FLIGHT TECHNOLOGIES AND PROCEDURES DIVISION

ASOC

Aircraft Statement of Capability

An Aircraft Manufacturer's Guide for Obtaining FAA Acceptance

Version 2.0

NextGEN

FEDERAL AVIATION ADMINISTRATION

FLIGHT TECHNOLOGIES AND PROCEDURES DIVISION

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Document Changes

Version	Date	Description of Change
1.0		Initial Operating Capability (IOC) version
1.1	12/9/2021	Added Table 1.1 for aircraft installed equipment
2.0	3/31/2022	• Edit of paragraph 1.1, p.1 • Added D095 to table 1-1, p.1 • Added note to table 1-1 • Edit of paragraph 1.2, p.2 • Moved 1.3 to 2.1, p. 3 • Edits and added queries to 2.1, p.3 • Edit of Table in 2.2, p.3 • Edits to introduction paragraphs of all appendices • Deleted all references to Advance RNP (A-RNP) in Appendix B and F

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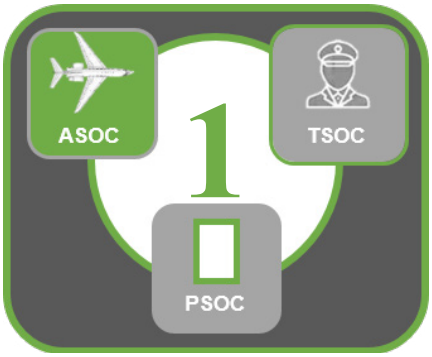

Section 1 | Introduction

1.1 Overview

This guide facilitates an aircraft Original Manufacturer's (OEM) request to obtain acceptance of a Aircraft Statement of Capability (ASOC) from the FAA. An FAA-accepted ASOC is a critical component of the Streamlined Part 91 Operational Approval Application.

This guide will help ensure the application includes the documentation FAA policy specialists need to verify the procedural compliance stated in the ASOC.

Table 1-1 LOAs Available in the Streamlined Part 91 Operational Approval Application

LOA	*Title*
A056	Data Link Communications
B036	Oceanic and Remote Continental Navigation Using Multiple Long-Range Navigation Systems (M-LRNS)
B039	Operations in North Atlantic High Level Airspace (NAT HLA)
B046	Operations in Reduced Vertical Separation Minimum (RVSM) Airspace
B054	Oceanic and Remote Airspace Navigation Using a Single Long-Range Navigation System
C048	Enhanced Flight Vision System (EFVS) Operations
C052	Straight-in Non-Precision, Approach Procedure with Vertical Guidance (APV), and Category I Precision Approach and Landing Minima - All Airports
C063	Area Navigation (RNAV) and Required Navigation Performance (RNP) Terminal Operations
C073	Vertical Navigation (VNAV) Instrument Approach Procedures (IAP) Using Minimum Descent Altitude (MDA) as a Decision Altitude (DA)/Decision Height (DH)
D095	Minimum Equipment List (MEL) Authorization

Note: An ASOC is used to verify aircraft capability for all the LOAs in Table 1-1 except D095.

1.2 Application Instructions

1. Fill out the information and attach the documentation requested in Section 2.
2. Use the appendices to provide quick reference for the compliance items listed. This will facilitate the specialist's review of the application.

   Note: Contacting the FAA's Streamlined Part 91 Operational Approval Specialist prior to preparing/ submitting an application is recommended and may facilitate the review process.
3. Email the completed application to the Flight Technologies and Procedures Division. The subject line of the email should read "Request for ASOC Acceptance".

   Note: When this guide is filled out, it serves as an application for ASOC acceptance.

Visit the following web-page for more information on
Streamlined Part 91 Operational Approvals
We appreciate any feedback to improve
this application guide.
Contact the
Flight Technologies and Procedures Division at:
Email: 9-AWA-AVS-AFS-400-Flight-Technologies-Procedures@faa.gov

Section 2 | Application

2.1 Application Information

Date: _____ Aircraft: _____

○ This is a request to accept an initial ASOC.

○ This is a request to accept a revision to a previously accepted ASOC.

Please explain the reason for this revision.

_____

Aircraft Manufacturer Information:

Manufacturer Name: _____

Contact Name and Position: _____

Contact Phone: _____

Contact Email: _____

2.2 Application Attachments

Check Box	Attachments
☐	**Proposed Aircraft Statement of Capability (ASOC)**. Attach the proposed ASOC. Instructions for developing an industry standard ASOC are on the GAMA website. The ASOC should be signed by a appropriate OEM representative.
☐	**Supporting Documentation.** Attach excerpts from the AFM or other documentation that can be used to verify the aircraft meets the equipment requirements of the LOAs listed on the ASOC. The appendices of this guide list the equipment requirements for each LOA. **Note:** If you are submitting a revision to a previously accepted ASOC, attach supporting documentation to verify any changes in aircraft capability.

Appendix A | A056 Aircraft Eligibility

A.1 A056, Data Link Communications

The overarching guidance regarding aircraft eligibility for data link communications is found in AC 20-140, *Guidelines for Design Approval of Aircraft Data Link Communication Systems Supporting Air Traffic Services (ATS)*. For each aircraft eligibility requirement in this Appendix, list the page(s) where the capability is addressed in the manufacturer's documentation. Highlighting is recommended.

Table A-1 A056 Aircraft Eligibility Requirements

Item Number	Aircraft Eligibility Requirements	Reference
1	Data link FANS 1/A+ with a minimum performance of: CPDLC with RCP 240 ADC-C with RSP 180 **Note:** The plus symbol (+) in FANS 1/A + indicates that the system has a latency timer. Latency monitoring is included in the latency timer function.	
2	VDL M2. If seeking US Domestic En Route CPDLC, show that the VDL Mode 2 radio meets TSO C-160a or equivalent.	
3	Data communications recording equipment (CVR, CVFDR etc.) See Part 91, §91.609(j) and InFO 16004. Provide documentation that the cockpit voice recorder(s) and flight data recorder(s) are in compliance with 14 CFR Part §91.609(j), Part §121.359(k), §125.227(i), §135.151(h). FAA INFO 16004 provides additional guidance concerning the applicability of these regulations.	
4	Functional integration aka "push to load" capability enabling the pilot to incorporate received routing changes (e.g., uplink message (UM79, UM80, and UM83) into the FMS.	
5	RNP system has a minimum performance capability of RNP 4. Note: RNP 4 is the minimum performance required for Performance Based Communication Surveillance (PBCS) operations.	

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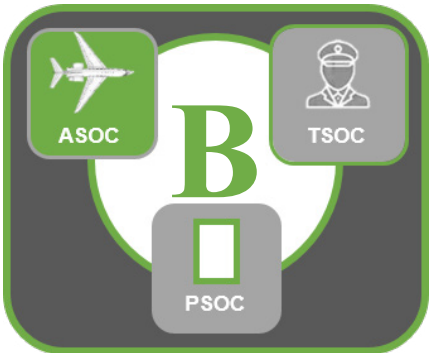

Appendix B | B036, B039, and B054 Aircraft Eligibility

B.1 B036, B039, or B054 , Oceanic and Remote Continental Operations and Required Navigation Performance (RNP)

The overarching guidance regarding aircraft eligibility for oceanic and remote continental operations is found in AC 20-138, *Airworthiness Approval of Positioning and Navigation Systems*.

In accordance with Part 91, §91.511, your aircraft must have two-way radio communication that is adequate for over-water operations in order to comply with 14 CFR Part 91, §91.183. Fill in Table B-1 with information of the equipment that is installed and operational on your aircraft.

Table B-1 Summary of Installed Equipment

Number Installed	Type	Manufacturer(s)	Model(s)	Additional Notes/Limitations	Standard Equip-ment	Optional Equip-ment
0	FMS				◯	◯
0	GNSS				◯	◯
0	IRS				◯	◯
0	HF				◯	◯
0	SAT-VOICE				◯	◯
0	ADS-B				◯	◯

Number Installed	Type	Manufacturer(s)	Model(s)	Additional Notes/Limitations	Standard Equip-ment	Optional Equip-ment
0	TCAS				○	○

Notes:
Qualifying SATVOICE must be installed in accordance with AC 20-150( )
For the IRS row, include RNP time limit in the "Additional Notes/Limitations" column.

For each aircraft eligibility requirement in this Appendix, list the page(s) where the capability is addressed in the manufacturer's documentation. Highlighting is recommended.

Table B-2 B036, B039 or B054 Aircraft Eligibility Requirements

Item Number	Aircraft Eligibility Requirements	Reference
1	RNP Capabilities: Attach a page/paragraph showing a Statement of Compliance (SOC) with criteria of RNP capability of your aircraft in Advisory Circular (AC) 20-138( ), Airworthiness Approval of Positioning and Navigation Systems. The SOC may be in your Airplane Flight Manual (AFM), Airplane Flight Manual Supplement (AFMS), pilot's operating handbook (POH), avionics operating manual or manufacturer's service letter. This SOC may be provided from the manufacturer, the entity that owns the design approval for the installed navigation systems or an alternative authority approved by the FAA. **Note 1:** Confirm that RNP navigation requirements meet the current requirements of AC 90-105 ( ), Approval Guidance for RNP Operations and Barometric Vertical Navigation in the U.S. National Airspace System and in Oceanic and Remote Continental Airspace, and/or ICAO Document 9613 – PBN Manual.	
2	RNP 2: If you are applying for RNP 2, then provide documentation that your aircraft has at least two fully serviceable independent GNSS LRNS. **Note 1:** Not applicable for B054	
3	RNP 4: If you are applying for RNP 4, then provide documentation that your aircraft has at least two serviceable independent long-range navigation systems (LRNS). Global Navigation Satellite System (GNSS) must be used as either a standalone navigation system, as one of the sensors in a multisensor system, or as part of an integrated GNSS/inertial system. **Note 1:** Not applicable for B054	

Item Number	Aircraft Eligibility Requirements	Reference
4	RNP 10: B036 Provide documentation that your aircraft has at least two approved serviceable independent LRNS receiving inputs from GNSS or inertial navigation sources. Source: AC 90-105( ), paragraph G.2-G.7 B054 Provide documentation that your aircraft has one approved independent serviceable LRNS receiving inputs from GNSS or inertial navigation sources. **Note 1:** B054 should not be selected/applied for in aircraft where multiple LRNS are installed.	
5	Provide installation documentation that your aircraft is equipped with ADS-B Out, Version 2 (V2) in accordance with DO 260B.	
6	Provide installation documentation that your aircraft is equipped with TCAS II, V7.1	

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Appendix C | B046, Aircraft Eligibility

C.1 B046 , Reduced Vertical Separation Minimum (RVSM)

The overarching guidance regarding aircraft eligibility for RVSM is found in AC 91-85, *Authorization of Aircraft and Operators for Flight in Reduced Vertical Separation Minimum (RVSM) Airspace*. For the aircraft eligibility requirement in this Appendix, list the page(s) where the capability is addressed in the manufacturer's documentation. Highlighting is recommended.

Table C-1 B046 , Reduced Vertical Separation Minimum (RVSM)

Item Number	Aircraft Eligibility Requirements	Reference
1	Aircraft airworthiness to conduct Title 14 of the Code of Federal Regulations (14 CFR) part 91, §§ 91.180 and 91.706 Reduced Vertical Separation Minimum (RVSM) operations. RVSM airspace is any airspace or route between flight level (FL) 290 and FL 410 inclusive where aircraft are separated vertically by 1,000 feet.	

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Appendix D | C048 Aircraft Eligibility

D.1 C048 , Enhanced Flight Vision System Equipment (EFVS)

The overarching guidance regarding aircraft eligibility for EFVS is found in AC 20-167, *Airworthiness Approval of Enhanced Vision System, Synthetic Vision System, Combined Vision System, and Enhanced Flight Vision System Equipment.* For the aircraft eligibility requirement in this Appendix, list the page(s) where the capability is addressed in the manufacturer's documentation. Highlighting is recommended.

Table D-1 C048 Enhanced Flight Vision System Equipment (EFVS)

Item Number	Aircraft Eligibility Requirements	Reference
1	At a minimum, the aircraft's EFVS must be in accordance with Part 91, §91.176 (b) for EFVS operation to 100 feet above the touchdown zone elevation. The EFVS must be certified in accordance with the equipment requirements of § 91.176 (b)(1) and the criteria in AC 20-167 and found to be eligible for use in EFVS Operations to 100 feet Above the TDZE under § 91.176 (b). **Note:** An aircraft that meets the EFVS certification requirements for EFVS Operations to Touchdown and Rollout in accordance with § 91.176(a) also meets the certification requirements for EFVS Operations to 100 Feet Above the Touchdown Zone Elevation in accordance with § 91.176(b).	

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Appendix E | C052 Aircraft Eligibility

E.1 C052, Precision and Non-Precision GNSS Based Approaches

The overarching guidance regarding aircraft eligibility for approach operations is found in AC 20-138, *Airworthiness Approval of Positioning and Navigation Systems*. For each aircraft eligibility requirement in this Appendix, list the page(s) where the capability is addressed in the manufacturer's documentation. Highlighting is recommended.

Table E-1, C052 Precision and Non-Precision GNSS Based Approaches

Check If Applicable	Aircraft Eligibility Requirements	Reference
☐	The aircraft is capable of RNAV (GNSS) - LNAV approach procedures.	
☐	The aircraft is capable of RNAV (GNSS) - LP approach procedures.	
☐	The aircraft is capable of RNAV (GNSS) - LNAV/VNAV approach procedures.	
☐	The aircraft is capable of RNAV (GNNS) - LPV approach procedures.	
☐	The aircraft is capable of GLS approach procedures.	

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Appendix F | C063 Aircraft Eligibility

F.1 C063, Area Navigation (RNAV) and Required Navigation Performance (RNP) Terminal Operations

The overarching guidance regarding aircraft eligibility for approach operations is found in AC 20-138, *Airworthiness Approval of Positioning and Navigation Systems*. For the aircraft eligibility requirement in this Appendix, list the page(s) where the capability is addressed in the manufacturer's documentation. Highlighting is recommended.

Table F-1, C063 Area Navigation (RNAV) and Required Navigation Performance (RNP) Terminal Operations

Item Number	Aircraft Eligibility Requirements	Reference
1	At a minimum the aircraft is RNAV 1 capable to perform the following terminal operations: 1. Instrument departure procedures (DP) Obstacle Departure Procedures (ODP), 2. Standard Instrument Departures (SID), and 3. Standard Terminal Arrival Routes (STAR).	

APPENDIX F: LOA C063

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Appendix G | C073 Aircraft Eligibility

G.1 C073, Vertical Navigation (VNAV) Guidance

The overarching guidance regarding aircraft eligibility for approach operations is found in AC 20-138, *Airworthiness Approval of Positioning and Navigation Systems*. For the aircraft eligibility requirement in this Appendix, list the page(s) where the capability is addressed in the manufacturer's documentation. Highlighting is recommended.

Table G-1, C073 Vertical Navigation (VNAV) Guidance

Item Number	Aircraft Eligibility Requirements	Reference
1	Aircraft is capable of performing VNAV guidance with a defined Vertical Path (VPATH) that provides a continuous descent final approach (CDFA)	

APPENDIX F: LOA C073

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