SUBJ: Optional Letter of Authorization (LOA) for Straight-In Non-Precision, APV, and Category I Precision Approach and Landing Minima–All Airports

1. Purpose of This Notice. This document provides notice of changes to letter of authorization (LOA) C052 and implementation of guidance for operations under Title 14 of the Code of Federal Regulations (14 CFR) part 91.

2. Audience. The primary audience for this notice is certificate-holding district offices (CHDO), Flight Standards District Offices (FSDO), certificate management offices (CMO), principal inspectors (PI), and aviation safety inspectors (ASI). The secondary audience includes Flight Standards Service (AFS) divisions and branches in the regions and in headquarters (HQ).


4. Background. LOA C052 is not needed for operations within the United States or territories for part 91 operators. Some foreign nations have requested evidence of training and approval to fly Global Navigation Satellite System (GNSS)-based approaches to Localizer Performance with Vertical Guidance (LPV) minima. This LOA can satisfy that request. A similar approach was taken with optional LOA C063, Area Navigation (RNAV) and Required Navigation Performance (RNP) Terminal Operations.

5. Inspector Guidance. This optional LOA template is provided to satisfy a request from foreign regulatory authorities for evidence of training and approval to fly GNSS-based approaches. Unlike the other C052 templates, the inspector only has the option of selecting Ground Based Augmentation System (GBAS) Landing System (GLS) or RNAV (GNSS) approaches to lateral navigation (LNAV), LNAV/vertical navigation (VNAV), LPV or Localizer Performance (LP) lines of minima. As a result, this LOA is not a comprehensive list of authorized approaches for the operator, but only a subset to address foreign GNSS-based approaches.
a. **Capability and Training.** The inspector should ensure the applicant presents documentation of capability to perform these operations. Additionally, the inspector should verify evidence of training. After completing these actions, the inspector may select the appropriate lines of minima in Table 1 of the LOA.

b. **Resources.** The inspector may find these resources helpful: Order 8900.1, Volume 3, Chapter 18, Section 5 and the current edition of Advisory Circular (AC) 90-107, Guidance for Localizer Performance with Vertical Guidance and Localizer Performance without Vertical Guidance Approach Operations in the U.S. National Airspace System, paragraphs, 7, 8, and 9, to determine GNSS-based approach eligibility. Finally, the inspector may also reference Aeronautical Information Manual, paragraphs 1-1-19 and 1-1-20, and FAA’s Performance Based Flight Systems Branch Web page for more details.

6. **Guidance.** The Flight Technologies and Procedures Division (AFS-400) developed this notice. This notice contains the following sample LOA C052 template in Appendix A, which applies to part 91.

7. **Action.** Upon operator request, PIs should follow guidance above to issue template.

8. **Disposition.** We will incorporate the information in this notice into FAA Order 8900.1 before this notice expires. Direct your questions or comments concerning this notice to the Performance Based Flight Systems Branch (AFS-470) at 202-267-8806 or your regional Next Generation Air Transportation System (NextGen) Branch listed below.

- AAL-220 at 907-271-3579.
- ACE-220 at 816-329-3280.
- AEA-220 at 781-238-7207.
- AGL-220 at 847-294-7549.
- ANM-220 at 425-227-2644.
- ASO-220 at 404-305-6041.
- ASW-220 at 817-222-5244.
- AWP-220 at 310-725-7215.

ORIGINAL SIGNED by

/s/ John Barbagallo
Deputy Director, Flight Standards Service
Appendix A. Sample LOA C052, Straight-In Non-Precision, Approach Procedure with Vertical Guidance (APV), and Category I Precision Approach and Landing Minima—All Airports: 14 CFR Part 91

1. This optional letter of authorization (LOA) is provided to satisfy a request from foreign regulatory authorities for evidence of training and approval to fly Global Navigation Satellite System (GNSS)-based approaches. The operator is authorized to conduct operations using RNAV GNSS IAP to the lines of minima listed in Table 1 below. This LOA is not a comprehensive list of authorized approaches for the operator, but only a subset to address foreign GNSS-based approaches.

2. Limitations and Provisions for IAPs at foreign airports.

   a. Unless otherwise authorized by this LOA, the operator must not conduct any IFR IAP at any foreign airport unless:

      (1) All GNSS procedures have been constructed using criteria based on current FAA Order 8260 series criteria specified for that type procedure, or International Civil Aviation Organization (ICAO) Doc 8168, Procedures for Air Navigation Services, or special criteria approved by the Flight Technologies and Procedures Division (AFS-400). Additionally, Satellite-based Augmentation System (SBAS) specific procedures (LPV, LP and SBAS-based LNAV/VNAV) have been constructed using criteria authorized by the SBAS service provider, and State, as being compatible with the specified SBAS system performance;

      (2) The provisions outlined in the State’s Aeronautical Information Publication are met, including type of SBAS receiver (for example, European Geostationary Navigation Overlay Service (EGNOS)-capable);

      (3) The visibility, Runway Visual Range (RVR), or Converted Meteorological Visibility (CMV) is based on FAA Order 8260.3, or the applicable European Union (EU) or European Aviation Safety Agency (EASA) regulation or ICAO Doc 9365, Manual of All-Weather Operations; and

      (4) The operator uses a procedure with minimum descent altitude (MDA) or decision altitude/height (DA/H) at or above 200 feet height above threshold (HATh).

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

      (1) The mid-point (MID) RVR and rollout (RO) RVR reports (if available) provide advisory information to pilots.
(2) Visibility values below ½ statute mile are not authorized and must not be used.

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

c. Approach Procedures Using GNSS or SBAS. The operator is authorized to conduct GNSS or SBAS-based instrument approach operations using the approved GNSS or SBAS equipment listed in LOA B034 if RNAV (GNSS) or Ground Based Augmentation System (GBAS) Landing System (GLS) is listed in Table 1 above. This authorization to conduct approaches using GNSS or SBAS is subject to the following limitations and conditions:

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

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

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

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

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

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

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

- Runway, runway markings, or runway lights.
- Approach light system (in accordance with 14 CFR § 91.175(c)(3)(i)).
- Threshold, threshold markings, or threshold lights.
- TDZ, TDZ markings, or TDZ lights.
• Visual glidepath indicator (such as Visual Approach Slope Indicator (VASI), precision approach path indicator (PAPI)).
• Runway end identifier lights.

3. **Crew Training.** Crew training conducted by [Text Box]. In accordance with §§ 91.3 and 91.703(a)(1) and (2) and ICAO Annex 2 (Rules of the Air), paragraph 2.3.2 (Pre-flight action) crews are responsible for policies and procedures in areas of operations where flights are conducted.

4. **Responsible Person.** This person should be the individual person who will be the operator or if the operator is a legal entity, then an officer, employee or person who that entity has contracted with in order to act on behalf of the legal entity with respect to the IAP authorization. This person must be a U.S. Citizen, or a person who holds a U.S. pilot certificate and who accepts responsibility for complying with the stated regulations.

   a. If the Responsible Person named on this LOA relinquishes responsibility, this LOA becomes invalid.

   b. The name, email address, and telephone number of the Responsible Person are listed in Table 2:

   ![Table 2 - Responsible Person](table)

5. **Point of Contact (POC).** If the operator has decided to use a separate individual other than the Responsible Person to fulfill this role, then the POC will be listed in Table 3, otherwise the Responsible Person will be listed in Table 2 and Table 3.

   a. The POC is the individual the FAA should first contact with respect to the operator’s IAP-compliant airplane operations and maintenance status.

   b. If the POC is other than the Responsible Person that individual is not authorized to sign the LOA.

   c. The name, email address, and telephone number of the POC are listed in Table 3:

   ![Table 3 - Point of Contact](table)