NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

N 8900.758

National Policy

Effective Date:
12/29/25

Cancellation Date:
12/29/26

SUBJ: New B033 Authorization, Revision to A002 Authorization, and Decommissioning of B031, B032, B034, and B035 Authorizations

1. Purpose of This Notice. This notice announces the introduction of a new Operations Specification (OpSpec)/Management Specification (MSpec)/14 CFR part 125 Letter of Authorization (LOA) B033, IFR En Route Operations, and the corresponding revision to inspector guidance in Federal Aviation Administration (FAA) Order 8900.1. This notice also announces a revision to OpSpec/MSpec/part 125 LOA A002, Definitions and Abbreviations, and the decommissioning of the authorizations listed in Table 1 below. The revisions announced in this notice affect operators under 14 CFR parts 91 subpart K (part 91K), 121, 121/135, 125 (including part 125 Letter of Deviation Authority (LODA) holders), and 135. This notice also requires Safety Assurance offices to notify affected operators about these changes. This notice contains information that is administrative in nature.

Table 1. OpSpecs/MSpecs/Part 125 LOAs Decommissioned by This Notice

Paragraph	Title
B031	Areas of En Route Operation (MSpec title is "IFR En Route Limitations and Provisions")
B032	En Route Limitations and Provisions (MSpec does not exist)
B034	IFR Class I Terminal and En Route Navigation Using Area Navigation Systems
B035	Class I Navigation in the U.S. Class A Airspace Using Area or Long-Range Navigation Systems

2. Audience. The primary audience for this notice is the Flight Standards (FS) Safety Assurance offices' principal inspectors (PI) and aviation safety inspectors (ASI) assigned to operators under 14 CFR parts 91K, 121, 121/135, 125 (including part 125 LODA holders), and 135. The secondary audience includes the Safety Standards and Foundational Business offices. This notice is available to the public for information purposes only. Its content is not legally binding on the public in its own right and will not be relied upon by the Department as a separate basis for affirmative enforcement action or other administrative penalty. Public

conformity with the guidance document is voluntary only; nonconformity will not affect rights and obligations under existing statutes and regulations.

3. Where You Can Find This Notice. You can find this notice on the MyFAA employee website at https://employees.faa.gov/tools_resources/orders_notices and the Dynamic Regulatory System (DRS) at https://drs.faa.gov. Operators and the public can find this notice on the FAA's website at https://www.faa.gov/regulations_policies/orders_notices and DRS.

4. Background. This notice introduces a new instrument flight rules (IFR) en route authorization to replace four existing Class I authorizations. This notice also announces revisions to A002 authorizations. Below is relevant background information.

a. Helicopter Air Ambulance (HAA) and Powered-Lift Terms in A002. The revisions to the A002 authorization shown in Appendices A–F below include new and/or updated terms associated with HAA and powered-lift operations.

b. No 14 CFR Part 91 LOA for B033. In 2020, FS announced the decommissioning of the part 91 LOA B034 in Notice N 8900.539, Decommissioning LOA B034, Navigation Equipment Eligibility to Operate in Terminal and En Route Airspace Designated as P-RNAV and/or B-RNAV/RNAV 5 Airspace, for Part 91. Accordingly, no part 91 LOA is provided for B033.

c. B033 Previously Existed. In 1998, FS announced the withdrawal of OpSpec B033, which had provided limitations and provisions for terminal flight rules. The newly reintroduced OpSpec B033 for 14 CFR parts 121, 121/135, and 135 will therefore have a mandatory revision number that begins with "030." The new OpSpec/MSpec/part 125 LOA B033 for 14 CFR parts 91K, 125, and 125 LODA holders will have the initial release number "000."

d. Related Notices. The following notices affecting operators under 14 CFR parts 91K, 121, 121/135, 125, and 135 were issued concurrently with this notice and include relevant content:

(1) Notice N 8900.759, Editorial Revisions Adopting "Gulf of America" Name in B050. This notice announced revisions to B050 areas with the "Gulf of Mexico" name in them.

(2) Notice N 8900.757, Revised B030, B036, and B039 Authorizations, Decommissioned B054 Authorization for 14 CFR Parts 91K, 121, 121/125, 125, and 135. This notice announces revisions to the B030, B036, and B039 authorizations and decommissions the B054 authorization. This notice affects B050 reference paragraphs.

5. Visual Flight Rules (VFR) En Route Authorizations. The B031 templates decommissioned by this notice included an optional VFR-only en route authorization. Existing B050 template language accommodates such authorizations. PIs with oversight responsibilities for holders of B031 VFR-only authorizations should inform those operators that their en route authorization is now provided via B050.

6. Tables in B034 and B035 Are Removed. Inspectors will note that the new B033 authorization no longer includes tables with Area Navigation (RNAV) equipment listed by aircraft make, model, and series (M/M/S). Such tables were appropriate when RNAV equipment

was originally introduced but are now not necessary. The new B033 templates require appropriate language in approved flight manuals or flight manual supplements that provide documentation of compliance with RNAV 2 and/or Required Navigation Performance (RNP) 2 navigation specifications, as applicable.

7. Revisions to FAA Order 8900.1. FS has revised inspector guidance in Order 8900.1, Volume 3, Chapter 18, Section 4, Part B Operations Specifications—En Route Authorization and Limitations, affecting OpSpecs/MSpecs/LOAs B031, B032, B033, B034, B035, and B050. FS has updated B050 inspector guidance on reference paragraphs and to describe the new use of B050 authorizations for VFR en route operations. FS has also updated inspector guidance in Order 8900.1, Volume 4, Chapter 1, Section 1, General Navigation Concepts, FAA and International Civil Aviation Organization (ICAO) Legal Framework, and Section 2, Air Navigation Approval Requirements, and will separately complete an editorial revision affecting remaining portions of Order 8900.1 to remove obsolete OpSpec names, terms, and designations.

8. Guidance. Appendices to this notice show revised A002 templates and the newly reintroduced B033 templates. This notice contains the following:

Appendix	Authorizing Document	Paragraph	Applicable to Part
A	OpSpec	A002	121
B	OpSpec	A002	125
C	OpSpec	A002	135
D	OpSpec	A002	121/135
E	MSpec	A002	91K
F	LOA	A002	125 LODA holder
G	OpSpec	B033	121
H	OpSpec	B033	125
I	OpSpec	B033	135
J	OpSpec	B033	121/135
K	MSpec	B033	91K
L	LOA	B033	125 LODA holder

9. Action. The revised A002 authorization introduces new definitions and abbreviations. The new B033 authorization replaces authorizations previously provided in B031, B032, B034, and B035. There are administrative impacts to A004, Summary of Special Authorizations and Limitations, and B050, Authorized Areas of En Route Operations, Limitations, and Provisions, authorizations due to this change. Inspectors should complete the actions in subparagraphs b, c, and d below at the same time to ensure there is no gap in authorization and no overlapping authorization.

a. Review Related Notices. Inspectors should review the related notices listed in subparagraph 4d above to determine whether their operators are affected. This review may be helpful in planning reissuance activities.

> **Note:** The notices listed in subparagraph 4d were released concurrently to allow inspectors to update the applicable B050 reference paragraphs and Authorized Areas, and perform one B050 reissuance instead of three. However, due to the large number of revisions, the Safety Assurance System (SAS) Operations Safety System (OPSS) will not have all new templates available until January 16, 2026. Inspectors are advised to wait until then to begin B050 reissuance actions.

b. Decommissioning. Inspectors must archive B031, B032, B034, and B035 (see Table 1) within 12 months of the effective date of this notice, or upon issuing the new B033, whichever comes first.

c. New B033 Issuance. B033 is required for operators under 14 CFR parts 91K, 121, 121/135, 125, and 135 to conduct IFR en route operations and will be a new issuance. Inspectors must complete new issuances within 12 months of the effective date of this notice.

d. A002, A004, and B050 Actions. When issuing B033, inspectors should:

(1) Reissue A002 to reflect the applicable One-Hour Reliable Fix (1HRF) definition.

(2) Reissue A004 to deauthorize B031, B032, B034, and B035 and reflect the new authorizing statements associated with the newly issued B033.

(3) Reissue B050 to include B033 reference paragraphs as applicable and to remove obsolete reference paragraphs.

e. Inform Operators. Inspectors should provide a copy of this notice to advise affected operators of these changes and to update operations guidance, procedures, and/or manuals to avoid use of obsolete designations of OpSpecs/MSpecs/LOAs.

10. Disposition. We are issuing this notice concurrently with corresponding revisions to Order 8900.1. Relevant inspector guidance can thus now be found in Order 8900.1, Volume 3, Chapter 18, Section 4, and in Volume 4, Chapter 1, Sections 1 and 2. Direct questions and comments concerning the information in this notice to the Flight Technologies and Procedures Division (AFS-400) at 202-267-8790 or via email at 9-AWA-AVS-AFS-400-Flight-Technologies-Procedures@faa.gov.

Timothy R. Adams for
Hugh Thomas
Acting Executive Director, Flight Standards Service

Appendix A. Sample OpSpec A002, Definitions and Abbreviations: 14 CFR Part 121

Unless otherwise defined in these operations specifications, all words, phrases, definitions, and abbreviations have identical meanings to those used in Title 14 of the Code of Federal Regulations (14 CFR) and Title 49 of the United States Code as cited in Public Law (PL) 103-272, as amended. Additionally, the definitions listed below are applicable to operations conducted in accordance with these operations specifications.

Term or Terms	Definition
Air Ambulance Aircraft	An aircraft used in air ambulance operations. The aircraft must be equipped with at least medical oxygen, suction, and a stretcher, isolette, or other approved patient restraint/containment device. The aircraft need not be used exclusively as an air ambulance aircraft and the equipment need not be permanently installed.
Air Ambulance Operations	Holding out to the public as willing to provide air transportation to a person with a health condition that requires medical personnel including, but not limited to, advertising, solicitation, or association with a hospital or medical care provider in the following aircraft: 1) Airplanes. Air ambulance operation of an airplane includes: a) Unscheduled air transportation in an airplane of a person(s) with a health condition that requires: i. Medical personnel to provide special care, including, but not limited to, basic life support (BLS) or advanced life support (ALS); and ii. Medical equipment necessary to support the level of care required for the patient(s), such as medical oxygen, suction, and/or a stretcher, isolette, or other approved patient restraint/containment device as determined by a health care provider. 2) Helicopters and Powered-Lift. A flight or sequence of flights with a patient or medical personnel on board for the purpose of medical transportation conducted by a part 135 certificate holder authorized by the Administrator to conduct air ambulance operations. A helicopter or powered-lift air ambulance operation includes, but is not limited to: a) Flights conducted to position the air ambulance at a site where medical personnel, a patient, donor organ, or human tissue will be picked up. b) Flights conducted to reposition an air ambulance after completing transportation of the medical personnel, patient, donor organ, or human tissue transport. c) Flights initiated for the transport of a patient, donor organ, or human tissue that are terminated due to weather or other reasons. (Refer to §§ 135.601 and 194.306(mmm).)

Term or Terms	Definition
Airways Navigation Facilities	Airways navigation facilities are those ICAO standard navigation aids (VOR, VOR/DME, and/or NDB) which are used to establish the en route airway structure within the sovereign airspace of ICAO Member States. These facilities are also used to establish the degree of navigation accuracy required for air traffic control (ATC) and Class I navigation within that airspace.
Approved Unit Load Device (ULD) Cargo	Cargo loaded into a ULD, as defined by National Aerospace Standard (NAS) 3610, SAE Aerospace Standard (AS) 36100, Technical Standard Order (TSO)-C90, or other approval standards, that is approved for carriage within the airplane as specified in the Airplane Flight Manual (AFM)/Weight and Balance Manual (WBM) approved by the type certificate or supplemental type certificate.
Auto Flight Guidance System (AFGS)	Aircraft systems, such as an autopilot, autothrottles, displays, and controls, that are interconnected in such a manner to allow the crew to automatically control the aircraft's lateral and vertical flightpath and speed. A flight management system is sometimes associated with an AFGS.
Automatic Dependent Surveillance (ADS)	A function for use by air traffic services in which the ADS equipment in the aircraft automatically transmits data derived from onboard navigation systems via a datalink. As a minimum, the data include aircraft identification and three-dimensional position. ADS is sometimes referred to as ADS-A or ADS-Contract (e.g., a communications contract between the aircraft communications/surveillance system and an air traffic facility or service provider only).
Automatic Dependent Surveillance-Broadcast (ADS-B)	ADS-B is a function on an aircraft or surface vehicle operating within the surface movement area that periodically broadcasts via datalink its state vector (horizontal and vertical position, horizontal and vertical velocity) and other information. ADS-B is Automatic in that it requires no external stimulus to elicit a transmission. ADS-B is Dependent because it relies on onboard navigation sources. ADS-B Surveillance information is provided, via data link, to any users (either aircraft or ground-based) within range of the Broadcast signal.
Available Landing Distance (ALD)	ALD is that portion of a runway available for landing and rollout for aircraft cleared for land and hold short operations (LAHSO). This distance is measured from the landing threshold to the hold-short point.
Bulk Cargo	Cargo usually transported as individual pieces and loaded into a compartment approved for bulk cargo by the Airplane Flight Manual (AFM)/Weight and Balance Manual (WBM) that is approved by the type certificate or supplemental type certificate. These items are generally loaded planeside and loaded directly into the bulk compartment.
Cargo	Any property carried on an aircraft other than mail, stores, and accompanied or mishandled baggage.
Category I Instrument Approach	A Category I instrument approach is any authorized precision or nonprecision instrument approach which is conducted with a minimum height for IFR flights not less than 200 feet (60 meters) above the touchdown zone and a minimum visibility/RVV not less than 1/2 statute mile or RVR 1800 (for helicopters, or

Term or Terms	Definition
	powered-lift operating in the vertical-lift flight mode, 1/4 statute mile or RVR 1600).
Certificate Holder	In these operations specifications, the term "certificate holder" shall mean the holder of the certificate described in Part A paragraph A001 and any of its officers, employees, or agents used in the conduct of operations under these operations specifications.
Class I Navigation	Class I navigation is any en route flight operation or portion of an operation that is conducted entirely within the designated Operational Service Volumes (or ICAO equivalents) of ICAO standard airway navigation facilities (VOR, VOR/DME, NDB). Class I navigation also includes en route flight operations over routes designated with an "MEA Gap" (or ICAO equivalent). En route flight operations conducted within these areas are defined as "Class I navigation" operations irrespective of the navigation means used. Class I navigation includes operations within these areas using pilotage or any other means of navigation which does not rely on the use of VOR, VOR/DME, or NDB.
Class II Navigation	Class II navigation is any en route flight operation which is not defined as Class I navigation. Class II navigation is any en route flight operation or portion of an en route operation (irrespective of the means of navigation) which takes place outside (beyond) the designated Operational Service Volume (or ICAO equivalents) of ICAO standard airway navigation facilities (VOR, VOR/DME, NDB). However, Class II navigation does not include en route flight operations over routes designated with an "MEA Gap" (or ICAO equivalent).
Cockpit Display of Traffic Information (CDTI)	A CDTI is a generic display that provides a flightcrew with surveillance information about other aircraft including their position. Traffic information for a CDTI may be obtained from one or multiple sources (including ADS-B, TCAS, and traffic information services) to provide improved awareness of proximate aircraft and as an aid to visual acquisition as part of the normal see and avoid operations both in the air and on the ground.
Decision Altitude (Height) (DA(H))	DA(H) is a specified minimum altitude in an instrument approach procedure by which a missed approach must be initiated if the required visual reference to continue the approach has not been established. The 'altitude' value is typically measured by a barometric altimeter; the 'height' value (H) is typically a radio altitude equivalent height above the touchdown zone (HAT) used only for advisory reference and does not necessarily reflect actual height above underlying terrain. [This definition is consistent with both current U.S. operator usage and ICAO international agreements.]
Dual-Certificated-Noise Compliance	For purposes of noise compliance rules, dual-certificated airplanes are those that are certificated to operate in either a Stage 2 or Stage 3 configuration. The only airplanes dual certificated by the FAA were certain Boeing 747s, -300 series or earlier. For noise compliance purposes, these airplanes are considered Stage 2 unless the operator gets a supplemental type certificate to make the airplane Stage 3 only, or unless the operator voluntarily limits the operation to Stage 3 only.

Term or Terms	Definition
Fault Detection and Exclusion (FDE)	FDE technology allows onboard GPS equipment to automatically detect a satellite failure that effects navigation and to exclude that satellite from the navigation solution.
Flight Management Systems (FMS)	An integrated system used by flightcrews for flight planning, navigation, performance management, aircraft guidance, and flight progress monitoring.
Free Flight	A safe and efficient flight operating capability under instrument flight rules (IFR) in which the operators have the freedom to select a path and speed in real time. Air traffic restrictions are imposed only to ensure separation, to preclude exceeding airport capacity, to prevent unauthorized flight through special use airspace, and to ensure safety of flight. Restrictions are limited in extent and duration to correct the identified problem. Any activity that removes restrictions represents a move toward Free Flight.
Global Position System (GPS) Landing System (GLS)	GLS is a differential GPS-based landing system providing both vertical and lateral position fixing capability. The term GLS may also be applied to any GNSS-based differentially corrected landing system.
ILS-PRM	Simultaneous close parallel ILS approaches are enabled through the implementation of special precision runway monitoring (PRM) equipment operated by ATC at certain airfields for specific runways, titled in 14 CFR Part 97 as “ILS PRM.” ILS PRM approaches are conducted between 4,299 and 3,000 feet parallel runway spacing. Runways 3,400 feet or greater apart utilize two parallel ILS courses, aligned with the runway centerlines (RCL). For runways spaced less than 3,400 feet, one ILS is offset 2.5° to 3.0°.
Imported Airplane-Noise Compliance	For purposes of the noise compliance rules, an imported airplane is a Stage 2 airplane of 75,000 pounds or more that was purchased by a U.S. person from a non-U.S. owner on or after November 5, 1990. [Under the nonaddition rule (see 14 CFR Part 91, § 91.855), an imported airplane may not be operated to or from any airport in the contiguous United States. Such airplanes may be owned and registered by U.S. persons but are limited to operation outside the contiguous United States.]
JAA JAR OPS-1	Joint Aviation Authorities (JAA) Joint Aviation Requirements (JAR) operational agreements (OPS). The European JAA adopted common operational guidance for all Member States in order to harmonize the rules within those States. The JAR-OPS-1, is part 1 of the operational agreement and comprises the operational requirements applicable to commercial air transportation fixed wing aircraft.
Life Vest (Non-Quick-Donning)	A non-quick-donning life vest is one which must be removed from its container, placed over the wearer’s head, and/or requires additional steps beyond inflation to make it ready to use for its intended purpose.
Life Vest, Quick-Donning	A quick-donning life vest is fastened around a person in a manner which requires the wearer only to pull on a single tab and lift the life vest over the head. At this point, the life vest needs only to be inflated to be ready to use for its intended purpose.
Local Flying Area	An area designated by the operator in which air ambulance services will be conducted. Each local flying area should be defined in a manner acceptable to the operator, the local Flight Standards District Office, and the Principal

Term or Terms	Definition
	Operations Inspector, taking into account the operating environment, the geographic terrain features, and the capabilities of the aircraft.
Localizer-Type Directional Aid (LDA) PRM	See definition of SOIA.
Major Contract Training	Any flight training, flight testing, or flight checking leading to and maintaining certification and qualification of air carrier flightcrew members in accordance with the requirements (maneuvers and procedures) explicitly stated in 14 CFR Part 61, 121, or 135; or in SFAR 58, Advanced Qualification Program (AQP), as applicable.
Medical Personnel	Individuals with medical training, including but not limited to flight physicians, flight nurses, or flight paramedics, who are carried aboard an air ambulance aircraft during an air ambulance operation in order to provide medical care.
Minimum Descent Altitude (Height) (MDA(H))	MDA(H) is the lowest altitude in an instrument approach procedure to which a descent is authorized on final approach or during circle-to-land maneuvering. The 'altitude' value is typically measured by a barometric altimeter; the 'height' value (H) is typically a radio altitude equivalent height above the touchdown zone (HAT) or height above airport (HAA) published elevation. The (H) is used only for advisory reference and does not necessarily reflect actual height above underlying terrain. [This definition is consistent with both current U.S. operator usage and ICAO international agreements.]
One-Hour Reliable Fix (1HRF) Operations	Operations over land or over water where a reliable ground-based NAVAID fix is available at least once each hour.
Operational Service Volume	The Operational Service Volume is that volume of airspace surrounding a NAVAID which is available for operational use and within which a signal of usable strength exists and where that signal is not operationally limited by co-channel interference. Operational Service Volume includes all of the following: (1) The officially designated Standard Service Volume excluding any portion of the Standard Service Volume which has been restricted. (2) The Expanded Service Volume. (3) Within the United States, any published instrument flight procedure (victor or jet airway, SID, STAR, SIAP, or instrument departure). (4) Outside the United States, any designated signal coverage or published instrument flight procedure equivalent to U.S. standards.
Outsourced Training	Any training, testing, or checking activity which an operator provides by way of a contract arrangement with another party.
Parabolic Flight Operations	Parabolic flight operations are aerobatic maneuvers in which the aircraft is intentionally pitched in excess of 30 degrees above and 30 degrees below the horizon in a repeated fashion for the specific purpose of exposing the participants to reduced or zero gravity conditions.

Term or Terms	Definition
Planned Redispatch or Rerelease En Route	The term "planned redispatch or rerelease en route" means any flag operation (or any supplemental operation that includes a departure or arrival point outside the 48 contiguous United States and the District of Columbia) that is planned before takeoff to be redispatched or rereleased, in accordance with 14 CFR § 121.631(f), at a predetermined point along the route of flight to an airport other than that specified in the original dispatch or flight release.
Polar Area (North)	The north polar area of operations is that area that lies north of latitude N 78º 00'.
Powered-Lift Air Ambulance	A powered-lift that is identified as being capable of air ambulance operations in the certificate holder's operations specifications. It need not be used exclusively as an air ambulance. Air ambulance specific equipment need not be permanently installed.
Qualified Local Observer	A person who provides weather, landing area, and other information as required by the operator, and has been trained by the operator under a training program approved by the Principal Operations Inspector.
Raw Terrain	Raw terrain is devoid of any person, structure, vehicle, or vessel.
Receiver Autonomous Integrity Monitoring (RAIM)	RAIM is a function that considers the availability of satisfactory signal integrity broadcasted from the particular GPS satellites used during a given flight. Onboard GPS navigators accomplish this automatically as the aircraft proceeds along its route. When insufficient signal integrity is detected, an alarm is provided to the flightcrew. Using the predictive RAIM software, flightcrews and dispatchers know in advance whether or not suitable GPS navigation will be available throughout the flight. This predictive information may also be determined during flight planning by contacting an FAA Flight Service Station.
Reliable Fix or Reliable Ground-Based NAVAID Fix	A "reliable fix" or "reliable ground-based NAVAID fix" means station passage of a VOR, VORTAC, or NDB. A reliable fix also includes a VOR/DME fix, an NDB/DME fix, a VOR intersection, an NDB intersection, and a VOR/NDB intersection provided course guidance is available from one of the facilities, and the fix lies within the designated Operational Service Volumes of any facilities which define the fix.
Required Navigation Performance (RNP)	A statement of navigation performance necessary for operations within a defined airspace.
Required Navigation Performance (RNP) Time Limit	Applies to aircraft equipped with INS or IRU systems where those systems provide the means of navigation to navigate to the degree of accuracy required by ATC. The FAA-approved time in hours (after the system is placed in navigation mode or is updated en route) that the specific INS or IRU make/model can meet a specific RNP type on a 95 percent probability basis. It is used to establish the area of operations or routes on which the aircraft/navigation system is qualified to operate.
Required Navigation Performance (RNP) Type	A value typically expressed as a distance in nautical miles (NM) from the intended position within which an aircraft would be for at least 95 percent of the total flying time. For example, RNP 4 represents a lateral and longitudinal navigation accuracy of 4 NM on a 95 percent basis. Note: Applications of RNP to terminal area and other operations may also include a vertical component.

Term or Terms	Definition
RNAV (GPS) PRM	Area Navigation (RNAV) (GPS) PRM approach that may be substituted for an ILS PRM or LDA PRM approach and is procedurally equivalent.
Runway	In these operations specifications, the term "runway" in the case of land airports, water airports, heliports, helipads, and vertiports shall mean that portion of the surface intended for the takeoff and landing of land airplanes, seaplanes, rotorcraft, or powered-lift, as appropriate.
Simultaneous Offset Instrument Approach (SOIA)	This operation comprises one ILS and one LDA with glide slope. The ILS is aligned with its runway, but the LDA serving the second runway is offset (between 2.5° and 3°) from a parallel track. This offset permits simultaneous instrument approach operations to parallel runways spaced less than 3,000 feet apart, but no less than 750 feet. Because of the offset, this operation is also known as an SOIA.
Special Cargo	Cargo that requires special handling and securing/restraining procedures within the limitations specified in the Airplane Flight Manual (AFM)/Weight and Balance Manual (WBM) approved by the type certificate or supplemental type certificate. Special cargo may be enclosed in an approved bulk compartment if the WBM has limitations supporting procedures for securing and restraining the special cargo.
VFR Station-Referenced Class I Navigation	VFR station-referenced Class I navigation is any operation conducted within the Operational Service Volumes of ICAO standard navigation aids under visual flight rules (VFR) which uses nonvisual navigation aids (stations), such as VOR, VOR/DME, or NDB as the primary navigation reference. VFR station-referenced Class I navigation includes Class I navigation conducted on-airways and off-airway routings predicated on airways navigation facilities. These operations also include Class I navigation using an Area Navigation (RNAV) system which is certificated for IFR flights over the routes being flown.
Wide Area Augmentation System (WAAS)	WAAS has been developed to improve the accuracy, integrity, availability, and reliability of GPS signals. WAAS utilizes a fixed localized ground station to calculate GPS integrity and correction data, then broadcasts this information through the GPS satellites to GPS/WAAS users along with ranging signals. It is a safety critical system consisting of a ground network of reference and integrity monitor data processing sites which assess current GPS performance, as well as a space segment that broadcasts that assessment to GNSS users to support IFR navigation.

Appendix B. Sample OpSpec A002, Definitions and Abbreviations: 14 CFR Part 125

Unless otherwise defined in these operations specifications, all words, phrases, definitions, and abbreviations have identical meanings to those used in Title 14 of the Code of Federal Regulations (14 CFR) and Title 49 of the United States Code as cited in Public Law (PL) 103-272, as amended. Additionally, the definitions listed below are applicable to operations conducted in accordance with these operations specifications.

Term or Terms	Definition
Airways Navigation Facilities	Airways navigation facilities are those ICAO standard navigation aids (VOR, VOR/DME, and/or NDB) which are used to establish the en route airway structure within the sovereign airspace of ICAO Member States. These facilities are also used to establish the degree of navigation accuracy required for air traffic control (ATC) and Class I navigation within that airspace.
Approved Unit Load Device (ULD) Cargo	Cargo loaded into a ULD, as defined by National Aerospace Standard (NAS) 3610, SAE Aerospace Standard (AS) 36100, Technical Standard Order (TSO)-C90, or other approval standards, that is approved for carriage within the airplane as specified in the Airplane Flight Manual (AFM)/Weight and Balance Manual (WBM) approved by the type certificate or supplemental type certificate.
Auto Flight Guidance System (AFGS)	Aircraft systems, such as an autopilot, autothrottles, displays, and controls, that are interconnected in such a manner to allow the crew to automatically control the aircraft's lateral and vertical flightpath and speed. A flight management system is sometimes associated with an AFGS.
Automatic Dependent Surveillance (ADS)	A function for use by air traffic services in which the ADS equipment in the aircraft automatically transmits data derived from onboard navigation systems via a datalink. As a minimum, the data include aircraft identification and three-dimensional position. ADS is sometimes referred to as ADS-A or ADS-Contract (e.g., a communications contract between the aircraft communications/surveillance system and an air traffic facility or service provider only).
Automatic Dependent Surveillance-Broadcast (ADS-B)	ADS-B is a function on an aircraft or surface vehicle operating within the surface movement area that periodically broadcasts via datalink its state vector (horizontal and vertical position, horizontal and vertical velocity) and other information. ADS-B is Automatic in that it requires no external stimulus to elicit a transmission. ADS-B is Dependent because it relies on onboard navigation sources. ADS-B Surveillance information is provided, via data link, to any users (either aircraft or ground-based) within range of the Broadcast signal.
Available Landing Distance (ALD)	ALD is that portion of a runway available for landing and rollout for aircraft cleared for land and hold short operations (LAHSO). This distance is measured from the landing threshold to the hold-short point.
Bulk Cargo	Cargo usually transported as individual pieces and loaded into a compartment approved for bulk cargo by the Airplane Flight Manual (AFM)/Weight and Balance Manual (WBM) that is approved by the type certificate or

Term or Terms	Definition
	supplemental type certificate. These items are generally loaded planeside and loaded directly into the bulk compartment.
Cargo	Any property carried on an aircraft other than mail, stores, and accompanied or mishandled baggage.
Category I Instrument Approach	A Category I instrument approach is any authorized precision or nonprecision instrument approach which is conducted with a minimum height for IFR flights not less than 200 feet (60 meters) above the touchdown zone and a minimum visibility/RVV not less than 1/2 statute mile or RVR 1800 (for helicopters, or powered-lift operating in the vertical-lift flight mode, 1/4 statute mile or RVR 1600).
Certificate Holder	In these operations specifications, the term “certificate holder” shall mean the holder of the certificate described in Part A paragraph A001 and any of its officers, employees, or agents used in the conduct of operations under these operations specifications.
Class I Navigation	Class I navigation is any en route flight operation or portion of an operation that is conducted entirely within the designated Operational Service Volumes (or ICAO equivalents) of ICAO standard airway navigation facilities (VOR, VOR/DME, NDB). Class I navigation also includes en route flight operations over routes designated with an “MEA Gap” (or ICAO equivalent). En route flight operations conducted within these areas are defined as “Class I navigation” operations irrespective of the navigation means used. Class I navigation includes operations within these areas using pilotage or any other means of navigation which does not rely on the use of VOR, VOR/DME, or NDB.
Class II Navigation	Class II navigation is any en route flight operation which is not defined as Class I navigation. Class II navigation is any en route flight operation or portion of an en route operation (irrespective of the means of navigation) which takes place outside (beyond) the designated Operational Service Volume (or ICAO equivalents) of ICAO standard airway navigation facilities (VOR, VOR/DME, NDB). However, Class II navigation does not include en route flight operations over routes designated with an “MEA Gap” (or ICAO equivalent).
Cockpit Display of Traffic Information (CDTI)	A CDTI is a generic display that provides a flightcrew with surveillance information about other aircraft including their position. Traffic information for a CDTI may be obtained from one or multiple sources (including ADS-B, TCAS, and traffic information services) to provide improved awareness of proximate aircraft and as an aid to visual acquisition as part of the normal see and avoid operations both in the air and on the ground.
Decision Altitude (Height) (DA(H))	DA(H) is a specified minimum altitude in an instrument approach procedure by which a missed approach must be initiated if the required visual reference to continue the approach has not been established. The ‘altitude’ value is typically measured by a barometric altimeter; the ‘height’ value (H) is typically a radio altitude equivalent height above the touchdown zone (HAT) used only for advisory reference and does not necessarily reflect actual height above underlying terrain. [This definition is consistent with both current U.S. operator usage and ICAO international agreements.]

Term or Terms	Definition
Dual-Certificated-Noise Compliance	For purposes of noise compliance rules, dual-certificated airplanes are those that are certificated to operate in either a Stage 2 or Stage 3 configuration. The only airplanes dual certificated by the FAA were certain Boeing 747s, -300 series or earlier. For noise compliance purposes, these airplanes are considered Stage 2 unless the operator gets a supplemental type certificate to make the airplane Stage 3 only, or unless the operator voluntarily limits the operation to Stage 3 only.
Fault Detection and Exclusion (FDE)	FDE technology allows onboard GPS equipment to automatically detect a satellite failure that effects navigation and to exclude that satellite from the navigation solution.
Flight Management Systems (FMS)	An integrated system used by flightcrews for flight planning, navigation, performance management, aircraft guidance, and flight progress monitoring.
Free Flight	A safe and efficient flight operating capability under instrument flight rules (IFR) in which the operators have the freedom to select a path and speed in real time. Air traffic restrictions are imposed only to ensure separation, to preclude exceeding airport capacity, to prevent unauthorized flight through special use airspace, and to ensure safety of flight. Restrictions are limited in extent and duration to correct the identified problem. Any activity that removes restrictions represents a move toward Free Flight.
Global Position System (GPS) Landing System (GLS)	GLS is a differential GPS-based landing system providing both vertical and lateral position fixing capability. The term GLS may also be applied to any GNSS-based differentially corrected landing system.
ILS-PRM	Simultaneous close parallel ILS approaches are enabled through the implementation of special precision runway monitoring (PRM) equipment operated by ATC at certain airfields for specific runways, titled in 14 CFR Part 97 as “ILS PRM.” ILS PRM approaches are conducted between 4,299 and 3,000 feet parallel runway spacing. Runways 3,400 feet or greater apart utilize two parallel ILS courses, aligned with the runway centerlines (RCL). For runways spaced less than 3,400 feet, one ILS is offset 2.5° to 3.0°.
Imported Airplane-Noise Compliance	For purposes of the noise compliance rules, an imported airplane is a Stage 2 airplane of 75,000 pounds or more that was purchased by a U.S. person from a non-U.S. owner on or after November 5, 1990. [Under the nonaddition rule (see 14 CFR Part 91, § 91.855), an imported airplane may not be operated to or from any airport in the contiguous United States. Such airplanes may be owned and registered by U.S. persons but are limited to operation outside the contiguous United States.]
JAA JAR OPS-1	Joint Aviation Authorities (JAA) Joint Aviation Requirements (JAR) operational agreements (OPS). The European JAA adopted common operational guidance for all Member States in order to harmonize the rules within those States. The JAR-OPS-1, is part 1 of the operational agreement and comprises the operational requirements applicable to commercial air transportation fixed wing aircraft.
Life Vest (Non-Quick-Donning)	A non-quick-donning life vest is one which must be removed from its container, placed over the wearer’s head, and/or requires additional steps beyond inflation to make it ready to use for its intended purpose.

Term or Terms	Definition
Life Vest, Quick-Donning	A quick-donning life vest is fastened around a person in a manner which requires the wearer only to pull on a single tab and lift the life vest over the head. At this point, the life vest needs only to be inflated to be ready to use for its intended purpose.
Localizer-Type Directional Aid (LDA) PRM	See definition of SOIA.
Major Contract Training	Any flight training, flight testing, or flight checking leading to and maintaining certification and qualification of air carrier flightcrew members in accordance with the requirements (maneuvers and procedures) explicitly stated in 14 CFR Part 61, 91K, 121, 135, or 194, as applicable.
Minimum Descent Altitude (Height) (MDA(H))	MDA(H) is the lowest altitude in an instrument approach procedure to which a descent is authorized on final approach or during circle-to-land maneuvering. The 'altitude' value is typically measured by a barometric altimeter; the 'height' value (H) is typically a radio altitude equivalent height above the touchdown zone (HAT) or height above airport (HAA) published elevation. The (H) is used only for advisory reference and does not necessarily reflect actual height above underlying terrain. [This definition is consistent with both current U.S. operator usage and ICAO international agreements.]
One-Hour Reliable Fix (1HRF) Operations	Operations over land or over water where a reliable ground-based NAVAID fix is available at least once each hour.
Operational Service Volume	The Operational Service Volume is that volume of airspace surrounding a NAVAID which is available for operational use and within which a signal of usable strength exists and where that signal is not operationally limited by co-channel interference. Operational Service Volume includes all of the following: (1) The officially designated Standard Service Volume excluding any portion of the Standard Service Volume which has been restricted. (2) The Expanded Service Volume. (3) Within the United States, any published instrument flight procedure (victor or jet airway, SID, STAR, SIAP, or instrument departure). (4) Outside the United States, any designated signal coverage or published instrument flight procedure equivalent to U.S. standards.
Outsourced Training	Any training, testing, or checking activity which an operator provides by way of a contract arrangement with another party.
Parabolic Flight Operations	Parabolic flight operations are aerobatic maneuvers in which the aircraft is intentionally pitched in excess of 30 degrees above and 30 degrees below the horizon in a repeated fashion for the specific purpose of exposing the participants to reduced or zero gravity conditions.
Planned Redispatch or Rerelease En Route	The term "planned redispatch or rerelease en route" means any flag operation (or any supplemental operation that includes a departure or arrival point outside the 48 contiguous United States and the District of Columbia) that is planned before takeoff to be redispatched or rereleased, in accordance with 14 CFR

Term or Terms	Definition
	§ 121.631(f), at a predetermined point along the route of flight to an airport other than that specified in the original dispatch or flight release.
Polar Area (North)	The north polar area of operations is that area that lies north of latitude N 78º 00'.
Qualified Local Observer	A person who provides weather, landing area, and other information as required by the operator, and has been trained by the operator under a training program approved by the Principal Operations Inspector.
Raw Terrain	Raw terrain is devoid of any person, structure, vehicle, or vessel.
Receiver Autonomous Integrity Monitoring (RAIM)	RAIM is a function that considers the availability of satisfactory signal integrity broadcasted from the particular GPS satellites used during a given flight. Onboard GPS navigators accomplish this automatically as the aircraft proceeds along its route. When insufficient signal integrity is detected, an alarm is provided to the flightcrew. Using the predictive RAIM software, flightcrews and dispatchers know in advance whether or not suitable GPS navigation will be available throughout the flight. This predictive information may also be determined during flight planning by contacting an FAA Flight Service Station.
Reliable Fix or Reliable Ground-Based NAVAID Fix	A “reliable fix” or “reliable ground-based NAVAID fix” means station passage of a VOR, VORTAC, or NDB. A reliable fix also includes a VOR/DME fix, an NDB/DME fix, a VOR intersection, an NDB intersection, and a VOR/NDB intersection provided course guidance is available from one of the facilities, and the fix lies within the designated Operational Service Volumes of any facilities which define the fix.
Required Navigation Performance (RNP)	A statement of navigation performance necessary for operations within a defined airspace.
Required Navigation Performance (RNP) Time Limit	Applies to aircraft equipped with INS or IRU systems where those systems provide the means of navigation to navigate to the degree of accuracy required by ATC. The FAA-approved time in hours (after the system is placed in navigation mode or is updated en route) that the specific INS or IRU make/model can meet a specific RNP type on a 95 percent probability basis. It is used to establish the area of operations or routes on which the aircraft/navigation system is qualified to operate.
Required Navigation Performance (RNP) Type	A value typically expressed as a distance in nautical miles (NM) from the intended position within which an aircraft would be for at least 95 percent of the total flying time. For example, RNP 4 represents a lateral and longitudinal navigation accuracy of 4 NM on a 95 percent basis. Note: Applications of RNP to terminal area and other operations may also include a vertical component.
RNAV (GPS) PRM	Area Navigation (RNAV) (GPS) PRM approach that may be substituted for an ILS PRM or LDA PRM approach and is procedurally equivalent.
Runway	In these operations specifications, the term “runway” in the case of land airports, water airports, heliports, helipads, and vertiports shall mean that portion of the surface intended for the takeoff and landing of land airplanes, seaplanes, rotorcraft, or powered-lift, as appropriate.

Term or Terms	Definition
Simultaneous Offset Instrument Approach (SOIA)	This operation comprises one ILS and one LDA with glide slope. The ILS is aligned with its runway, but the LDA serving the second runway is offset (between 2.5° and 3°) from a parallel track. This offset permits simultaneous instrument approach operations to parallel runways spaced less than 3,000 feet apart, but no less than 750 feet. Because of the offset, this operation is also known as an SOIA.
Special Cargo	Cargo that requires special handling and securing/restraining procedures within the limitations specified in the Airplane Flight Manual (AFM)/Weight and Balance Manual (WBM) approved by the type certificate or supplemental type certificate. Special cargo may be enclosed in an approved bulk compartment if the WBM has limitations supporting procedures for securing and restraining the special cargo.
VFR Station-Referenced Class I Navigation	VFR station-referenced Class I navigation is any operation conducted within the Operational Service Volumes of ICAO standard navigation aids under visual flight rules (VFR) which uses nonvisual navigation aids (stations), such as VOR, VOR/DME, or NDB as the primary navigation reference. VFR station-referenced Class I navigation includes Class I navigation conducted on-airways and off-airway routings predicated on airways navigation facilities. These operations also include Class I navigation using an Area Navigation (RNAV) system which is certificated for IFR flights over the routes being flown.
Wide Area Augmentation System (WAAS)	WAAS has been developed to improve the accuracy, integrity, availability, and reliability of GPS signals. WAAS utilizes a fixed localized ground station to calculate GPS integrity and correction data, then broadcasts this information through the GPS satellites to GPS/WAAS users along with ranging signals. It is a safety critical system consisting of a ground network of reference and integrity monitor data processing sites which assess current GPS performance, as well as a space segment that broadcasts that assessment to GNSS users to support IFR navigation.

Appendix C. Sample OpSpec A002, Definitions and Abbreviations: 14 CFR Part 135

Unless otherwise defined in these operations specifications, all words, phrases, definitions, and abbreviations have identical meanings to those used in Title 14 of the Code of Federal Regulations (14 CFR) and Title 49 of the United States Code as cited in Public Law (PL) 103-272, as amended. Additionally, the definitions listed below are applicable to operations conducted in accordance with these operations specifications.

Term or Terms	Definition
Agent(s)	The significance of the words "agent" and "agents" as used in these operations specifications is that the certificate holder is the principal and that the certificate holder is accountable and liable for the acts or omissions of each of its agent or agents.
Air Ambulance Aircraft	An aircraft used in air ambulance operations. The aircraft must be equipped with at least medical oxygen, suction, and a stretcher, isolette, or other approved patient restraint/containment device. The aircraft need not be used exclusively as an air ambulance aircraft and the equipment need not be permanently installed.
Air Ambulance Operations	Holding out to the public as willing to provide air transportation to a person with a health condition that requires medical personnel including, but not limited to, advertising, solicitation, or association with a hospital or medical care provider in the following aircraft: 1) Airplanes. Air ambulance operation of an airplane includes: a) Unscheduled air transportation in an airplane of a person(s) with a health condition that requires: i. Medical personnel to provide special care, including, but not limited to, basic life support (BLS) or advanced life support (ALS); and ii. Medical equipment necessary to support the level of care required for the patient(s), such as medical oxygen, suction, and/or a stretcher, isolette, or other approved patient restraint/containment device as determined by a health care provider. 2) Helicopters and Powered-Lift. A flight or sequence of flights with a patient or medical personnel on board for the purpose of medical transportation conducted by a part 135 certificate holder authorized by the Administrator to conduct air ambulance operations. A helicopter or powered-lift air ambulance operation includes, but is not limited to: a) Flights conducted to position the air ambulance at a site where medical personnel, a patient, donor organ, or human tissue will be picked up. b) Flights conducted to reposition an air ambulance after completing transportation of the medical personnel, patient, donor organ, or human tissue transport.

Term or Terms	Definition
	c) Flights initiated for the transport of a patient, donor organ, or human tissue that are terminated due to weather or other reasons. (Refer to §§ 135.601 and 194.306(mmm).)
Airways Navigation Facilities	Airways navigation facilities are those ICAO standard navigation aids (VOR, VOR/DME, and/or NDB) which are used to establish the en route airway structure within the sovereign airspace of ICAO Member States. These facilities are also used to establish the degree of navigation accuracy required for air traffic control (ATC) and Class I navigation within that airspace.
Approved Unit Load Device (ULD) Cargo	Cargo loaded into a ULD, as defined by National Aerospace Standard (NAS) 3610, SAE Aerospace Standard (AS) 36100, Technical Standard Order (TSO)-C90, or other approval standards, that is approved for carriage within the airplane as specified in the Airplane Flight Manual (AFM)/Weight and Balance Manual (WBM) approved by the type certificate or supplemental type certificate.
Authority	A power that a person is vested with.
Auto Flight Guidance System (AFGS)	Aircraft systems, such as an autopilot, autothrottles, displays, and controls, that are interconnected in such a manner to allow the crew to automatically control the aircraft's lateral and vertical flightpath and speed. A flight management system is sometimes associated with an AFGS.
Automatic Dependent Surveillance (ADS)	A function for use by air traffic services in which the ADS equipment in the aircraft automatically transmits data derived from onboard navigation systems via a datalink. As a minimum, the data include aircraft identification and three-dimensional position. ADS is sometimes referred to as ADS-A or ADS-Contract (e.g., a communications contract between the aircraft communications/surveillance system and an air traffic facility or service provider only).
Automatic Dependent Surveillance-Broadcast (ADS-B)	ADS-B is a function on an aircraft or surface vehicle operating within the surface movement area that periodically broadcasts via datalink its state vector (horizontal and vertical position, horizontal and vertical velocity) and other information. ADS-B is Automatic in that it requires no external stimulus to elicit a transmission. ADS-B is Dependent because it relies on onboard navigation sources. ADS-B Surveillance information is provided, via data link, to any users (either aircraft or ground-based) within range of the Broadcast signal.
Available Landing Distance (ALD)	ALD is that portion of a runway available for landing and rollout for aircraft cleared for land and hold short operations (LAHSO). This distance is measured from the landing threshold to the hold-short point.
Bulk Cargo	Cargo usually transported as individual pieces and loaded into a compartment approved for bulk cargo by the Airplane Flight Manual (AFM)/Weight and Balance Manual (WBM) that is approved by the type certificate or supplemental type certificate. These items are generally loaded planeside and loaded directly into the bulk compartment.
Cargo	Any property carried on an aircraft other than mail, stores, and accompanied or mishandled baggage.

Term or Terms	Definition
Category I Instrument Approach	A Category I instrument approach is any authorized precision or nonprecision instrument approach which is conducted with a minimum height for IFR flights not less than 200 feet (60 meters) above the touchdown zone and a minimum visibility/RVV not less than 1/2 statute mile or RVR 1800 (for helicopters, or powered-lift operating in the vertical-lift flight mode, 1/4 statute mile or RVR 1600).
Certificate Holder	In these operations specifications, the term "certificate holder" shall mean the holder of the certificate described in Part A paragraph A001 and any of its officers, employees, or agents used in the conduct of operations under these operations specifications.
Class I Navigation	Class I navigation is any en route flight operation or portion of an operation that is conducted entirely within the designated Operational Service Volumes (or ICAO equivalents) of ICAO standard airway navigation facilities (VOR, VOR/DME, NDB). Class I navigation also includes en route flight operations over routes designated with an "MEA Gap" (or ICAO equivalent). En route flight operations conducted within these areas are defined as "Class I navigation" operations irrespective of the navigation means used. Class I navigation includes operations within these areas using pilotage or any other means of navigation which does not rely on the use of VOR, VOR/DME, or NDB.
Class II Navigation	Class II navigation is any en route flight operation which is not defined as Class I navigation. Class II navigation is any en route flight operation or portion of an en route operation (irrespective of the means of navigation) which takes place outside (beyond) the designated Operational Service Volume (or ICAO equivalents) of ICAO standard airway navigation facilities (VOR, VOR/DME, NDB). However, Class II navigation does not include en route flight operations over routes designated with an "MEA Gap" (or ICAO equivalent).
Cockpit Display of Traffic Information (CDTI)	A CDTI is a generic display that provides a flightcrew with surveillance information about other aircraft including their position. Traffic information for a CDTI may be obtained from one or multiple sources (including ADS-B, TCAS, and traffic information services) to provide improved awareness of proximate aircraft and as an aid to visual acquisition as part of the normal see and avoid operations both in the air and on the ground.
Decision Altitude (Height) (DA(H))	DA(H) is a specified minimum altitude in an instrument approach procedure by which a missed approach must be initiated if the required visual reference to continue the approach has not been established. The 'altitude' value is typically measured by a barometric altimeter; the 'height' value (H) is typically a radio altitude equivalent height above the touchdown zone (HAT) used only for advisory reference and does not necessarily reflect actual height above underlying terrain. [This definition is consistent with both current U.S. operator usage and ICAO international agreements.]
Dual-Certificated-Noise Compliance	For purposes of noise compliance rules, dual-certificated airplanes are those that are certificated to operate in either a Stage 2 or Stage 3 configuration. The only airplanes dual certificated by the FAA were certain Boeing 747s, -300 series or earlier. For noise compliance purposes, these airplanes are considered Stage 2 unless the operator gets a supplemental type certificate to make the

Term or Terms	Definition
	airplane Stage 3 only, or unless the operator voluntarily limits the operation to Stage 3 only.
Duty	A task or function a person must do.
Fault Detection and Exclusion (FDE)	FDE technology allows onboard GPS equipment to automatically detect a satellite failure that effects navigation and to exclude that satellite from the navigation solution.
Flight Management Systems (FMS)	An integrated system used by flightcrews for flight planning, navigation, performance management, aircraft guidance, and flight progress monitoring.
Free Flight	A safe and efficient flight operating capability under instrument flight rules (IFR) in which the operators have the freedom to select a path and speed in real time. Air traffic restrictions are imposed only to ensure separation, to preclude exceeding airport capacity, to prevent unauthorized flight through special use airspace, and to ensure safety of flight. Restrictions are limited in extent and duration to correct the identified problem. Any activity that removes restrictions represents a move toward Free Flight.
Global Position System (GPS) Landing System (GLS)	GLS is a differential GPS-based landing system providing both vertical and lateral position fixing capability. The term GLS may also be applied to any GNSS-based differentially corrected landing system.
Helicopter Air Ambulance (HAA)	A helicopter that is identified as being capable of air ambulance operations in the certificate holder's operations specifications. It need not be used exclusively as an HAA. HAA-specific equipment need not be permanently installed.
ILS-PRM	Simultaneous close parallel ILS approaches are enabled through the implementation of special precision runway monitoring (PRM) equipment operated by ATC at certain airfields for specific runways, titled in 14 CFR Part 97 as "ILS PRM." ILS PRM approaches are conducted between 4,299 and 3,000 feet parallel runway spacing. Runways 3,400 feet or greater apart utilize two parallel ILS courses, aligned with the runway centerlines (RCL). For runways spaced less than 3,400 feet, one ILS is offset 2.5° to 3.0°.
Imported Airplane-Noise Compliance	For purposes of the noise compliance rules, an imported airplane is a Stage 2 airplane of 75,000 pounds or more that was purchased by a U.S. person from a non-U.S. owner on or after November 5, 1990. [Under the nonaddition rule (see 14 CFR Part 91, § 91.855), an imported airplane may not be operated to or from any airport in the contiguous United States. Such airplanes may be owned and registered by U.S. persons but are limited to operation outside the contiguous United States.]
JAA JAR OPS-1	Joint Aviation Authorities (JAA) Joint Aviation Requirements (JAR) operational agreements (OPS). The European JAA adopted common operational guidance for all Member States in order to harmonize the rules within those States. The JAR-OPS-1, is part 1 of the operational agreement and comprises the operational requirements applicable to commercial air transportation fixed wing aircraft.
Lease	A lease is where an aircraft owner transfers possession and use of a specific aircraft to a lessee for a fixed period. In a lease, as opposed to other types of custody/use agreements, the lessee has the right to possess and use the aircraft

Term or Terms	Definition
	even if the aircraft owner needs the aircraft returned, assuming the lessee has made timely payments and is properly maintaining the aircraft. In accordance with § 119.53(b), the certificate holder may not wet lease from or enter into any wet leasing arrangement with any person not authorized by the FAA to engage in common carriage operations under 14 CFR Part 121 or 135 (as appropriate), whereby that other person provides an aircraft and at least one crewmember to the certificate holder.
Life Vest (Non-Quick-Donning)	A non-quick-donning life vest is one which must be removed from its container, placed over the wearer's head, and/or requires additional steps beyond inflation to make it ready to use for its intended purpose.
Life Vest, Quick-Donning	A quick-donning life vest is fastened around a person in a manner which requires the wearer only to pull on a single tab and lift the life vest over the head. At this point, the life vest needs only to be inflated to be ready to use for its intended purpose.
Local Flying Area	An area designated by the operator in which air ambulance services will be conducted. Each local flying area should be defined in a manner acceptable to the operator, the local Flight Standards District Office, and the Principal Operations Inspector, taking into account the operating environment, the geographic terrain features, and the capabilities of the aircraft.
Localizer-Type Directional Aid (LDA) PRM	See definition of SOIA.
Major Contract Training	Any flight training, flight testing, or flight checking leading to and maintaining certification and qualification of flightcrew members in accordance with the requirements (maneuvers and procedures) explicitly stated in 14 CFR Part 61, 91K, 121, 135, or 194, as applicable.
Medical Crewmember	A person with medical training who is assigned to provide medical care and other crewmember duties related to the aviation operation during flight.
Medical Personnel	Individuals with medical training, including but not limited to flight physicians, flight nurses, or flight paramedics, who are carried aboard air ambulance aircraft during an air ambulance operation in order to provide medical care. (Refer to § 135.601(b)(2) or § 194.306(mmm).)
Minimum Descent Altitude (Height) (MDA(H))	MDA(H) is the lowest altitude in an instrument approach procedure to which a descent is authorized on final approach or during circle-to-land maneuvering. The 'altitude' value is typically measured by a barometric altimeter; the 'height' value (H) is typically a radio altitude equivalent height above the touchdown zone (HAT) or height above airport (HAA) published elevation. The (H) is used only for advisory reference and does not necessarily reflect actual height above underlying terrain. [This definition is consistent with both current U.S. operator usage and ICAO international agreements.]
One-Hour Reliable Fix (1HRF) Operations	Operations over land or over water where a reliable ground-based NAVAID fix is available at least once each hour.
Operational Service Volume	The Operational Service Volume is that volume of airspace surrounding a NAVAID which is available for operational use and within which a signal of

Term or Terms	Definition
	usable strength exists and where that signal is not operationally limited by co-channel interference. Operational Service Volume includes all of the following: (1) The officially designated Standard Service Volume excluding any portion of the Standard Service Volume which has been restricted. (2) The Expanded Service Volume. (3) Within the United States, any published instrument flight procedure (victor or jet airway, SID, STAR, SIAP, or instrument departure). (4) Outside the United States, any designated signal coverage or published instrument flight procedure equivalent to U.S. standards.
Outsourced Training	Any training, testing, or checking activity which an operator provides by way of a contract arrangement with another party.
Parabolic Flight Operations	Parabolic flight operations are aerobatic maneuvers in which the aircraft is intentionally pitched in excess of 30 degrees above and 30 degrees below the horizon in a repeated fashion for the specific purpose of exposing the participants to reduced or zero gravity conditions.
Polar Area (North)	The north polar area of operations is that area that lies north of latitude N 78º 00'.
Powered-Lift Air Ambulance	A powered-lift that is identified as being capable of air ambulance operations in the certificate holder's operations specifications. It need not be used exclusively as an air ambulance. Air ambulance specific equipment need not be permanently installed.
Qualified Local Observer	A person who provides weather, landing area, and other information as required by the operator, and has been trained by the operator under a training program approved by the Principal Operations Inspector.
Raw Terrain	Raw terrain is devoid of any person, structure, vehicle, or vessel.
Receiver Autonomous Integrity Monitoring (RAIM)	RAIM is a function that considers the availability of satisfactory signal integrity broadcasted from the particular GPS satellites used during a given flight. Onboard GPS navigators accomplish this automatically as the aircraft proceeds along its route. When insufficient signal integrity is detected, an alarm is provided to the flightcrew. Using the predictive RAIM software, flightcrews and dispatchers know in advance whether or not suitable GPS navigation will be available throughout the flight. This predictive information may also be determined during flight planning by contacting an FAA Flight Service Station.
Reliable Fix or Reliable Ground-Based NAVAID Fix	A "reliable fix" or "reliable ground-based NAVAID fix" means station passage of a VOR, VORTAC, or NDB. A reliable fix also includes a VOR/DME fix, an NDB/DME fix, a VOR intersection, an NDB intersection, and a VOR/NDB intersection provided course guidance is available from one of the facilities, and the fix lies within the designated Operational Service Volumes of any facilities which define the fix.
Required Navigation Performance (RNP)	A statement of navigation performance necessary for operations within a defined airspace.

Term or Terms	Definition
Required Navigation Performance (RNP) Time Limit	Applies to aircraft equipped with INS or IRU systems where those systems provide the means of navigation to navigate to the degree of accuracy required by ATC. The FAA-approved time in hours (after the system is placed in navigation mode or is updated en route) that the specific INS or IRU make/model can meet a specific RNP type on a 95 percent probability basis. It is used to establish the area of operations or routes on which the aircraft/navigation system is qualified to operate.
Required Navigation Performance (RNP) Type	A value typically expressed as a distance in nautical miles (NM) from the intended position within which an aircraft would be for at least 95 percent of the total flying time. For example, RNP 4 represents a lateral and longitudinal navigation accuracy of 4 NM on a 95 percent basis. Note: Applications of RNP to terminal area and other operations may also include a vertical component.
Responsibility	Something a person is accountable for.
RNAV (GPS) PRM	Area Navigation (RNAV) (GPS) PRM approach that may be substituted for an ILS PRM or LDA PRM approach and is procedurally equivalent.
Runway	In these operations specifications, the term “runway” in the case of land airports, water airports, heliports, helipads, and vertiports shall mean that portion of the surface intended for the takeoff and landing of land airplanes, seaplanes, or rotorcraft, or powered-lift, as appropriate.
Simultaneous Offset Instrument Approach (SOIA)	This operation comprises one ILS and one LDA with glide slope. The ILS is aligned with its runway, but the LDA serving the second runway is offset (between 2.5° and 3°) from a parallel track. This offset permits simultaneous instrument approach operations to parallel runways spaced less than 3,000 feet apart, but no less than 750 feet. Because of the offset, this operation is also known as an SOIA.
Special Cargo	Cargo that requires special handling and securing/restraining procedures within the limitations specified in the Airplane Flight Manual (AFM)/Weight and Balance Manual (WBM) approved by the type certificate or supplemental type certificate. Special cargo may be enclosed in an approved bulk compartment if the WBM has limitations supporting procedures for securing and restraining the special cargo.
Sustainable Transfer	A sustainable transfer is a transfer of operational control, without any impediment, by a contract, agreement, lease, or other written or verbal arrangement between the owner, lessor, or other entity and any other entity, that restricts any person or entity from transferring operational control to the certificate holder. Examples of such impediments are lease, mortgage, insurance, management agreements, and other agreements which limit the use of the aircraft to a particular party or purpose other than the certificate holder and its authorized kinds of operation.
VFR Station-Referenced Class I Navigation	VFR station-referenced Class I navigation is any operation conducted within the Operational Service Volumes of ICAO standard navigation aids under visual flight rules (VFR) which uses nonvisual navigation aids (stations), such as VOR, VOR/DME, or NDB as the primary navigation reference. VFR station-referenced Class I navigation includes Class I navigation conducted on-airways and off-airway routings predicated on airways navigation facilities.

Term or Terms	Definition
	These operations also include Class I navigation using an Area Navigation (RNAV) system which is certificated for IFR flights over the routes being flown.
Wide Area Augmentation System (WAAS)	WAAS has been developed to improve the accuracy, integrity, availability, and reliability of GPS signals. WAAS utilizes a fixed localized ground station to calculate GPS integrity and correction data, then broadcasts this information through the GPS satellites to GPS/WAAS users along with ranging signals. It is a safety critical system consisting of a ground network of reference and integrity monitor data processing sites which assess current GPS performance, as well as a space segment that broadcasts that assessment to GNSS users to support IFR navigation.

Appendix D. Sample OpSpec A002, Definitions and Abbreviations: 14 CFR Part 121/135

Unless otherwise defined in these operations specifications, all words, phrases, definitions, and abbreviations have identical meanings to those used in Title 14 of the Code of Federal Regulations (14 CFR) and Title 49 of the United States Code as cited in Public Law (PL) 103-272, as amended. Additionally, the definitions listed below are applicable to operations conducted in accordance with these operations specifications.

Term or Terms	Definition
Agent(s)	The significance of the words "agent" and "agents" as used in these operations specifications is that the certificate holder is the principal and that the certificate holder is accountable and liable for the acts or omissions of each of its agent or agents.
Air Ambulance Aircraft	An aircraft used in air ambulance operations. The aircraft must be equipped with at least medical oxygen, suction, and a stretcher, isolette, or other approved patient restraint/containment device. The aircraft need not be used exclusively as an air ambulance aircraft and the equipment need not be permanently installed.
Air Ambulance Operations	Holding out to the public as willing to provide air transportation to a person with a health condition that requires medical personnel including, but not limited to, advertising, solicitation, or association with a hospital or medical care provider in the following aircraft: 1) Airplanes. Air ambulance operation of an airplane includes: a) Unscheduled air transportation in an airplane of a person(s) with a health condition that requires: i. Medical personnel to provide special care, including, but not limited to, basic life support (BLS) or advanced life support (ALS); and ii. Medical equipment necessary to support the level of care required for the patient(s), such as medical oxygen, suction, and/or a stretcher, isolette, or other approved patient restraint/containment device as determined by a health care provider. 2) Helicopters and Powered-Lift. A flight or sequence of flights with a patient or medical personnel on board for the purpose of medical transportation conducted by a part 135 certificate holder authorized by the Administrator to conduct air ambulance operations. A helicopter or powered-lift air ambulance operation includes, but is not limited to: a) Flights conducted to position the air ambulance at a site where medical personnel, a patient, donor organ, or human tissue will be picked up. b) Flights conducted to reposition an air ambulance after completing transportation of the medical personnel, patient, donor organ, or human tissue transport.

Term or Terms	Definition
	c) Flights initiated for the transport of a patient, donor organ, or human tissue that are terminated due to weather or other reasons. (Refer to §§ 135.601 and 194.306(mmm).)
Airways Navigation Facilities	Airways navigation facilities are those ICAO standard navigation aids (VOR, VOR/DME, and/or NDB) which are used to establish the en route airway structure within the sovereign airspace of ICAO Member States. These facilities are also used to establish the degree of navigation accuracy required for air traffic control (ATC) and Class I navigation within that airspace.
Approved Unit Load Device (ULD) Cargo	Cargo loaded into a ULD, as defined by National Aerospace Standard (NAS) 3610, SAE Aerospace Standard (AS) 36100, Technical Standard Order (TSO)-C90, or other approval standards, that is approved for carriage within the airplane as specified in the Airplane Flight Manual (AFM)/Weight and Balance Manual (WBM) approved by the type certificate or supplemental type certificate.
Authority	A power that a person is vested with.
Auto Flight Guidance System (AFGS)	Aircraft systems, such as an autopilot, autothrottles, displays, and controls, that are interconnected in such a manner to allow the crew to automatically control the aircraft's lateral and vertical flightpath and speed. A flight management system is sometimes associated with an AFGS.
Automatic Dependent Surveillance (ADS)	A function for use by air traffic services in which the ADS equipment in the aircraft automatically transmits data derived from onboard navigation systems via a datalink. As a minimum, the data include aircraft identification and three-dimensional position. ADS is sometimes referred to as ADS-A or ADS-Contract (e.g., a communications contract between the aircraft communications/surveillance system and an air traffic facility or service provider only).
Automatic Dependent Surveillance-Broadcast (ADS-B)	ADS-B is a function on an aircraft or surface vehicle operating within the surface movement area that periodically broadcasts via datalink its state vector (horizontal and vertical position, horizontal and vertical velocity) and other information. ADS-B is Automatic in that it requires no external stimulus to elicit a transmission. ADS-B is Dependent because it relies on onboard navigation sources. ADS-B Surveillance information is provided, via data link, to any users (either aircraft or ground-based) within range of the Broadcast signal.
Available Landing Distance (ALD)	ALD is that portion of a runway available for landing and rollout for aircraft cleared for land and hold short operations (LAHSO). This distance is measured from the landing threshold to the hold-short point.
Bulk Cargo	Cargo usually transported as individual pieces and loaded into a compartment approved for bulk cargo by the Airplane Flight Manual (AFM)/Weight and Balance Manual (WMB) that is approved by the type certificate or supplemental type certificate. These items are generally loaded planeside and loaded directly into the bulk compartment.
Cargo	Any property carried on an aircraft other than mail, stores, and accompanied or mishandled baggage.

Term or Terms	Definition
Category I Instrument Approach	A Category I instrument approach is any authorized precision or nonprecision instrument approach which is conducted with a minimum height for IFR flights not less than 200 feet (60 meters) above the touchdown zone and a minimum visibility/RVV not less than 1/2 statute mile or RVR 1800 (for helicopters, or powered-lift operating in the vertical-lift flight mode, 1/4 statute mile or RVR 1600).
Certificate Holder	In these operations specifications, the term "certificate holder" shall mean the holder of the certificate described in Part A paragraph A001 and any of its officers, employees, or agents used in the conduct of operations under these operations specifications.
Class I Navigation	Class I navigation is any en route flight operation or portion of an operation that is conducted entirely within the designated Operational Service Volumes (or ICAO equivalents) of ICAO standard airway navigation facilities (VOR, VOR/DME, NDB). Class I navigation also includes en route flight operations over routes designated with an "MEA Gap" (or ICAO equivalent). En route flight operations conducted within these areas are defined as "Class I navigation" operations irrespective of the navigation means used. Class I navigation includes operations within these areas using pilotage or any other means of navigation which does not rely on the use of VOR, VOR/DME, or NDB.
Class II Navigation	Class II navigation is any en route flight operation which is not defined as Class I navigation. Class II navigation is any en route flight operation or portion of an en route operation (irrespective of the means of navigation) which takes place outside (beyond) the designated Operational Service Volume (or ICAO equivalents) of ICAO standard airway navigation facilities (VOR, VOR/DME, NDB). However, Class II navigation does not include en route flight operations over routes designated with an "MEA Gap" (or ICAO equivalent).
Cockpit Display of Traffic Information (CDTI)	A CDTI is a generic display that provides a flightcrew with surveillance information about other aircraft including their position. Traffic information for a CDTI may be obtained from one or multiple sources (including ADS-B, TCAS, and traffic information services) to provide improved awareness of proximate aircraft and as an aid to visual acquisition as part of the normal see and avoid operations both in the air and on the ground.
Decision Altitude (Height) (DA(H))	DA(H) is a specified minimum altitude in an instrument approach procedure by which a missed approach must be initiated if the required visual reference to continue the approach has not been established. The 'altitude' value is typically measured by a barometric altimeter; the 'height' value (H) is typically a radio altitude equivalent height above the touchdown zone (HAT) used only for advisory reference and does not necessarily reflect actual height above underlying terrain. [This definition is consistent with both current U.S. operator usage and ICAO international agreements.]
Dual-Certificated-Noise Compliance	For purposes of noise compliance rules, dual-certificated airplanes are those that are certificated to operate in either a Stage 2 or Stage 3 configuration. The only airplanes dual certificated by the FAA were certain Boeing 747s, -300 series or earlier. For noise compliance purposes, these airplanes are considered Stage 2 unless the operator gets a supplemental type certificate to make the

Term or Terms	Definition
	airplane Stage 3 only, or unless the operator voluntarily limits the operation to Stage 3 only.
Duty	A task or function a person must do.
Fault Detection and Exclusion (FDE)	FDE technology allows onboard GPS equipment to automatically detect a satellite failure that effects navigation and to exclude that satellite from the navigation solution.
Flight Management Systems (FMS)	An integrated system used by flightcrews for flight planning, navigation, performance management, aircraft guidance, and flight progress monitoring.
Free Flight	A safe and efficient flight operating capability under instrument flight rules (IFR) in which the operators have the freedom to select a path and speed in real time. Air traffic restrictions are imposed only to ensure separation, to preclude exceeding airport capacity, to prevent unauthorized flight through special use airspace, and to ensure safety of flight. Restrictions are limited in extent and duration to correct the identified problem. Any activity that removes restrictions represents a move toward Free Flight.
Global Position System (GPS) Landing System (GLS)	GLS is a differential GPS-based landing system providing both vertical and lateral position fixing capability. The term GLS may also be applied to any GNSS-based differentially corrected landing system.
Helicopter Air Ambulance (HAA)	A helicopter that is identified as being capable of air ambulance operations in the certificate holder's operations specifications. It need not be used exclusively as an HAA. HAA-specific equipment need not be permanently installed.
ILS-PRM	Simultaneous close parallel ILS approaches are enabled through the implementation of special precision runway monitoring (PRM) equipment operated by ATC at certain airfields for specific runways, titled in 14 CFR Part 97 as "ILS PRM." ILS PRM approaches are conducted between 4,299 and 3,000 feet parallel runway spacing. Runways 3,400 feet or greater apart utilize two parallel ILS courses, aligned with the runway centerlines (RCL). For runways spaced less than 3,400 feet, one ILS is offset 2.5° to 3.0°.
Imported Airplane-Noise Compliance	For purposes of the noise compliance rules, an imported airplane is a Stage 2 airplane of 75,000 pounds or more that was purchased by a U.S. person from a non-U.S. owner on or after November 5, 1990. [Under the nonaddition rule (see 14 CFR Part 91, § 91.855), an imported airplane may not be operated to or from any airport in the contiguous United States. Such airplanes may be owned and registered by U.S. persons but are limited to operation outside the contiguous United States.]
JAA JAR OPS-1	Joint Aviation Authorities (JAA) Joint Aviation Requirements (JAR) operational agreements (OPS). The European JAA adopted common operational guidance for all Member States in order to harmonize the rules within those States. The JAR-OPS-1, is part 1 of the operational agreement and comprises the operational requirements applicable to commercial air transportation fixed wing aircraft.
Lease	A lease is where an aircraft owner transfers possession and use of a specific aircraft to a lessee for a fixed period. In a lease, as opposed to other types of custody/use agreements, the lessee has the right to possess and use the aircraft

Term or Terms	Definition
	even if the aircraft owner needs the aircraft returned, assuming the lessee has made timely payments and is properly maintaining the aircraft. In accordance with § 119.53(b), the certificate holder may not wet lease from or enter into any wet leasing arrangement with any person not authorized by the FAA to engage in common carriage operations under 14 CFR Parts 121 or 135 (as appropriate), whereby that other person provides an aircraft and at least one crewmember to the certificate holder.
Life Vest (Non-Quick-Donning)	A non-quick-donning life vest is one which must be removed from its container, placed over the wearer's head, and/or requires additional steps beyond inflation to make it ready to use for its intended purpose.
Life Vest, Quick-Donning	A quick-donning life vest is fastened around a person in a manner which requires the wearer only to pull on a single tab and lift the life vest over the head. At this point, the life vest needs only to be inflated to be ready to use for its intended purpose.
Local Flying Area	An area designated by the operator in which air ambulance services will be conducted. Each local flying area should be defined in a manner acceptable to the operator, the local Flight Standards District Office, and the Principal Operations Inspector, taking into account the operating environment, the geographic terrain features, and the capabilities of the aircraft.
Localizer-Type Directional Aid (LDA) PRM	See definition of SOIA.
Major Contract Training	Any flight training, flight testing, or flight checking leading to and maintaining certification and qualification of air carrier flightcrew members in accordance with the requirements (maneuvers and procedures) explicitly stated in 14 CFR Part 61, 121, or 135; or in SFAR 58, Advanced Qualification Program (AQP), as applicable.
Medical Crewmember	A person with medical training who is assigned to provide medical care and other crewmember duties related to the aviation operation during flight.
Medical Personnel	Individuals with medical training, including but not limited to flight physicians, flight nurses, or flight paramedics, who are carried aboard an air ambulance aircraft during an air ambulance operation in order to provide medical care. (Refer to § 135.601(b)(2) or § 194.306(mmm).)
Minimum Descent Altitude (Height) (MDA(H))	MDA(H) is the lowest altitude in an instrument approach procedure to which a descent is authorized on final approach or during circle-to-land maneuvering. The 'altitude' value is typically measured by a barometric altimeter; the 'height' value (H) is typically a radio altitude equivalent height above the touchdown zone (HAT) or height above airport (HAA) published elevation. The (H) is used only for advisory reference and does not necessarily reflect actual height above underlying terrain. [This definition is consistent with both current U.S. operator usage and ICAO international agreements.]
One-Hour Reliable Fix (1HRF) Operations	Operations over land or over water where a reliable ground-based NAVAID fix is available at least once each hour.

Term or Terms	Definition
Operational Service Volume	The Operational Service Volume is that volume of airspace surrounding a NAVAID which is available for operational use and within which a signal of usable strength exists and where that signal is not operationally limited by co-channel interference. Operational Service Volume includes all of the following: (1) The officially designated Standard Service Volume excluding any portion of the Standard Service Volume which has been restricted. (2) The Expanded Service Volume. (3) Within the United States, any published instrument flight procedure (victor or jet airway, SID, STAR, SIAP, or instrument departure). (4) Outside the United States, any designated signal coverage or published instrument flight procedure equivalent to U.S. standards.
Outsourced Training	Any training, testing, or checking activity which an operator provides by way of a contract arrangement with another party.
Parabolic Flight Operations	Parabolic flight operations are aerobatic maneuvers in which the aircraft is intentionally pitched in excess of 30 degrees above and 30 degrees below the horizon in a repeated fashion for the specific purpose of exposing the participants to reduced or zero gravity conditions.
Planned Redispatch or Rerelease En Route	The term “planned redispatch or rerelease en route” means any flag operation (or any supplemental operation that includes a departure or arrival point outside the 48 contiguous United States and the District of Columbia) that is planned before takeoff to be redispatched or rereleased, in accordance with 14 CFR § 121.631(f), at a predetermined point along the route of flight to an airport other than that specified in the original dispatch or flight release.
Polar Area (North)	The north polar area of operations is that area that lies north of latitude N 78º 00'.
Powered-Lift Air Ambulance	A powered-lift that is identified as being capable of air ambulance operations in the certificate holder’s operations specifications. It need not be used exclusively as an air ambulance. Air ambulance specific equipment need not be permanently installed.
Qualified Local Observer	A person who provides weather, landing area, and other information as required by the operator, and has been trained by the operator under a training program approved by the Principal Operations Inspector.
Raw Terrain	Raw terrain is devoid of any person, structure, vehicle, or vessel.
Receiver Autonomous Integrity Monitoring (RAIM)	RAIM is a function that considers the availability of satisfactory signal integrity broadcasted from the particular GPS satellites used during a given flight. Onboard GPS navigators accomplish this automatically as the aircraft proceeds along its route. When insufficient signal integrity is detected, an alarm is provided to the flightcrew. Using the predictive RAIM software, flightcrews and dispatchers know in advance whether or not suitable GPS navigation will be available throughout the flight. This predictive information may also be determined during flight planning by contacting an FAA Flight Service Station.

Term or Terms	Definition
Reliable Fix or Reliable Ground-Based NAVAID Fix	A "reliable fix" or "reliable ground-based NAVAID fix" means station passage of a VOR, VORTAC, or NDB. A reliable fix also includes a VOR/DME fix, an NDB/DME fix, a VOR intersection, an NDB intersection, and a VOR/NDB intersection provided course guidance is available from one of the facilities, and the fix lies within the designated Operational Service Volumes of any facilities which define the fix.
Required Navigation Performance (RNP)	A statement of navigation performance necessary for operations within a defined airspace.
Required Navigation Performance (RNP) Time Limit	Applies to aircraft equipped with INS or IRU systems where those systems provide the means of navigation to navigate to the degree of accuracy required by ATC. The FAA-approved time in hours (after the system is placed in navigation mode or is updated en route) that the specific INS or IRU make/model can meet a specific RNP type on a 95 percent probability basis. It is used to establish the area of operations or routes on which the aircraft/navigation system is qualified to operate.
Required Navigation Performance (RNP) Type	A value typically expressed as a distance in nautical miles (NM) from the intended position within which an aircraft would be for at least 95 percent of the total flying time. For example, RNP 4 represents a lateral and longitudinal navigation accuracy of 4 NM on a 95 percent basis. Note: Applications of RNP to terminal area and other operations may also include a vertical component.
Responsibility	Something a person is accountable for.
RNAV (GPS) PRM	Area Navigation (RNAV) (GPS) PRM approach that may be substituted for an ILS PRM or LDA PRM approach and is procedurally equivalent.
Runway	In these operations specifications, the term "runway" in the case of land airports, water airports, heliports, helipads, and vertiports shall mean that portion of the surface intended for the takeoff and landing of land airplanes, seaplanes, rotorcraft, or powered-lift, as appropriate.
Simultaneous Offset Instrument Approach (SOIA)	This operation comprises one ILS and one LDA with glide slope. The ILS is aligned with its runway, but the LDA serving the second runway is offset (between 2.5° and 3°) from a parallel track. This offset permits simultaneous instrument approach operations to parallel runways spaced less than 3,000 feet apart, but no less than 750 feet. Because of the offset, this operation is also known as an SOIA.
Special Cargo	Cargo that requires special handling and securing/restraining procedures within the limitations specified in the Airplane Flight Manual (AFM)/Weight and Balance Manual (WBM) approved by the type certificate or supplemental type certificate. Special cargo may be enclosed in an approved bulk compartment if the WBM has limitations supporting procedures for securing and restraining the special cargo.
Sustainable Transfer	A sustainable transfer is a transfer of operational control, without any impediment, by a contract, agreement, lease, or other written or verbal arrangement between the owner, lessor, or other entity from transferring operational control to the certificate holder. Examples of such impediments are lease, mortgage, insurance, management agreements, and other agreements

Term or Terms	Definition
	which limit the use of the aircraft to a particular party or purpose other than the certificate holder and its authorized kinds of operation.
VFR Station-Referenced Class I Navigation	VFR station-referenced Class I navigation is any operation conducted within the Operational Service Volumes of ICAO standard navigation aids under visual flight rules (VFR) which uses nonvisual navigation aids (stations), such as VOR, VOR/DME, or NDB as the primary navigation reference. VFR station-referenced Class I navigation includes Class I navigation conducted on-airways and off-airway routings predicated on airways navigation facilities. These operations also include Class I navigation using an area navigation (RNAV) system which is certificated for IFR flights over the routes being flown.
Wide Area Augmentation System (WAAS)	WAAS has been developed to improve the accuracy, integrity, availability, and reliability of GPS signals. WAAS utilizes a fixed localized ground station to calculate GPS integrity and correction data, then broadcasts this information through the GPS satellites to GPS/WAAS users along with ranging signals. It is a safety critical system consisting of a ground network of reference and integrity monitor data processing sites which assess current GPS performance, as well as a space segment that broadcasts that assessment to GNSS users to support IFR navigation.

Appendix E. Sample MSpec A002, Definitions and Abbreviations: 14 CFR Part 91K

Unless otherwise defined in these management specifications, all words, phrases, definitions, and abbreviations have identical meanings to those used in Title 14 of the Code of Federal Regulations (14 CFR) and Title 49 of the United States Code as cited in Public Law (PL) 103-272, as amended. Additionally, the definitions listed below are applicable to operations conducted in accordance with these management specifications.

Term or Terms	Definition
Air Ambulance Aircraft	An aircraft used in air ambulance operations. The aircraft must be equipped with at least medical oxygen, suction, and a stretcher, isolette, or other approved patient restraint/containment device. The aircraft need not be used exclusively as an air ambulance aircraft and the equipment need not be permanently installed.
Air Ambulance Operations	a) Air transportation of a person with a health condition that requires medical personnel as determined by a health care provider; or b) Holding out to the public as willing to provide air transportation to a person with a health condition that requires medical personnel as determined by a health care provider including, but not limited to, advertisement, solicitation, association with a hospital or medical care provider; and c) Uses an air ambulance aircraft.
Airways Navigation Facilities	Airways navigation facilities are those ICAO standard navigation aids (VOR, VOR/DME, and/or NDB) which are used to establish the en route airway structure within the sovereign airspace of ICAO Member States. These facilities are also used to establish the degree of navigation accuracy required for air traffic control (ATC) and Class I navigation within that airspace.
Approved Unit Load Device (ULD) Cargo	Cargo loaded into a ULD, as defined by National Aerospace Standard (NAS) 3610, SAE Aerospace Standard (AS) 36100, Technical Standard Order (TSO)-C90, or other approval standards, that is approved for carriage within the airplane as specified in the Airplane Flight Manual (AFM)/Weight and Balance Manual (WBM) approved by the type certificate or supplemental type certificate.
Auto Flight Guidance System (AFGS)	Aircraft systems, such as an autopilot, autothrottles, displays, and controls, that are interconnected in such a manner to allow the crew to automatically control the aircraft's lateral and vertical flightpath and speed. A flight management system is sometimes associated with an AFGS.
Automatic Dependent Surveillance (ADS)	A function for use by air traffic services in which the ADS equipment in the aircraft automatically transmits data derived from onboard navigation systems via a datalink. As a minimum, the data include aircraft identification and three-dimensional position. ADS is sometimes referred to as ADS-A or ADS-Contract (e.g., a communications contract between the aircraft communications/surveillance system and an air traffic facility or service provider only).

Term or Terms	Definition
Automatic Dependent Surveillance-Broadcast (ADS-B)	ADS-B is a function on an aircraft or surface vehicle operating within the surface movement area that periodically broadcasts via datalink its state vector (horizontal and vertical position, horizontal and vertical velocity) and other information. ADS-B is Automatic in that it requires no external stimulus to elicit a transmission. ADS-B is Dependent because it relies on onboard navigation sources. ADS-B Surveillance information is provided, via data link, to any users (either aircraft or ground-based) within range of the Broadcast signal.
Available Landing Distance (ALD)	ALD is that portion of a runway available for landing and rollout for aircraft cleared for land and hold short operations (LAHSO). This distance is measured from the landing threshold to the hold-short point.
Bulk Cargo	Cargo usually transported as individual pieces and loaded into a compartment approved for bulk cargo by the Airplane Flight Manual (AFM)/Weight and Balance Manual (WBM) that is approved by the type certificate or supplemental type certificate. These items are generally loaded planeside and loaded directly into the bulk compartment.
Cargo	Any property carried on an aircraft other than mail, stores, and accompanied or mishandled baggage.
Category I Instrument Approach	A Category I instrument approach is any authorized precision or nonprecision instrument approach which is conducted with a minimum height for IFR flight not less than 200 feet (60 meters) above the touchdown zone and a minimum visibility/RVV not less than 1/2 statute mile or RVR 1800 (for helicopters, or powered-lift operating in the vertical-lift flight mode, 1/4 statute mile or RVR 1600).
Class I Navigation	Class I navigation is any en route flight operation or portion of an operation that is conducted entirely within the designated Operational Service Volumes (or ICAO equivalents) of ICAO standard airway navigation facilities (VOR, VOR/DME, NDB). Class I navigation also includes en route flight operations over routes designated with an “MEA Gap” (or ICAO equivalent). En route flight operations conducted within these areas are defined as “Class I navigation” operations irrespective of the navigation means used. Class I navigation includes operations within these areas using pilotage or any other means of navigation which does not rely on the use of VOR, VOR/DME, or NDB.
Class II Navigation	Class II navigation is any en route flight operation which is not defined as Class I navigation. Class II navigation is any en route flight operation or portion of an en route operation (irrespective of the means of navigation) which takes place outside (beyond) the designated Operational Service Volume (or ICAO equivalents) of ICAO standard airway navigation facilities (VOR, VOR/DME, NDB). However, Class II navigation does not include en route flight operations over routes designated with an “MEA Gap” (or ICAO equivalent).
Cockpit Display of Traffic Information (CDTI)	A CDTI is a generic display that provides a flightcrew with surveillance information about other aircraft including their position. Traffic information for a CDTI may be obtained from one or multiple sources (including ADS-B, TCAS, and traffic information services) to provide improved awareness of

Term or Terms	Definition
	proximate aircraft and as an aid to visual acquisition as part of the normal see and avoid operations both in the air and on the ground.
Decision Altitude (Height) (DA(H))	DA(H) is a specified minimum altitude in an instrument approach procedure by which a missed approach must be initiated if the required visual reference to continue the approach has not been established. The 'altitude' value is typically measured by a barometric altimeter; the 'height' value (H) is typically a radio altitude equivalent height above the touchdown zone (HAT) used only for advisory reference and does not necessarily reflect actual height above underlying terrain. [This definition is consistent with both current U.S. operator usage and ICAO international agreements.]
Dual-Certificated-Noise Compliance	For purposes of noise compliance rules, dual-certificated airplanes are those that are certificated to operate in either a Stage 2 or Stage 3 configuration. The only airplanes dual certificated by the FAA were certain Boeing 747s, -300 series or earlier. For noise compliance purposes, these airplanes are considered Stage 2 unless the operator gets a supplemental type certificate to make the airplane Stage 3 only, or unless the operator voluntarily limits the operation to Stage 3 only.
Fault Detection and Exclusion (FDE)	FDE technology allows onboard GPS equipment to automatically detect a satellite failure that effects navigation and to exclude that satellite from the navigation solution.
Flight Management Systems (FMS)	An integrated system used by flightcrews for flight planning, navigation, performance management, aircraft guidance, and flight progress monitoring.
Free Flight	A safe and efficient flight operating capability under instrument flight rules (IFR) in which the operators have the freedom to select a path and speed in real time. Air traffic restrictions are imposed only to ensure separation, to preclude exceeding airport capacity, to prevent unauthorized flight through special use airspace, and to ensure safety of flight. Restrictions are limited in extent and duration to correct the identified problem. Any activity that removes restrictions represents a move toward Free Flight.
Global Position System (GPS) Landing System (GLS)	GLS is a differential GPS-based landing system providing both vertical and lateral position fixing capability. The term GLS may also be applied to any GNSS-based differentially corrected landing system.
ILS-PRM	Simultaneous close parallel ILS approaches are enabled through the implementation of special precision runway monitoring (PRM) equipment operated by ATC at certain airfields for specific runways, titled in 14 CFR Part 97 as "ILS PRM." ILS PRM approaches are conducted between 4,299 and 3,000 feet parallel runway spacing. Runways 3,400 feet or greater apart utilize two parallel ILS courses, aligned with the runway centerlines (RCL). For runways spaced less than 3,400 feet, one ILS is offset 2.5° to 3.0°.
Imported Airplane-Noise Compliance	For purposes of the noise compliance rules, an imported airplane is a Stage 2 airplane of 75,000 pounds or more that was purchased by a U.S. person from a non-U.S. owner on or after November 5, 1990. [Under the nonaddition rule (see 14 CFR § 91.855), an imported airplane may not be operated to or from any airport in the contiguous United States. Such airplanes may be owned and

Term or Terms	Definition
	registered by U.S. persons but are limited to operation outside the contiguous United States.]
JAA JAR-OPS-1	Joint Aviation Authorities (JAA) Joint Aviation Requirements (JAR) operational agreements (OPS). The European JAA adopted common operational guidance for all Member States in order to harmonize the rules within those States. The JAR-OPS-1, is part 1 of the operational agreement and comprises the operational requirements applicable to commercial air transportation fixed wing aircraft.
Life Vest, Non-Quick-Donning	A non-quick-donning life vest is one which must be removed from its container, placed over the wearer's head, and/or requires additional steps beyond inflation to make it ready to use for its intended purpose.
Life Vest, Quick-Donning	A quick-donning life vest is fastened around a person in a manner which requires the wearer only to pull on a single tab and lift the life vest over the head. At this point, the life vest needs only to be inflated to be ready to use for its intended purpose.
Localizer-Type Directional Aid (LDA) PRM	See definition of SOIA.
Major Contract Training	Any flight training, flight testing, or flight checking leading to and maintaining certification and qualification of flightcrew members in accordance with the requirements (maneuvers and procedures) explicitly stated in 14 CFR Parts 61, 91K, 121, 135, or 194, as applicable.
Minimum Descent Altitude (Height) (MDA(H))	MDA(H) is the lowest altitude in an instrument approach procedure to which a descent is authorized on final approach or during circle-to-land maneuvering. The 'altitude' value is typically measured by a barometric altimeter; the 'height' value (H) is typically a radio altitude equivalent height above the touchdown zone (HAT) or height above airport (HAA) published elevation. The (H) is used only for advisory reference and does not necessarily reflect actual height above underlying terrain. [This definition is consistent with both current U.S. operator usage and ICAO international agreements.]
One-Hour Reliable Fix (1HRF) Operations	Operations over land or over water where a reliable ground-based NAVAID fix is available at least once each hour.
Operational Service Volume	The Operational Service Volume is that volume of airspace surrounding a NAVAID which is available for operational use and within which a signal of usable strength exists and where that signal is not operationally limited by co-channel interference. Operational Service Volume includes all of the following: (1) The officially designated Standard Service Volume excluding any portion of the Standard Service Volume which has been restricted. (2) The Expanded Service Volume. (3) Within the United States, any published instrument flight procedure (victor or jet airway, SID, STAR, SIAP, or instrument departure).

Term or Terms	Definition
	(4) Outside the United States, any designated signal coverage or published instrument flight procedure equivalent to U.S. standards.
Outsourced Training	Any training, testing, or checking activity which an operator provides by way of a contract arrangement with another party.
Parabolic Flight Operations	Parabolic flight operations are aerobatic maneuvers in which the aircraft is intentionally pitched in excess of 30 degrees above and 30 degrees below the horizon in a repeated fashion for the specific purpose of exposing the participants to reduced or zero gravity conditions.
Polar Area (North)	The north polar area of operations is that area that lies north of latitude N 78º'00'.
Program Manager	In these management specifications, the term "program manager" shall mean the holder of the fractional ownership program described in Part A paragraph MA001 and any of its officers, employees, or agents used in the conduct of operations under these management specifications.
Qualified Local Observer	A person who provides weather, landing area, and other information as required by the operator, and has been trained by the operator under a training program approved by the Principal Operations Inspector.
Raw Terrain	Raw terrain is devoid of any person, structure, vehicle, or vessel.
Receiver Autonomous Integrity Monitoring (RAIM)	RAIM is a function that considers the availability of satisfactory signal integrity broadcasted from the particular GPS satellites used during a given flight. Onboard GPS navigators accomplish this automatically as the aircraft proceeds along its route. When insufficient signal integrity is detected, an alarm is provided to the flightcrew. Using the predictive RAIM software, flightcrews and dispatchers know in advance whether or not suitable GPS navigation will be available throughout the flight. This predictive information may also be determined during flight planning by contacting an FAA Flight Service Station.
Reliable Fix or Reliable Ground-Based NAVAID Fix	A "reliable fix" or "reliable ground-based NAVAID fix" means station passage of a VOR, VORTAC, or NDB. A reliable fix also includes a VOR/DME fix, an NDB/DME fix, a VOR intersection, an NDB intersection, and a VOR/NDB intersection provided course guidance is available from one of the facilities, and the fix lies within the designated Operational Service Volumes of any facilities which define the fix.
Required Navigation Performance (RNP)	A statement of navigation performance necessary for operations within a defined airspace.
Required Navigation Performance (RNP) Time Limit	Applies to aircraft equipped with INS or IRU systems where those systems provide the means of navigation to navigate to the degree of accuracy required by ATC. The FAA-approved time in hours (after the system is placed in navigation mode or is updated en route) that the specific INS or IRU make/model can meet a specific RNP type on a 95 percent probability basis. It is used to establish the area of operations or routes on which the aircraft/navigation system is qualified to operate.

Term or Terms	Definition
Required Navigation Performance (RNP) Type	A value typically expressed as a distance in nautical miles (NM) from the intended position within which an aircraft would be for at least 95 percent of the total flying time. For example, RNP 4 represents a lateral and longitudinal navigation accuracy of 4 NM on a 95 percent basis. Note: Applications of RNP to terminal area and other operations may also include a vertical component.
RNAV (GPS) PRM	Area Navigation (RNAV) (GPS) PRM approach that may be substituted for an ILS PRM or LDA PRM approach and is procedurally equivalent.
Runway	In these management specifications, the term "runway" in the case of land airports, water airports, heliports, helipads, and vertiports shall mean that portion of the surface intended for the takeoff and landing of land airplanes, seaplanes, rotorcraft, or powered-lift, as appropriate.
Simultaneous Offset Instrument Approach (SOIA)	This operation comprises one ILS and one LDA with glide slope. The ILS is aligned with its runway, but the LDA serving the second runway is offset (between 2.5° and 3°) from a parallel track. This offset permits simultaneous instrument approach operations to parallel runways spaced less than 3,000 feet apart, but no less than 750 feet. Because of the offset, this operation is also known as an SOIA.
Special Cargo	Cargo that requires special handling and securing/restraining procedures within the limitations specified in the Airplane Flight Manual (AFM)/Weight and Balance Manual (WBM) approved by the type certificate or supplemental type certificate. Special cargo may be enclosed in an approved bulk compartment if the WBM has limitations supporting procedures for securing and restraining the special cargo.
VFR Station-Referenced Class I Navigation	VFR station-referenced Class I navigation is any operation conducted within the Operational Service Volumes of ICAO standard navigation aids under visual flight rules (VFR) which uses nonvisual navigation aids (stations), such as VOR, VOR/DME, or NDB as the primary navigation reference. VFR station-referenced Class I navigation includes Class I navigation conducted on-airways and off-airway routings predicated on airways navigation facilities. These operations also include Class I navigation using an Area Navigation system which is certificated for IFR flights over the routes being flown.
Wide Area Augmentation System (WAAS)	WAAS has been developed to improve the accuracy, integrity, availability, and reliability of GPS signals. WAAS utilizes a fixed localized ground station to calculate GPS integrity and correction data, then broadcasts this information through the GPS satellites to GPS/WAAS users along with ranging signals. It is a safety critical system consisting of a ground network of reference and integrity monitor data processing sites which assess current GPS performance, as well as a space segment that broadcasts that assessment to GNSS users to support IFR navigation.

Appendix F. Sample LOA A002, Definitions and Abbreviations: 14 CFR Part 125 (A125 LODA Holder)

Unless otherwise defined in these authorizations, all words, phrases, definitions, and abbreviations have identical meanings to those used in Title 14 of the Code of Federal Regulations (14 CFR) and Title 49 of the United States Code as cited in Public Law (PL) 103-272, as amended. Additionally, the definitions listed below are applicable to operations conducted in accordance with these authorizations.

Term or Terms	Definition
Airways Navigation Facilities	Airways navigation facilities are those ICAO standard navigation aids (VOR, VOR/DME, and/or NDB) which are used to establish the en route airway structure within the sovereign airspace of ICAO Member States. These facilities are also used to establish the degree of navigation accuracy required for ATC and Class I navigation within that airspace.
Approved Unit Load Device (ULD) Cargo	Cargo loaded into a ULD, as defined by National Aerospace Standard (NAS) 3610, SAE Aerospace Standard (AS) 36100, Technical Standard Order (TSO)-C90, or other approval standards, that is approved for carriage within the airplane as specified in the Airplane Flight Manual (AFM)/Weight and Balance Manual (WBM) approved by the type certificate or supplemental type certificate.
Auto Flight Guidance System (AFGS)	Aircraft systems, such as an autopilot, autothrottles, displays, and controls, that are interconnected in such a manner to allow the crew to automatically control the aircraft's lateral and vertical flightpath and speed. A flight management system is sometimes associated with an AFGS.
Automatic Dependent Surveillance (ADS)	A function for use by air traffic services in which the ADS equipment in the aircraft automatically transmits data derived from onboard navigation systems via a datalink. As a minimum, the data include aircraft identification and three-dimensional position. ADS is sometimes referred to as ADS-A or ADS-Contract (e.g., a communications contract between the aircraft communications/surveillance system and an air traffic facility or service provider only).
Automatic Dependent Surveillance-Broadcast (ADS-B)	ADS-B is a function on an aircraft or surface vehicle operating within the surface movement area that periodically broadcasts via datalink its state vector (horizontal and vertical position, horizontal and vertical velocity) and other information. ADS-B is Automatic in that it requires no external stimulus to elicit a transmission. ADS-B is Dependent because it relies on onboard navigation sources. ADS-B Surveillance information is provided, via data link, to any users (either aircraft or ground-based) within range of the Broadcast signal.
Available Landing Distance (ALD)	ALD is that portion of a runway available for landing and rollout for aircraft cleared for land and hold short operations (LAHSO). This distance is measured from the landing threshold to the hold-short point.
Bulk Cargo	Cargo usually transported as individual pieces and loaded into a compartment approved for bulk cargo by the Airplane Flight Manual (AFM)/Weight and Balance Manual (WBM) that is approved by the type certificate or

Term or Terms	Definition
	supplemental type certificate. These items are generally loaded planeside and loaded directly into the bulk compartment.
Cargo	Any property carried on an aircraft other than mail, stores, and accompanied or mishandled baggage.
Category I Instrument Approach	A Category I instrument approach is any authorized precision or nonprecision instrument approach which is conducted with a minimum height for IFR flights not less than 200 feet (60 meters) above the touchdown zone and a minimum visibility/RVV not less than 1/2 statute mile or RVR 1800 (for helicopters, or powered-lift operating in the vertical-lift flight mode, 1/4 statute mile or RVR 1600).
Class I Navigation	Class I navigation is any en route flight operation or portion of an operation that is conducted entirely within the designated Operational Service Volumes (or ICAO equivalents) of ICAO standard airway navigation facilities (VOR, VOR/DME, NDB). Class I navigation also includes en route flight operations over routes designated with an "MEA Gap" (or ICAO equivalent). En route flight operations conducted within these areas are defined as "Class I navigation" operations irrespective of the navigation means used. Class I navigation includes operations within these areas using pilotage or any other means of navigation which does not rely on the use of VOR, VOR/DME, or NDB.
Class II Navigation	Class II navigation is any en route flight operation which is not defined as Class I navigation. Class II navigation is any en route flight operation or portion of an en route operation (irrespective of the means of navigation) which takes place outside (beyond) the designated Operational Service Volume (or ICAO equivalents) of ICAO standard airway navigation facilities (VOR, VOR/DME, NDB). However, Class II navigation does not include en route flight operations over routes designated with an "MEA Gap" (or ICAO equivalent).
Cockpit Display of Traffic Information (CDTI)	A CDTI is a generic display that provides a flightcrew with surveillance information about other aircraft including their position. Traffic information for a CDTI may be obtained from one or multiple sources (including ADS-B, TCAS, and traffic information services) to provide improved awareness of proximate aircraft and as an aid to visual acquisition as part of the normal see and avoid operations both in the air and on the ground.
Decision Altitude (Height) (DA(H))	DA(H) is a specified minimum altitude in an instrument approach procedure by which a missed approach must be initiated if the required visual reference to continue the approach has not been established. The 'altitude' value is typically measured by a barometric altimeter; the 'height' value (H) is typically a radio altitude equivalent height above the touchdown zone (HAT) used only for advisory reference and does not necessarily reflect actual height above underlying terrain. [This definition is consistent with both current U.S. operator usage and ICAO international agreements.]
Dual-Certificated-Noise Compliance	For purposes of noise compliance rules, dual-certificated airplanes are those that are certificated to operate in either a Stage 2 or Stage 3 configuration. The only airplanes dual certificated by the FAA were certain Boeing 747s, -300 series or earlier. For noise compliance purposes, these airplanes are considered Stage 2 unless the operator gets a supplemental type certificate to make the

Term or Terms	Definition
	airplane Stage 3 only, or unless the operator voluntarily limits the operation to Stage 3 only.
Fault Detection and Exclusion (FDE)	FDE technology allows onboard GPS equipment to automatically detect a satellite failure that effects navigation and to exclude that satellite from the navigation solution.
Flight Management Systems (FMS)	An integrated system used by flightcrews for flight planning, navigation, performance management, aircraft guidance, and flight progress monitoring.
Free Flight	A safe and efficient flight operating capability under instrument flight rules (IFR) in which the operators have the freedom to select a path and speed in real time. Air traffic restrictions are imposed only to ensure separation, to preclude exceeding airport capacity, to prevent unauthorized flight through special use airspace, and to ensure safety of flight. Restrictions are limited in extent and duration to correct the identified problem. Any activity that removes restrictions represents a move toward Free Flight.
Global Position System (GPS) Landing System (GLS)	GLS is a differential GPS-based landing system providing both vertical and lateral position fixing capability. The term GLS may also be applied to any GNSS-based differentially corrected landing system.
ILS-PRM	Simultaneous close parallel ILS approaches are enabled through the implementation of special precision runway monitoring (PRM) equipment operated by ATC at certain airfields for specific runways, titled in 14 CFR Part 97 as “ILS PRM.” ILS PRM approaches are conducted between 4,299 and 3,000 feet parallel runway spacing. Runways 3,400 feet or greater apart utilize two parallel ILS courses, aligned with the runway centerlines (RCL). For runways spaced less than 3,400 feet, one ILS is offset 2.5° to 3.0°.
Imported Airplane-Noise Compliance	For purposes of the noise compliance rules, an imported airplane is a Stage 2 airplane of 75,000 pounds or more that was purchased by a U.S. person from a non-U.S. owner on or after November 5, 1990. [Under the nonaddition rule (see 14 CFR Part 91, § 91.855), an imported airplane may not be operated to or from any airport in the contiguous United States. Such airplanes may be owned and registered by U.S. persons but are limited to operation outside the contiguous United States.]
JAA JAR OPS-1	Joint Aviation Authorities (JAA) Joint Aviation Requirements (JAR) operational agreements (OPS). The European JAA adopted common operational guidance for all Member States in order to harmonize the rules within those States. The JAR-OPS-1, is part 1 of the operational agreement and comprises the operational requirements applicable to commercial air transportation fixed wing aircraft.
Life Vest (Non-Quick-Donning)	A non-quick-donning life vest is one which must be removed from its container, placed over the wearer’s head, and/or requires additional steps beyond inflation to make it ready to use for its intended purpose.
Life Vest, Quick-Donning	A quick-donning life vest is fastened around a person in a manner which requires the wearer only to pull on a single tab and lift the life vest over the head. At this point, the life vest needs only to be inflated to be ready to use for its intended purpose.

Term or Terms	Definition
Localizer-Type Directional Aid (LDA) PRM	See definition of SOIA.
Major Contract Training	Any flight training, flight testing, or flight checking leading to and maintaining certification and qualification of air carrier flightcrew members in accordance with the requirements (maneuvers and procedures) explicitly stated in 14 CFR Part 61, 91K, 121, 135, or 194, as applicable.
Minimum Descent Altitude (Height) (MDA(H))	MDA(H) is the lowest altitude in an instrument approach procedure to which a descent is authorized on final approach or during circle-to-land maneuvering. The 'altitude' value is typically measured by a barometric altimeter; the 'height' value (H) is typically a radio altitude equivalent height above the touchdown zone (HAT) or height above airport (HAA) published elevation. The (H) is used only for advisory reference and does not necessarily reflect actual height above underlying terrain. [This definition is consistent with both current U.S. operator usage and ICAO international agreements.]
One-Hour Reliable Fix (1HRF) Operations	Operations over land or over water where a reliable ground-based NAVAID fix is available at least once each hour.
Operational Service Volume	The Operational Service Volume is that volume of airspace surrounding a NAVAID which is available for operational use and within which a signal of usable strength exists and where that signal is not operationally limited by co-channel interference. Operational Service Volume includes all of the following: (1) The officially designated Standard Service Volume excluding any portion of the Standard Service Volume which has been restricted. (2) The Expanded Service Volume. (3) Within the United States, any published instrument flight procedure (victor or jet airway, SID, STAR, SIAP, or instrument departure). (4) Outside the United States, any designated signal coverage or published instrument flight procedure equivalent to U.S. standards.
Operator/Company	In these authorizations, the term "Operator/Company" shall mean the holder of a Letter of Deviation Authority (LODA A125) and any of its officers, employees, or agents used in the conduct of operations under these authorizations.
Outsourced Training	Any training, testing, or checking activity which an operator provides by way of a contract arrangement with another party.
Parabolic Flight Operations	Parabolic flight operations are aerobatic maneuvers in which the aircraft is intentionally pitched in excess of 30 degrees above and 30 degrees below the horizon in a repeated fashion for the specific purpose of exposing the participants to reduced or zero gravity conditions.
Planned Redispatch or Rerelease En Route	The term "planned redispatch or rerelease en route" means any flag operation (or any supplemental operation that includes a departure or arrival point outside the 48 contiguous United States and the District of Columbia) that is planned before takeoff to be redispatched or rereleased, in accordance with 14 CFR

Term or Terms	Definition
	§ 121.631(f), at a predetermined point along the route of flight to an airport other than that specified in the original dispatch or flight release.
Polar Area (North)	The north polar area of operations is that area that lies north of latitude N 78º 00'.
Qualified Local Observer	A person who provides weather, landing area, and other information as required by the operator, and has been trained by the operator under a training program approved by the Principal Operations Inspector.
Raw Terrain	Raw terrain is devoid of any person, structure, vehicle, or vessel.
Receiver Autonomous Integrity Monitoring (RAIM)	RAIM is a function that considers the availability of satisfactory signal integrity broadcasted from the particular GPS satellites used during a given flight. Onboard GPS navigators accomplish this automatically as the aircraft proceeds along its route. When insufficient signal integrity is detected, an alarm is provided to the flightcrew. Using the predictive RAIM software, flightcrews and dispatchers know in advance whether or not suitable GPS navigation will be available throughout the flight. This predictive information may also be determined during flight planning by contacting an FAA Flight Service Station.
Reliable Fix or Reliable Ground-Based NAVAID Fix	A “reliable fix” or “reliable ground-based NAVAID fix” means station passage of a VOR, VORTAC, or NDB. A reliable fix also includes a VOR/DME fix, an NDB/DME fix, a VOR intersection, an NDB intersection, and a VOR/NDB intersection provided course guidance is available from one of the facilities, and the fix lies within the designated Operational Service Volumes of any facilities which define the fix.
Required Navigation Performance (RNP)	A statement of navigation performance necessary for operations within a defined airspace.
Required Navigation Performance (RNP) Time Limit	Applies to aircraft equipped with INS or IRU systems where those systems provide the means of navigation to navigate to the degree of accuracy required by ATC. The FAA-approved time in hours (after the system is placed in navigation mode or is updated en route) that the specific INS or IRU make/model can meet a specific RNP type on a 95 percent probability basis. It is used to establish the area of operations or routes on which the aircraft/navigation system is qualified to operate.
Required Navigation Performance (RNP) Type	A value typically expressed as a distance in nautical miles (NM) from the intended position within which an aircraft would be for at least 95 percent of the total flying time. For example, RNP 4 represents a lateral and longitudinal navigation accuracy of 4 NM on a 95 percent basis. Note: Applications of RNP to terminal area and other operations may also include a vertical component.
RNAV (GPS) PRM	Area Navigation (RNAV) (GPS) PRM approach that may be substituted for an ILS PRM or LDA PRM approach and is procedurally equivalent.
Runway	In these authorizations, the term “runway” in the case of land airports, water airports, heliports, helipads, and vertiports shall mean that portion of the surface intended for the takeoff and landing of land airplanes, seaplanes, rotorcraft, or powered-lift, as appropriate.

Term or Terms	Definition
Simultaneous Offset Instrument Approach (SOIA)	This operation comprises one ILS and one LDA with glide slope. The ILS is aligned with its runway, but the LDA serving the second runway is offset (between 2.5° and 3°) from a parallel track. This offset permits simultaneous instrument approach operations to parallel runways spaced less than 3,000 feet apart, but no less than 750 feet. Because of the offset, this operation is also known as an SOIA.
Special Cargo	Cargo that requires special handling and securing/restraining procedures within the limitations specified in the Airplane Flight Manual (AFM)/Weight and Balance Manual (WBM) approved by the type certificate or supplemental type certificate. Special cargo may be enclosed in an approved bulk compartment if the WBM has limitations supporting procedures for securing and restraining the special cargo.
VFR Station-Referenced Class I Navigation	VFR station-referenced Class I navigation is any operation conducted within the Operational Service Volumes of ICAO standard navigation aids under visual flight rules (VFR) which uses nonvisual navigation aids (stations), such as VOR, VOR/DME, or NDB as the primary navigation reference. VFR station-referenced Class I navigation includes Class I navigation conducted on-airways and off-airway routings predicated on airways navigation facilities. These operations also include Class I navigation using an Area Navigation (RNAV) system which is certificated for IFR flights over the routes being flown.
Wide Area Augmentation System (WAAS)	WAAS has been developed to improve the accuracy, integrity, availability, and reliability of GPS signals. WAAS utilizes a fixed localized ground station to calculate GPS integrity and correction data, then broadcasts this information through the GPS satellites to GPS/WAAS users along with ranging signals. It is a safety critical system consisting of a ground network of reference and integrity monitor data processing sites which assess current GPS performance, as well as a space segment that broadcasts that assessment to GNSS users to support IFR navigation.

Appendix G. Sample OpSpec B033, IFR En Route Operations: 14 CFR Part 121

a. General. The certificate holder is authorized to conduct en route operations under instrument flight rules (IFR) in accordance with the limitations and provisions of these operations specifications, listed below.

(1) This authorization is valid only within the areas of en route operation listed in paragraph B050 of these operations specifications.

(2) Except as provided in operations specification(s) B030 and/or B036, flights must be One-Hour Reliable Fix (1HRF) Operations, where a reliable ground-based Navigational Aid (NAVAID) fix is available at least once each hour.

(3) Except as provided in operations specification B036, the certificate holder must not indicate oceanic capability of Area Navigation (RNAV) 10, Required Navigation Performance (RNP) 10, RNP 4, or oceanic/remote continental RNP 2 on the air traffic control (ATC) flight plan.

(4) Except as provided in operations specification A014, en route operations must remain within controlled airspace.

(5) Except when navigation is performed under the supervision of a properly qualified check pilot, the flightcrew must be qualified in accordance with the certificate holder's approved training program for IFR en route operations. The flightcrew must have satisfactorily completed the ground school portion of that training program before performing under the supervision of a check pilot.

b. Using Ground-Based NAVAIDs. The certificate holder is authorized to navigate on published airways and over off-airway routings defined by ground-based NAVAIDs, in accordance with the following additional provisions:

(1) These airways and routings lie within the Operational Service Volume of the NAVAIDs used, except along airways where minimum en route altitude (MEA) gaps in NAVAID reception are published.

(2) The required aircraft NAVAID receivers and ground-based NAVAIDs are available and operational.

[Help Button Text –
If applicable, select to load text for subparagraph c for using an RNAV system.]

c. Using an RNAV System. In accordance with part 121, § 121.349(a)(3), the certificate holder is authorized to navigate using the/an RNAV system(s) compliant with navigation specification(s) RNAV 2 and/or RNP 2 domestic/offshore, as indicated in the applicable flight manual or flight manual supplement. The following additional provisions apply:

(1) If navigating using only a single RNAV system, or multiple RNAV systems that rely solely on Global Positioning System (GPS) navigation sensors, any non-extended overwater

operations over off-airway routing must remain within airspace which is under Air Traffic Service (ATS) surveillance and is covered by very high frequency (VHF) voice communications.

(2) Except as provided in operations specification B036 or authorized in subparagraph d, operations must remain outside oceanic control areas (OCA) where ATC requires use of a long-range communication system (LRCS).

[Help Button Text –
- *Subparagraph c MUST be selected before selecting to add subparagraph d. If applicable, select to load text for subparagraph d for in OCAs.*
- *This subparagraph is NOT applicable and should not be added if the certificate holder has been issued B036.]*

d. In OCAs. The certificate holder is authorized to operate within OCAs where ATC requires use of a LRCS (outside the coverage of VHF voice). During such operations, the following must be installed and operational:

(1) Two independent RNAV systems that qualify as long-range navigation systems (LRNS) as defined in 14 CFR Part 1, § 1.1; and

(2) Two independent LRCS.

Appendix H. Sample OpSpec B033, IFR En Route Operations: 14 CFR Part 125

a. General. The certificate holder is authorized to conduct en route operations under instrument flight rules (IFR) in accordance with the limitations and provisions of these operations specifications, listed below.

(1) This authorization is valid only within the areas of en route operation listed in paragraph B050 of these operations specifications.

(2) Except as provided in operations specification(s) B030 and/or B036, flights must be One-Hour Reliable Fix (1HRF) Operations, where a reliable ground-based Navigational Aid (NAVAID) fix is available at least once each hour.

(3) Except as provided in operations specification B036, the certificate holder must not indicate oceanic capability of Area Navigation (RNAV) 10, Required Navigation Performance (RNP) 10, RNP 4, or oceanic/remote continental RNP 2 on the air traffic control (ATC) flight plan.

(4) Except as provided in operations specification A014, en route operations must remain within controlled airspace.

(5) Except when navigation is performed under the supervision of a properly qualified check pilot, the flightcrew must be qualified in accordance with the certificate holder's approved training program for IFR en route operations. The flightcrew must have satisfactorily completed the ground school portion of that training program before performing under the supervision of a check pilot.

b. Using Ground-Based NAVAIDs. The certificate holder is authorized to navigate on published airways and over off-airway routings defined by ground-based NAVAIDs, in accordance with the following additional provisions:

(1) These airways and routings lie within the Operational Service Volume of the NAVAIDs used, except along airways where minimum en route altitude (MEA) gaps in NAVAID reception are published.

(2) The required aircraft NAVAID receivers and ground-based NAVAIDs are available and operational.

[Help Button Text –
If applicable, select to load text for subparagraph c for using an RNAV system.]

c. Using an RNAV System. In accordance with part 125, § 125.203(c)(3), the certificate holder is authorized to navigate using the/an RNAV system(s) compliant with navigation specification(s) RNAV 2 and/or RNP 2 domestic/offshore, as indicated in the applicable flight manual or flight manual supplement. The following additional provisions apply:

(1) If navigating using only a single RNAV system, or multiple RNAV systems that rely solely on Global Positioning System (GPS) navigation sensors, any non-extended overwater

operations over off-airway routing must remain within airspace which is under Air Traffic Service (ATS) surveillance and is covered by very high frequency (VHF) voice communications.

(2) Except as provided in operations specification B036 or authorized in subparagraph d, operations must remain outside oceanic control areas (OCA) where ATC requires use of a long-range communication system (LRCS).

[Help Button Text –

- *Subparagraph c MUST be selected before selecting to add subparagraph d. If applicable, select to load text for subparagraph d for in OCAs.*
- *This subparagraph is NOT applicable and should not be added if the certificate holder has been issued B036.]*

d. In OCAs. The certificate holder is authorized to operate within OCAs where ATC requires use of a LRCS (outside the coverage of VHF voice). During such operations, the following must be installed and operational:

(1) Two independent RNAV systems that qualify as long-range navigation systems (LRNS) as defined in 14 CFR Part 1, § 1.1; and

(2) Two independent LRCS.

Appendix I. Sample OpSpec B033, IFR En Route Operations: 14 CFR Part 135

a. General. The certificate holder is authorized to conduct en route operations under instrument flight rules (IFR) in accordance with the limitations and provisions of these operations specifications, listed below.

(1) This authorization is valid only within the areas of en route operation listed in paragraph B050 of these operations specifications.

(2) Except as provided in operations specification(s) B030 and/or B036, flights must be One-Hour Reliable Fix (1HRF) Operations, where a reliable ground-based Navigational Aid (NAVAID) fix is available at least once each hour.

(3) Except as provided in operations specification B036, the certificate holder must not indicate oceanic capability of Area Navigation (RNAV) 10, Required Navigation Performance (RNP) 10, RNP 4, or oceanic/remote continental RNP 2 on the air traffic control (ATC) flight plan.

(4) Except as provided in operations specification A014, en route operations must remain within controlled airspace.

(5) Except when navigation is performed under the supervision of a properly qualified check pilot, the flightcrew must be qualified in accordance with the certificate holder's approved training program for IFR en route operations. The flightcrew must have satisfactorily completed the ground school portion of that training program before performing under the supervision of a check pilot.

b. Using Ground-Based NAVAIDs. The certificate holder is authorized to navigate on published airways and over off-airway routings defined by ground-based NAVAIDs, in accordance with the following additional provisions:

(1) These airways and routings lie within the Operational Service Volume of the NAVAIDs used, except along airways where minimum en route altitude (MEA) gaps in NAVAID reception are published.

(2) The required aircraft NAVAID receivers and ground-based NAVAIDs are available and operational.

[Help Button Text –
If applicable, select to load text for subparagraph c for using an RNAV system.]

c. Using an RNAV System. In accordance with part 135, § 135.165(a)(4), the certificate holder is authorized to navigate using the/an RNAV system(s) compliant with navigation specification(s) RNAV 2 and/or RNP 2 domestic/offshore, as indicated in the applicable flight manual or flight manual supplement. The following additional provisions apply:

(1) If navigating using only a single RNAV system, or multiple RNAV systems that rely solely on Global Positioning System (GPS) navigation sensors, any non-extended overwater

operations over off-airway routing must remain within airspace which is under Air Traffic Service (ATS) surveillance and is covered by very high frequency (VHF) voice communications.

(2) Except as provided in operations specification B036 or authorized in subparagraph d, operations must remain outside oceanic control areas (OCA) where ATC requires use of a long-range communication system (LRCS).

[Help Button Text –

- *Subparagraph c MUST be selected before selecting to add subparagraph d. If applicable, select to load text for subparagraph d for in OCAs.*
- *This subparagraph is NOT applicable and should not be added if the certificate holder has been issued B036.]*

d. In OCAs. The certificate holder is authorized to operate within OCAs where ATC requires use of a LRCS (outside the coverage of VHF voice). During such operations, the following must be installed and operational:

(1) Two independent RNAV systems that qualify as long-range navigation systems (LRNS) as defined in 14 CFR Part 1, § 1.1; and

(2) Two independent LRCS.

Appendix J. Sample OpSpec B033, IFR En Route Operations: 14 CFR Part 121/135

a. General. The certificate holder is authorized to conduct en route operations under instrument flight rules (IFR) in accordance with the limitations and provisions of these operations specifications, listed below.

(1) This authorization is valid only within the areas of en route operation listed in paragraph B050 of these operations specifications.

(2) Except as provided in operations specification(s) B030 and/or B036, flights must be One-Hour Reliable Fix (1HRF) Operations, where a reliable ground-based Navigational Aid (NAVAID) fix is available at least once each hour.

(3) Except as provided in operations specification B036, the certificate holder must not indicate oceanic capability of Area Navigation (RNAV) 10, Required Navigation Performance (RNP) 10, RNP 4, or oceanic/remote continental RNP 2 on the air traffic control (ATC) flight plan.

(4) Except as provided in operations specification A014, en route operations must remain within controlled airspace.

(5) Except when navigation is performed under the supervision of a properly qualified check pilot, the flightcrew must be qualified in accordance with the certificate holder's approved training program for IFR en route operations. The flightcrew must have satisfactorily completed the ground school portion of that training program before performing under the supervision of a check pilot.

b. Using Ground-Based NAVAIDs. The certificate holder is authorized to navigate on published airways and over off-airway routings defined by ground-based NAVAIDs, in accordance with the following additional provisions:

(1) These airways and routings lie within the Operational Service Volume of the NAVAIDs used, except along airways where minimum en route altitude (MEA) gaps in NAVAID reception are published.

(2) The required aircraft NAVAID receivers and ground-based NAVAIDs are available and operational.

[Help Button Text –
If applicable, select to load text for subparagraph c for using an RNAV system.]

c. Using an RNAV System. In accordance with 14 CFR Part 121, § 121.349(a)(3), and/or Part 135, § 135.165(a)(4), the certificate holder is authorized to navigate using the/an RNAV system(s) compliant with navigation specification(s) RNAV 2 and/or RNP 2 domestic/offshore, as indicated in the applicable flight manual or flight manual supplement. The following additional provisions apply:

(1) If navigating using only a single RNAV system, or multiple RNAV systems that rely solely on Global Positioning System (GPS) navigation sensors, any non-extended overwater operations over off-airway routing must remain within airspace which is under Air Traffic Service (ATS) surveillance and is covered by very high frequency (VHF) voice communications.

(2) Except as provided in operations specification B036 or authorized in subparagraph d, operations must remain outside oceanic control areas (OCA) where ATC requires use of a long-range communication system (LRCS).

[Help Button Text –

- *Subparagraph c MUST be selected before selecting to add subparagraph d. If applicable, select to load text for subparagraph d for in OCAs.*
- *This subparagraph is NOT applicable and should not be added if the certificate holder has been issued B036.]*

d. In OCAs. The certificate holder is authorized to operate within OCAs where ATC requires use of a LRCS (outside the coverage of VHF voice). During such operations, the following must be installed and operational:

(1) Two independent RNAV systems that qualify as long-range navigation systems (LRNS) as defined in 14 CFR Part 1, § 1.1; and

(2) Two independent LRCS.

Appendix K. Sample MSpec B033, IFR En Route Operations:14 CFR Part 91K

a. General. The program manager is authorized to conduct en route operations under instrument flight rules (IFR) in accordance with the limitations and provisions of these management specifications, listed below.

(1) This authorization is valid only within the areas of en route operation listed in paragraph B050 of these management specifications.

(2) Except as provided in management specification(s) B030 and/or B036, flights must be One-Hour Reliable Fix (1HRF) Operations, where a reliable ground-based Navigational Aid (NAVAID) fix is available at least once each hour.

(3) Except as provided in management specification B036, the program manager must not indicate oceanic capability of Area Navigation (RNAV) 10, Required Navigation Performance (RNP) 10, RNP 4, or oceanic/remote continental RNP 2 on the air traffic control (ATC) flight plan.

(4) Except as provided in management specification A014, en route operations must remain within controlled airspace.

(5) Except when navigation is performed under the supervision of a properly qualified check pilot, the flightcrew must be qualified in accordance with the program manager's approved training program for IFR en route operations. The flightcrew must have satisfactorily completed the ground school portion of that training program before performing under the supervision of a check pilot.

b. Using Ground-Based NAVAIDs. The program manager is authorized to navigate on published airways and over off-airway routings defined by ground-based NAVAIDs, in accordance with the following additional provisions:

(1) These airways and routings lie within the Operational Service Volume of the NAVAIDs used, except along airways where minimum en route altitude (MEA) gaps in NAVAID reception are published.

(2) The required aircraft NAVAID receivers and ground-based NAVAIDs are available and operational.

[Help Button Text –
If applicable, select to load text for subparagraph c for using an RNAV system.]

c. Using an RNAV System. The program manager is authorized to navigate using the/an RNAV system(s) compliant with navigation specification(s) RNAV 2 and/or RNP 2 domestic/offshore, as indicated in the applicable flight manual or flight manual supplement. The following additional provisions apply:

(1) If navigating using only a single RNAV system, or multiple RNAV systems that rely solely on Global Positioning System (GPS) navigation sensors, any non-extended overwater

operations over off-airway routing must remain within airspace which is under Air Traffic Service (ATS) surveillance and is covered by very high frequency (VHF) voice communications.

(2) Except as provided in management specification B036 or authorized in subparagraph d, operations must remain outside oceanic control areas (OCA) where ATC requires use of a long-range communication system (LRCS).

[Help Button Text –
- *Subparagraph c MUST be selected before selecting to add subparagraph d. If applicable, select to load text for subparagraph d for in OCAs.*
- *This subparagraph is NOT applicable and should not be added if the certificate holder has been issued B036.]*

d. In OCAs. The program manager is authorized to operate within OCAs where ATC requires use of a LRCS (outside the coverage of VHF voice). During such operations, the following must be installed and operational:

(1) Two independent RNAV systems that qualify as long-range navigation systems (LRNS) as defined in 14 CFR Part 1, § 1.1; and

(2) Two independent LRCS.

Appendix L. Sample LOA B033, IFR En Route Operations: 14 CFR Part 125 (A125 LODA Holder)

1. General. The operator/company, authorized to conduct operations in accordance with Letter of Deviation Authority (LODA) A125, is authorized to conduct en route operations under instrument flight rules (IFR) in accordance with the limitations and provisions of this Letter of Authorization (LOA), listed below.

a. This authorization is valid only within the areas of en route operation listed in paragraph B050 of this LOA.

b. Except as provided in LOA(s) B030 and/or B036, flights must be One-Hour Reliable Fix (1HRF) Operations, where a reliable ground-based Navigational Aid (NAVAID) fix is available at least once each hour.

c. Except as provided in LOA B036, the operator/company must not indicate oceanic capability of Area Navigation (RNAV) 10, Required Navigation Performance (RNP) 10, RNP 4, or oceanic/remote continental RNP 2 on the air traffic control (ATC) flight plan.

d. Except as provided in LOA A014, en route operations must remain within controlled airspace.

e. Except when navigation is performed under the supervision of a properly qualified check pilot, the flightcrew must be qualified in accordance with the operator/company's approved training program for IFR en route operations. The flightcrew must have satisfactorily completed the ground school portion of that training program before performing under the supervision of a check pilot.

2. Using Ground-Based NAVAIDs. The operator/company is authorized to navigate on published airways and over off-airway routings defined by ground-based NAVAIDs, in accordance with the following additional provisions:

a. These airways and routings lie within the Operational Service Volume of the NAVAIDs used, except along airways where minimum en route altitude (MEA) gaps in NAVAID reception are published.

b. The required aircraft NAVAID receivers and ground-based NAVAIDs are available and operational.

[Help Button Text –
If applicable, select to load text for subparagraph c for using an RNAV system.]

3. Using an RNAV System. In accordance with part 125, § 125.203(c)(3), the operator/company is authorized to navigate using the/an RNAV system(s) compliant with navigation specification(s) RNAV 2 and/or RNP 2 domestic/offshore, as indicated in the applicable flight manual or flight manual supplement. The following additional provisions apply:

a. If navigating using only a single RNAV system, or multiple RNAV systems that rely solely on Global Positioning System (GPS) navigation sensors, any non-extended overwater operations over off-airway routing must remain within airspace which is under Air Traffic Service (ATS) surveillance and is covered by very high frequency (VHF) voice communications.

b. Except as provided in LOA B036 or authorized in subparagraph 4, operations must remain outside oceanic control areas (OCA) where ATC requires use of a long-range communication system (LRCS).

[Help Button Text –
- *Subparagraph 3 MUST be selected before selecting to add subparagraph 4. If applicable, select to load text for subparagraph 4 for in OCAs.*
- *This subparagraph is NOT applicable and should not be added if the certificate holder has been issued B036.]*

4. In OCAs. The operator/company is authorized to operate within OCAs where ATC requires use of a LRCS (outside the coverage of VHF voice). During such operations, the following must be installed and operational:

a. Two independent RNAV systems that qualify as long-range navigation systems (LRNS) as defined in 14 CFR Part 1, § 1.1; and

b. Two independent LRCS.