraft, the pilot selects a five-digit GBAS channel number or associated approach within the flight management system (FMS) menu. Selection of the GBAS channel number by the pilot or FMS also tunes the VDB. The VDB provides information to the airborne receiver where the guidance is synthesized. The LAAS procedure is identified by a four alpha-numeric character field referred to as the Reference Path Indicator (RPI) or approach ID. This identifier is analogous with the IDENT feature of the ILS. The RPI is charted. Following procedure selection, confirmation that the correct LAAS procedure is loaded is accomplished by cross-checking the charted RPI with the cockpit-displayed RPI or audio identification of the RPI with Morse code (for some systems). Once selected and identified, the pilot will fly the GLS approach using the same techniques as an ILS.

e) Authorized Criteria for Approved IAPs. For operations to all U.S. airports, foreign air carriers are authorized to execute instrument approach operations on IAPs that have been published:

1) Under part 97.

2) Under the criteria in FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).

3) Under any other criteria authorized by AFS-400.

4) By the U.S. military agency operating the U.S. military airport.

5) All published Standard Instrument Approach Procedures (SIAP) in the United States meet this requirement.

f) Runway Visual Range (RVR). Touchdown zone (TDZ) RVR is controlling for all operations authorized in C052. All other RVR reports are advisory. A mid-field RVR report may substitute for an inoperative TDZ RVR report.

g) Reduced Precision CAT I Landing Minima. OpSpec C052 specifies the equipment usage requirements and part 97 SIAP depiction required for reduced CAT I landing minima. Credit is given for flight director (FD), autopilot, and HUD usage. The POI should allow the use of 1800 RVR minima to runways without centerline (CL) lighting or TDZ lighting, provided the SIAP contain a straight-in ILS minimum with the chart note, "RVR 1800 Authorized with use of FD or autopilot or HUD to DA." Additionally, the foreign air carrier issued C052 is allowed to continue to use 1800 RVR line of minima on SIAPs without the above procedural note when the TDZ and/or CL lights are inoperative, if the approach is conducted in accordance with the equipment requirements outlined in C052. This is reflected in the published inoperative components table for IAPs.

1) FAA Approval. Foreign air carriers may continue to use the standard CAT I minima based solely on ground lighting systems without alteration of current authorizations or procedures. Foreign air carriers can utilize reduced CAT I landing minima, provided the SIAP contains a straight-in ILS minimum with the chart note, "RVR 1800 Authorized with use of FD or autopilot or HUD to DA."

2) Conditions of Approval. Before issuing the C052 authorization to use CAT I minima based on aircraft equipment and operation, ASIs will ensure that each foreign air carrier meets the following conditions:

a. Aircraft and Associated Aircraft Systems. The authorized aircraft must be equipped with an FD, autopilot, or HUD that provides guidance to DA. The FD, autopilot, or HUD must be used in approach mode (e.g., tracking the Localizer (LOC) and the GS). ASIs must establish that the FD, autopilot, or HUD are certified for use down to an altitude of 200 ft above ground level (AGL) or lower.

b. Flightcrew Procedures.

1. The flightcrew must use the FD, autopilot, or HUD to DA or to the initiation of a missed approach, unless visual references with the runway environment are established, thus allowing safe continuation to a landing.

2. If the FD, autopilot, or HUD malfunctions or becomes disconnected, the flightcrew must execute a missed approach unless the runway environment is in sight.

c. Flightcrew Qualification. Each member of the flightcrew must have demonstrated proficiency using the FD, autopilot, or HUD (as appropriate) in the foreign air carrier's training program, which is approved by their CAA.

h) Precision Runway Monitor (PRM) Approaches. C052 includes a selectable subparagraph to authorize PRM approaches.

1) Pilot Training. For pilot qualifications, the initial qualification segment of the foreign air carrier's approved (PRM) training program must be successfully completed prior to conducting PRM approach and landing operations. Initial training materials must include published PRM approach chart materials, the AIM, related Notices to Airmen (NOTAM), and the latest available FAA-produced and approved PRM slide presentation, titled "Precision Runway Monitor (PRM) Pilot Procedures," that each pilot must view, and which is available on the FAA website at https://www.faa.gov/training_testing/training/prm/.

2) PRM Approaches. Where parallel runway centerlines (RCL) are less than 4,300 ft apart, but no less than 2,500 ft, simultaneous PRM approaches may be conducted. Similarly, where parallel RCLs are 3,000 ft apart or less, but no less than 750 ft, simultaneous offset instrument approaches (SOIA) may be conducted using PRM approaches. Those approaches have "PRM" and the words "simultaneous close parallel" or "close parallel" in the title block. Air traffic control (ATC) provides one PRM monitor controller for each runway to provide intrusion protection for the no transgression zone (NTZ) located equidistant between the two final approach courses. Depending on the runway spacing and whether or not the final approach is offset, high update rate surveillance may or may not be required to conduct PRM approaches. Regardless of the surveillance in use, all other PRM approach requirements are applicable, but all other requirements remain. Pilots need not know which radar system is in use, as flight procedures are the same in either case. Utilization of vertical guidance is required for all PRM approaches. Different types of PRM approaches to the same runway are procedurally equivalent. Therefore, pilots may request a different type of approach to the same runway (e.g., the RNAV (GPS) PRM approach in lieu of the ILS PRM or Localizer Type Directional Aid (LDA) PRM approach). However, they may only conduct the approach when specifically cleared to do so by ATC.

3) Dual Communications. Aircraft that conduct PRM approaches must be capable of simultaneously monitoring the audio from two separately tuned communications receivers set to different frequencies.

4) The Breakout Maneuver. Working with industry, the FAA conducted extensive analysis of simulation data and determined that the implementation of PRM and SOIA approach operations to closely spaced parallel runways requires additional flightcrew training. The primary focus of this training is to raise each pilot's situational awareness in PRM operations.

a. Traffic Alert. One important element of the additional training is the pilot's understanding of the difference between a normal missed approach initiated by a pilot, and a

breakout initiated by a PRM final monitor controller. It must be clear to flightcrews that the words “Traffic Alert,” when used by the final monitor controller, signal critical instructions that the pilot must act on promptly to preserve adequate separation from an airplane straying into the adjoining approach path.

b. ATC Breakout Maneuver Command to Turn and Descend, or Climb. The flightcrew must immediately follow the final monitor controller’s vertical (climb/descend) and horizontal (turn) commands. If the flightcrew receives a Traffic Alert and Collision Avoidance System (TCAS) Resolution Advisory (RA) controller’s command, the flightcrew will simultaneously continue to turn to the controller’s assigned heading and follow the vertical guidance provided by the TCAS RA.

c. Time-to-Turn Standard. Responding to an ATC-issued breakout instruction in an expeditious manner is of paramount importance. While there is no specific standard, experience indicates pilots should be able to begin the turn in 10 seconds or less, and achieve a bank angle commensurate with safety of between 20 and 30 degrees. The foreign air carrier must show that its CAA has determined that pilots can readily meet this time-to-initiate-turn standard prior to the POI authorizing PRM approaches in OpSpec C052. Flightcrews are required to manually fly the breakout maneuver unless otherwise approved.

Note: In a breakout, ATC will never command a descent below the applicable minimum vector altitude (MVA), thus assuring that no flight will be commanded to descend to lower than 1,000 ft above the highest obstacle during a breakout.

5) PRM Approaches and the Use of TCAS. TCAS may be operated in TA/RA mode while executing PRM approaches. However, when conducting these operations, pilots must understand that the final monitor controller’s instruction to turn is the primary means for ensuring safe separation from another airplane. Pilots must bear in mind that TCAS does not provide separation in the horizontal plane; TCAS accomplishes separation by commands solely in the vertical plane. Therefore, during final approach only the final monitor controller has the capability to command a turn for lateral separation. Flightcrews are expected to follow any ATC instruction to turn.

a. ATC Command to Turn with TCAS RA. In the unlikely event that a flightcrew should simultaneously receive a final monitor controller’s command to turn and a TCAS RA, the flightcrew must follow both the final monitor controller’s turn command and the TCAS RA’s climb or descent command.

b. TCAS RA Alone. In the extremely unlikely event that an RA occurs without a concurrent breakout instruction from the final monitor controller, the pilot should follow the RA and advise the controller of the action taken as soon as possible. In this instance, it is likely that a breakout command would follow.

c. TCAS Not Required. An operative TCAS is not required to conduct PRM approaches.

OPSPEC C055—ALTERNATE AIRPORT IFR WEATHER MINIMUMS (OPTIONAL).

a) Applicability. OpSpec C055 is an optional authorization available to all operators conducting airplane operations under part 129. C055 is approved by the Administrator as an alternative method of calculating alternate minimums to that specified in § 91.169(c).

1) C055 may be issued if the State of the Operator has approved the foreign air carrier for this alternative method.

2) C055 must not be issued if the State of the Operator has not approved the foreign air carrier for this alternative method.

3) Without C055, the foreign air carrier must comply with the highest minimums of the State of the Operator authorized method and § 91.169(c).

4) The relevant ICAO standards are found in ICAO Annex 6, Part I, 4.3.4 and 4.3.5 with additional guidance in ICAO Doc 9976, Flight Planning and Fuel Management (FPFM) Manual.

5) C055 provides a two-part table from which the foreign air carrier, during the initial dispatch or flight release planning segment of a flight, derives alternate airport IFR weather minimums in those cases where it has been determined that an alternate airport is required.

Note: Questions regarding the issuance of C055 should be directed to AFS-400 or AFS-50. If the PI directs questions to AFS-50, the PI should copy AFS-400 and vice versa.

b) Airports With at Least One Operational Navigational Facility. The first part of the table in C055 is for airports with at least one operational navigational facility providing a straight-in Nonprecision Approach (NPA) procedure, a straight-in precision approach procedure, or, when applicable, a circling maneuver from an IAP. Obtain the required ceiling and visibility by adding 400 ft to the MDA/minimum descent height (MDH) or, when applicable, the authorized DA/H and by adding 1 statute mile (sm) or 1,600 meters (m) to the authorized landing minimum.

c) Airports With at Least Two Operational Navigational Facilities. The second part of the table in C055 is for airports with at least two operational navigational facilities, each providing a straight-in NPA procedure or a straight-in precision approach procedure to different suitable runways. Obtain the required ceiling and visibility by adding 200 ft to the higher MDA/H or DA/H of the two approaches used and by adding 1/2 mile (mi) or 800 m visibility to the higher authorized landing minimum of the two approaches used.

d) Higher Alternate Minimums When Using Two Operational Navigational Facilities. In some cases, it is possible to have higher alternate minimums when using two operational navigational facilities than when using one. For example, an airport with one straight-in NPA procedure with a MDA/H of 400 ft and 1 mi visibility would have alternate minimums of 800 ft and 2 mi visibility (400 ft + 400 ft and 1 mi + 1 mi). An airport with two straight-in approaches, a straight-in precision approach with a DA/H of 200 ft and 1/2 mi visibility and a straight-in NPA with a MDA/H of 700 ft and 1 mi visibility, would have alternate minimums of 900 ft and 1 1/2 mi visibility (200 ft + 700 ft and 1/2 mi + 1 mi). Since C055 requires that the operator use the higher ceiling and visibility, the minimums for the airport with two straight-in approaches are higher than for the airport with only one straight-in approach. When this situation exists, the

operator may elect to consider the airport as having only one straight-in approach procedure and may add the higher buffer requirement (400 ft and 1 mi) to whichever straight-in approach procedure provides for the lowest possible ceiling and visibility minimums.

e) Using Two Different Runways. Two different runways may be the different ends of the same physical runway surface (e.g., runway 4 and runway 22 are two different runways). When determining the suitability of a runway, wind plus gust must be forecast to be within operating limits, including reduced visibility and runway contamination limits, and should be within the manufacturer's maximum demonstrated crosswind. The operator should also take into account any other potential runway limitations, such as NOTAMs that may affect the landing at the estimated time of arrival (ETA).

f) Credit for Alternate Minimums. C055 allows credit for alternate minimums for airports with a published CAT II or CAT III approach based on engine inoperative CAT II or CAT III capability (see subparagraph i) for additional details). Flightcrews having that capability may take credit for engine inoperative CAT II/III qualified aircraft and adjust minimums accordingly. The alternate minimums are based on CAT III engine inoperative requirements. The ceiling and visibility required for CAT II procedures is a ceiling of at least 300 ft and a visibility of at least RVR 4000, or for CAT III procedures, a ceiling of at least 200 ft height above touchdown (HAT), and a visibility of at least RVR 1800. Foreign air carriers having that capability may take credit for CAT II/III-qualified aircraft and adjust minimums accordingly. The alternate minimums are based on CAT III engine inoperative requirements.

1) The following are some, but not all, of those requirements. Refer to AC 120-118 for further guidance.

a. The aircraft is capable of engine inoperative CAT III.

b. The carrier has established appropriate procedures.

c. Performance and obstruction clearance information has been provided to the flightcrew.

d. Appropriate aircraft configuration, wind limits, and other appropriate information is provided to the flightcrew.

2) Before authorizing the additional selectable row(s) in Table 1 of C055, the POI will ensure through documentation that the foreign air carrier has provided that subparagraphs f)1)a through d above are met and the foreign air carrier's CAA authorizes it for CAT II/III alternate minimums. If the foreign air carrier does not meet the preceding conditions or equivalent conditions acceptable to the FAA, the PI must ensure that C055 does not contain any additional rows in Table 1 (should only have two rows).

Note: The ICAO equivalent to AC 120-28 is ICAO Doc 9365, Manual of All-Weather Operations.

g) Definition of “Two Operational Facilities.” The FAA considers an ILS facility that contains a single transmitter frequency for an ILS, but with two different ILS identifications (depending on which runway is being used), as one navigational facility.

1) The words “two operational facilities” have always meant that in the event there is a single failure of one facility, the other would be operational. In the situation where both ILS facilities share a single transmitter, it is considered “one operational navigational facility,” because both ILSs would become inoperative in the event of a single transmitter failure.

2) The two ILS identifiers would have to be different even though the ILS transmitter frequency is the same for both. The charts should tell pilots whether there is one frequency or two. Thus, one or two navigational facilities.

h) Use of RNAV GPS Minimums at a Destination Alternate.

1) Pilots may plan to use any instrument approach authorized for use with WAAS avionics at a required alternate if:

a. The aircraft is suitably equipped with GPS WAAS equipment; and

b. The foreign air carrier is authorized to conduct LPV and/or LP approach and landing operations by the State of the Operator.

2) When using WAAS at an alternate airport, flight planning must be based on flying the RNAV (GPS) LNAV minimums line, minimums on a GPS approach procedure, or conventional approach procedure with “or GPS” in the title.

Note: RNAV (GPS) (or RNAV Global Navigation Satellite System (GNSS)) are based on a single navigational facility when determining the approach facility configuration in Table 1 of C055, even if there are two or more RNAV (GPS) approaches to different suitable runways.

3) Upon arrival at an alternate, when the WAAS navigation system indicates that LNAV/VNAV or LPV service is available, vertical guidance may be used to complete the approach using the displayed level of service.

Note: The FAA is removing the “NA” (alternate minimums not authorized) symbol from select RNAV (GPS) and GPS approach procedures so they may be used by approach approved WAAS receivers at alternate airports. Some approach procedures will still require the “NA” for other reasons (e.g., no weather reporting); therefore, it cannot be removed from all procedures. Every procedure is individually evaluated for removal of “NA” from RNAV (GPS) and GPS procedures.

i) Selectable Text and Table 1. There are two selectable rows which can be loaded into Table 1 of C055 (Alternate Airport IFR Weather Minimums) and three selectable text options for additional limitations and provisions (C055 subparagraph b(6)).

1) Table 1. The two selectable rows in Table 1 authorize lower alternate minimums when planning to use either a CAT II or CAT III approach at the alternate airport. If authorized CAT II or CAT III credit, the first selectable text paragraph must be loaded as well.

2) Selectable Text Options. Selectable text options for additional limitations and provisions (C055 subparagraph b(6)):

a. The first selectable text option states requirements for CAT II and CAT III credit applicable to alternate airport flight planning, and must be loaded if the operator is authorized the CAT II or CAT III credit described in subparagraph i)1) above.

b. The second selectable text option authorizes operators equipped with WAAS to use GPS approaches when determining an alternate, and lists the restrictions associated with using GPS approaches in alternate planning.

c. The third selectable text option authorizes both (the air carrier is authorized CAT II or III and GPS/WAAS alternate minimums).

Note: Prior to issuing C055 to the foreign air carrier, the PI must ensure that the appropriate selectable text option is selected, if applicable. If none of the selectable text options applies, the PI must ensure that none of the selectable text options are selected.

OPSPEC C056—IFR TAKEOFF MINIMUMS—AIRPLANES (OPTIONAL).

a) General. The FAA issues OpSpec C056 to foreign air carriers who conduct airplane operations to the United States under IFR. C056 contains guidance regarding pilots, aircraft, and airports when lower minimums than those defined in § 91.175(f), hereinafter referred to as "standard takeoff minimums," are used. Standard takeoff minimums are defined as 1 sm visibility or RVR 5000 for airplanes having two engines or less and 1/2 sm visibility or RVR 2400 for airplanes having more than two engines. C056 lists the lowest RVR in feet based on the authorized airplane type.

b) ASI Action/OpSpec Entry. When issuing C056, the POI must select, or fill-in, the following in the table in C065 subparagraph b (see Figure 4-4C, Sample C056 Table 1):

1) No lower than the lowest State of the Operator authorized RVR for each airplane type to be used to fly to the United States. Regardless of the particular authorizations of a foreign air carrier, the POI may not authorize minimums lower than RVR 300/300/300. The TDZ 5000 selectable in the lowest RVR column must be selected for each single engine M/M/S airplane with a seating configuration of 30 seats or less or a maximum payload capacity of 7,500 pounds or less, as the FAA does not permit such operations below standard (1 sm/RVR 5000).

2) Manually enter the appropriate HUD into the free test box for each type of aircraft to be used to fly to the United States, or select "N/A" if the HUD is not authorized by the State of the Operator.

3) Any additional limitations and provisions not specified in C056 and applicable to the lowest RVR for the type of aircraft to be used.

Figure 4-4C. Sample C056 Table 1

Lowest RVR in Feet (TDZ/MD/Rollout)	Airplane Type*	HUD System*	Additional Limitations and Provisions*
TDZ 1800 TDZ 1600 TDZ 2600 TDZ 5000 1200/1200/1200 1000/1000/1000 700/700/700 600/600/600 500/500/500 300/300/300	ALL**	N/A***	N/A****

*The last three columns have space for manual entry.

**If the foreign air carrier operates all M/M/S aircraft to the same RVR value, then select "ALL." Otherwise, identify each M/M/S for each RVR value in separate row(s), as appropriate. Examples:

i. If the foreign air carrier operates all M/M/S aircraft to TDZ 1600, then select "TDZ 1600" in the "Lowest RVR" column and "ALL" in the "Airplane Type" column.

ii. If the lowest RVR authorized for the foreign air carrier's aircraft is the same for all except one type, then select the RVR value that is common to all and in the "Airplane Type" column enter: "All airplane types except for [enter the M/M/S exception]." In a separate row, identify the lowest RVR value for the M/M/S exception.

iii. If the foreign air carrier operates several M/M/S aircraft, each with a different RVR, then enter each M/M/S in its own separate row.

***Select "N/A" if the HUD is not authorized for takeoff. If the HUD system is authorized, then type in the HUD system.

****Select "N/A" if no limitations apply and use of the HUD is not authorized for takeoff. Select the blank space and type in any additional limitations not covered by C056.

Note: An example of a limitation: authorized for the B737-800 to 500/500/500, but when using the HUD on the B737-800 limited to 600/600/600. This may be a limitation provided by the CAA if the HUD is new.

4) Additionally, the POI must select:

a. The static text in C056 subparagraphs c(3) and e, if the foreign air carrier is operating airplanes with a seating configuration of 30 certificated seats or less or a maximum payload capacity of 7,500 pounds or less.

b. The radio button specifying the limitations and requirements applicable to the lowest RVR value selected in the table in C056 subparagraph b. Select the radio button that

included all of the selectable text, up to and including the lowest RVR value based on the lowest RVR value selected in the table in subparagraph b. The POI must preview the template to ensure that they have selected the correct radio button. If the lowest RVR value in the table is less than 1800, then select as follows:

- The first radio button if in the table the lowest RVR selected is TDZ 1600. When previewing the template, the POI would see subparagraphs d(1) and d(2).
- The second radio button if in the table the lowest RVR selected is TDZ 1200. When previewing the template, the POI would see subparagraphs d(1), d(2), d(3), and d(4).
- The third radio button if in the table the lowest RVR selected is TDZ 1000. When previewing the template, the POI would see subparagraphs d(1), d(2), d(3), d(4), and d(5).
- The fourth radio button if in the table the lowest RVR selected is TDZ less than 1000 ft, up to and including 500 ft. When previewing the template, the POI would see subparagraphs d(1), d(2), d(3), d(4), d(5), and d(6).
- The fifth radio button if in the table the lowest RVR selected is TDZ less than 500 ft, up to and including 300 ft. When previewing the template, the POI would see subparagraphs d(1), d(2), d(3), d(4), d(5), d(6), and d(7).

Note: See Table 4-4A, Runway Equipment Requirements for Takeoff Minima, for a graphical presentation of requirements covered by C056.

Table 4-4A. Runway Equipment Requirements for Takeoff Minima

Runway Visual Aid Required	Lowest Allowable Takeoff Minimum Authorization [visibility or RVR (TDZ/Mid/Rollout)]
Adequate visual reference, *or* Any *one* of the following: - Centerline (CL) lighting - High Intensity Runway Light (HIRL) - Runway centerline marking (RCLM)	RVR not available; 1/4 mile (mi) (500 meters (m)); or RVR 1600 feet (ft) (500 m)/Not Required/Not Required. (Mid-point can substitute for an unavailable touchdown.)
Note: Below RVR 1600, two operating RVR sensors are required. All operating RVR sensors are controlling (except per the note below for far-end sensors). Extremely long runways (e.g., Denver International Airport (DEN) 16R) utilize four RVR sensors (i.e., TDZ, mid, rollout, and far-end). When a fourth far-end RVR value is reported, it is not controlling and is not to be used as one of the two required operative RVR sensors. Visual aids (CL lighting, RCLM) must be visible (e.g., not obstructed by snow).	
Day: CL lighting or HIRL or RCLM Night: CL lighting or HIRL	RVR 1200 ft (350 m)/1200 ft (350 m)/1000 ft (300 m)
RCLM and HIRL, or CL lighting	RVR 1000 ft/1000 ft/1000 ft (300 m)

Runway Visual Aid Required	Lowest Allowable Takeoff Minimum Authorization [visibility or RVR (TDZ/Mid/Rollout)]
HIRL and CL lighting	RVR 600 ft/600 ft/600 ft (175 m) or RVR 500 ft/500 ft/500 ft (150 m)
With an approved HUD takeoff guidance system, HIRL, and CL lighting	RVR 300 ft/300 ft/300 ft (75 m)
Note: Additionally, RVR 300 ft/300 ft/300 ft (75 m) takeoff is conducted on a runway with a published landing minimum of RVR 300 and Localizer (LOC) front course guidance displayed on the HUD.	

c) Lights.

1) HIRL. If HIRL are operational but not at the required level to see them, then they are not serviceable.

2) Visible CL Lights. Need to see enough CL lights to maintain CL. Required runway length for your aircraft is the greater of accelerate stop, accelerate go, and normal takeoff to 35 ft. For additional references, refer to ICAO Annex 4, Aeronautical Charts; Annex 6, Operation of Aircraft; Annex 14, Aerodromes; and FAA Order 8260.3.

d) Comparable Values of RVR and Ground Visibility. Refer to § 91.175(h) for comparable values of RVR and ground visibility if the airport reports report visibility in miles and not RVR.

OPSPEC C059—SPECIAL AUTHORIZATION CATEGORY I (SA CAT I) INSTRUMENT APPROACH AND LANDING OPERATIONS.

a) General. SA CAT I operations are authorized by optional issuance of OpSpec C059 to foreign air carriers operating under part 129. AFS-410 has eliminated the previous requirements for CAT II trained aircrew and CAT II maintained aircraft for SA CAT I authorization. Additionally, the allowable equipment used as basis for SA CAT I authorization was expanded beyond the HUD (e.g., Synthetic Vision Guidance System (SVGS)). These changes were published in AC 120-118, Criteria for Approval/Authorization of All Weather Operations (AWO) for Takeoff, Landing, and Rollout, in July 2018. AFS-410 has also developed a separate OpSpec C059 to issue optional SA CAT I authorization.

b) Purpose. OpSpec C059 is issued to authorize SA CAT I landing minimums as low as a 150-foot radio altimeter (RA) DH and 1400 RVR to approved runways without TDZ lights and/or RCL lights in accordance with the following limitations and provisions.

c) Aircraft Requirements. To conduct the SA CAT I operations authorized by C059, each airplane must be equipped with an operable manual flight guidance system (FGS) certified and maintained to support a DH of 150 feet or lower.

1) Required equipment approved as basis for SA CAT I authorization (e.g., HUD, SVGS) must provide each pilot with course and glide path command guidance to the DH, while simultaneously providing the pilot flying (PF) with a continuous indication of the desired trajectory to the runway TDZ independent of the guidance used for the approach. The guidance system must also provide the PF with dynamic perception of aircraft position relative to the TDZ of the runway of intended landing in order to facilitate the transition to the visual segment of the approach by reducing the time needed for the acquisition of visual cues.

2) An aircraft type and/or system previously approved for SA CAT I, based upon HUD equipment, is considered to meet the requirements of subparagraph c)1).

3) The currently approved equipment for SA CAT I authorization is limited to those available for selection in OpSpec C059. Approval of additional or future FGS for SA CAT I authorization requires AFS-400 approval.

4) The operator must use a two-pilot flightcrew in aircraft certified and equipped for two-pilot IFR. Single-pilot operations are not authorized for SA CAT I.

5) Inspectors must instruct the foreign air carrier to submit documentation verifying that all airplanes utilizing SA CAT I are 5G C-Band radio altimeter tolerant airplanes. A “radio altimeter tolerant airplane” (also known within industry as a Group 4 airplane) is one for which the radio altimeter, as installed, demonstrates tolerance to radio altimeter interference at or above specific power levels. Foreign air carriers may submit documentation showing that their CAA has adopted the FAA AD requirements. AFM excerpts, supplements, or other manufacturer documentation showing the aircraft is 5G C-Band radio altimeter tolerant are also acceptable. The FAA has determined that non-radio altimeter tolerant airplanes do not meet an acceptable level of safety for SA CAT I instrument approach and landing operations. Inspectors should document those airplanes by registration number or fleet as described in subparagraph e) below.

d) Aircrew Training Requirements. The flightcrew must have demonstrated proficiency in instrument approaches and landings to SA CAT I minimums or lower (e.g., CAT II or CAT III) in the foreign air carrier’s CAA-approved training program using each FGS authorized for SA CAT I operations. For example, if an aircraft is equipped with both a HUD and an SVGS Head-Down Display (HDD), the operator may seek SA CAT I authorization independently on either FGS. In this specific case, the operator must have demonstrated proficiency in instrument approaches and landings using the HUD to SA CAT I minimums or lower (e.g., CAT II or CAT III) and also demonstrated proficiency in instrument approaches and landings using the SVGS to SA CAT I minimums.

e) Issuing OpSpec C059. C059 does not require specific aircraft to be identified. It provides authorization for any/all appropriately equipped aircraft in the operator’s fleet to conduct SA CAT I operations as long as the equipment and training requirements described in OpSpec C059 are met. This avoids the need to reissue C059 whenever the particular aircraft within an operator’s fleet change. If airplanes are not 5G C-Band radio altimeter tolerant, the airplanes must be listed by registration number or by fleet in the nonstandard text block of C059. Inspectors must add text stating, “The following airplanes are not 5G C-band radio altimeter

tolerant and not authorized for SA CAT I operations:" followed by the registration numbers or fleet.

OPSPEC C060—CATEGORY II AND CATEGORY III INSTRUMENT APPROACH AND LANDING OPERATIONS—U.S. AIRPORTS (OPTIONAL). The FAA authorizes CAT II and CAT III operations by issuing OpSpec C060. Each airplane type (M/M/S) used in CAT II or CAT III operations must be listed in C060 Subparagraph b, Authorized Approach and Landing Minimums, along with the DH/alert height (AH), and lowest RVR authorized.

Note: The FAA evaluates CAT II and CAT III operations in accordance with AC 120-118 (AC 120-28, Criteria for Approval of Category III Weather Minima for Takeoff, Landing, and Rollout, and AC 120-29, Criteria for Approval of Category I and Category II Weather Minima for Approach, continue to be used for airworthiness criteria and demonstration considerations until publishing of AC 20-191); equivalent European Union Aviation Safety Agency (EASA) criteria; or ICAO Doc 9365, Manual of All-Weather Operations.

a) SAS AR Activity Codes. POIs will make a SAS AR entry to record the actions directed by this section. The applicable SAS AR activity code for this task is 1430, CAT II/III ILS Operations approval for an operator.

b) General Principles. Authorized minimums will reflect the most restrictive of those authorized by the State of the Operator and what the FAA would authorize for a comparably equipped U.S. operator. When evaluating a request by a foreign air carrier to conduct SA CAT II, CAT II, or CAT III operations within the United States, the inspector must consider at least the following general principles:

1) A foreign air carrier will not be authorized to conduct SA CAT II, CAT II, or CAT III operations in the United States unless that foreign air carrier is authorized by its State to conduct the same operations or the foreign equivalent.

2) A foreign air carrier will not be authorized for operating minimums in the United States that are lower than the operating minimums authorized by its State.

3) A foreign air carrier will not be authorized for operating minimums in the United States that are lower than the lowest minimums authorized to a comparably equipped U.S. operator.

4) The FAA authorizes some U.S. operators to conduct SA CAT II and/or CAT II to RVR 1000 operations. These minimums are based on the use of onboard systems to mitigate a lack of specific ground equipment. These authorizations are available to foreign air carriers, but may be authorized by the State of the Operator under different names. For example, EASA authorizes operations similar to SA CAT II as "Other than Standard Category II." While the basic concepts of these operations are the same as those described in AC 120-118, the operating minimums, equipage basis, and operating requirements authorized by the State of the Operator may be different. Operating minimums and requirements authorized in the pertinent OpSpec must be the most restrictive of those given in U.S. or State of the Operator authorizations.

c) Issuing a New or Amended OpSpec. For foreign air carriers requesting a new issuance of C060 for CAT II or CAT III, or requesting to add a new aircraft type to an existing C060, inspectors must refer to the table below and apply the restrictions as appropriate when issuing a new or amended C060:

Authorization Requested	IF the foreign air carrier has:	THEN they may be authorized:
CAT II	Less than 6 months experience with CAT II in aircraft type	CAT II with RVR as low as 1600
	More than 6 months experience with CAT II in aircraft type	CAT II with RVR as low as 1200
CAT III	Less than 6 months experience with CAT III in aircraft type	CAT II with RVR as low as 1000
	More than 6 months experience with CAT III in aircraft type	CAT III with RVR as low as 300

d) Documentation. The POI must instruct the foreign air carrier to provide the following documentation when applying for a new or amended C060 authorization:

1) Approval from the State of the Operator for the requested operation including associated minimums and any special limitations or authorizations.

2) Excerpts from the CAA-approved AFM showing the aircraft is capable of the requested operation.

a. Airplanes must have AFM provisions stating an acceptable level of CAT II or CAT III capability as demonstrated to the FAA, or demonstrate to an authority recognized by the FAA as having acceptable equivalent CAT II or CAT III airworthiness criteria (e.g., EASA’s certification specifications (CS) AWO, Transport Canada). The only acceptable method of demonstrating that an airplane is airworthy for CAT II or CAT III operations is by approval under the type certificate (TC) or STC.

b. The approved AFM (or AFMS) typically contains a statement that the airborne systems and equipment meet performance requirements, a statement regarding reliability and/or redundancy, and affirmation that such systems and equipment have been demonstrated to be eligible for CAT II or CAT III operations.

c. CAT II airplanes typically have an AFM or AFMS statement showing compliance with the airworthiness performance and integrity criteria found in AC 120-29.

Note: Airplanes used for SA CAT II or 1000 RVR CAT II operations require guidance or flight control systems (fail passive (FP) HUD or autoland) showing compliance with the airworthiness and performance criteria found in AC 120-28.

d. CAT III airplanes typically have an AFM or AFMS statement showing compliance with the airworthiness performance and integrity criteria found in AC 120-28.

3) Inspectors must instruct the foreign air carrier to submit documentation verifying that all airplanes utilizing CAT II or CAT III are 5G C-Band radio altimeter tolerant airplanes. A "radio altimeter tolerant airplane" (also known within industry as a Group 4 airplane) is one for which the radio altimeter, as installed, demonstrates tolerance to radio altimeter interference at or above specific power levels. Foreign air carriers may submit documentation showing that their CAA has adopted the FAA AD requirements. AFM excerpts, supplements, or other manufacturer documentation showing the aircraft is 5G C-Band radio altimeter tolerant are also acceptable. The FAA has determined that non-radio altimeter tolerant airplanes do not meet an acceptable level of safety for CAT II/III instrument approach and landing operations as well as SA CAT II operations. Inspectors should document such airplanes in accordance with subparagraphs e)4)e*1* and e)6)g*1* below.

e) Filling Out the C060 Template. The C060 template is organized into sections applying to CAT II operations, CAT III operations, and sections applying to both operations. Standard 1200 RVR CAT II authorization is assumed for all foreign air carriers receiving C060; 1000 RVR CAT II, SA CAT II, and CAT III authorizations are optional.

1) The POI must authorize the foreign air carrier's airplane M/M/S for the applicable operation in the WebOPSS "Maintain Operator Data" — "Aircraft" listing before filling out the C060 template.

2) Begin the authorization by selecting either "Category II" or "Category II and III" in subparagraph a.

3) In subparagraph b, for CAT II/III operators, select option 1, "For all CAT III operations." For CAT II-only operators, select option 2, "CAT III operations are not authorized."

4) Fill in Table 1, CAT II Airplane Systems and Landing Minimums, as follows:

a. The CAT II approach/landing system must be specified for each aircraft M/M/S listed in Table 1 of C060. Select the appropriate phrase for each M/M/S to place in the CAT II "Approach/Landing System" column: Autopilot, HUD, FP HUD, or Autoland. Any of the above approach/landing systems may be selected for 1600 RVR or 1200 RVR CAT II operations. If a foreign air carrier desires to use two systems during approach (e.g., HUD-monitored autopilot), only the primary control system in use needs to be listed. "FP HUD" or "Autoland" must be selected if foreign air carriers conduct SA CAT II or 1000 RVR CAT II operations.

1. Autopilot: Autopilot approach coupler used to DH, followed by manual control landing.

2. HUD: CAT II-certified HUD providing guidance to DH, flown under manual control.

3. FP HUD: CAT III-certified FP HUD providing guidance at least to touchdown, flown under manual control.

4. Autoland: Any certified autoland system.

b. Select the DH as applicable.

c. For the "TDZ/Mid/RO RVR" column, select the RVR as applicable.

1. Minimums of TDZ 1600 RVR and TDZ 1200 RVR require the flightcrew to use an approach coupler or to fly at least to DH under manual control using a HUD for flight guidance. A manually flown landing is assumed and need not be specified.

2. Minimums of 1000 RVR, as published via a chart note on the part 97 procedure, require the flightcrew to use autoland or to fly under manual control using an FP HUD to touchdown.

d. No additional lines of minimums need to be selected for the authorization of SA CAT II operations. SA CAT II minimums and DH are 1200 RVR and 100 feet.

e. Special Operational Equipment and Limitations.

1. If airplanes are not 5G C-Band radio altimeter tolerant, the airplanes must be listed by registration number in this column, specifying the airplanes that are not authorized for CAT II operations.

2. Equipment explicitly required by airplane certification regulations and/or the approved AFM or AFMS should not be listed in Table 1 of C060. The standard text of C060 requires that this equipment be installed and operational.

3. Enter all additional equipment for the M/M/S and kind(s) of CAT II operations authorized. Include additional equipment required by any of the following:

- AC 120-118,
- AC 120-28,
- AC 120-29, and
- TC or STC.

Figure 4-4D. Sample C060 Table 1 – CAT II Airplane Systems and Landing Minimums

Airplane M/M/S	Approach/Landing System*	DH	TDZ/Mid/ RO RVR	Special Operational Equipment and Limitations
	Autopilot HUD FP HUD Autoland	150 DH 100 DH	1600/600/300 1200/600/300 1000/600/300	NA

Note: * The term HUD assumes Manual HUD, HUD = CAT II certified Head-Up Display; FP HUD = CAT III certified Head-Up Display; FP = Fail Passive Landing or Rollout Control System; NA = Not Applicable.

5) Table 4-4B below is a summary of the required RVR minimums for CAT II operations.

Table 4-4B. Category II Operating Minimums

CAT II RVR Minimums			
Type of Operation	**TDZ RVR**	**Mid-RVR**	**Rollout RVR**
Standard CAT II	1600 (500 m)	600 (175 m)#	300 (75 m)#
Standard CAT II	1200 (350 m)	600 (175 m)#	300 (75 m)
Standard CAT II to 1000 RVR	1000 (300 m)	600 (175 m)#	300 (75 m)
SA CAT II	1200 (350 m)	600 (175 m)#	300 (75 m)

Note: # If available.

6) Fill in Table 2, CAT III Airplane Systems and Landing Minimums, as follows:

a. Only CAT II Operations. If the foreign air carrier is approved to conduct only CAT II operations (i.e., CAT III not authorized), the table will automatically populate with "NA."

b. Approach/Landing Systems. Select the appropriate phrase for each M/M/S to place in the CAT III "Approach/Landing System" column: FP HUD, FP Autoland, or FO Autoland.

1. FP HUD.

2. FP Autoland: Any FP autoland system.

3. FO Autoland: Fail operational (FO) autoland system.

c. Rollout Systems. Select the appropriate rollout system: None, FP, or FO.

1. None: No rollout guidance or automatic rollout system.

2. FP: Any FP rollout system.

3. FO: FO automatic rollout system.

d. DH/AH. Select the DH/AH as applicable from the dropdown list. If the foreign operator is authorized “0 DH” or “No DH” on the specific authorization from the foreign operator’s CAA, you must manually enter “No DH” in this column.

e. TDZ/Mid/RO RVR. When the foreign air carrier’s airplanes have FP landing systems, or have been demonstrated for CAT IIIa operations, with AFM statements describing compliance with only AC 120-28C (or earlier editions) criteria:

1. Select 700/700/300; or

2. Select 600/600/300 for airplanes having FP landing systems that have been authorized RVR 600 minimums under AC 120-28D, Paragraph 4.3.7, Category IIIa.

f. When the foreign air carrier’s airplanes have an AFM statement showing compliance with AC 120-28D (or subsequent editions) criteria, or airplanes with FO landing and FO or FP rollout systems and an AFM statement showing compliance with AC 120-28C (or earlier) criteria:

1. Select 600/400/300 for airplanes using FP landing and FP or FO rollout systems;

2. Select 400/400/300 for airplanes using FO landing and FP rollout systems; or

3. Select 300/300/300 for airplanes using FO landing and FO rollout systems.

g. Special Operational Equipment and Limitations.

1. If airplanes are not 5G C-Band radio altimeter tolerant, the airplanes must be listed by registration number in this column, specifying the airplanes that are not authorized for CAT III operations.

2. Equipment explicitly required by airplane certification regulations and/or the approved AFM or AFMS should not be listed in Table 2 of C060. The standard text of C060 requires that this equipment be installed and operational.

3. Enter all additional equipment for the M/M/S and kind(s) of CAT III operations authorized. Include additional equipment required by any of the following:

- AC 120-118,
- AC 120-28,

- AC 120-29, and
- TC or STC.

Figure 4-4E. Sample C060 Table 2 – CAT III Airplane Systems and Landing Minimums

Airplane M/M/S	Approach/ Landing System*	Rollout System*	DH/AH	TDZ/Mid/ RO RVR	Special Operational Equipment and Limitations
	FP HUD FP Autoland FO Autoland	None FP FO	50 DH 30 DH 200 AH 100 AH 50 AH No DH	700/700/300 600/600/300 600/400/300 400/400/300 300/300/300	NA

Note: * FP HUD = CAT III certified Head-Up Display; FP = Fail Passive Landing or Rollout Control System; FO = Fail Operational Landing or Rollout Control System; NA = Not Applicable.

Table 4-4C. Category III Operating Minimums

Landing System	Rollout System	TDZ RVR	Mid-RVR	Rollout RVR
FP (CAT IIIa)	None	700 (200 m)	700 (200 m)	300 (75 m)
FP or FO	None	600 (175 m)	600 (175 m)	300 (75 m)
FP	FP or FO	600 (175 m)	400 (125 m)	300 (75 m)
FO	FP	400 (125 m)	400 (125 m)	300 (75 m)
FO	FO	300 (75 m)	300 (75 m)	300 (75 m)

7) In Subparagraph d, Required RVR Reports, for CAT II/CAT III operators, select option 1, “For all CAT III operations.” For CAT II-only operators, select option 2, “CAT III operations are not authorized.”

8) For Subparagraph f, CAT II Operations, in addition to the standard text of 1200 RVR CAT II, there are three optional texts to consider for authorization. Select option 1 for TDZ 1000 RVR CAT II, option 2 for SA CAT II, or option 3 for both TDZ 1000 RVR CAT II and SA CAT II. Table 1 of C060 must contain appropriate selections for these additional CAT II authorizations. To authorize only standard CAT II at 1200 RVR, do not select any additional options.

9) In Subparagraph g, Operating Limitations, select subparagraph g(4) for foreign air carriers authorized CAT II/III operations.

10) In Subparagraph h, Missed Approach Requirements, for CAT II/III operators, select option 1, “For all CAT III operations.” For CAT II-only operators, select option 2, “CAT III operations are not authorized.”

11) For Subparagraph i, Runway Restrictions, the U.S. ILS facilities provided in AFS-400’s “Restricted U.S. Facilities Approved for Category II/III Operations” list are approved only for the specific airplanes listed when conducting CAT III operations or CAT II operations using autoland or FP HUD to touchdown. Inspectors may reference the list of restricted U.S. facilities approved for CAT II/III operations here: https://www.faa.gov/sites/faa.gov/files/about/office_org/headquarters_offices/avs/Restrictedairports.xlsx.

a. The characteristics of the pre-threshold terrain, runway TDZ slope, or steep GS at these facilities may cause abnormal performance in flight control systems. Additional analysis and/or flight demonstrations are typically required for each airplane type before approval of CAT II/III minimums at each runway.

b. Publication of a part 97 SIAP or additional operators and their airplanes may be approved by AFS-400 as provided in AC 120-118, Appendix 4, Irregular Terrain Assessment. Approved airplanes are equipped with either autoland or FP HUD flight guidance equipment. The restrictions at U.S. facilities for the foreign air carrier are provided as selectables for listing in Table 3 of C060 (see Figure 4-4F below).

Figure 4-4F. Sample C060 Table 3 – Restricted/Nonstandard U.S. Facilities

Approach Category, Airport Name/Identifier, Runway(s)	Limitations
Pittsburgh/Greater Pittsburgh Intl, PA; KPIT RY10L; RVR 300	Airplanes approved: A319, A320, B757, and B767
Pittsburgh/Greater Pittsburgh Intl, PA; KPIT RY10R; RVR 600 and RVR 300	Restricted to 600 RVR until less than 600 RVR SMGCS operations are approved. Airplanes approved RVR 600: B757 and B767. Airplanes approved RVR 300: A319 and A330.

OPSPEC C063—AREA NAVIGATION (RNAV) AND REQUIRED NAVIGATION PERFORMANCE (RNP) TERMINAL OPERATIONS (OPTIONAL).

a) General. The FAA authorizes IFR RNAV 1 and RNP 1 departure procedures (DP) and Standard Terminal Arrival Routes (STAR) to U.S. airports in accordance with § 129.17 by issuance of C063. Before the FAA issues C063, each foreign air carrier and each airplane type used by that foreign air carrier require approval by the State of the Operator’s CAA.

Note: The terms “RNAV 1 departure procedures (DP)” and “RNP 1 departure procedures (DP)” may refer to either a Standard Instrument Departure (SID) or an Obstacle Departure Procedure (ODP).

1) OpSpec C063 authorizes foreign air carriers to conduct operations using part 97 U.S. IFR terminal RNAV 1 and/or RNP 1 DPs and STARs in the U.S. National Airspace System (NAS).

2) OpSpec C063 authorization must not be issued to a foreign air carrier unless the State of the Operator's CAA has approved the foreign air carrier for RNAV 1 and/or RNP 1 DPs and STARs (to include operations, procedures, aircraft and aircraft equipment, and flightcrew training to conduct RNAV 1 and/or RNP 1 DPs and STARs).

b) Criteria Acceptable to the FAA. The FAA issues C063 for RNAV 1 and RNP 1 DPs and STAR operations in accordance with, but not limited to, the following:

1) ICAO Doc 9613, Performance-based Navigation (PBN) Manual.

2) Joint Aviation Authority (JAA) Temporary Guidance Leaflet (TGL) No. 10, Airworthiness and Operational Approval for Precision RNAV Operations in Designated European Airspace.

3) If adopted by the State of the Operator's CAA, equivalent standards to AC 90-100, U.S. Terminal and En Route Area Navigation (RNAV) Operations, or AC 90-105, Approval Guidance for RNP Operations and Barometric Vertical Navigation in the U.S. National Airspace System and in Oceanic and Remote Continental Airspace.

Note: PIs must coordinate all acceptable criteria other than these specified in subparagraph b) above with AFS-50, who will coordinate with AFS-410, as appropriate.

c) RNAV 1 DPs and STARs. AC 90-100 provides detailed guidance for operations on RNAV 1 DPs and RNAV 1 STARs in U.S. airspace.

1) For current ACs, policy, guidance, and compliance tables, refer to https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afx/afs/afs400/afs410/pbn. For further questions, contact AFS-50, who will coordinate with AFS-410, as appropriate.

2) Additional information may also be found in the WebOPSS guidance in association with C063 by clicking on the "Guidance" button.

d) Designation of RNAV 1 or RNP 1. U.S. RNAV or RNP DPs and STARs throughout the NAS are designated as RNAV 1 or RNP 1 and published in accordance with part 97.

e) Definitions Related to This Authorization. Some important definitions as they relate to this authorization:

Area Navigation (RNAV) 1 Departure Procedures (DP) and Standard Terminal Arrival Routes (STAR). RNAV 1 terminal procedures require the aircraft's track-keeping accuracy remain bounded by +1 NM for 95 percent of the total flight time. RNAV 1 terminal procedures require, as a minimum, distance measuring equipment (DME)/DME/Inertial Reference Unit (IRU)-based equipment and/or a GPS-based RNAV system satisfying the criteria of AC 90-100.

Climb Via and Descent Via. Refer to Information for Operators (InFO) 14003, "Climb Via" Phraseology for Standard Instrument Departure (SID), Modification to "Descend Via" Phraseology for Standard Terminal Arrival (STAR), and Phraseology Associated with Speed Instructions.

Flight Management System Procedure (FMSP). An RNAV and/or RNP arrival, departure, or approach procedure developed for use by aircraft equipped with an FMS.

Note: The number of FMSPs in the NAS is limited, and FMSP criteria are no longer preferred for the design of RNAV and RNP procedures.

Instrument Departure Procedure (DP). Instrument DPs are published IFR procedures that provide obstruction clearance from the terminal area to the en route structure. There are two types of DPs: ODPs and SIDs.

Obstacle Departure Procedure (ODP). An ODP is a published IFR DP that provides obstruction clearance via the least onerous route from the terminal area to the appropriate en route structure. ODPs are recommended for obstruction clearance unless an alternate DP (such as a SID or radar vector) has been specifically assigned by ATC. The RNAV 1 and/or RNP 1 ODP must be retrievable from the FMS database and included in the filed flight plan.

Standard Instrument Departure (SID). A SID is a published IFR ATC DP that provides obstacle clearance and a transition from the terminal area to the en route structure. SIDs are primarily designed for air traffic system enhancement to expedite traffic flow and to reduce pilot/controller workload. A SID is normally published as a graphic representation of a DP.

Required Navigation Performance (RNP) 1. RNP 1 requires a lateral accuracy value of 1 for arrival and departure in the terminal area, and for the initial and intermediate approach phase when used on conventional procedures with Performance-based Navigation (PBN) segments (e.g., an ILS with a PBN feeder, initial approach fix (IAF), or missed approach).

Standard Terminal Arrival Route (STAR). An RNAV or RNP STAR is a published IFR ATC arrival procedure that provides a transition from the en route structure to the terminal area.

f) Foreign Air Carrier Actions. A foreign air carrier applying to the FAA for the issuance of C063 must provide the responsible IFO with evidence that the State of the Operator's CAA has approved the foreign air carrier for this operation. The approval must include:

- Documentation (e.g., foreign-issued OpSpecs, official letter) from the State of the Operator's CAA stating that the foreign air carrier is approved for RNAV 1 and/or RNP 1 DPs and STARs in accordance with [XXXX (e.g., ICAO Doc 9613)] criteria that the aircraft and aircraft equipment are eligible and approved for RNAV 1 and/or RNP 1 DPs and STARs, and that the flightcrews are trained to conduct RNAV 1 and/or RNP 1 DPs and STARs (see subparagraph b) above);

- RNAV or RNP system make, model, and part number(s) approved; and
- Any other pertinent information.

Note: The FAA and PIs are not responsible for evaluating a foreign air carrier's training program. Foreign air carrier training programs are evaluated and approved by the State of the Operator's CAA. PIs may accept equipment eligibility that has been determined eligible and approved by a foreign air carrier's CAA, when it is also documented by the AFM/Rotorcraft Flight Manual (RFM) or other FAA-recognized means.

g) PI Actions. Based on the information supplied by the foreign air carrier, POIs must coordinate with the Principal Avionics Inspector (PAI) to determine equipment eligibility in accordance with the RNAV 1 and/or RNP 1 DPs and STARs compliance table. An aircraft equipment compliance table is available via the AFS-410 web page at https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afx/afs/afs400/afs410/pbn.

1) The PAI determines the proper nomenclature of the equipment manufacturer's make and model, and that the RNAV or RNP equipment and system is installed in accordance with approved data and meets the criteria of AC 90-100 or AC 90-105.

2) As described in AC 90-100 and AC 90-105, the term "compliance" means meeting the operational and functional performance criteria. For the intended purpose of this policy, "compatible" means equipment and systems that perform their intended function and meet performance requirements for RNAV 1 or RNP 1 operations, as determined to be in compliance for approval.

Note: Per AC 90-100 and AC 90-105, data suppliers and avionics data suppliers must have a Letter of Authorization (LOA) in accordance with AC 20-153, Acceptance of Aeronautical Data Processes and Associated Databases. It is the responsibility of the foreign air carrier to ensure that data supplier(s) are compliant.

3) RNAV 1 procedures require DME/DME/IRU sensors and/or GPS inputs. Due to gaps in the DME infrastructure of the NAS, RNAV 1 procedures require IRU sensor inputs to augment DME/DME, often referred to as DME/DME/IRU.

Note 1: The ATC flight plan must contain information in item 18 of the International Flight Plan (FAA Form 7233-4, Pre-Flight Pilot Checklist and International Flight Plan) indicating the RNAV capabilities and include applicable descriptors.

Note 2: If the responsible IFO is unable to determine equipment eligibility for RNAV 1 and/or RNP 1 DPs and STARs via the AFS-410 web page, contact AFS-50, who will coordinate with AFS-410, as appropriate.

4) Some RNAV and RNP equipment and systems may not be able to perform multiple STAR runway transitions, sometimes known as "route Type 3," because of database limitations. Foreign air carriers of such RNAV or RNP systems must procure a "tailored" database and

charts to allow the use of multiple runway transitions in order to qualify for RNAV 1 or RNP 1 approval.

5) After the POI and PAI agree that the foreign air carrier has been authorized to conduct RNAV 1 and/or RNP 1 DPs and STAR operations (by the State of the Operator's CAA) and that the foreign air carrier is eligible for RNAV 1 and/or RNP 1 DPs and STAR operations in the U.S. NAS, the C063 template may be issued indicating the appropriate authorizations in Table 1, Airplane, RNAV System(s), Navigation Specification(s).

6) If the foreign air carrier has requested to conduct tailored arrivals into a U.S. airport, then PIs will:

a. Add the following statement in Table 1 of OpSpec C063, "Limitations and Provisions" column, for each M/M/S aircraft with documented FMS autoload/uplink function and approved for tailored arrival operations: "Tailored Arrivals (TA) authorized."

b. Confirm that each of the operator's M/M/S aircraft has been approved for data link communication (DLC) via OpSpec A003.

h) References (current editions):

- *Title 14 CFR Part 91, §§ 91.123, 91.205, and 91.503; Part 95; and Part 129, § 129.17.*
- *FAA Order 1050.1, Environmental Impacts: Policies and Procedures.*
- *FAA Order JO 7110.65, Air Traffic Control.*
- *FAA Order JO 7400.2, Procedures for Handling Airspace Matters.*
- *FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).*
- *FAA Order 8260.19, Flight Procedures and Airspace.*
- *AC 20-138, Airworthiness Approval of Positioning and Navigation Systems.*
- *AC 20-153, Acceptance of Aeronautical Data Processes and Associated Databases.*
- *AC 90-96, Approval of U.S. Operators and Aircraft to Operate Under Instrument Flight Rules (IFR) in European Airspace Designated for Basic Area Navigation (B-RNAV)/RNAV 5 and Precision Area Navigation (P-RNAV).*
- *AC 90-100, U.S. Terminal and En Route Area Navigation (RNAV) Operations.*
- *AC 90-105, Approval Guidance for RNP Operations and Barometric Vertical Navigation in the U.S. National Airspace System and in Oceanic and Remote Continental Airspace.*
- *ICAO Doc 9613, Performance-based Navigation (PBN) Manual.*
- *ICAO Doc 10037, Global Operational Data Link (GOLD) Manual.*

OPSPEC C065—POWERBACK OPERATIONS WITH AIRPLANES. DECOMMISSIONED.

OPSPEC C067—SPECIAL AIRPLANE AUTHORIZATIONS, PROVISIONS, AND LIMITATIONS FOR CERTAIN AIRPORTS (OPTIONAL).

a) General. Title 49 of the United States Code (49 U.S.C.) § 44701 and 14 CFR § 129.5 state that foreign air carriers must conduct their operations in accordance with OpSpecs issued by the Administrator. Foreign air carriers, prior to operation into any U.S. airport, must ensure that the airport is appropriate for the type of operation and aircraft. C067 authorizes and limits the foreign air carrier's operation of airplanes into certain airports. These authorizations and limitations include the following types of operations:

1) Operations at airports that require curfew limitations for flights into or out of specific airports.

Note: The FAA does not encourage foreign air carriers to list aircraft-specific limitations for airports with curfew hours in their OpSpecs. If an airport authority requires foreign air carriers to list such limitations in their OpSpecs, then they should be listed in Table 1 of C067. A sample of Table 1 shows an example of limitations for foreign air carrier operations into specific airports with curfew hours (see Figure 4-4G, Sample C067 Table 1 – Special Airplane Authorizations for Certain Airports).

2) Operations into airports that require special aircraft performance charts and equipment or special lighting (e.g., flare pots), or operate on unpaved runways.

3) Operations using the Reginald Bennett International Runway Reflectorization System in Alaska.

4) Operations into a U.S. airport where the U.S. airport requires a special provision to be included in OpSpecs.

5) Operations to airports/runways where AFS-400 has approved specific "special" instrument procedures for a foreign air carrier.

6) Operations within Class G airspace or at airports without an operating control tower.

7) Operations at alternate airports located in the United States for those scheduled regular airports located outside the United States. For example, a foreign air carrier conducts scheduled operations into the Vancouver International Airport (CYVR) in Canada, but uses the Seattle-Tacoma International Airport (KSEA) and Portland International Airport (KPDX) as alternate airports.

Figure 4-4G. Sample C067 Table 1 – Special Airplane Authorizations for Certain Airports

Airport (Airport Location/Identifier)	Airplane	Special Provisions/Limitations
KDCA, Ronald Reagan Washington National Airport, DC	Boeing 737-800	Limitations during the curfew hours. Max Takeoff—159,000 pounds. Max Landing—137,600 pounds.
KEWR, Newark Liberty International Airport, NY	B747-8F	Limited to taxi speed restriction of 17 kt/20 mph.[1]

[1] Unless there exists a special provision or limitation (e.g., taxi restriction imposed by the State of the Operator), PI(s) do not need to list airports used by foreign air carriers operating Airplane Design Group VI (ADG-VI)/ICAO Group F aircraft (e.g., A380, B747-8, or AN-124) into a U.S. airport if the airport has a Modification of Standard (MoS) for that aircraft.

8) Passenger-carrying operations into alternate airports that are not certificated.

9) The OpSpec imposes restrictions on foreign air carriers operating aircraft with more than 9 passenger seats in scheduled passenger-carrying operations, or more than 30 passenger seats in nonscheduled passenger-carrying operations into U.S. land airports.

a. Destination Airports.

1. The airport is certified under 14 CFR part 139; and

2. For Class I, II, III, and IV airports, as defined in 14 CFR part 139, the airport is classified under 14 CFR part 139 to serve the types of airplanes to be operated and the types of operations to be conducted.

b. Alternated Airports (military and non-military) operated by the US Government not certificated under14 CFR part 139. The OpSpec may allow for authorization for such operations by the FAA if:

1. The equivalent safety standards for airport(s) certificated under 14 CFR part 139 are met.

2. The equivalent airport classification requirements under 14 CFR part 139 serve the types of airplanes and the types of operations to be conducted.

3. Foreign air carriers should obtain permission to operate from:

i. The airport manager of non-military airports.

ii. The base operations of military airports.

iii. The designated airport manager for a joint-use civil and military airport.

Note: Refer to the U.S. Chart Supplements (airport database of every U.S. airport) for airport permission contact details.

b) Regulatory Compliance. Each foreign air carrier operating to the United States must comply with:

1) All applicable regulatory requirements found in 14 CFR, including, but not limited to, the following:

a. Part 91 (in particular, §§ 91.13, 91.103, and 91.123).

b. Part 93.

c. Part 129.

d. Part 139.

e. Any other applicable regulations and laws of the United States.

2) Aeronautical Information Publication (AIP) of the United States of America.

Note: Foreign air carriers may find a link to the Dynamic Regulatory System (DRS) list of U.S. special airports in the U.S. AIP. Refer to the U.S. AIP, page GEN 1.7-51. Those airports do not need to be listed in C067 Table 1.

3) ICAO Annex 6 standards (including, but not limited to, Part I, 4.2.3.2, 9.4.3.1, 9.4.3.2, 9.4.3.3, and 9.4.3.5).

4) Any regulations of the State of the Operator that are more restrictive than the equivalent U.S. regulations, as approved by the State of the Operator, for the foreign air carrier applying to operate to an airport within the United States. Examples:

- If the State of the Operator requires that to operate to XXX airport with the B777 all takeoffs and landings must be conducted by the pilot in command (PIC), then this limitation must be entered into C067 Table 1.
- If the State of the Operator requires that takeoffs and landings in the B747 into XXX airport may only be conducted between sunrise and sunset and the XXX airport limits B747 operations only between midnight and 6 a.m., then the more restrictive State of the Operator limitation must be entered into C067 Table 1.

OPSPEC C068—NOISE ABATEMENT DEPARTURE PROFILES (OPTIONAL).

a) General. OpSpec C068 authorizes foreign air carriers to conduct Noise Abatement Departure Profile (NADP) operations in accordance with the provisions of C068 and the procedures in the foreign air carrier's manuals that its CAA has accepted/approved. The foreign air carrier will use the approved NADPs for its turbojet airplanes, having a maximum certificated

gross takeoff weight (GTOW) of more than 75,000 pounds, operating from a noise-sensitive airport within the United States. The foreign air carrier will conduct each NADP in accordance with the restrictions and limitations specified in C068 and will not conduct any other NADP operations.

1) The NADPs for any airplane type at any one time will be limited to a maximum of two profiles:

- Close-In NADP operations, and/or
- Distant NADP operations.

2) Only one NADP is designated for each runway at each airport. The foreign air carrier's NADPs must meet the following criteria:

a. For each NADP, the foreign air carrier will specify the altitude above field elevation (AFE) at which flightcrews will initiate thrust reduction from takeoff thrust (close-in profile) or airplane configuration change (distant profile), excluding gear retraction.

b. Close-in NADP. The foreign air carrier will use the following NADP criteria for individual airplane types intended to provide noise reduction for noise-sensitive areas located in close proximity to the departure end of the runway:

1. Initiate thrust cutback at an altitude of no less than 800 ft AFE and prior to initiation of flaps or slats retraction.

2. The thrust cutback may be made by manual throttle reduction or by approved automatic means. Flightcrews may arm the automatic means before takeoff for cutback at or above 800 ft AFE or it may be pilot-initiated at or above 800 ft AFE.

3. For airplanes without an operational automatic thrust restoration system, achieve and maintain no less than the thrust level necessary, after thrust reduction, to maintain the takeoff path engine-inoperative climb gradients specified in part 25, § 25.111(c)(3), with the flaps/slats configuration of the airplane, in the event of an engine failure.

4. For airplanes with an operational automatic thrust restoration system, achieve and maintain no less than the thrust level necessary, after thrust reduction, to maintain a takeoff path engine-inoperative climb gradient of zero percent. This climb gradient is contingent upon the ability of the automatic thrust restoration system to (at a minimum) restore sufficient thrust to maintain the takeoff path engine-inoperative climb gradients specified in § 25.111(c)(3), with the flaps/slats configuration of the airplane, in the event of an engine failure.

5. During the thrust reduction, coordinate the pitchover rate and thrust reduction to provide a decrease in pitch consistent with allowing indicated airspeed to decay no more than 5 knots below the all-engine target climb speed, and in no case to less than takeoff safety speed (multi) (V_2) for the airplane configuration. The acceptable speed tolerances for automated throttle systems are found in AC 25-15, Approval of Flight Management Systems in Transport Category Airplanes.

6. Maintain the speed and thrust criteria as described in steps a)2)b*2* through *5* to 3,000 ft AFE or above, or until the airplane has been fully transitioned to the en route climb configuration (whichever occurs first), then transition to normal en route climb procedures.

c. Distant NADP. The foreign air carrier will use the following NADP criteria for individual airplane types intended to provide noise reduction for all other noise sensitive areas.

1. Initiate flaps/slats retraction prior to thrust cutback initiation. Flightcrews should initiate thrust cutback at an altitude no less than 800 ft AFE.

2. Flightcrews may make the thrust cutback by manual throttle reduction or by approved automatic means. Flightcrews may arm the automatic means prior to takeoff for cutback at or above 800 ft AFE or the flightcrew may initiate it at or above 800 ft AFE.

3. Same as subparagraph a)2)b*3*.

4. Same as subparagraph a)2)b*4*.

5. Same as subparagraph a)2)b*5*.

6. Same as subparagraph a)2)b*6*.

b) Airplane Vertical Departure Profiles. Before authorizing this paragraph, the POI must ensure that all airplane vertical departure profiles described in the certificate holder's operations and/or training manuals comply with the above criteria before authorizing C068 for the foreign air carrier.

1) Configuration changes necessary to meet regulatory performance or operations requirements will not be affected by this procedure.

2) For those airplanes that have a performance requirement to reduce takeoff flaps to an intermediate takeoff flap setting at 400 ft AFE or above, the next flap/slats retraction should be initiated at an altitude of no less than 800 ft AFE.

OPSPEC C075—CIRCLING MANEUVERS AND/OR CONTACT APPROACHES AT U.S. AIRPORTS (OPTIONAL).

a) Issuing OpSpec C075. The FAA issues C075 to foreign air carriers with fixed-wing airplanes who conduct either circling maneuvers, contact approaches, or both (circling maneuvers and contact approaches). OpSpec C075 specifies the lowest minimums that can be used.

Note: Do not issue C075 if the foreign air carrier is not authorized for either the circling maneuver or contact approach.

b) Before Issuing OpSpec C075. The foreign air carrier must submit documentation showing that their crewmember training program approved by their CAA provides the appropriate training and checking, and that the CAA authorized the maneuver and/or approach.

c) Drafting OpSpec C075. Within C075, there are two sets of selectable static text for circling maneuvers and contact approaches (one for each when authorized, and one for each when not authorized). The ASI must select the appropriate text based on what the foreign air carrier is authorized. For example, if the foreign air carrier is authorized for circling maneuvers and not for contact approaches, then select the text that states the limitations of circling maneuvers and the "not authorized" text for contact approaches.

d) Circling Maneuvers Terminology. In any weather condition, a foreign air carrier that permits its pilots to accept a "circle to land" or a "circle to runway (runway number)" clearance from ATC conducts circle-to-land maneuvers. The term "circle-to-land maneuver" includes the maneuver referenced in various regulations, publications, and documents as "circle-to-land maneuver," "circling," "circling maneuver," "circle," "circling approach," and "circling approach maneuver." With regard to pilots, conducting a circle-to-land maneuver means to act as the PF when a circle-to-land maneuver is being conducted.

e) Aircraft Operating Under IFR During All Circle-To-Land Maneuvers. Aircraft operating under IFR during all circle-to-land maneuvers are required to remain clear of clouds. If a flightcrew loses visual reference to the airport while conducting a circle-to-land maneuver, they must follow the missed approach procedure specified for the applicable instrument approach, unless ATC specifies an alternate missed approach procedure.

f) Circling Landing Maneuver. When the ceiling is less than 1,000 ft and visibility is less than 3 sm, the foreign air carrier will not use any circling landing minimum lower than that prescribed for the applicable published instrument approach to be used.

Note: This does not authorize the pilots to go below the lowest minimum authorized by the State of the Operator.

g) Pilots Restricted to Circling in Visual Conditions. Any pilot who possesses a pilot certificate restricting circling approaches to visual meteorological conditions (VMC) is not eligible to conduct circle-to-land maneuvers except as provided:

1) The pilot must use the higher of the MDA of 1,000 ft height above airport (HAA) or the MDA of the published circling landing minimums for the instrument approach to be used.

2) The pilot remains under an IFR clearance and must comply with the procedures otherwise required for circle-to-land maneuvers. The foreign air carrier may conduct a circle-to-land maneuver when the reported ceiling is at least 1,000 ft and the visibility is at least 3 mi, or the reported weather is at least equal to the published circling landing minimums for the instrument approach to be used, whichever is higher.

Note: Foreign air carriers conducting circle-to-land maneuvers without training and checking are subject to the same provisions as pilots restricted to circling in visual conditions.

h) Contact Approach Criteria. The U.S. AIP provides further guidance on foreign air carriers operating contact approaches in the United States. Refer to the U.S. AIP, Part 2—

En Route (ENR), ENR 1.1, paragraph 42.3 and ENR 1.5, paragraph 23, located at https://www.faa.gov/air_traffic/publications/.

OPSPEC C077—TERMINAL VISUAL FLIGHT RULES, LIMITATIONS, AND PROVISIONS (OPTIONAL).

a) Applicability. The FAA issues OpSpec C077 to foreign air carriers operating turbine-engine-powered airplanes to the United States that may utilize other than IFR in the terminal area (i.e., any portion of the operation to conduct flight under VFR or predicated on VMC). Except as provided within C077, it restricts all operations to those conducted to IFR except in accordance with the provisions of part 93; Special Federal Aviation Regulation (SFAR) 50-2, Special Flight Rules in the Vicinity of the Grand Canyon National Park, AZ; or OpSpec B051 or B056, if issued. C077 allows the foreign air carrier to conduct the following operations in the terminal area with the restrictions and limitations listed therein:

1) Terminal arrival IFR—visual approach or a charted visual flight procedure (CVFP).

2) Terminal arrival VFR.

3) Terminal departures VFR.

4) Terminal departures IFR.

b) CVFP. For a foreign air carrier conducting a CVFP, the weather minimums of part 91 prevail, except that the carrier will not use minimums lower than those established in the CVFP.

c) Uncontrolled Airports, C077 Subparagraph c(2)(b). Uncontrolled airports may be in Class G Airspace. In order for the foreign air carrier to exercise this provision, OpSpec C080 must also be issued, allowing operation at airports without an operating control tower and/or operation in Class G Airspace.

d) C077 Subparagraph c(3). In lieu of a CVFP, a charted visual procedure that the foreign air carrier’s CAA approved is highly recommended for all terminal VFR departures/arrivals that fall under C077. The proximity of obstacles to the departure flightpath, visibility, the accuracy of the guidance and control systems, the pilot’s proficiency, and the foreign air carrier’s training should determine the size of the area in which obstacle clearance or avoidance must be considered.

e) C077 Subparagraph d(3). This subparagraph contains a requirement to obtain an IFR clearance no farther than 50 NM from the departure airport. However, this procedure may not be practical in all situations. If a greater distance is necessary, the foreign air carrier may apply for a nonstandard paragraph. If OpSpec B051 is issued for VFR en route operations, then for propeller-driven aircraft, except for certain en route VFR provisions in part 93, SFAR 50-2, or SFAR 71, Special Operating Rules for Air Tour Operators in the State of Hawaii, the flightcrew may depart VFR under the provision of C077 subparagraph d, and the requirement to obtain an IFR clearance en route does not apply.

f) Terminal Departures IFR Requirements in C077 Subparagraph e. If ATC clears the flight, it is acceptable to execute a VMC takeoff and climb to a specified point in the clearance as part of an IFR clearance. However, the foreign air carrier must ensure they meet the obstacle performance requirements. Further, the flight must not depart on a VFR flight plan if the capability to go on an IFR flight plan is evident.

1) At certain airports, ATC may have established a "charted visual departure procedure" with a transition to IFR that permits aircraft to depart the airport under VFR and activate its IFR clearance at a designated point and/or altitude as published on the procedure.

a. Use of the charted visual DP requires that all of the conditions and limitations of C077 subparagraph d(1) through (4) be met. These procedures are established by the FAA and published in the FAA Chart Supplement as a Terminal Area Graphic Notice in the Special Notices section and may also be located online at the Aeronav products web page at https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/dafd/.

b. Flightcrews must specifically request this type of procedure by name and ATC may issue a clearance for the aircraft to depart using the visual DP. In this instance, the flight will have an IFR flight plan filed and will have received its IFR clearance prior to departure. This will include a clearance to depart the airport under VFR using the procedure published in the Graphic Notice for the airport of departure. The IFR clearance is activated at the point and/or altitude described in the Graphic Notice.

c. Flightcrews must comply with flightpath/course to be flown, altitudes, and speed limitations published on the procedure, in addition to maintaining their own terrain and obstruction clearance until their IFR clearance is activated at a specific point and/or above a specific altitude as defined by the procedure.

2) Traffic separation with VFR aircraft when operating in VMC remains with the flightcrew. Flightcrews should advise ATC if a revised clearance or instruction is required to maintain VFR while on a charted visual DP.

g) Special Limitations and Provisions for VFR in C077 Subparagraph f. Subparagraph f provides special limitations and provisions for all VFR operations. This subparagraph is applicable to all of the provisions and limitations of C077.

1) C077 Subparagraph f(1). In order for the foreign air carrier to conduct VFR operations under C077, they must have in place either a procedure or program that can identify obstacles in the planned flightpath and the associated airport obstacle data, to ensure adequate information is available for arrival operations, takeoff, and departure performance requirements specified by operating rules and C077. The foreign air carrier must ensure that the flightcrew uses that information. The POI will request documentation from the foreign air carrier that this program is in place and that the foreign air carrier's CAA has approved VFR terminal operations.

2) C077 Subparagraph f(2). Although each subparagraph in C077 has specific details and minimums regarding VFR, the requirement for sufficient visibility to identify and avoid obstacles is required for all VFR operations.

OPSPEC C080—TERMINAL AREA IFR OPERATIONS IN CLASS G AIRSPACE AND AT AIRPORTS WITHOUT AN OPERATING CONTROL TOWER (OPTIONAL). The FAA issues C080 to authorize a foreign air carrier to conduct terminal area airplane IFR operations in Class G airspace or at airports without an operating control tower.

a) Before Authorizing C080. Before authorizing C080, the POI must determine that the foreign air carrier's CAA has authorized/approved it for these types of operations. The foreign air carrier must provide documentation to the POI showing that they have the required methods or procedures and arrangements in place for obtaining and disseminating necessary operational information and that their CAA has accepted/approved them. This operational information must include the following:

1) That the airport is served by an authorized IAP (and DP, when applicable).

2) Applicable charts for crewmember use.

3) Operational weather data from an approved source for control of flight movements and crewmember use. (For a list of examples, see Volume 3, Chapter 26, Section 4. The examples contained therein are not all-inclusive.)

4) Status of airport services and facilities at the time of the operation.

5) Suitable means for pilots to obtain traffic advisories (TA).

6) Sources of traffic and airport advisories.

7) Scheduled passenger operations. The POI must select the optional text for scheduled operations. The optional text specifies the following additional requirement: would it not have been for weather, mechanical, or ATC delays, the flight would have arrived at the scheduled time and the airspace would have been Class D.

b) Sources of Traffic and Airport Advisories. Foreign air carriers may be authorized to use any two-way radio source of air TA information listed in the AIM (for operations in U.S. airspace) or equivalent AIPs.

1) Sources include common traffic advisory frequencies (CTAF), Aeronautical Advisory Stations (UNICOM), Multicom, and Flight Service Stations (FSS).

2) When two sources are listed at the same airport, ASIs must ensure that the foreign air carrier's manuals have procedures that require pilots to continuously monitor and use the TA frequency when operating within 10 NM of the airport. The procedures should require communication concerning airport services and facilities to be completed while more than 10 NM from the airport.

3) At some airports, no public use frequencies may be available. In those cases, a foreign air carrier must arrange for radio communication of essential information, including surveillance of local or transient aircraft operations by ground personnel. Ground personnel who

provide airport status and TA reports using a company radio must be able to view airspace around the airport.

OPSPEC C081—SPECIAL INSTRUMENT AND RNAV VISUAL FLIGHT PROCEDURES (OPTIONAL).

a) General. OpSpec C081 is an optional authorization available for issuance to 14 CFR part 129 foreign air carriers. C081 authorizes special (non-14 CFR part 97) IAPs and DPs, and the use of STARs and RNAV Visual Flight Procedures (RVFP) operations.

1) Authorization for special instrument procedures (IP) and RVFP was previously through the issuance of OpSpec C381. OpSpec C381 is no longer used. Authorization is now through the issuance of C081.

2) The FAA sets criteria for special procedures within U.S. airspace. There is no ICAO standard for these procedures. To operate a special procedure at a private airport, the foreign air carrier must obtain written permission from the owner/manager of the airport.

b) SAS AR Code. Approval of Special Navigation Procedures: 1410.

c) What is a Special Procedure? A special procedure is an Instrument Flight Procedure (IFP) not published in the Federal Register (FR) or in accordance with 14 CFR part 97. Any IP serving a private-use, permission-required, airport/heliport is a special procedure. Many public-use airports are served by special procedures, as well, some of which are proprietary (which require permission from the owner or sponsor), and some of which are not. Special procedures are reviewed and approved by AFS-400 and may have specified aircraft performance or equipment requirements, special crew training, airport facility equipment, waivers from published standards, proprietary criteria, and/or restricted access. A special procedure may require the use of landing aids, communications, or weather services not available for public use. For more information, refer to FAA Order 8260.60, Special Procedures.

d) What is an RVFP? An RVFP is an FMS-coded visual procedure flown with an IFR-approved RNAV system in visual conditions. The procedure is selected from an approved database and must be flown as published. RVFPs may have altitude and airspeed restrictions associated with a waypoint. They are designed to allow access into airfields that cannot support an instrument approach, promote flightpath repeatability, reduce ATC communications, and enhance a stabilized approach to a designated runway.

e) Development of a New Special Procedure or RVFP. Use Order 8260.60 to create and publish a special procedure or RVFP.

1) Special procedures are typically developed and/or maintained by an FAA-approved third party or by the FAA via a reimbursable agreement. Waiver or reduction in the cost of the reimbursable agreement is possible if the special procedure is determined to be in the public’s interest. In most cases, development and approval will take a minimum of 24 months.

2) RVFPs are developed by foreign air carriers in coordination with FS. Foreign air carriers may use a third party to develop the RVFP.

f) FAA Responsibilities.

1) AFS-400. Provides policy, oversees approved procedure developers, and approves special IPs and RVFPs authorized for specific CHs.

2) Flight Procedures and Airspace Group (AFS-420). Assists in the design, distribution, and coordination of special IPs and RVFPs.

3) IFO POIs. Authorize the use of approved special IPs and/or RFVPs via OpSpec C081. The POI remains the central point of contact (POC) for communications between the FAA and the foreign air carrier. The POI or designee will be present and participate by telephone, video conference, or in person for all meetings between the FAA and the foreign air carrier. The POI ensures that:

a. The foreign air carrier's CAA approves the use of the special procedure and/or RVFP.

b. The foreign air carrier's training program provides training in the equipment and special procedure, if required.

c. The foreign air carrier's request is not approved if the foreign air carrier's training program does not address the training required associated with the special procedure.

d. The foreign air carrier provides approval documentation from the foreign air carrier's CAA when submitting the formal request.

g) FAA Requirements Prior to Authorization of C081 or for Approval of a Special Procedure or RVFP. Because of the unique nature of C081, a special procedure, and an RVFP, it is essential that the FAA organizations identified in subparagraph f) above effectively review and process a foreign air carrier's written request for authorization or approval of C081, a special procedure, or an RVFP. IFO POIs will only accept written requests from foreign air carriers, then contact AFS-400 and AFS-420 to coordinate the request. AFS-420 will provide the POI with the appropriate procedure requirements and information, to include the proprietary versus nonproprietary status of the procedure. If the procedure is proprietary, then the IFO PI must advise the foreign air carrier that they need to request and obtain permission from the sponsor of the procedure.

h) FAA 8260-Series Forms Requirements. AFS-420 will provide the POI with the appropriate FAA 8260-series forms for each requested procedure. They will include a form that defines the procedure for charting purposes and a form that describes any applicable foreign air carrier requirements. See subparagraph h)7) below for the FAA 8260-series forms' descriptions and uses.

Note: Notification of new, amended, expiring, or canceled special procedures, requests for distribution of the relevant FAA 8260-series forms, distribution tracking, and transfer of documents between AFS-420 and the POI are all accomplished online through the Centralized Special Procedure Tracker (CSPT). Throughout the processes described in this section, communications between AFS-420 and the POI are to be accomplished primarily through the

CSPT. For information and guidance on the use of the CSPT, visit the AFS-420 website at https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afx/afs/afs400/afs420 and select “Special Instrument Procedures Application Guide.” New users of the CSPT are encouraged to consult this job aid for familiarization.

1) Distribution and Review. The POI will provide the FAA 8260-series forms to the foreign air carrier and instruct the foreign air carrier to provide their CAA with the completed forms for review. The CAA reviews the foreign air carrier’s existing procedures, documentation, equipment, manuals, and training to ensure that any requirements specific to the procedure and listed on the FAA 8260-series forms are satisfactorily addressed. These requirements may require special aircraft performance, equipment, avionics/software, and/or crew training.

2) Unaddressed Requirements. If existing foreign air carrier procedures do not address all requirements, the POI will instruct the foreign air carrier to submit a plan to the CAA with the necessary changes needed to comply with the requirements of the special procedure. This plan must address any aircraft-specific requirements for each M/M/S that the foreign air carrier plans to use to fly the special procedure.

3) Review the Implementation Plan. Once documentation is received from the CAA concurring with the implementation plan and usage of the procedure, the POI reviews the implementation plan.

4) Sign the Completed FAA Form 8260-7B, Special Procedure Authorization. The POI and the foreign air carrier’s representative will sign FAA Form 8260-7B after:

a. The POI has discussed the special procedure requirements with the foreign air carrier; and

b. The foreign air carrier has provided the POI with documentation showing compliance with procedure requirements (e.g., aircraft performance, aircraft equipment, and crew qualifications) or an implementation plan that shows a reasonable expectation that they will safely meet all procedural requirements.

Note: Signing the back of FAA Form 8260-7B is not the formal issuance of the authority for use of a special procedure. Conveyance of authority is by the issuance of OpSpec C081.

5) Distribute the Signed FAA Form 8260-7B. The POI will give a signed copy of FAA Form 8260-7B to the foreign air carrier and maintain a signed copy in the office file in accordance with the record retention requirements.

a. FAA Form 8260-7A, Special Instrument Approach Procedure, contains the data for the instrument approach that is provided by the foreign air carrier to the chart maker to create customized charts. FAA Form 8260-7B allows the foreign air carrier to receive customized charts and navigation database coding (if applicable) from chart vendors and training from most contract training vendors.

b. It may take some time for a foreign air carrier to fully implement their plan and qualify all relevant personnel to conduct the procedure(s).

c. OpSpec C081 must not be authorized, or an issued C081 updated to add the special procedure, until the foreign air carrier has implemented their plan and is fully prepared to fly the procedure.

6) POI Review of Procedure Requirements. The POI will review the procedure requirements to ensure that the aircraft type(s) in question can perform the procedure. Some special IPs require nonstandard/higher missed approach climb gradients and specific qualities or levels of avionics. An additional review by both AFS-50 and AFS-400 is at the discretion of the POI.

a. POIs must ensure that OpSpec authorization includes an entry in the fourth column of OpSpec C081, Table 1 (see Figure 4-4J, Sample C081 Table 1 – Authorized Airports, Procedures, and Airplanes(s)) listing only the aircraft approved to fly the procedure(s). This precludes adding new aircraft at a future date without conducting the appropriate review.

b. If FAA Form 8260-7B or AFS-420 requires a demonstration flight, see subparagraph k) below.

7) FAA 8260-Series Forms Description and Use.

a. FAA Form 8260-7A. FAA Form 8260-7A defines the procedure for charting purposes and is used for new approaches and current special instrument approach procedures and amendments.

Note: For older approach procedures, FAA Form 8260-7, Special Instrument Approach Authorization, was used for the dual function of defining the procedural data and granting user authorization to conduct training and obtain charts. FAA Form 8260-10, Standard Approach Instrument Procedure, was used to define the operator requirements. Throughout this section, any reference to FAA Form 8260-7A or FAA Form 8260-7B should be read to include the functions of the older FAA Form 8260-7 and FAA Form 8260-10. Any procedure that is currently defined and approved by FAA Form 8260-7 or FAA Form 8260-10 will remain active until the procedure is amended or canceled.

b. FAA Form 8260-7B. FAA Form 8260-7B defines any applicable foreign air carrier requirements and used for newer approaches and special non-14 CFR part 97 DPs. This form requires POI and foreign air carrier signatures.

c. FAA Form 8260-15A, Takeoff Minimums and Obstacle Departure Procedures (ODP). FAA Form 8260-15A is used for special non-14 CFR part 97 DPs.

d. FAA Form 8260-15B, Graphic Departure Procedures (DP). FAA Form 8260-15B defines the special procedure and is used for special non-14 CFR part 97 DPs.

e. FAA Form 8260-15C, Departure (Data Record). FAA Form 8260-15C defines the special procedure and is used for special non-14 CFR part 97 DPs.

i) Training Requirements. The POI must ensure that the foreign air carrier is aware of the specific training requirements associated with approval of special procedures or RVFPs.

1) Flightcrews must be trained on:

a. All procedures and equipment required to accomplish the special procedure or RVFP.

b. All training specified in FAA Form 8260-7B. If the FAA Form 8260-7B contains training requirements that must be accomplished in a flight simulation training device (FSTD), the FSTD must be approved to train the RVFP by the foreign CAA. Questions about FSTD qualification or capabilities should be directed to the appropriate foreign CAA official.

c. Any specific items related to aircraft and equipment performance, airport and area services, terrain effects, or a combination of these factors to ensure an overall safe operation.

2) The POI will contact the foreign air carrier and/or their CAA if there is any question about the training and to verify that any specific training requirements have been met.

3) If a foreign air carrier is seeking authorization for multiple special procedures or RVFPs, the POI must emphasize that training for each specific procedure may not be necessary if any of the following applies:

a. The training is duplicative,

b. The multiple special procedures are basic instrument approaches to a private-use landing area, or

c. There are no additional performance or training requirements noted on the FAA 8260-series forms for a specific airfield.

j) Chart Production, Review, and Distribution.

1) AFS-420 will send the appropriate FAA 8260-series forms (via the CSPT) to the POI, who will then advise the foreign air carrier to use the forms to get a chart produced.

2) The POI will instruct the foreign air carrier that when they receive the completed chart, to submit a copy to the POI.

3) Upon receipt, the POI will forward a copy of the chart to AFS-420 for review and distribution in accordance with Order 8260.60.

4) The POI must not authorize operational implementation of the procedure until AFS-400 has reviewed and distributed the chart. In some cases, a third-party developer will create a chart for the foreign air carrier and submit it to AFS-420 for distribution. AFS-420 will distribute this chart to the POI, who in turn will give it to the foreign air carrier.

k) Demonstration Flights. The FAA or CAA may require a demonstration flight, or suitable alternative, prior to procedure approval.

1) Demonstration Flight Required. The POI will forward the requirements and criteria for satisfactorily completing an FAA-required demonstration flight. The CAA will observe, assess, and determine if a foreign air carrier's demonstration flight is satisfactory. If there is no FAA written requirement for the accomplishment of the demonstration on a nonrevenue flight, the CAA will decide what type of demonstration flight to accomplish. The POI may continue to proceed with processing the application request once receiving the written documentation from the applicant verifying satisfactory completion of a demonstration flight.

2) Demonstration Flight or Suitable Alternative. On special procedures without a required demonstration flight specified in the FAA Form 8260-7B, the CAA, FAA, or both may still require that a demonstration flight or suitable alternative be accomplished before a foreign air carrier is issued a new or amended special IFP.

a. Considerations for requiring a demonstration flight or suitable alternative may be a foreign air carrier's experience at that airport, profiles and procedures, aircraft capabilities, deviation from IFP criteria, and local environmental considerations (i.e., terrain, radar and communications coverage, and obstacles).

b. A flight simulator and/or tabletop review (at the CAA's or FAA's discretion) are other accepted ways to demonstrate a safely conducted special procedure. FAA Form 8260-7B will provide the type of additional training/demonstration required.

l) Table 1 of OpSpec C081. When authorizing a special procedure or RVFP, enter the information in Table 1 of OpSpec C081 as shown in the example in Figure 4-4J below. See subparagraphs 1) through 5) below.

1) Airport Identifier (ICAO) column. Select the airport using the ICAO airport identifier. The field will populate with the ICAO identifier, city, airport name, and state.

2) Procedure Name, ORIG or AMDT NO. column. Enter the procedure name found on the FAA 8260-series forms to complete this column. Because procedures are subject to revision, ensure that the amendment number (including ORIG for "original") is included in the procedure name.

3) Airport State column. Select the two-letter identifier for the U.S. airport state.

4) Airplane M/M/S column. List the airplanes approved to fly the special procedure. To authorize a new airplane to use a special procedure already authorized, contact AFS-420 for a joint review of the new aircraft's capabilities. POIs should ask AFS-420 if concurrence is required to authorize any new airplane to fly these procedures. POIs should use M/M/S as authorized in the carrier's A003. "All" should be added to the M/M/S if all aircraft in the M/M/S are authorized. If "All" is not applicable, use the "Limitations and Provisions" column for clarification.

5) Limitations and Provisions column. For procedures that require specific review and evaluation of aircraft performance, equipment/avionics, training, or other criteria that would require that an authorization be limited to a specific airplane M/M/S, enter the limitation or provision. This ensures that any future airplane added by the foreign air carrier is not authorized by default without completing the same review of the new airplane capabilities. Limitations and provisions may be specified by the FAA (FAA Form 8260-7B), CAA, AFM, or foreign air carrier's Flight Operations Manual (FOM). Use this column to designate what airplane/s are "authorized" or "not authorized" for the procedure when "All" is not applicable in the Airplane M/M/S column. This may be designated by registration number or by some other means acceptable by the IFO.

Figure 4-4J. Sample C081 Table 1 – Authorized Airports, Procedures, and Airplane(s)

Airport Identifier (ICAO)	Procedure Name, ORIG or AMDT NO.	Airport State	Airplane M/M/S	Limitations and Provisions
KJFK; New York/ John F. Kennedy Intl, NY	RNAV (RNP) RWY 13R, AMDT 2	NY	B-737-800	N00001 Not Authorized
KJFK; New York/ John F. Kennedy Intl, NY	RNAV Visual RWY 13R, AMDT 2	NY	All B-767 All B-757	HUD Required
KRNO; Reno/ Reno/Tahoe Intl, NV	ILS/DME RWY 16R, AMDT 3	NV	All A-319 All B-757	
KEGE; Eagle County Regional Airport, Eagle, CO	ILS or LOC/DME RWY 25, ORIG	CO	G-VALL GVII-G500	N00002 Authorized
KARP; Anytown Municipal, Anytown, IL	ILS or LOC/DME RWY 25, ORIG	IL	All GV-SP	Not Authorized After 0500 UTC, 04/22/2021
PADG; Red Dog, AK (FAA ID: DGG)	RNAV (GPS) RWY 03, AMDT 1	AK	B-737-301	Effective 11/07/19

m) OpSpec C081 Authorization. POIs will issue the approved special procedure RVFP via C081, as follows:

1) Limited/Provisional Authorization.

a. The POIs may issue OpSpec C081 with a limitation/provision authorization that allows a foreign air carrier to conduct a special procedure or RVFP for routine operations in VMC under the evaluation of the foreign air carrier's CAA inspector.

b. Do not issue C081 if there is a safety concern identified during the POI's evaluation.

c. Once the foreign air carrier provides documentation from the CAA in which they have satisfied the VMC limitation/provision, then the POI will remove the VMC limitation/provision authorization from C081.

2) General Requirements. The POI will complete the following requirements before authorizing and issuing C081:

a. Receive verification that the foreign air carrier has implemented their plan to address all of the requirements listed on FAA Form 8260-7B (including training, dispatch, equipment, performance, etc.), has a chart, and the demonstration flight(s) (if required) have been completed satisfactorily.

b. Receive written verification from the foreign air carrier that, if required by the responsible Terminal Radar Approach Control (TRACON), they have signed a letter of agreement with the responsible TRACON.

c. Enter the aircraft M/M/S reviewed as suitable in the Airplane M/M/S column of Table 1 of OpSpec C081.

d. Review the specific FAA Form 8260-7B requirements (and obtain concurrence from AFS-420, if necessary) before authorizing additional aircraft M/M/S and/or any aircraft in which the foreign air carrier has modified the aircraft avionics package.

n) Additional OpSpec Authorizations. Title 14 CFR part 129 foreign air carriers must be issued OpSpec C052. The “type” (e.g., RNAV, ILS, or LDA) of instrument approach listed in Table 1 of OpSpec C081 must be listed in the table of authorized approaches in C052. RVFP and RNP Authorization Required (RNP AR) procedures will not be listed in C052. The following OpSpecs may be required for the authorization of specific procedures in C081.

1) OpSpec C063. Title 14 CFR part 129 foreign air carriers may require a C063 authorization. C063 authorizes RNAV 1, RNP 1, and other PBN flight operations and is required for foreign air carriers authorized to conduct RNAV 1, RNP 1, or other PBN flight operations in C081.

2) OpSpec C077. Title 14 CFR part 129 foreign air carriers must be issued C077 if operating turbine-engine-powered aircraft under IFR. C077 provides arrival and departure guidance for instrument and visual flight operations (e.g., VFR departure on an IFR clearance). C077 provides guidance on the use of a CVFP. Determine if a VFR operation into or out of an airport is part of the C081 authorization.

3) OpSpec C080. Title 14 CFR part 129 foreign air carriers may require a C080 authorization. Determine the type of airport and operation conducted in association with C081 authorization.

4) OpSpec C384. Title 14 CFR part 129 foreign air carriers with an issued C384 should be eligible to have an RNP AR procedure (titled “RNAV (RNP)”) approved on their C081.

a. The aircraft capabilities listed in their C384 authorization must meet all the requirements specified for the special procedure.

b. If their C384 authorization does not meet the requirements of a special procedure, and the foreign air carrier believes the airplane has the capability to meet the special

requirements, the foreign air carrier may request to update their C384 per the guidance in this section. AFS-400 will provide a written notification to the IFO recommending the approval or disapproval on updating the foreign air carrier's C384.

Table 4-4D. Additional Authorizations for C081 Foreign Air Carriers

	C052	C063	C077	C080	C384
129	R	*	*	*	*
R – Required			* – May Be Required		
Note: Foreign air carriers must be authorized C052. The "type" of special approach (e.g., ILS) to be authorized in C081 must be authorized in C052.					

o) Amendment/Cancellation/Rescinding Authorization of a Special Procedure or RVFP.

1) Amendments.

a. For an amended special procedure or RVFP, the amendment cancels the previously approved special procedure or RVFP on the effective date set by AFS-400. The POI must remove the previously approved special procedure or RVFP from the foreign air carrier's C081. See Volume 12, Chapter 4, Section 12 for specific procedures for FAA-initiated amendments of OpSpecs.

b. AFS-420 will notify the POI of procedure amendments and send the POI the new forms. The POI will review the amendment and then forward the procedure amendment to the foreign air carrier for their review. The POI and foreign air carrier will ensure that no significant changes have occurred that will inhibit the foreign air carrier's ability to accomplish the procedure. The POI may direct another approval process be accomplished if the amendment affects the foreign air carrier's ability to fly the procedure.

c. The foreign air carrier will be required to get a new chart, which they must submit to the POI. The POI will forward the new chart to AFS-420 for review and distribution. AFS-420 will advise the POIs of changes or updates to the procedures and distribute such information in accordance with Order 8260.60. See subparagraph j) above for chart production, review, and distribution.

d. If the foreign air carrier requests to fly an authorized RVFP or special procedure in a new aircraft (i.e., one that they are not currently authorized to fly), the POI should review this entire process to ensure the suitability of the proposed aircraft.

2) Cancellations.

a. FAA. AFS-420 will notify the POIs when a special procedure or RVFP is canceled and the effective date, if applicable.

b. Foreign Air Carrier. If a foreign air carrier is no longer going to use a procedure, the POI must remove the procedure from the foreign air carrier's C081 and advise AFS-420 that the foreign air carrier is no longer authorized to use that procedure.

3) Rescinding Authorization. The POI must rescind authorization for use of a procedure immediately upon notification of the following reasons:

a. The foreign air carrier deviates from the procedure requirements,

b. Additional operational/training requirements are required, or

c. Any other factors that affect the safe operation of the procedure.

p) Effective Dates. Procedure effective dates are critical to flight safety. Procedures must not be used after the expired effective date. For example, some procedure amendments use the same fix names but with the fixes in a slightly different location. Those fix locations will change on the effective date, allowing the use of the expiring procedure until the effective date and the use of the new procedure on and after the effective date.

1) If the procedure has a specific effective date set by AFS-400, add a reference to that effective date in the Limitations and Provisions column of Table 1 of OpSpec C081 for the new procedure as well as the expiring procedure (if applicable).

2) For new, amended, or canceled special procedures or RVFPs, the POI will issue the OpSpec C081 revision in accordance with this subparagraph within 30 days of AFS-420 notification or by the effective date, whichever is later. If the POI/foreign air carrier cannot meet this deadline, the POI must remove the expiring procedure from the foreign air carrier's C081 authorization by the effective date canceling that special procedure or RVFP.

3) To ensure that foreign air carriers are using the correct and current procedure, the POI will enter the procedure amendment number (ORIG, 1, 2, etc.) as part of the procedure name in the second column of Table 1 of OpSpec C081. POIs may also want to add a reference to the effective date in the Limitations and Provisions column of Table 1 for the new procedure. POIs will reference the cancellation date of the expiring procedure in the Limitations and Provisions column of Table 1 or remove the authorization for the expiring procedure (if applicable). Figure 4-4J above provides an example of an expiring procedure in the fifth row and an example of a new procedure in the sixth row.

q) Notices to Air Missions (NOTAM). Most special procedures serve landing areas that are in the public NOTAM system. However, sometimes it is not possible to issue a NOTAM for a special procedure, which requires updates and changes issued to all authorized foreign air carriers through their POI. Therefore, it is critical to record, maintain, and update foreign air carrier contact data with AFS-420.

Note: If a given airport is not in the public NOTAM database, then the POIs must contact AFS-420 for assistance to get the airport added to the database.

r) Oversight and Auditing. Oversight management of foreign air carrier authority and use of special IPs is not currently in the FAA automated work programs. POIs should annually review the C081 for their assigned foreign air carriers to ensure that the currency of their special IPs is maintained and disseminated. IFOs must maintain files for foreign air carriers authorized to conduct special procedures in accordance with the recordkeeping requirements in Volume 12, Chapter 4, Section 14.

s) Informational Sharing. Certain special procedures (e.g., LOC/DME RWY 15 and RNAV (GPS) Z RWY 15 to Aspen, CO) allow access to challenging airports with steep, close terrain. POIs may find it helpful to set up an informational sharing meeting that includes AFS-50, AFS-420, the foreign air carrier, or the foreign air carrier's CAA (operations representative or management personnel listed on the foreign air carrier's OpSpec A006) to discuss FAA Form 8260-7B requirements and best practices.

OPSPEC C083. DECOMMISSIONED.

OPSPEC C091—OPERATIONAL REQUIREMENTS AIRPLANE DESIGN GROUP VI (ICAO CODE F) (OPTIONAL).

a) Applicability. OpSpec C091 must be issued to foreign air carriers who conduct takeoff and landing operations using ADG-VI/ICAO Code F within the United States on runways as narrow as 150 ft (45 m) wide. AC 150/5300-13, Airport Design, contains metric conversions throughout the document. The FAA uses 45 m as an equivalent to 150 ft.

b) Operational Requirements. C091 specifies the runway width, Obstacle Free Zone (OFZ), and other airport standards for these aircraft. ADG-VI are airplanes with a wingspan from 214 ft (65 m) up to 262 ft (80 m). It closely parallels ICAO Code F criteria. However, where the ICAO Code designation is also dependent on main gear track width, the FAA criteria is dependent on the wingspan of the aircraft and tail height. AC 150/5300-13 establishes airport standards for the different ADGs, including runway width, taxiway width, OFZ dimensions, and other airport considerations.

1) Historically, the FAA assessed deviations from these established design standards when an aircraft operation exceeded the existing airport design. The FAA evaluated the specific air carrier's operational procedures and flightcrew training program and standards. Operational limitations were then typically part of the air carrier's operational authorization to operate as per the specific deviation granted to the air carrier.

2) To allow ADG-VI aircraft operations on existing infrastructure, U.S. ADG-V airports accepting scheduled service of ADG-VI aircraft should evaluate their airport infrastructure capabilities to accommodate ADG-VI aircraft. In locations on the airport where ADG-VI aircraft exceeds the infrastructure design, the airport should implement operational mitigations if necessary. These mitigations shall be in place in advance of conducting operations of the ADG-VI aircraft. If it is an alternate airport for ADG-VI aircraft, U.S. airports should only develop an operational plan in the event the aircraft is diverted.

c) Foreign Air Carrier and POI Actions. Prior to initiating service to any ADG-V/ICAO Code E airport with an aircraft designed for ADG-VI/ICAO Code F, the foreign air carrier must supply the POI with the following:

- State of the Operator authorization;
- Evidence that the requirements of C091 were met for the proposed runway(s) of operations at those airports, including potential alternates;
- For destination airports, U.S. airport operational mitigation for that make and model (M/M) (e.g., A380 or B747-8) or documentation that a mitigation evaluation was performed and not necessary (see subparagraph h) below); and
- For alternate airports, the process the foreign air carrier used to evaluate the airport to ensure it could accommodate the aircraft.

1) It is the foreign air carrier's responsibility to confirm that they can comply with the requirements of C091 and supply the POI with sufficient documentation to verify their compliance. The foreign air carrier is responsible for any necessary coordination and letters of understanding with applicable ATC facilities and the airport operators to meet the requirements of C091. For scheduled destination U.S. airports serving ADG-VI/ICAO Code F airplanes, taxi routes used and procedures to follow will be established in a written Taxi Operational Plan approved by the airport operator, ATC, and local control. Taxi Operational Plans may be applicable to:

- A specific foreign air carrier;
- All operators of a specific type of ADG-VI/ICAO Code F airplane (e.g., all A380s serving that airport); or
- All ADG-VI/ICAO Code F airplanes serving the airport (e.g., all A380s and B747-8s).

2) The POI should provide the foreign air carrier, ATC facility, or airport operator with support as necessary to comply with the requirements of C091. Information, to include a list of questions and answers, a list of POCs, and other helpful information, is located at https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afx/afs/afs050/afs052/. A list of airports with MoSs for the A380 and B747-8 is located at https://www.faa.gov/airports/engineering/nla_mos/.

Note: The foreign air carrier's compliance with the requirements of C091 eliminates them from having to demonstrate their capability to operate to the lower criteria specified in C091 prior to issuing C091 for that aircraft and airport combination.

d) ADG-VI/ICAO Code F Aircraft. ADG-VI/ICAO Code F specifies that the required runway width be at least 200 ft (60 m), while ADG-V/ICAO Code E specifies that the runway width be at least 150 ft (45 m). Currently, examples of ADG-VI/ICAO Code F aircraft include, but are not limited to:

- A380.

- AN-124.
- AN-225.
- B747-8.
- B777-8.
- B777-9.

e) B747-8 Limitations. The following limitations apply to B747-8 operations:

1) Runways for takeoffs and landings will be at least 150 ft (45 m) wide.

2) Foreign air carriers must comply with all limitations and procedures specified in the applicable B747-8 AFM for lightweight and aft center of gravity (CG) takeoffs.

3) In accordance with FAA Airports Engineering Brief No. 74A, Use of 150-Foot (45-M) Wide Runways and Blast Pads for Boeing 747-8 Operations, the 35-ft standard stabilized runway shoulder width for ADG-V does not need to increase to the ADG-VI standard of 40 ft.

f) A380 Limitations. The following limitations apply to A380 operations:

1) The overall runway plus shoulder width is 280 ft (85 m) for U.S. ADG-VI and 250 ft (75 m) for ICAO Code F. In order to reduce the jet blast impact to 150 ft (45 m) of runway surface, the FAA recommends stabilized shoulders beyond the runway edge. The FAA 150 ft runway (width) evaluation for the A380, along with the recommendations for these operations contained in ICAO Annex 14 and the A380 AFM has led to the following runway width authorization for A380 operation in the United States:

a. Runways for takeoffs and landings will be at least 150 ft (45 m) wide with stabilized runway shoulders on both sides of the runway extending an additional 50 ft (15 m) outward from the runway edge. The additional safety width is prescribed because the standard ADG-V runway shoulder width is only 35 ft (10 m).

b. Runways as narrow as 150 ft (45 m) wide, with or without the 35 ft (10 m) wide stabilized shoulders, may be used for takeoffs and landings provided applicable flight manual procedures for takeoffs on such runways are followed. Procedures must be implemented for the full length of the runway to be inspected by the airport operator for foreign object damage (FOD) after each takeoff prior to successive aircraft operations.

Note: Only the airport operator conducts runway inspections for FOD. Hence, the foreign air carrier should make sure, or have some documentation, that the airport operator will do it. The document is the required Federal Airport Certification Manual under part 139.

2) The hold-short lines or hold position must expand outward from the 280-ft point by 1 ft for every 100 ft the runway threshold elevation is above sea level. For example, a threshold elevation of 5,000 ft above mean sea level (MSL) requires an additional 50 ft. Thus, the hold-short lines or hold position can be no closer than 330 ft (280 ft + 50 ft) from the RCL. This is to address the hold position of aircraft when an A380 is on final approach and is a standard per

AC 150/5300-13. Specifically, so that if the A380 has to go-around (balked landing), then the lateral area on both sides of the runway is clear of obstacles so that if the A380 deviates left or right during the go-around maneuver (balked landing), its wing tips will not strike anything.

g) AN-124 and AN-225 Limitation. Operation of the AN-124 and AN-225 is limited to runways that are at least 150 ft (45 m) wide.

h) B777-8 and B777-9 Limitations. Operation of the B777-8 and B777-9 is limited to runways that are at least 150 ft (45 m) wide. At certain U.S. airports, aircraft may not require operational mitigations per subparagraph b)2), depending on the airport, airport geometry, and aircraft operator procedures. PIs can reach out to the Airports District Office (ADO) responsible for the airport for information on operational mitigations, if available. The airlines should remain the primary channel, but the PIs can contact ADOs as needed for additional or supporting information. ADO contact information may be found at https://www.faa.gov/airports/news_information/contact_info/regional/. All airports need to have a standard operating procedure (SOP) for non-nominal operations with the airport operator. A Letter of Agreement with tower/air traffic should be included with the SOP. Non-nominal operations are operations where the aircraft is approved for the airport for folded wingtip taxi after landing and the operator after landing cannot get the wingtips to fold (for taxi). In this scenario, the airport should have a plan in place so the tower/air traffic/airport operations know how to move the aircraft to its destination on the airport (e.g., will a “follow-me” vehicle be needed?).

OPSPEC C381—SPECIAL INSTRUMENT AND RNAV VISUAL FLIGHT PROCEDURES. DECOMMISSIONED.

OPSPEC C384—RNP AR—AREA NAVIGATION (RNAV) REQUIRED NAVIGATION PERFORMANCE (RNP) AUTHORIZATION REQUIRED (AR) (OPTIONAL FOR FOREIGN AIR CARRIERS OPERATING TO THE UNITED STATES).

a) General. The FAA authorizes RNP AR to U.S. airports in accordance with § 129.9 by issuance of OpSpec C384. C384 is used to authorize foreign air carriers to conduct RNP AR IAP and DPs. These approaches have been published in accordance with part 97 and are charted as “RNAV (RNP) RWY XX,” hereinafter referred to as RNP AR IAP; and “Procedure Name (RNP),” hereinafter referred to as RNP AR DP.

Note: RNP AR IAP authorization is a requirement for RNP AR DP approval.

b) Criteria Acceptable to the FAA. The FAA issues C384 for RNP AR procedures in accordance with, but not limited to, one of the documents listed below. PIs must coordinate all acceptable criteria with AFS-50 who will coordinate with AFS-400.

1) ICAO Doc 9613, Performance-based Navigation (PBN) Manual.

2) EASA Acceptable Means of Compliance (AMC) 20-26, Airworthiness Approval and Operational Criteria for RNP Authorisation Required (RNP AR) Operations.

3) If adopted by the CAA, equivalent standards to AC 90-101, Approval Guidance for RNP Procedures with AR.

c) Alternative Method. AC 90-101 provides an acceptable method of compliance with public RNP AR requirements. In lieu of following this method without deviation, foreign air carriers may elect to follow an alternative method, provided the alternative method is also found to be acceptable to the FAA.

d) C384 Application Process. Complete operational approval guidance for RNP AR procedures is found in AC 90-101 and AC 20-138, Airworthiness Approval of Positioning and Navigation Systems.

e) Foreign Air Carrier Actions. Foreign air carriers are encouraged to use the RNP AR Application Guide to expedite the submission and approval of their application. The application guide may be found at https://www.faa.gov/sites/faa.gov/files/about/office_org/headquarters_offices/avs/RNP_AR_AG.pdf. The foreign air carrier should apply for RNP AR/C384 either through the Operations Approval Portal System (OAPS) or directly to their PI. The foreign air carrier applying for RNP AR/C384 must provide the responsible IFO with evidence that the State of the Operator has approved the carrier for RNP AR. If the foreign air carrier is using the RNP AR Application Guide, this should be provided with the application.

f) PI Actions.

1) Kickoff Meeting. PIs must contact AFS-410 to schedule an RNP AR/C384 kickoff meeting. During the kickoff meeting, the application process, required documentation, aircraft eligibility requirements, operational requirements, training requirements, the Navigation Database Management process, RNP AR monitoring program, future hardware and software modifications, and an estimated timeline will be discussed. The kickoff meeting will be accomplished over telephone or video conference and will be attended by the operator, the PI, AFS-410B, and the Aircraft Certification Service's Aircraft Information Systems Section (AIR-622). The kickoff meeting will also review the use of the optional RNP AR Application Guide as well as use of OAPS.

2) Nonstandard OpSpec. Because C384 is a 300-series OpSpec, it is considered a nonstandard OpSpec and the PI must follow the procedures for requesting a nonstandard OpSpec in accordance with the policy in Volume 12, Chapter 4, Section 1, paragraph 1.9.4.

3) Application in OAPS. If the foreign air carrier has not applied through OAPS, the PI must enter the RNP AR application into OAPS. The PI should ensure that the OAPS application includes:

a. The RNP AR Application Guide, if applicable.

b. Documentation from the State of the Operator showing approval for RNP AR.

c. The request memo for a nonstandard OpSpec in subparagraph e)2) above.

4) AFS-410B and AIR-622 Actions. Upon receipt of all application documents, AFS-410B and AIR-622 will conduct a thorough review of the operator's application. If additional documentation is needed in order to process the application, a request for these documents will be made to the operator through the PI. Once the application has been reviewed

and approval is recommended, AFS-410B will indicate concurrence via email to AFS-50. AFS-50 will send a concurrence email to the IFO manager in accordance with Volume 12, Chapter 4, Section 1, paragraph 1.9.4.

5) Authorization. Upon receipt of concurrence, the PI may issue OpSpec C384 to the foreign air carrier. The OpSpec must be issued and signed in accordance with the policy in Volume 12, Chapter 4, Section 1, paragraph 1.9.4. The C384 OpSpec should be filled out using the instructions in Figure 4-4K below.

g) Amendment of Existing C384. The POI and PAI must coordinate any amendments to an existing C384, initiated by either the operator or the IFO, with AFS-400 and AFS-50. The POI or PAI should email the details of the amendment to AFS-400 and copy AFS-50. AFS-400 will determine if a full application or abbreviated application is needed.

1) Full Application. If AFS-400 determines that a full application is needed for the amendment, they will instruct the POI and PAI to follow the procedures in subparagraphs d) and e) above.

2) Abbreviated Application. If AFS-400 determines that only an abbreviated application is needed, they will provide the POI and PAI a listing of the information needed from the operator or the IFO. The information between all parties can be exchanged via email. Once AFS-400 has reviewed the information and made a determination, they will send an email to the POI and PAI and copy AFS-50 indicating concurrence or nonconcurrence for the OpSpec amendment.

a. If concurrence is received, the POI or PAI will issue the OpSpec amendment in accordance with the policy in Volume 12, Chapter 4, Section 1, paragraph 1.9.4.

b. If nonconcurrence is received, the POI or PAI will inform the operator that the amendment has been denied.

Figure 4-4K. Sample C384 Table 1 – Aircraft and Navigation Systems Eligible for RNP Procedures with AR

Aircraft M/M/S[1]	Navigation System[2]		Limitations[3]	Autopilot Coupled or Flight Director Required[4]	Lowest RNP[5]	Additional Aircraft Capabilities
	M/M	Software Version				
			Not authorized to use temperature compensation system. Not authorized procedures with missed approaches requiring RNP less than 1.0. None	Autopilot Coupled with Flight Director Autopilot and/or Flight Director Flight Director only	With Flight Director: 0.1 RNP With Autopilot: 0.1 RNP Missed Approach: 0.3 RNP	RF Legs[6] Missed approach requiring less than RNP 1.0.

[1] Enter the aircraft M/M/S authorized for RNP AR into the United States.

[2] Enter the specific navigation system manufacturer, model, and current software version.

[3] Enter any additional limitations from the AFS-400 concurrence memo. If there are no limitations, enter "None" (do not leave the column blank).

[4] Enter autopilot or FD requirement. RNP AR procedures with RNP values less than RNP 0.3 or with RF legs require the use of autopilot or FD driven by the RNAV system in all cases. In the column labeled "Autopilot Coupled or Flight Director Required," select one of the following in accordance with the aircraft/navigation system qualification:

- "Autopilot Coupled with Flight Director," or
- "Flight Director Only."

PIs may also select "Autopilot and/or Flight Director" if AFS-50 concurrence was received and the foreign air carrier will be training their flightcrews for both autopilot and FD to that RNP value.

[5] Enter the lowest RNP value for which the operator is authorized from the AFS-400 concurrence memo.

[6] Since all operators in U.S. airspace must have RF leg capability, the "RF Legs" option on the "Additional Aircraft Capabilities" dropdown list must be selected for all foreign air carriers to whom C384 is issued. Any foreign air carrier who does not have RF leg capability must not be issued C384.