Customer Services

Advisory Wire

REFERENCE NO:	AW700-23-0632, Rev. 01	INFORMATION TYPE:	Maintenance Operational
ATA:	23-23	EFFECTIVITY:	Global Express / XRS (9002 - 9312, 9314 - 9380, 9384 - 9429) Global 5000 (9127 to 9383, 9389 to 9400, 9404 to 9431 and 9998) Global 5000 feat. Vision Flight Deck (9386, 9401, 9445 - 9997) Global 6000 (9313, 9381, 9432 -9997)
SUBJECT:	**FAA Operational Authorization A056 Data Link Communication Revision**		

1. REFERENCES:

   1.1. FAA Notice N8900.446 - OpSpec/MSpec/LOA (Letter Of Authorization) A056, Data Link Communications, dated December 12, 2017
   https://www.faa.gov/documentLibrary/media/Notice/N_8900.446.pdf

   1.2. FAA Advisory Circular (AC) 90-117, Data Link Communications, dated October 03, 2017
   https://www.faa.gov/regulations_policies/advisory_circulars/

   1.3. Table 1 Template - Global 5000 Featuring Vision Flight Deck and Global 6000 aircraft

   1.4. Table 1 Template - Global aircraft equipped with Honeywell Primus 2000XP avionics suite

   1.5. FAA Data Link Communications Compliance Guide, latest version
   https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afx/afs/afs400/afs470/datacomm/media/A056_Compliance_Guide.pdf

   1.6. Annex 1 - LOA A056 Compliance Guide Template - Global 5000 Featuring Vision Flight Deck and Global 6000 aircraft

   1.7. Annex 2 - LOA A056 Compliance Guide Template - Global aircraft equipped with Honeywell Primus 2000XP avionics suite

   1.8. Honeywell Service Information Letter (SIL) D201802000051, Honeywell Avionic Capabilities for AC90-117 (LOA A056), scheduled February 23, 2018. Will be published on the Honeywell website under Technical Publications (https://myaerospace.honeywell.com) and subsequently on the Bombardier Customer Portal.

The web links in references 1.1, 1.2, 1.5 and 1.8 are confirmed valid at the time of release of this Advisory Wire revision.

2. INTRODUCTION:

The revision 1 of this Advisory Wire (AW) provides further guidance to assist operators completing the latest FAA LOA A056 compliance Guide version (Ref. 1.5).

It also to notifies operators of Global aircraft equipped with Honeywell Primus 2000XP avionics suite about a condition reported by Honeywell that the FANS 1/A+ Latency timer was not implemented per the intent of the specification (Ref. 1.8).

This Advisory Wire provides general guidance to Global Series operators to fulfill the new FAA national policy Notice N8900.446 (Ref. 1.1) to revise existing or to obtain operational authorization for use of Data Link communication system. It incorporates data link communication expansion in the United States as well as implementation of Performance-based Communication and Surveillance (PBCS) internationally.

3. DESCRIPTION:

FAA has developed a new AC90-117 (Ref. 1.2), regarding Data Link Communications to provide new guidance for aircraft eligibility and operational use of data link communications in the United States and in oceanic/ remote continental airspace.

This AC replaces AC 120-70C, Operational Authorization Process for Use of Data Link Communication System.

New guidance and information were added to support the future FAA En Route ATC Controller-Pilot Data Link Communication (CPDLC) services in the National Airspace System (NAS) as well as the compliance with the ICAO PBCS required for the Reduced Lateral Separation Minima in North Atlantic High Level Airspace (NAT HLA).

Accordingly, FAA has issued a Notice N8900.446 (Ref. 1.1), mandating either revision or new operational authorization, using the new version of OpSpec/MSpec/LOA (Letter Of Authorization) A056.

To assist operators to complete their revision to the A056, we have completed a template for each Global Series (Ref.1.3 and 1.4) similar to the template table appended to the FAA Notice. These can be used with the information already available from the Operational Guidance Material LOA on the Bombardier Customer Portal.

Additionally, a compliance guide (Ref 1.5) was developed by FAA to provide operators with an organized method for submitting required content, especially for new applications. This compliance guide is designed to expedite the application process as it provides the required information at one location. Operators adhering to this guidance by supplying the requested documentation will significantly reduce the application processing time.

We have added LOA A056 template annexes (Ref. 1.6 and Ref. 1.7) to provide more detailed guidance. These annexes include only items marked “Yes” in the column “Previous A056 Only” and are intended to be used by operators upgrading from an existing A056 authorization. For new applications, the operator must refer to the current Bombardier Operational Guidance Material FANS 1/A+ LOA as well, which can be found on the Bombardier Customer Portal.

This FAA compliance guide can be used until such time that Bombardier revise the Operational Guidance Material LOA for Future Air Navigation System (FANS) 1/A+ airspace to align with the new requirements in submitting documentation for operational approval.

4. ACTION:

Operators should be familiar with the FAA Notice (Ref. 1.1) and the associated mandatory revision to A056 authorization by March 29, 2018. Operators requesting data link communications authorization must understand and comply with the guidance in AC 90-117 (Ref. 1.2) and their specific A056 authorization.

For FAR Part 91 operation only, FAA advised Bombardier that they are currently evaluating to move the authorization renewal deadline to June 30, 2018. This will be formally communicated via revision of the FAA Notice (Ref. 1.1).

4.1. Global equipped with Honeywell Primus 2000XP avionics suite:

The Required Communication Performance (RCP) and Required Surveillance Performance (RSP) values are not available since their certification basis was AC 20-140 which was written prior to RTCA DO-306 release, wherein RCP and RSP specifications are defined.

While waiting for the regulatory authorities certification approval of RCP/RSP specifications, Honeywell had notified Bombardier on February 9, 2018 that the NZ (NZ6.1) FMS Latency Timer that was implemented as part of the FANS1/A+ functionality to meet DO258A, was not implemented per the intent of the specification (Ref. 1.8).

As a result the regulation authorities were unable to grant the approval to include the RCP/RSP values in the Airplane Flight Manual (AFM) as previously expected on March 5th, 2018. Consequently operators will not be able to apply for PBCS approval per AC90-117, thus, they will not be authorized to enter “P” designators (e.g. P2 for CPDLC RCP 240) in the flight plan.

However, North Atlantic (NAT) operators not eligible for PBCS are still allowed to fly the remaining Non-PCBS tracks where the Reduced Lateral Separation Minima (RLatSM) requirement is not yet applied. Additionally, on tactical basis, operators may be permitted to cross but not join the RLatSM tracks as well as to climb or descend through levels FL350 – FL390.

Therefore, the RCP and RSP columns in the Notice Table 1 will be annotated with “N/A”. The operator must complete the information into the FAA Data Link Communications Compliance Guide, and have the revised OpSpec/MSpec/LOA A056 issued. For assistance refer to Table 1 (Ref. 1.4) and Annex 2 (Ref. 1.7).

Operators will be kept updated on the availability of the Latency Timer correction plan and AFM revision to support PBCS requirement via revision of this Advisory Wire (AW).

4.2. Global 5000 Featuring Vision Flight Deck and Global 6000:

These aircraft meet all pertinent requirements and the RCP/RSP information is available in the AFM. The operators must complete the information into the FAA Data Link Communications Compliance Guide, and have the revised OpSpec/MSpec/LOA A056 issued. For assistance refer to Table 1 (Ref. 1.3) and Annex 1 (Ref. 1.6).

Should you have any queries pertaining to this AW or requiring additional information in completing your operational approval please contact your Bombardier Field Service Representative (FSR) or the Customer Response Center (CRC).

Reference 1.3 – Template Global 5000 Featuring Vision Flight Deck and Global 6000 aircraft

Table 1 – Authorized Aircraft and Equipment for Data Link Communications (Extract from FAA N 8900.446 appendix)

Aircraft M/M/S	Data Link System ❶			Subnetworks	CSP	RCP	RSP	Limitations (If no limitations, type "N/A")
	Manufacturer	Model	INTEROP Designator					
Make: **BOMBARDIER** Model: **BD-700-1A11** OR **BD-700-1A10** Series: **9XXX**	**Rockwell Collins**	**DLCA-6000**	• **FANS 1/A+ with push to load** • **ATN B1** ❷	• **VDL M0/A** • **VDL M2 TSO-C160** • **SATCOM Inmarsat**	Choose all that apply or specify if other: • Rockwell-Collins/ ARINC • SITA • Other: - - - -	**RCP 240** ❸	**RSP 180** ❸	**Other** ❸

Additional Avionics information:

FMS Make: **Rockwell Collins**

FMS Model: **FMSA-6010**

FMS Series: **Proline Fusion**

FMS Software: **810-0163-1B0013 (V5)** or **810-0163-1B0005 (pre-V5)**

Version: **N/A**

Notes:

❶ The equipment shown is the Datalink unit. If requested by the FAA Principal Inspector (PI), for additional details on authorized datalink equipment refer to Operational Guidance Material for FANS LOA on Bombardier Customer Portal

❷ Aircraft Post SB 700-23-6012/ 700-23-5013 or post SB 700-34-6018/ 700-23-5018 or aircraft 9778 and subs

❸ Refer to AFM approval status and information in Limitations - Navigation Systems, Chapter 02-09, Section FANS−1/A+ / CPDLC / DATA LINK

Reference 1.4 – Template Global aircraft equipped with Honeywell Primus 2000XP avionics suite

Table 1 – Authorized Aircraft and Equipment for Data Link Communications (Extract from FAA N 8900.446 appendix)

Aircraft M/M/S	Data Link System ❶			Subnetworks	CSP	RCP	RSP	Limitations (If no limitations, type "N/A")
	Manufacturer	Model	INTEROP Designator					
Make: **BOMBARDIER** Model: **BD-700-1A11** OR **BD-700-1A10** Series: **9XXX**	**Teledyne Controls**	**TL-608 (P/N 8400021-03)** ❷	Choose all that apply: • **FANS 1/A** ❹ **with push to load**	Choose all that apply: • **VDL M0/A** • **SATCOM Inmarsat**	Choose all that apply or specify if other: • Rockwell-Collins/ ARINC • SITA • Other: ……	**N/A** ❸	**N/A** ❸	**N/A**

Additional Avionics information:

FMS Make: **Honeywell**
FMS Model: **IC-810**
FMS Series: **FMZ-2000**
FMS Software: **FMSGEX12003F110 (Post Batch 3) or FMSGEX15001F110 (Post Batch 3.3)**
Version: **NZ6.1**
Aircraft with Batch 3: Post SB 700-31-030 / 700-1A11-31-014, IAC P/N: 7017300-61010
Aircraft with Batch 3.3: Post SB 700-31-034 / 700-1A11-31-017, IAC P/N: 7017300-61013

Notes:

❶ The equipment shown is the Datalink unit. If requested by the FAA Principal Inspector (PI), for additional details on authorized datalink equipment refer to Operational Guidance Material for FANS LOA on Bombardier Customer Portal

❷ Post SB 700-34-053/ 700-1A11-34-027, Introduction of FANS 1/A+ and RNP 4 30/30 Functionality

❸ See AW Action section 4 for details and as stated in the N 8900.446: "*… Operators who currently have an A056 authorization may choose not to upgrade to PBCS. In such cases, these operators must provide data link communication equipage justification to complete Table 1 and have the revised A056 issued.* The *Required Communication Performance (RCP) and Required Surveillance Performance (RSP) columns will be annotated with "N/A" and the operator will not be authorized to file flight plan "P" designators or participate in services based on PBCS.*"

❹ Although the SB 700-34-053/ 700-1A11-34-027 and the AFM documents show compliance to FANS 1/A+ as per DO-258A. Due to Message Latency Monitor problem, reference should be made to FANS 1/A without "+" (Ref. 1.8).

Reference 1.6 – Annex 1 – Global 5000 Featuring Vision Flight Deck and Global 6000 aircraft

Annex 1 – LOA A056 Compliance Guide Template (Extract from LOA A056 Guide Version: 02.18)

Section 2: Aircraft Eligibility

Statement of Compliance (SOC):

Check Box	Reference Number	Previous A056 Only	SOC Attachments / Comments
✓	**SOC-1**	Yes	**Use AFM statements at page 02-09-11.** (Provide a copy) • *"FANS−1/A+ / CPDLC: − In accordance with AC 20−140A the aircraft data link system has been demonstrated to meet the requirements for FANS−1/A+ using VDL M2 and VDL M0/A, including ATS applications AFN, CPDLC and ADS−C using the ACARS network."* • *If installed – "LINK2000+ / ATN CPDLC: − In accordance with AC 20−140A, the aircraft data link system has been demonstrated to comply with the applicable safety, performance and interoperability requirements for continental ATN B1 Data Link using VDL Mode−2".* • *"DATA LINK − The data link system meets the aircraft−allocated performance requirements of RCP 240 and type 180 (all sub−networks)".* **Note:** The keyword is "In accordance with AC 20−140A", this document defines the interoperability, safety and performance criteria for the aircraft data link system. In this AC, FAA made reference to RTCA DO-306/EUROCAE ED-122 where the RCP and RSP specifications are defined.
✓	**SOC-2**	Yes	– **Use AFM statement at page 02-09-11.** (Provide a copy) *"FANS−1/A+ / CPDLC: − In accordance with AC 20−140A the aircraft data link system has been demonstrated to meet the requirements for FANS−1/A+ using VDL M2 and VDL M0/A, including ATS applications AFN, CPDLC and ADS−C using the ACARS network."* – **Use AFM Completion Supplement statement.** (Provide a copy) *"CONTROLLER PILOT DATA LINK COMMUNICATIONS (CPDLC)* *The aircraft datalink system has been demonstrated to meet the requirements for FANS-1/A+ using SATCOM (Inmarsat)."* **Note:** – The statements show subnetworks capability to VDL M0/A, VDL Mode 2 and SATCOM (Inmarsat). – VDL Mode 2 is qualified to TSO-C160, refer to EQP-2.

Statement of Compliance (SOC): (Cont.)

Check Box	Reference Number	Previous A056 Only	SOC Attachments / Comments
✓	**SOC-3**	Yes	**Use AFM statement at page 02-09-11.** (Provide a copy) *"FANS−1/A+ / CPDLC: − In accordance with AC 20−140A the aircraft data link system has been demonstrated to meet the requirements for FANS−1/A+ using VDL M2 and VDL M0/A, including ATS applications AFN, CPDLC and ADS−C using the ACARS network.* *DATA LINK: − The data link system meets the aircraft−allocated performance requirements of RCP 240 and type 180 (all sub−networks)."* **Note:** – The GVFD AFM statement is fully taken from the proposed wording in AC20-140A, where originally the Required Surveillance Performance (RSP) 180 designator was named Type 180. RSP 180 has same meaning as Type 180. – Compliance statement referencing AC20-140C is not applicable to GVFD aircraft.

Equipage Attachments:

Check Box	Reference Number	Previous A056 Only	SOC Attachments / Comments
✓	**EQP-2**	Yes	– **Use the attached Rockwell Collins document** or refer to FAA TSO Index of Articles for TSO-C160 to show VHF VDL M2 qualification to TSO-C160. The references mentioned above show TSO-C160 qualification of VHF-4000 P/N 822-1468-310, by similarity, P/N 822-1468-390 is qualified to similar TSO level. – **Use AFM statement at page 02-09-11** To show Datalink system multi-frequency capability: (Provide a copy) *"− The aircraft ATC Data Link system does support multi−frequency operation as defined in ARINC Spec. 631−5."* **Note:** The "Note 2" at EQP-2, allows OEM to demonstrate the VDL 2 multi-frequency (more than one VDL M2 channel) capability using other means than compliance to TSO-C160a.

Equipage Attachments: (Cont.)

Check Box	Reference Number	Previous A056 Only	SOC Attachments / Comments
✓	**EQP-3**	Yes	– **Use AFM statement at page 02-09-1.** (Provide a copy) *"The FMS must be operated in accordance with the latest version of the following:* *• Rockwell Collins "Operator's Guide – Flight Management System for the Bombardier Global Vision" 5000/6000 (publication 523-0808931 at the latest applicable revision)."* – **Use Global Vision 5000/6000 FMS Operator's Guide**, refer to Flight Plan section. (Provide copy of page 5-2). Page 5-2: "*Note: Via the FANS CPDLC application, a CPDLC flight plan edit message can be uplinked from ATC to provide changes that have been either requested by the crew in a route request or clearance request downlink message. The uplinked message can be inserted into the FMS to create a Modified Flight Plan that can be reviewed and executed. Note that during the INSERT MOD process, …*" – **Use AFM statement at pages 02-09-9 & 10.** (Provide a copy) "Push to Load" shall be operated in accordance with AFM section: FANS−1/A+ / CPDLC / DATA LINK, GENERAL. **Note:** In accordance with DO-258A which AC20-140A refers to, by definition CPDLC uplink message elements (e.g. UM79, UM80, UM83…) are automatically loadable on all FANS-1/A+ aircraft. Therefore, "Push to Load", that it also has been defined as "With automation" or "INSERT MOD", is a basic function that FANS1/A+ CPDLC has by definition which is applicable in Global Vision.
✓	**EQP-6**	Yes	**Use AFM statement at page 02-09-11.** (Provide a copy) *"FANS−1/A+ / CPDLC: − In accordance with AC 20−140A the aircraft data link system has been demonstrated to meet the requirements for FANS−1/A+ using VDL M2 and VDL M0/A, including ATS applications AFN, CPDLC and ADS−C using the ACARS network."* **Note:** The keyword is "FANS1/A+", the major difference between FANS1/A and FANS1/A+ is the message latency time monitoring capability. This feature is implemented in DLCA-6000 installed in Global Vision.

Section 3: Operational Requirements

Communication Service Provider (CSP) Eligibility

The operator is responsible to ensure their CSP provides the minimum performance and service.

Check Box	Reference Number	Previous A056 Only	CSP Attachment/Comments
✓	**CSP-1**	Yes	Provide documentation of each CSP arrangement. The operator is responsible to ensure each CSP service provides the following: 1. Failure Notification, 2. Recording data link messages, 3. CSP Integrity, 4. Compliance with CSP allocations for RCP/RSP, and 5. Adequate subnetwork coverage for the route flown. ***or*** Provide charter membership documentation of operator and CSP. When providing documentation of charter membership, provide a screen shot of the charter stakeholders with your name included in the screen capture (See Appendix B, Becoming a Charter Member). **Note:** Operators and CSPs need only to become charter members by following the instructions at http://www.fans-cra.com/. See Appendix B of this guide. (*AC 90-117, p. 4-1 and 4-5)* **Note: Coordinate with your Ground Service Provider to obtain the required documentation**

Flight Plans

Check Box	Reference Number	Previous A056 Only	CSP Attachment/Comments
✓	**FLP-1**	Yes	Demonstrate the appropriate use of flight plan designators by completing a sample flight plan of a typical route your pilots fly. If your operation includes oceanic routes, provide an oceanic flight plan. Below are resources to aid in your flight planning: FAA ICAO Flight Plan Quick Guide FAA Form 7233-4 AC 90-117, Appendix D Appendix A of this guide **Additional resource:** **Refer to Bombardier guide for ICAO Flight Plan 2012 for J and P designators. At Bombardier Customer Portal website https://my.businessaircraft.bombardier.com > Services > Operations > Global ICAO Flight Plans**

Performance Monitoring

Check Box	Reference Number	Previous A056 Only	Monitoring Attachment (Oceanic and Remote Operations)
✓	**MON-1**	Yes	Provide documentation of your data link monitoring process with procedures to address substandard performance. (*AC 90-117, pp. 6-1 and 6-2)* **Note: The operator is responsible to develop and document their specific monitoring and procedures to address substandard performance in accordance AC90-117.**
✓	**MON-2**	Yes	Provide documentation of procedures to report data link communication failures and/or problems. This should include contacting the appropriate Data Link Monitoring Agency (DLMA) for your area of operation. (*AC 90-117, p. 8-1)* **Note: The operator is responsible to develop and document their specific procedures to report data link communication failures and/or problems in accordance AC90-117**
✓	**MON-3**	Yes	Provide documentation of demonstrated performance results from: https://www.faa.gov/air_traffic/separation_standards/PBCS_Monitoring/ (*AC 90-117, p. 6-2)* Note: If no data or insufficient data, then compliance is based on the SOC until sufficient data becomes available. **Note: If no data or insufficient data, Refer to SOC-3 Item for RCP/RSP compliance.**

Reference 1.7 – Annex 2 – Global aircraft equipped with Honeywell Primus 2000XP avionics suite

Annex 2 – LOA A056 Compliance Guide Template (Extract from LOA A056 Guide Version: 02.18)

Section 2: Aircraft Eligibility

Statement of Compliance (SOC):

Check Box	Reference Number	Previous A056 Only	SOC Attachments / Comments
✓	**SOC-1**	Yes	– **Use AFM Supplement 30 statement at page 07–30–01–1.** (Provide a copy) *"The aircraft datalink system has been demonstrated to meet the requirements of AC 20–140 for FANS 1/A+ using VDL Mode 0/A and SATCOM (INMARSAT) including ATS applications AFN, CPDLC and ADS–C using the ACARS network."* – **Use SB 700-34-053/ 700-1A11-34-027 statement at page 04 of 15.** (Provide a copy) *"This Service Bulletin introduces the Future Air Navigation System (FANS) 1/A+ option to provide air–ground data–link communication between the Air Traffic Services (ATS) and FANS–equipped aircraft. It also introduces the Required Navigation Performance 4 (RNP 4 30/30) with 30 nautical mile lateral and/or longitudinal separation. Furthermore, the FANS 1/A+ implementation has been developed in accordance with RTCA DO–258A "Interoperability Requirements for ATS Applications using ARINC 622 Data Communications – FANS 1/A Interop Standard"."* **Note:** – AFM statement refers to AC 20–140, where the safety and interoperability requirements are defined to support the design approval of the aircraft data communications system and applications FANS/CPDLC & ADS-C. – Service Bulletins statement refers to RTCA DO-258A which provides the interoperability requirements (INTEROP) standard for the implementation of FANS 1/A+. – The RCP and RSP values are not available for Global Express, XRS and Global 5000 aircraft.

Statement of Compliance (SOC): (Cont.)

Check Box	Reference Number	Previous A056 Only	SOC Attachments / Comments
✓	**SOC-2**	Yes	– **Use AFM Supplement 30 statement at page 07–30–01–1.** (Provide a copy) *"The aircraft datalink system has been demonstrated to meet the requirements of AC 20–140 for FANS 1/A+ using VDL Mode 0/A and SATCOM (INMARSAT) including ATS applications AFN, CPDLC and ADS–C using the ACARS network."* **Note:** – The AFM statement show subnetworks capability to VDL M0/A and SATCOM (Inmarsat). – Global Express, XRS and Global 5000 aircraft is not VDL Mode 2 capable.
	SOC-3	Yes	**Not Compliant** **Note:** The RCP and RSP values are not available for Global Express, XRS and Global 5000 aircraft, since their certification basis was AC 20-140 which was written prior to RTCA DO-306 release, wherein RCP and RSP specifications are defined.

Equipage Attachments:

Check Box	Reference Number	Previous A056 Only	SOC Attachments / Comments
	EQP-2	Yes	**Not Compliant** **Note:** Global Express, XRS and Global 5000 aircraft is not VDL Mode 2 capable.

Equipage Attachments: (Cont.)

Check Box	Reference Number	Previous A056 Only	SOC Attachments / Comments
✓	**EQP-3**	Yes	– **Use AFM statement at page 02-09-1.** (Provide a copy) *"The FMS must be operated in accordance with the latest version of the following:* – *Batch 3: Honeywell Flight Management System (FMS) Pilot's Guide (publication number D201203000019–000), or* – *Batch 3.3: Honeywell Flight Management System (FMS) Pilot's Guide (publication number D201203000019–R004)."* – **Use the Bombardier Global Express/5000/XRS Software Version NZ 6.1, Pilot's Guide**, refer to ATC Uplink Message Handling section (from page 6-46). (Provide copy). Page 6-49: "*—3R-- … Once the route clearance message acceptance has been sent (from the last ATC UPLINK page) the page automatically transitions to the ATC FPL REVIEW page and the ACTIVATE prompt is shown in field 4R…*" – **Use Honeywell Service Information Letter (SIL) D201802000051, Honeywell Avionic Capabilities for AC90-117 (LOA A056), scheduled February 23, 2018,** (Provide a copy) Refer to Table 2, Push to Load = YES **Note:** In accordance with DO-258A (referenced in the FANS 1/A+ Service Bulletins), by definition CPDLC uplink message elements (e.g. UM79, UM80, UM83…) are automatically loadable on all FANS-1/A+ aircraft. Therefore, "Push to Load", that it also has been defined as "With automation" or "ACTIVATE prompt", is a basic function that FANS1/A+ CPDLC has by definition which is applicable in Global Express, XRS and Global 5000 aircraft.
	EQP-6	Yes	**Not Compliant** **Use Honeywell Service Information Letter (SIL) D201802000051, Honeywell Avionic Capabilities for AC90-117 (LOA A056), scheduled February 23, 2018,** (Provide a copy) Global Express, XRS and Global 5000 aircraft do not meet the latency timer requirements for FANS1/A+. **Note:** Although the SB 700-34-053/ 700-1A11-34-027 and the AFM documents show compliance to FANS 1/A+ as per DO-258A. Due to Message Latency Monitor problem, reference should be made to FANS 1/A without "+" (Ref. 1.8).

Section 3: Operational Requirements

Communication Service Provider (CSP) Eligibility

The operator is responsible to ensure their CSP provides the minimum performance and service.

Check Box	Reference Number	Previous A056 Only	CSP Attachment/Comments
✓	**CSP-1**	Yes	Provide documentation of each CSP arrangement. The operator is responsible to ensure each CSP service provides the following: 6. Failure Notification, 7. Recording data link messages, 8. CSP Integrity, 9. Compliance with CSP allocations for RCP/RSP, and 10. Adequate subnetwork coverage for the route flown. ***or*** Provide charter membership documentation of operator and CSP. When providing documentation of charter membership, provide a screen shot of the charter stakeholders with your name included in the screen capture (See Appendix B, Becoming a Charter Member). **Note:** Operators and CSPs need only to become charter members by following the instructions at http://www.fans-cra.com/. See Appendix B of this guide. (*AC 90-117, p. 4-1 and 4-5)* **Note: Coordinate with your Ground Service Provider to obtain the required documentation**

Flight Plans

Check Box	Reference Number	Previous A056 Only	CSP Attachment/Comments
✓	**FLP-1**	Yes	Demonstrate the appropriate use of flight plan designators by completing a sample flight plan of a typical route your pilots fly. If your operation includes oceanic routes, provide an oceanic flight plan. Below are resources to aid in your flight planning: FAA ICAO Flight Plan Quick Guide FAA Form 7233-4 AC 90-117, Appendix D Appendix A of this guide **Additional resource:** **Refer to Bombardier guide for ICAO Flight Plan 2012 for J and P designators. At Bombardier Customer Portal website https://my.businessaircraft.bombardier.com > Services > Operations > Global ICAO Flight Plans**

Performance Monitoring

Check Box	Reference Number	Previous A056 Only	Monitoring Attachment *(Oceanic and Remote Operations)*
✓	**MON-1**	Yes	Provide documentation of your data link monitoring process with procedures to address substandard performance. (*AC 90-117, pp. 6-1 and 6-2)* **Note: The operator is responsible to develop and document their specific monitoring and procedures to address substandard performance in accordance AC90-117.**
✓	**MON-2**	Yes	Provide documentation of procedures to report data link communication failures and/or problems. This should include contacting the appropriate Data Link Monitoring Agency (DLMA) for your area of operation. (*AC 90-117, p. 8-1)* **Note: The operator is responsible to develop and document their specific procedures to report data link communication failures and/or problems in accordance AC90-117**
✓	**MON-3**	Yes	Provide documentation of demonstrated performance results from: https://www.faa.gov/air_traffic/separation_standards/PBCS_Monitoring/ (*AC 90-117, p. 6-2)* Note: If no data or insufficient data, then compliance is based on the SOC until sufficient data becomes available.