PERFORMANCE BASED FLIGHT SYSTEMS BRANCH

A056, Data Link Communications

Data Link Communications Compliance Guide

Version: 03.18B

PERFORMANCE BASED
FLIGHT SYSTEMS BRANCH

Federal Aviation Administration
Performance Based Flight Systems Branch, AFS-470
470 L'Enfant Plaza, Suite 4102
Washington, DC 20024

Phone: (202) 267-4623

Document Changes

Version	Date	Description of Change
10.17	October 6, 2017	Initial Issue of the Data Link Compliance Guide
01.18	January 24, 2018	• Added tables for change log and summary of document reference numbers. • Changed wording for SOC, EQP and CSP requirements. • Added two appendices: Appendix: A Flight Plan Com Descriptors Appendix: B Quick Website Navigation Guide
02.18	February 6, 2018	• Added note to MON-3 • Added EQP-6 • Corrected SOC-2 and SOC-3 • Added note to EQP-2
02.18B	February 21, 2018	• Changed AC 20-140 versions for SOC-2 and SOC-3 • Added “Letter attachment check” • Moved page 15 to page 5 with edits
03.18	March 5, 2018	• Added pages to document changes • SOC-1: deleted “operators” from paragraph • SOC-1: added “+” to FANS 1/A • TNG-2: added “Yes” to Previous A056 Only column
3.18A	March 16, 2018	• Change the wording of SOC-2 • Corrections to page iii • RSP in bold, App C • 2 bullets remove from FLP-1 • Table references corrected on page 17

Version	Date	Description of Change
3.18B	March 27, 2018	• Updated the instructions • Changed table titles • Added application types to general information • Created a summary of data link requirement by operations • TNG-2 added “and/or” • Deleted column: ”Previous A056” • Several edits throughout the document

Contents

Section 1

Section 1: Introduction

This compliance guide was developed by the Federal Aviation Administration (FAA) Flight Technologies and Procedures Division (AFS-400) to provide operators with an organized method for submitting required content for an A056 data link authorization. Use of this guide expedites the application process because it condenses into one location the information required for data link communications. Operators adhering to this guidance by supplying the requested documentation will significantly reduce the application processing time. This document may be used for the following:

1. New applications
2. Operators with a current A056 upgrading to conduct Performance-based Communication and Surveillance (PBCS) and/or domestic data link operations (See AC 90-117)
3. Operators with a current A056 who are not upgrading but need to submit information for the new A056 template format.
4. Operators with a current A056 adding identically equipped aircraft

This document uses the term "Principal Inspector (PI)" which may be a Principal Operations Inspector (POI), Principal Avionics Inspector (PAI) or Principal Maintenance Inspector (PMI). The use of "operator" refers to an operator, certificate holder, program manager, and operator/company.

The overarching guidance for data link approval is in Advisory Circular (AC) 90-117, *Data Link Communication*. For airworthiness guidance, refer to AC 20-140, *Guidelines for Design Approval of Aircraft Data Link Communication Systems Supporting Air Traffic Services (ATS)*. For new applications, operators should schedule a pre-application meeting or teleconference with your Flight Standards Office (FS).

We appreciate any feedback to improve this compliance guide.

Contact AFS-470 by calling: (202) 267-8847

Instructions

1. All applications must use the fill-in-the-blank portion of this guide (pages 4-6). Operators with an existing A056 authorization who do not want to upgrade only need to send the fill-in-the-blank portion with a letter explaining your intent not to upgrade. It is not necessary to send any attachments.
2. For new applications or upgrades from a current A056 authorization, review Tables 1 and determine your aircraft's overall eligibility per operation. Also, determine the required attachment items per desired upgrade column (e.g. U.S. Domestic) in Tables 2-4. Respond to the applicable attachment items for a desired upgrade column as indicated by an "X" or "As Required". With each attachment, include the corresponding reference number (e.g. SOC-1) next to each excerpt (screen shot or copied text) and include the document title, page number and paragraph number. If an item is not applicable, provide a brief explanation as to why it does not apply (e.g. "Our aircraft do not use EFB data link communication integration").
3. Operators with an A056 authorization adding identically equipped aircraft should provide their PI with a

request letter stating the aircraft is identically equipped as their previously approved aircraft. Include the AFM or change order signed off per serial number for each new aircraft.

4. If aircraft are not identically equipped, then make a separate application for each aircraft or fleet.
5. Place your attachments in a single Microsoft Word (MS) file with any screen captures or direct wording from applicable manuals and then convert the MS Word file using the "Save as" function to a PDF format. Use the naming convention described on page 7 of this guide to name your file(s). If possible, submit your application and attachments in a single PDF format by combining PDF files. If you do not have the ability to combine the two PDF files, then submit your application (Data Link Compliance Guide) and your attachment file as two PDF documents using the naming conventions on page 7. The use of highlights, outlines, tables and/or hyper-links for your supporting documentation (attachments) will greatly reduce the application process time.
6. For the attachments, please include **only the applicable page or paragraph to show compliance**. Attaching irrelevant documentation other than the requested page/paragraph to show compliance, only delays the application process.

Table 1: Summary of Upgrade Requirements by Operation:

Options	Operation	Requirements
1.	U.S. Domestic CPDLC-DCL* (Departure Clearance)	• FANS 1/A (+) VDL Mode 0/A or VDL Mode 2
2.	U.S. Domestic CPDLC-DCL and En Route clearance*	• FANS 1/A (+) • VDL Mode 2 • TSO-160a or equivalent documentation (i.e. ARINC 631-5) • "Push to load" capability enabling the pilot to incorporate received routing changes (e.g., uplink messages (UM)79, UM80, and UM83) into the FMS supported by B2 and FANS 1/A (+) operations.
3.	PBCS(Oceanic/Remote Operations) only	• FANS 1/A+ (latency required indicated by "+" symbol) • CPDLC Performance must be RCP 240 • ADS-C Performance must be RSP 180
4.	U.S. Domestic CPDLC-DCL and En Route and PBCS	• FANS 1/A+ • VDL Mode 2 • TSO-160a or equivalent documentation (i.e. ARINC 631-5) • "Push to load" capability enabling the pilot to incorporate received routing changes (e.g., uplink messages (UM)79, UM80, and UM83) into the FMS supported by B2 and FANS 1/A (+) operations. • CPDLC Performance must be RCP 240 • ADS-C Performance must be RSP 180

*Part 91 operators are not required to have a Letter of Authorization (LOA) for U.S. domestic data link operations. All operators must meet the minimum equipage requirements for data link operations in the U.S.

Summary of Reference Numbers for Attachments by Upgrade

Below is a summary of possible A056 authorizations with the required attachments for each operation indicated by an "X" or "As Required".

Table 2: Aircraft Eligibility Summary:

Reference Number	U.S. Domestic DCL Only	U.S. Domestic DCL and En route CPDLC	Oceanic and Remote PBCS Only	U.S. Domestic DCL, CPDLC En route, and Oceanic and Remote PBCS
SOC-1	*	*	X	X
SOC-2	*	*	X	X
SOC-3	*	*	X	X
EQP-1	X	X	X	X
EQP-2	X	X		X
EQP-3		X		X
EQP-4	X	X	X	X
EQP-5	X	X	X	X
EQP-6			X	X

*A statement of compliance (SOC) is not required for U.S. domestic data link operations. Part 91 operators are not required to have a Letter of Authorization (LOA) for U.S. domestic data link operations. All operators must meet the minimum equipage requirements for data link operations in the U.S.

Table 3: Operational Requirements Summary:

Reference Number	U.S. Domestic DCL Only	U.S. Domestic DCL and En route CPDLC	Oceanic and Remote PBCS Only	U.S. Domestic DCL, CPDLC En route, and Oceanic and Remote PBCS
OPS-1	X	X	X	X
OPS-2	X	X	X	X
OPS-3	X	X	X	X
EFB-1	As Required	As Required	As Required	As Required
CSP-1			X	X
MEL-1	X	X	X	X
FLP-1	X	X	X	X
MON-1			X	X
MON-2			X	X
MON-3			X	X
TNG-1	91K, 121, 125 135	91K, 121, 125 135	91K, 121, 125 135	91K, 121, 125 135
TNG-2			91 Only	91 Only

Table 4: Additional Information Summary:

Reference Number	U.S. Domestic DCL Only	U.S. Domestic DCL and En route CPDLC	Oceanic and Remote PBCS Only	U.S. Domestic DCL, CPDLC En route, and Oceanic and Remote PBCS
POI-1	As Required	As Required	As Required	As Required
DOC-1	X	X	X	X
DOC-2	X	X	X	X
DOC-3	X	X	X	X
DOC-4	X	X	X	X
DOC-5	X	X	X	X
DOC-6	X	X	X	X
DOC-7	X	X	X	X

General Information

Fill in the blanks below:

Type of Application:

No Upgrade (Template change only)

U.S. Domestic CPDLC-DCL only

U.S. Domestic CPDLC-DCL and En Route

PBCS only

U.S. Domestic CPDLC-DCL and En Route and PBCS

Adding Aircraft to existing A056

- Company/Operator Name:
- 14 CFR Part: Select
- Address: Suite:
- City: State: Select Zip Code:

Contact Information

- Contact Name:
- Contact Phone:
- Contact Email:

Aircraft/Fleet

- ✈ Make:
- ✈ Model:
- ✈ Series:

Sample Letter of Request

(Fill in the blanks below)

Refer to letter of request attachment

Company/Name:

Federal Aviation Administration (FAA)

Principal Inspector (PI) First Name:

Principal Inspector (PI) Last Name:

PI Email Address:

PI Phone:

Dear Sir/Madam,

Name/Company(FAA Designator:) request authorization for OpSpec/MSpec/LOA A056, Data Link Communication, operating under Part: Select of Title 14 of the Code of Federal Regulations.

We request authorization for the following aircraft (Fleet with identical equipage and configuration):

Make: Model: Series:

Registration Number(s) ("N number"): Serial Number(s):

Avionics:

FMS Make: FMS Model: FMS Series:

FMS Software: Version:

FANS 1/A (+) and/or ATN:

We are sending this application and the associated attachments electronically in a PDF format for your review and approval. Our planned date to commence data link operations is on or about (mm/dd/yyyy):

Our primary business location:

Street Address: Suite:

City: State: Select Zip Code:

Name of Primary Contact:

Phone:

Email:

Please refer to attachments labeled with corresponding references numbers provided in the Data Link Communication Compliance Guide.

Sincerely,

Sample Authorization Table

Use the table below and provide your information as part of your application.

Aircraft:

Make:

Model:

Series:

Data Link System:

Make:

Model:

Series:

Software:

FMS Software:

Version Number:

Table 5: Sample Authorization Table

INTEROP (Check all that apply)	Subnetworks (Check all that apply)	CSP	RCP	RSP	Limitations (If no limitations, type "N/A")
FANS 1/A (+) with "push to load" FANS 1/A (+) without "push to load" ATN B1 B2	VDL Mode 0/A VDL Mode 2 TSO C-160/ Equivalent VDL Mode 2 TSO C-160a or later/Equiv-alent HFDL SATCOM (Iridium) SATCOM (Inmarsat) SATCOM MTSTAT	Rockwell-Collins (ARINC) SITA Other	Select	Select	U.S Domestic CPDLC En Route Only ADS-C Only Other

Naming Convention

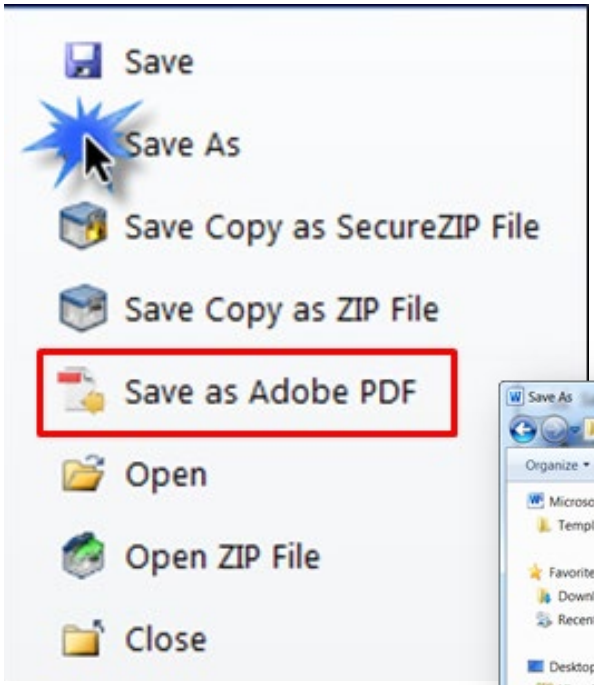
Use the following file naming convention when submitting this document and attachments.

A056_Application_Company/Name_Date(XX_XX_XXXX)_Version_Number_(VX)
Example: A056_Application_ABCAirlines_02_29_2016_V2

Use the following file naming convention when submitting your attachments.

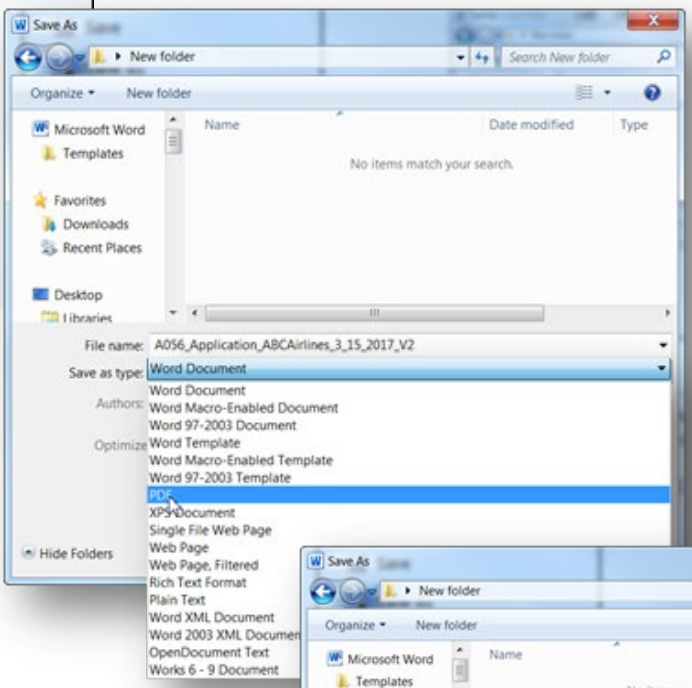
A056_Attachments_Company/Name_Date(XX_XX_XXXX)_Version_Number_(VX)
Example: A056_Attachments_ABCAirlines_02_29_2016_V2

Note: Version numbers are used in order for the PI to distinguished between a re-submittal of an application and the original which should be labeled beginning with (Version 1 (V1)).



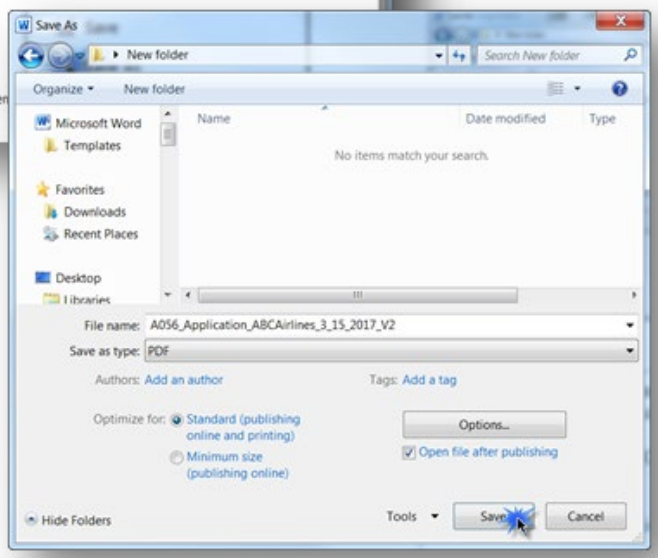
Step 1:

In MS Word, select "Save As" under File Menu or select "Save as Adobe PDF" and skip Step 2



Step 2:

Select "PDF" under "Save as type"



Step 3: Saving file with naming convention.

Use the following naming convention with underlines "_" as shown:

A056_Application_Your_Company_Name_Date_Version

Example:

A056_Application_ABCAirlines_02_29_2016_V2

Section 2: Aircraft Eligibility

For each attachment, provide the necessary page(s)/paragraph(s) to establish compliance. Include the corresponding reference numbers with each attachment in a separate MS Word document which is to be converted to a PDF format. Specific airworthiness guidance is provided in AC 20-140( ). For domestic operations only, RCP/RSP performance is not necessary and operators should select N/A in the sample table in Table 5. Part 91 operators are not required to have an A056 authorization for U.S. domestic operations.

Statement of Compliance (SOC):

Check Box	Reference Number	SOC Attachments
	SOC-1	Provide an OEM Statement of Compliance (SOC). The SOC must indicate interoperability (INTEROP) (See AC 90-117, *p. C-3, Table C-3)*. This may be documentation from the aircraft manufacturer, the manufacturer of the data link system, or another party. The SOC must indicate the aircraft data link system meets the aircraft-allocated requirements for Required Communication Performance (RCP) and Required Surveillance Performance (RSP) specifications stated in the AFM, AFM Supplement, or other acceptable documentation. An example SOC is provided in Table C-3 of AC 90-117. **Note:** For a FANS 1/A+ CPDLC and ADS C aircraft system, RTCA DO 306/ EUROCAE ED 122 is equivalent to RCP 240, RCP 400, RSP 180 and RSP 400 specifications.

SOC Continued:

Check Box	Reference Number	SOC Attachments
	SOC-2	Provide documentation of the subnetworks that are supported by your aircraft. The compliance statement must reference AC 20-140A or later for any of the following subnetworks: • VDL M0/A, • VDL M2, • High Frequency Data Link (HFDL), • Inmarsat, and • Satellite communications (SATCOM) Iridium (Short Burst Data (SBD)). **Note:** For aircraft utilizing Inmarsat (SwiftBroadband (SBB)), the SOC must reference AC 20-140C or later. (*AC 90-117, p. 3-2 and p. C-3)*
	SOC-3	Provide documentation that your aircraft data link system meets the aircraft-allocated requirements of RCP and RSP specifications. The compliance statement should reference AC 20-140A or later revision for any of the following performance specifications: • RCP 400 and/or RCP 240 • RSP 400 and/or RSP 180 The compliance statement should reference AC 20-140C or later revision for: • RCP 130 and/or RCP 240 and/or RCP 400 • RSP 160 and/or RSP 180 and/or RSP 400 Note: Documentation of the lowest RCP and RSP value is adequate for showing compliance. For fleet aircraft, records for every tail number are not necessary provided that all the aircraft have the same data link configuration. (*AC 90-117, p. 3-2 and p. C-3)*

Equipage Attachments:

Check Box	Reference Number	Equipage Attachments
	EQP-1	Provide documentation of maintenance and manufacturer/model of data link equipment installation records (AFM, Service Bulletins and Aircraft Service Changes (ASC) related to data link communications, Supplemental Type Certificates (STCs) etc.) Provide documentation of the following installed data communication equipment: • FANS 1/A (Satellite, HF, VHF) equipment and/ or ATN (VDL 2) VHF equipment • Data communications recording equipment (CVR, CVD-FR etc.) See Part 91, §91.609(j) and InFO 16004. (*AC 90-117, p. 3-1)*
	EQP-2	For U.S. domestic airspace en route operations, provide documentation that your aircraft is equipped with VDL M2. The VDL M2 requirement must include a tunable radio approved to TSO-C160a or later or equivalent documentation. **Note 1:** If not equipped with VDL M2, the operator may use an alternate non-VDL M2 means of compliance in coordination with their CSP(s) as per AC 90-117. (*AC 90-117, p. 3-3)* **Note 2:** Equivalent documentation (e.g. OEM, regulatory) that meets the specification of tuning to more than one VDL M2 channel may also be acceptable (i.e. ARINC 631-5)
	EQP-3	For en route U.S. domestic airspace operations, provide documentation your avionics system has "push to load" capability enabling the pilot to incorporate received routing changes (e.g., uplink message (UM)79, UM80, and UM83) into the FMS supported by B2 and FANS 1/A (+) operations. (*AC 90-117, p. 3-2)*
	EQP-4	Provide documentation that your 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. (*AC 90-117, p. 1-5)*

Equipage Attachments Continued:

Check Box	Reference Number	Equipage Attachments
	EQP-5	Provide documentation of current configuration (e.g. current avionics software load); aircraft modifications (if applicable, list all Aircraft Service Changes (ASC) specific to data link communications, Service bulletins etc). **Note:** The operator must confirm any modifications did not affect the data link system, or if it was affected, affirm compliance to the associated INTEROP, subnetworks and performance standards. (*AC 90-117, p. 3-3)*
	EQP-6	Provide documentation that your FANS 1/A system includes message latency monitoring indicated by the "+" symbol. RCP 240 requires latency monitoring.

Section 3

Section 3: Operational Requirements

For each attachment, provide the necessary page(s)/paragraph(s) to establish compliance. Include the corresponding reference numbers with each attachment.

This section includes the minimum operational requirements in the following areas:

1. Operational Procedures
2. CSP Requirements
3. MMEL/MEL
4. Flight Plans
5. Monitoring Performance and Reporting
6. Training

Operational Procedures

Establish policies and procedures for pilots and operational staff involved in data link operations and incorporate them in the appropriate operations manuals.

Check Box	Reference Number	Operational Attachments
	OPS-1	Attach operational data link procedures from the following documents: • AFM (page/paragraph), • Domestic data link procedures from your operations manual, and • For international/oceanic and remote airspace operations, operational data link procedures from your International Operations Manual (IOM) (See *AC 90-117, p. 5-2)* **Note:** Generic procedure manuals do not qualify.
	OPS-2	Attach documentation of procedures for establishing and maintaining voice communications (including any required SELCAL check(s)). (*AC 90-117, p. 5-5)* **Note:** In-flight publications should include a listing of ATSU identifiers required for international operations.

Operational Procedures Continued

Check Box	Reference Number	Operational Attachments
	OPS-3	Attach procedures and limitations applicable to data link communication equipment for both normal and emergency operations in compliance with AC 90-117. (*AC 90-117, p. 7-3 and p. 7-4)*

Electronic Flight Bag (EFB)

Check Box	Reference Number	EFB Attachment
	EFB-1	Provide documentation to show how the Electronic Flight Bag (EFB) is updated for data link operations. If not applicable, then record the reference number with "Not Applicable".

Communication Service Provider (CSP) Eligibility

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

Check Box	Reference Number	CSP Attachment
	CSP-1	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)*

MEL/MMEL

Check Box	Reference Number	MEL/MMEL Attachment
	MEL-1	Provide documentation of your Minimum Equipment List (MEL) and Master Minimum Equipment List (MMEL) that addresses all data communication equipment (Section 23). **Note 1:** Reference FAA Policy Letter 106, (PL-106), High Frequency (HF) Communications MMEL Requirements. **Note 2:** If MMEL has not been updated for CPDLC equipment for aircraft that are issued an STC, the operator is reminded that they must adhere to 14 CFR 91.213. (*AC 90-117, p. 5-1 and pp. B-1 and B-2)*

Flight Plans

Check Box	Reference Number	Flight Plan Attachment
	FLP-1	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 Form 7233-4 • Appendix A of this guide

Performance Monitoring

Check Box	Reference Number	Monitoring Attachment *(Oceanic and Remote Operations)*
	MON-1	Provide documentation of your data link monitoring process with procedures to address substandard performance. (*AC 90-117, pp. 6-1 and 6-2)*
	MON-2	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)*
	MON-3	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.

Training

Check Box	Reference Number	Training Attachment
	TNG-1	If you are under Part 91K, 121, 125, and/or 135, provide documentation that your training program addresses the operational practices, procedures and training items related to data link communication operations (e.g., initial, upgrade, or recurrent training for pilots, operational control personnel, and maintenance personnel). Training curricula should be in accordance with AC 90-117, §§ 91.3, 91.703(a) (1) and (2) and ICAO Annex 2 (Rules of the Air), paragraph 2.5.1. (*AC 90-117, Chapter 7)*
	TNG-2	If you are under Part 91, show the syllabus and/or certificate of completion of data link communications training. (*AC 90-117, p. 7-1)*

Section 4: Additional Information

Additional PI Requested Documentation.

This section is optional and reserved for any additional information that may be requested by your Principal Inspector (PI). For each attachment, provide the necessary page(s)/paragraph(s) to establish compliance. Include the corresponding reference number with the attachment.

Check Box	Reference Number	Additional PI Requested Documentation
	POI-1	If requested, attach additional documentation requested by your PI.

Document Review

Check each document below to indicate you are familiar with each.

Check Box	Reference Number	Document List
	DOC-1	AC 90-117, Data Link Communications
	DOC-2	AC 20-140 ( ) Guidelines for Design Approval of Aircraft Data Link Communication Systems Supporting Air Traffic Services (ATS).
	DOC-3	Global Operational Data Link (GOLD) Manual (Doc 10037), ICAO.
	DOC-4	Performance-based Communication and Surveillance (PBCS) Manual (Doc 9869), ICAO.
	DOC-5	State Aeronautical Information Publications (AIP). (U.S. Link)
	DOC-6	State Notices to Airmen (NOTAM). (U.S. Link)
	DOC-7	FAA chart supplements, Oceanic Errors Safety Bulletin (OESB) (NAT OPS Bulletins).

Appendix A

Appendix A: Flight Plan Com Descriptors

Table A-1. Item 10a Flight Plan COM Descriptors

Descriptors	System
E1	FMC WPR ACARS
E2	D-FIS ACARS
E3	PDC ACARS
J1	CPDLC ATN VDL Mode 2
J2	CPDLC FANS 1/A HFDL
J3	CPDLC FANS 1/A VDL Mode 0/A
J4	CPDLC FANS 1/A VDL Mode 2
J5	CPDLC FANS 1/A SATCOM (Inmarsat)
J6	CPDLC FANS 1/A SATCOM (MTSAT)
J7	CPDLC FANS 1/A SATCOM (Iridium)
P1	CPDLC RCP 400
P2	CPDLC RCP 240

Note: Part 91 operators filing “J” codes for U.S. domestic data link services must have a data link authorization to file J5–J7 in oceanic and remote continental airspace.

J1 through J7 for Controller-Pilot Data Link Communication (CPDLC) (Table B-1, Item 10a Flight Plan COM Descriptors); and P1 and P2 for RCP Performance (Table B-1).

Example. As a flight plan example, use the following:

If Actual Communications Performance (ACP) meets at least RCP 240 at 95 percent and Actual Surveillance Performance (ASP) meets at least RSP 180 at 95 percent, then the operator approved for RCP 240/RSP 180 may file the following:

- Field 10: “P2.”
- Field 18: “SUR/RSP180.”

In Item 10a of the flight plan, operators should insert one of the descriptors, P1-P2, as appropriate, listed in Table A-1, to identify an aircraft's RCP capability.

Table A-2. Item 10b Flight Plan COM Descriptors

Descriptors	System
D1	ADS-C with FANS 1/A capabilities
G1	ADS-C with ATN capabilities

In Item 10b of the flight plan, operators should insert one of the descriptors, D1 and G1, as appropriate, listed in Table A-2, to identify an aircraft's RSP capability

Appendix

B

Appendix B: Quick Website Navigation Guide

For FANS 1/A Problem reporting and/or charter membership go to: http://www.fans-cra.com/. This appendix provides screen shots for navigating the website to report a data link problem and/or charter membership.

Home Page Menu

The Home Page header has five user function tabs:

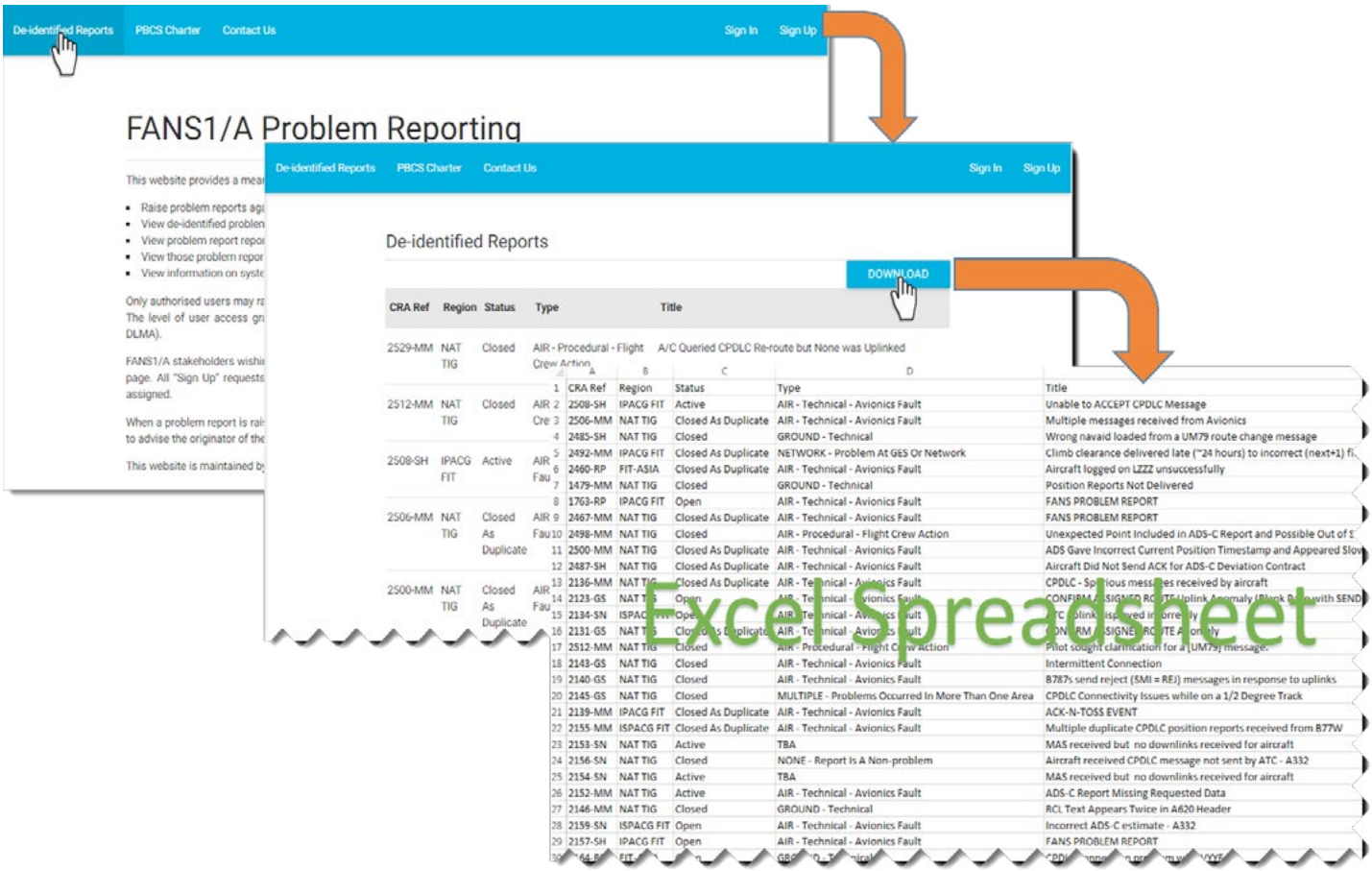
1. De-identified Reports
2. PBCS Charter
3. Contact Us
4. Sign In – Note: current users of the ISPACG-CRA/NAT DLMA/ FIT-ASIA website please continue to use your existing username/password. Do not sign up again.
5. Sign Up

De-Identified Reports

The De-identified Reports list is controlled by the appropriate regional Central Reporting Agency/ Data Link Monitoring Agency (CRA/DLMA).

Reports displayed in this list have been assigned to the list by the CRA/DLMA.

A user may download the de-identified reports in EXCEL format using the DOWNLOAD button

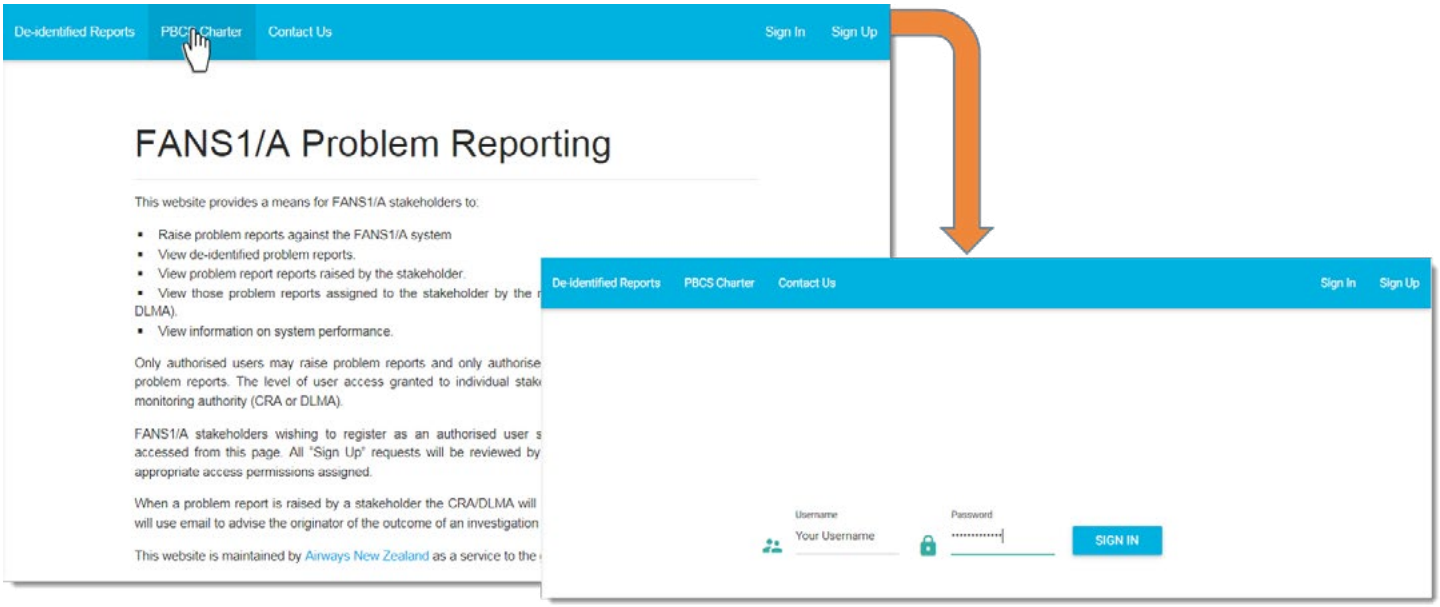


CRA Ref	Region	Status	Type	Title
2529-MM	NAT TIG	Closed	AIR - Procedural - Flight Crew Action	A/C Queried CPDLC Re-route but None was Uplinked
2512-MM	NAT TIG	Closed	AIR	
2508-SH	IPACG FIT	Active	AIR	
2506-MM	NAT TIG	Closed As Duplicate	AIR	
2500-MM	NAT TIG	Closed As Duplicate	AIR	

	A	B	C	D	
1	CRA Ref	Region	Status	Type	Title
2	2508-SH	IPACG FIT	Active	AIR - Technical - Avionics Fault	Unable to ACCEPT CPDLC Message
3	2506-MM	NAT TIG	Closed As Duplicate	AIR - Technical - Avionics Fault	Multiple messages received from Avionics
4	2485-SH	NAT TIG	Closed	GROUND - Technical	Wrong navaid loaded from a UM79 route change message
5	2492-MM	IPACG FIT	Closed As Duplicate	NETWORK - Problem At GES Or Network	Climb clearance delivered late (~24 hours) to incorrect (next+1) fi
6	2460-RP	FIT-ASIA	Closed As Duplicate	AIR - Technical - Avionics Fault	Aircraft logged on LZZZ unsuccessfully
7	1479-MM	NAT TIG	Closed	GROUND - Technical	Position Reports Not Delivered
8	1763-RP	IPACG FIT	Open	AIR - Technical - Avionics Fault	FANS PROBLEM REPORT
9	2467-MM	NAT TIG	Closed As Duplicate	AIR - Technical - Avionics Fault	FANS PROBLEM REPORT
10	2498-MM	NAT TIG	Closed	AIR - Procedural - Flight Crew Action	Unexpected Point Included in ADS-C Report and Possible Out of S
11	2500-MM	NAT TIG	Closed As Duplicate	AIR - Technical - Avionics Fault	ADS Gave Incorrect Current Position Timestamp and Appeared Slow
12	2487-SH	NAT TIG	Closed As Duplicate	AIR - Technical - Avionics Fault	Aircraft Did Not Send ACK for ADS-C Deviation Contract
13	2136-MM	NAT TIG	Closed As Duplicate	AIR - Technical - Avionics Fault	CPDLC - Spurious messages received by aircraft
14	2123-GS	NAT TIG	Open	AIR - Technical - Avionics Fault	CONFIRM ASSIGNED ROUTE Uplink Anomaly (Block Rejects with SEND
15	2134-SN	ISPACG FIT	Open	AIR - Technical - Avionics Fault	ATC Uplink displayed incorrectly
16	2131-GS	NAT TIG	Closed As Duplicate	AIR - Technical - Avionics Fault	CONFIRM ASSIGNED ROUTE Anomaly
17	2512-MM	NAT TIG	Closed	AIR - Procedural - Flight Crew Action	Pilot sought clarification for a [UM79] message.
18	2143-GS	NAT TIG	Closed	AIR - Technical - Avionics Fault	Intermittent Connection
19	2140-GS	NAT TIG	Closed	AIR - Technical - Avionics Fault	B787s send reject (SMI = REJ) messages in response to uplinks
20	2145-GS	NAT TIG	Closed	MULTIPLE - Problems Occurred In More Than One Area	CPDLC Connectivity Issues while on a 1/2 Degree Track
21	2139-MM	IPACG FIT	Closed As Duplicate	AIR - Technical - Avionics Fault	ACK-N-TOSS EVENT
22	2155-MM	ISPACG FIT	Closed As Duplicate	AIR - Technical - Avionics Fault	Multiple duplicate CPDLC position reports received from B77W
23	2153-SN	NAT TIG	Active	TBA	MAS received but no downlinks received for aircraft
24	2156-SN	NAT TIG	Closed	NONE - Report Is A Non-problem	Aircraft received CPDLC message not sent by ATC - A332
25	2154-SN	NAT TIG	Active	TBA	MAS received but no downlinks received for aircraft
26	2152-MM	NAT TIG	Active	AIR - Technical - Avionics Fault	ADS-C Report Missing Requested Data
27	2146-MM	NAT TIG	Closed	GROUND - Technical	RCL Text Appears Twice in A620 Header
28	2159-SN	ISPACG FIT	Open	AIR - Technical - Avionics Fault	Incorrect ADS-C estimate - A332
29	2157-SH	IPACG FIT	Open	AIR - Technical - Avionics Fault	FANS PROBLEM REPORT

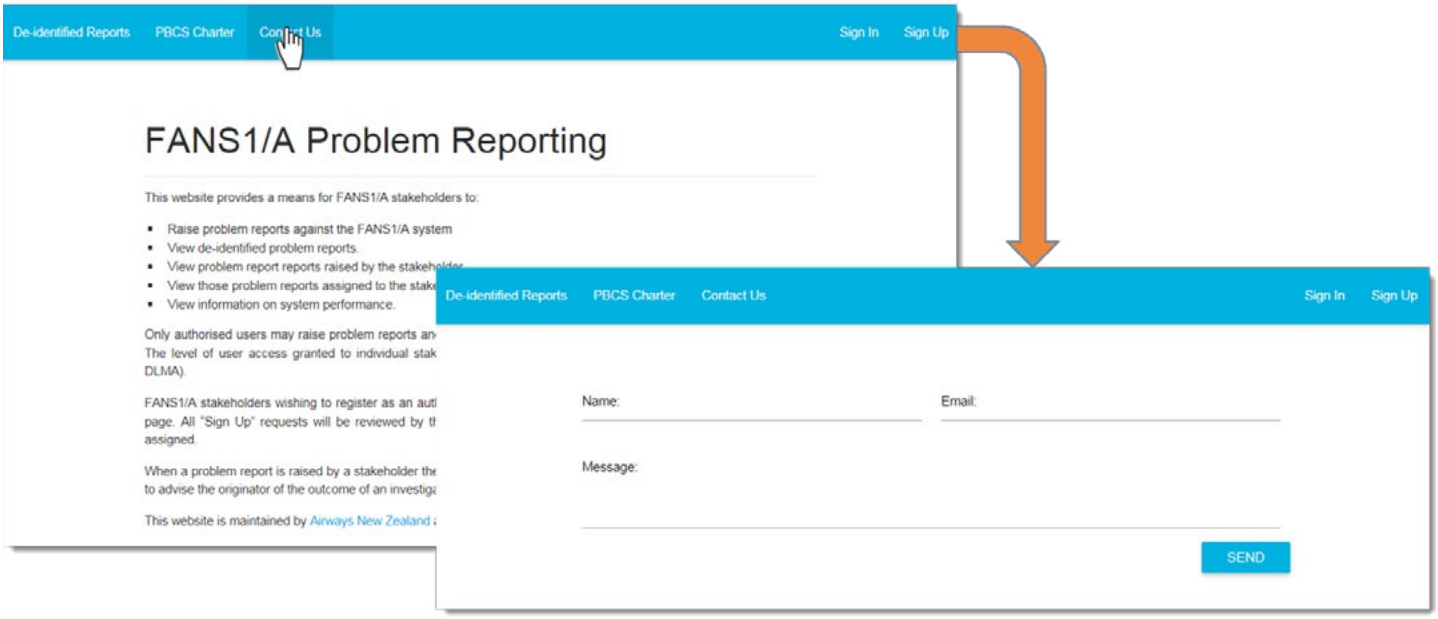
PBCS Charter Sign-In

The PBCS Charter link provides the sign-in screen for charter members.



Contact Us

A “Contact Us ” function is provided for CRA/DLMA and website queries.



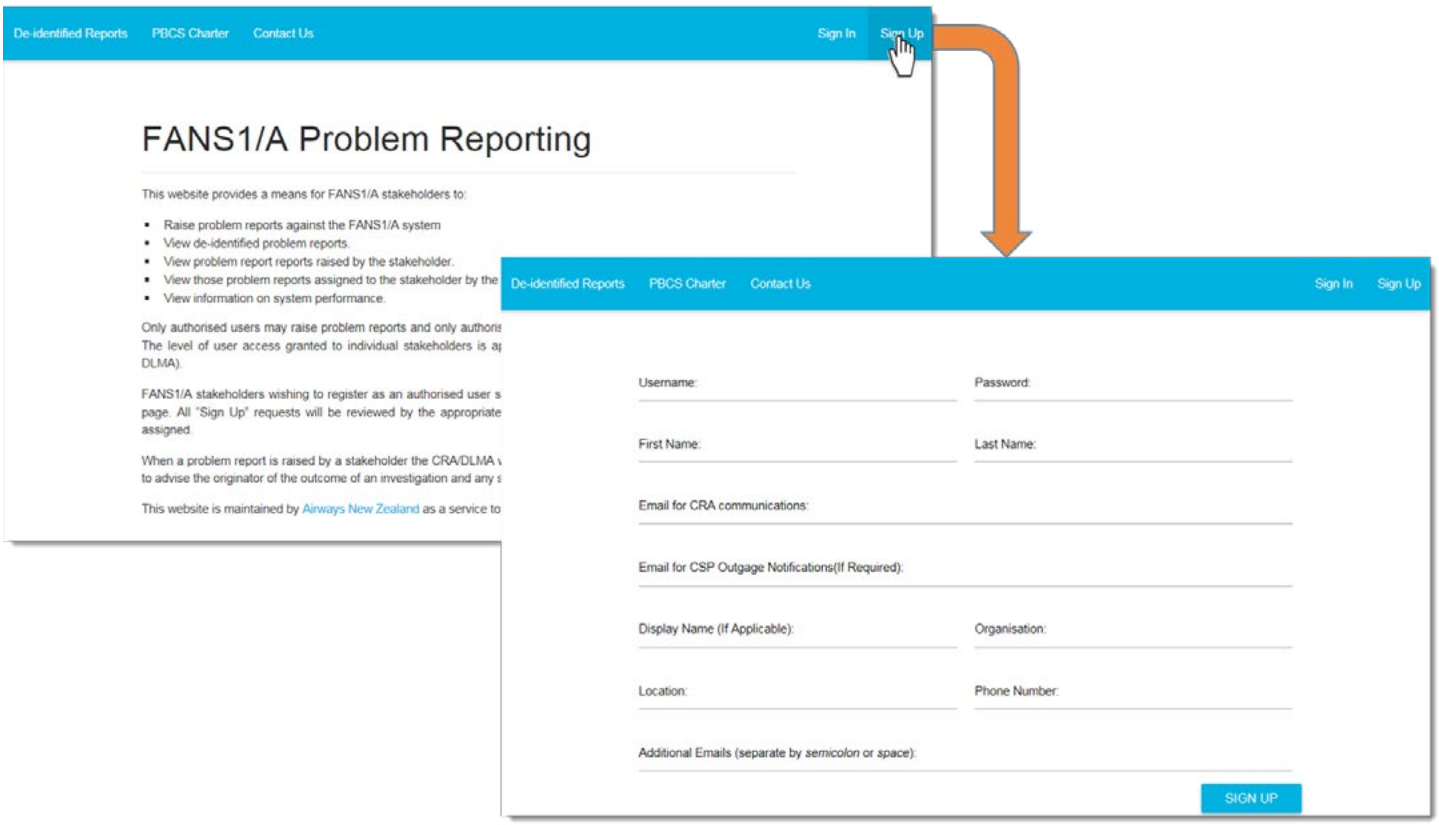
Sign-Up

The sign-up link allows stakeholders to request access to the website. Fill in the requested details and then click the SIGN UP button. This action will log the stakeholders information on the website and advise the CRA that a new user application has been received.

The CRA will process the user request, assign the new user the appropriate permissions, and advise the new user if their application has been successful.

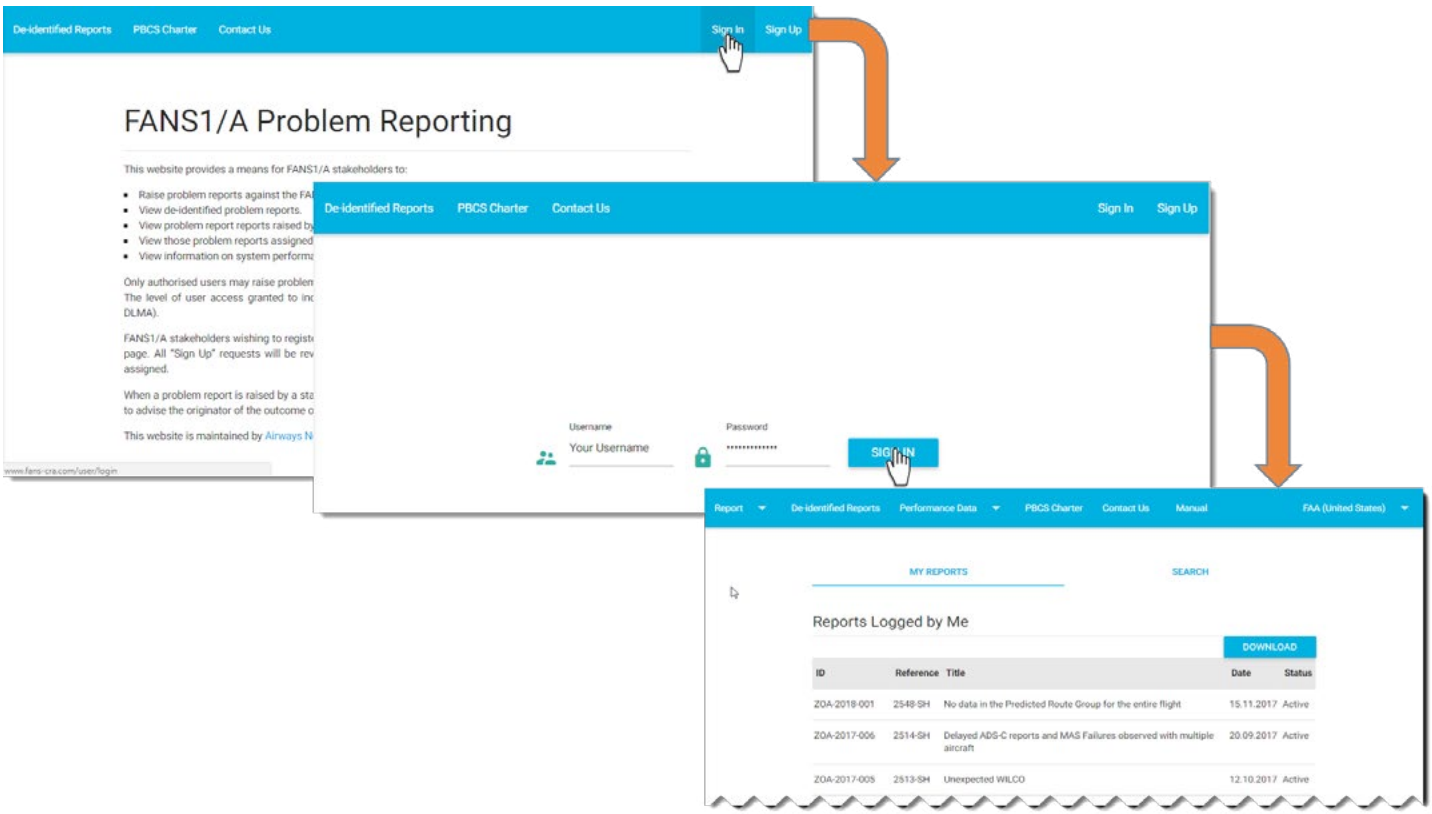
Notes:

1. Display Name: Enter the name to be displayed on the “My Reports” page after logging in.
2. Additional Emails: List all other emails that are to be used in automatic email notifications from the website for this log-on.
3. Username/Password: Enter the username and password that you want to use on this site
4. Email: List your primary email contact
5. Organization: Enter your company name.
6. Location: Enter city and country.



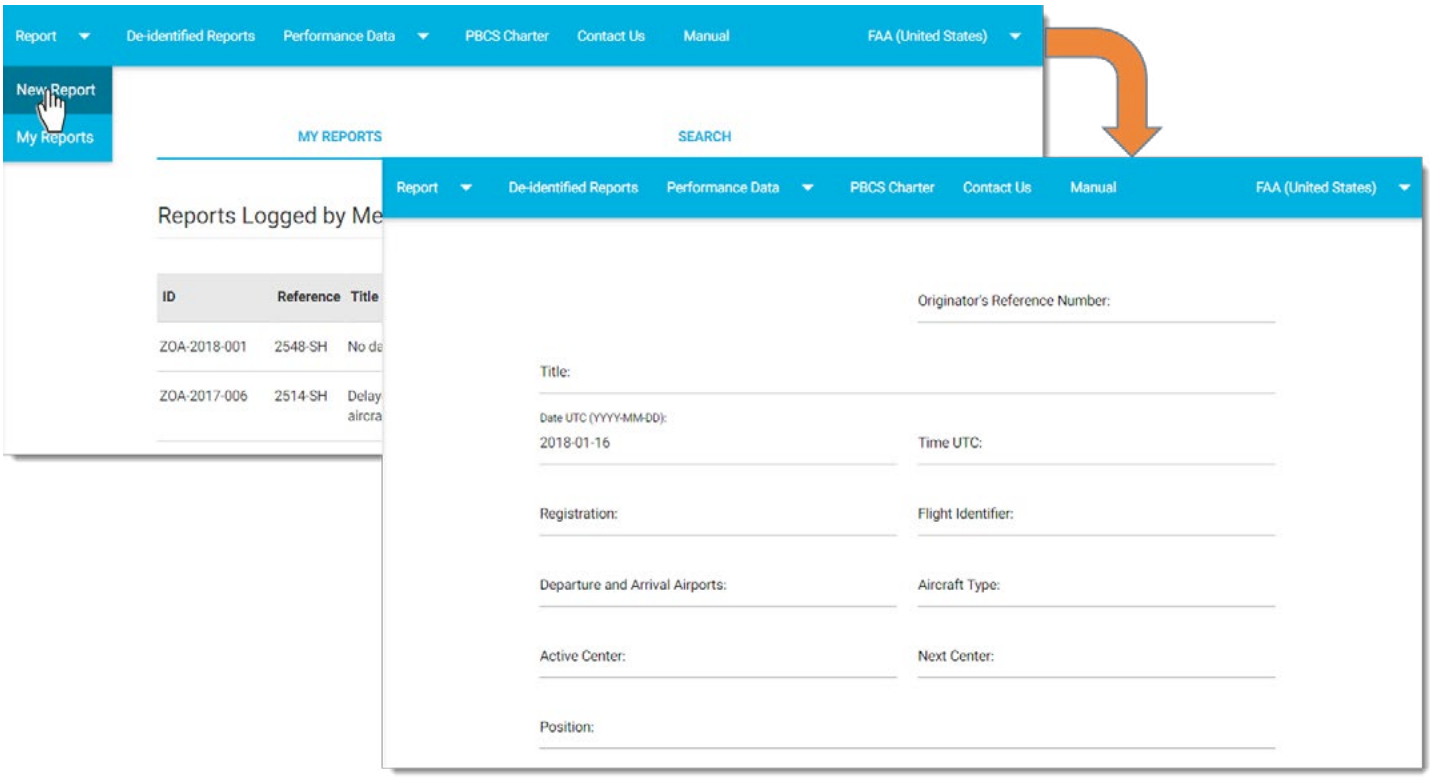
Sign-In

Once you have signed-up for the website, use your username and password as shown below.



New Report

After signing-in, the first link in the header is “Report”. Selecting Report gives two options: New Report and My Reports. Below displays the form for filing a new report.

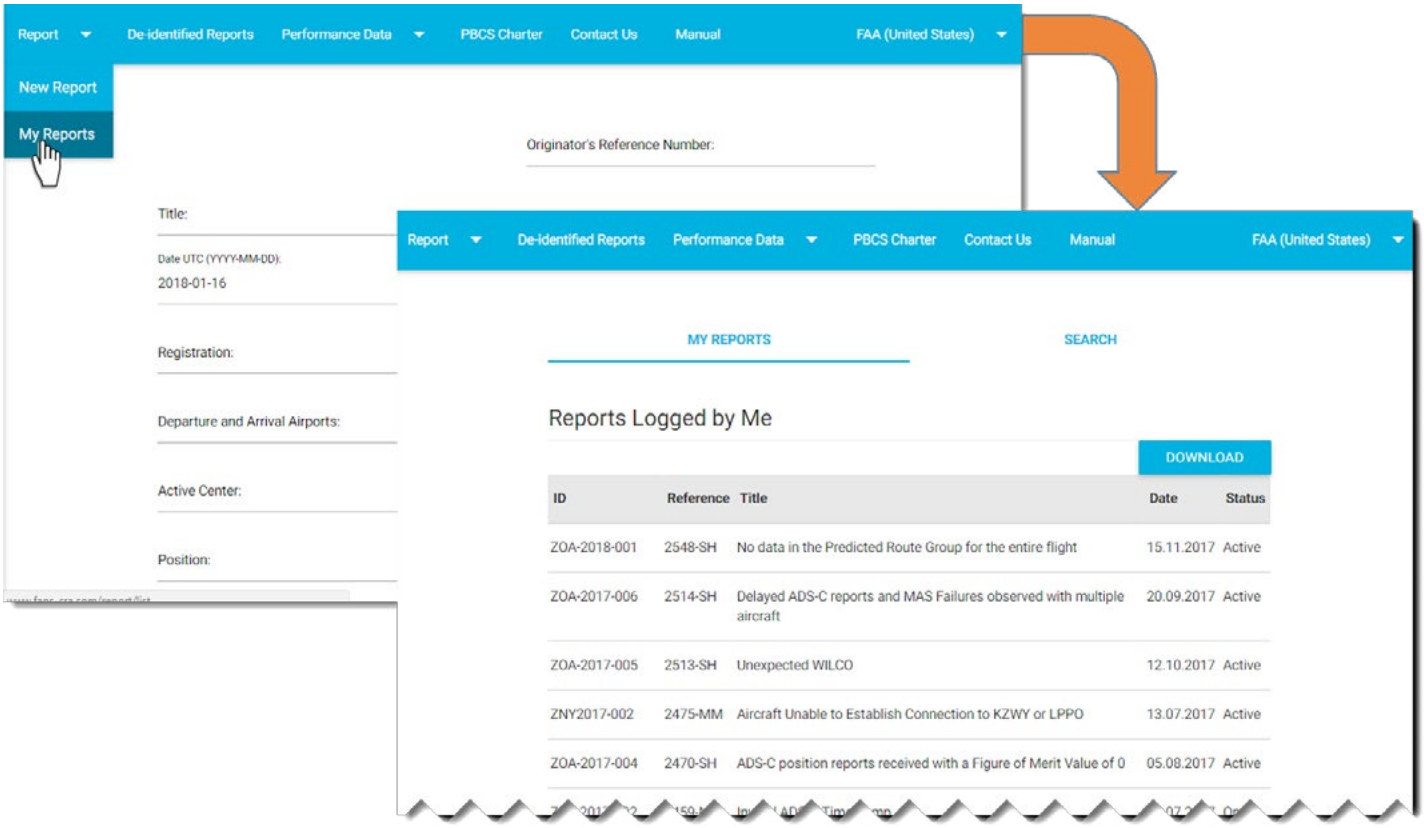


My Reports

The My Reports page opens by default on logging in and displays four sections:

- “Reports Pending CRA action”;
- “Reports Logged by Me”;
- “Reports Assigned to me”; and
- “Closed Reports relating to Me”.

A DOWNLOAD button associated with each section allows the user to download the reports in an EXCEL format.

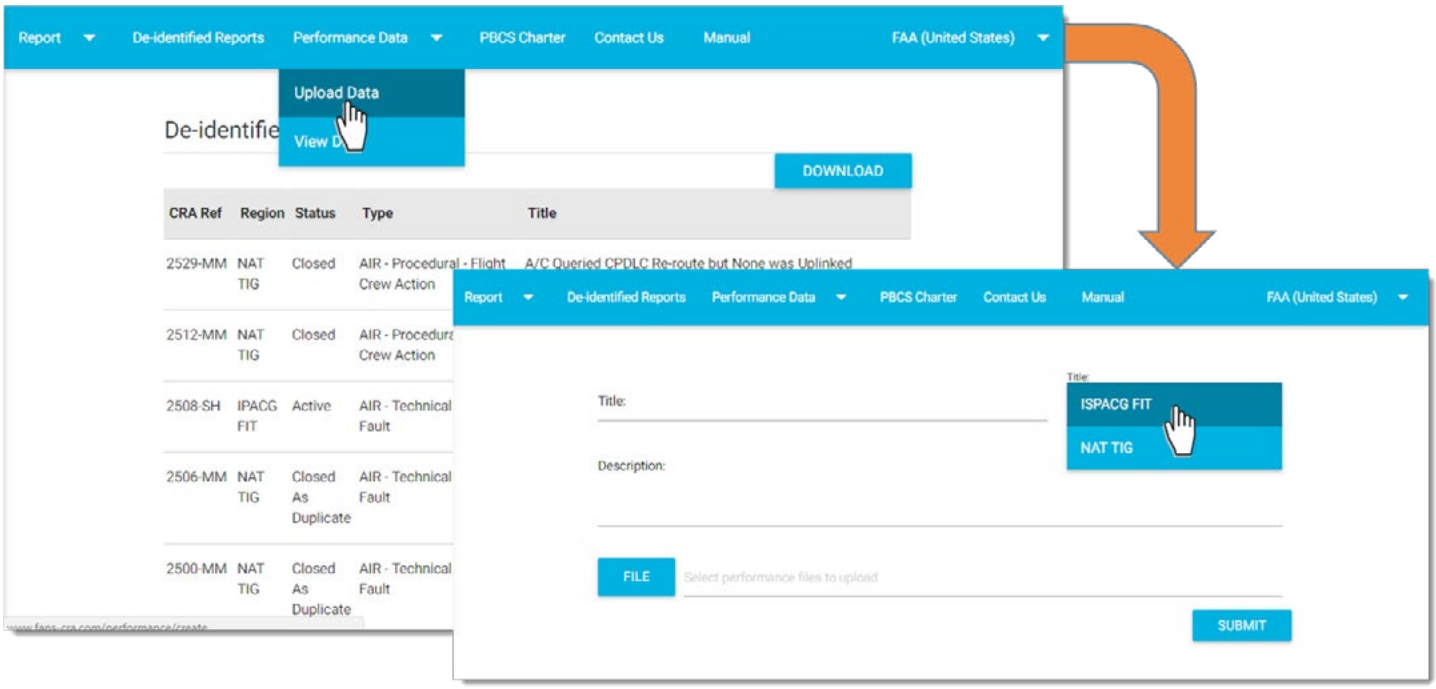


Upload Data

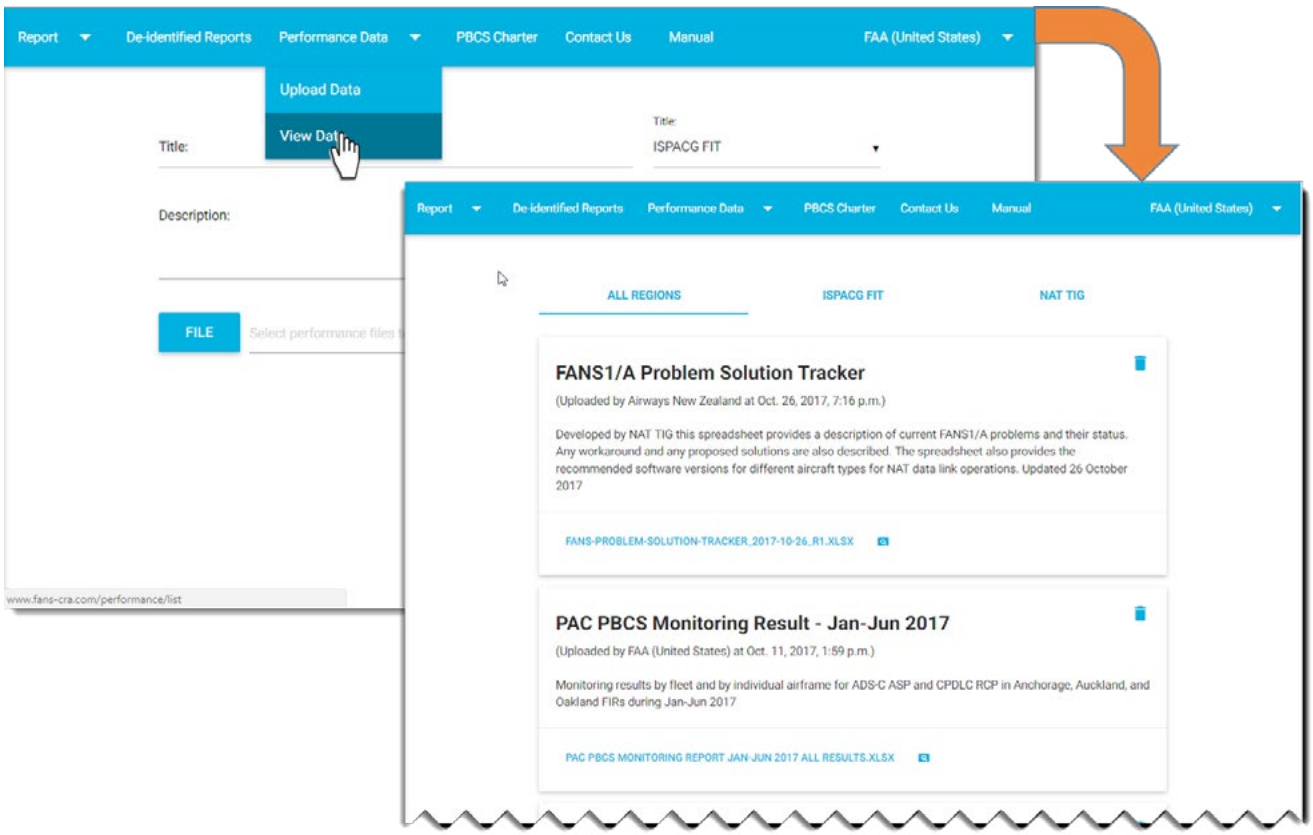
The “Performance Data” option in the my reports header provides a means to display FANS1/A performance data. Selecting performance data gives the following options:

Upload Data: Only displayed if user has required permissions.

View Data: Displays any performance data that has been uploaded (See image below).

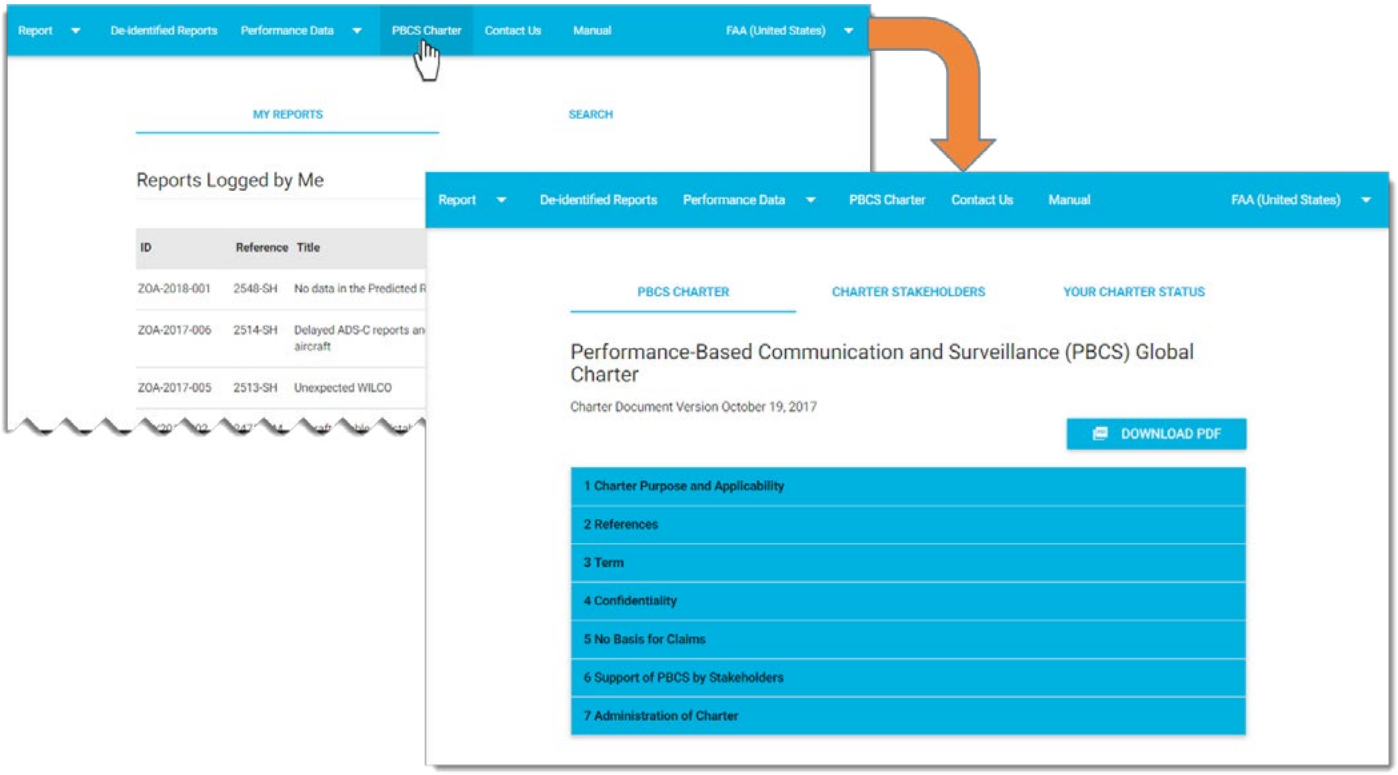


View Data

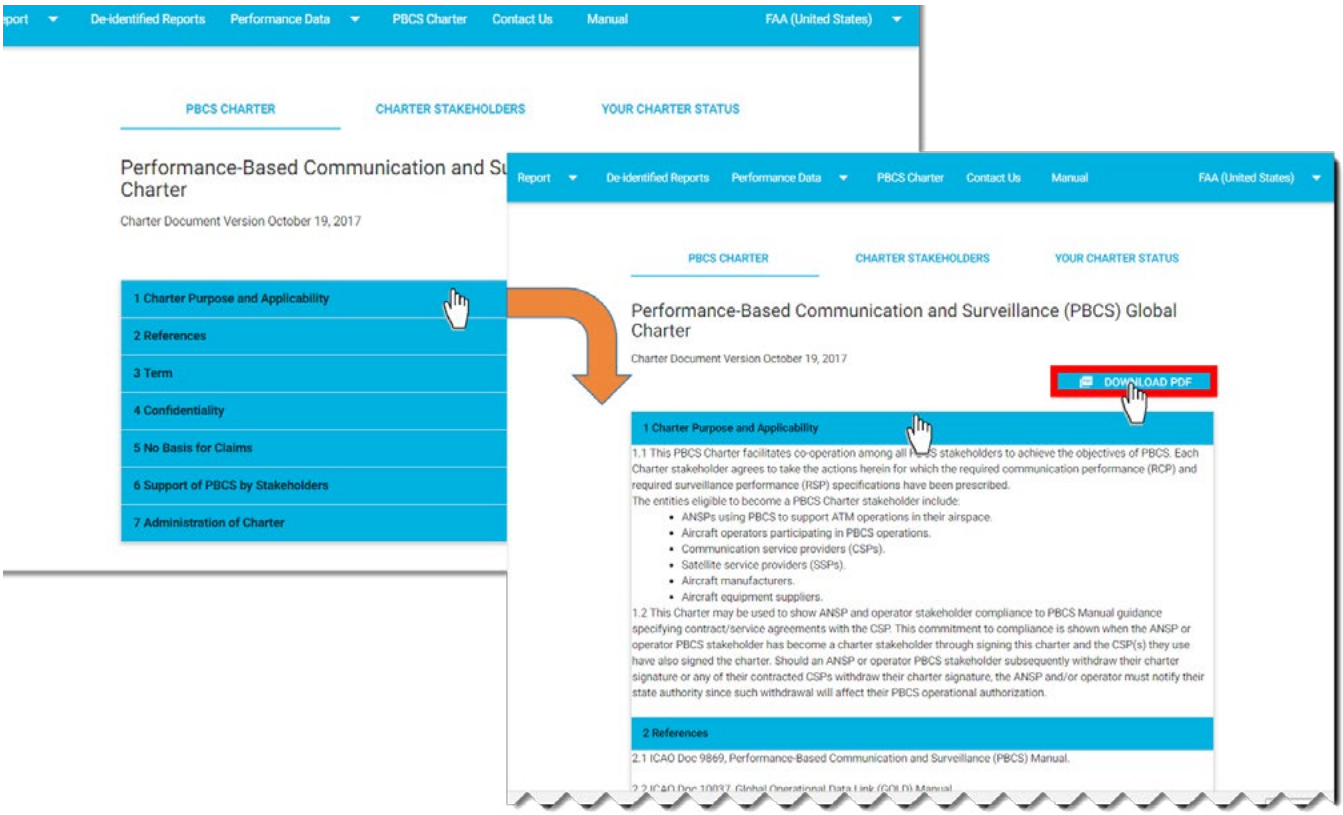


PBCS Charter

Under PBCS Charter, stakeholders can view the charter on-line as shown below by clicking on the various charter sections or by means of downloading the charter by clicking the “DOWNLOAD PDF” button.

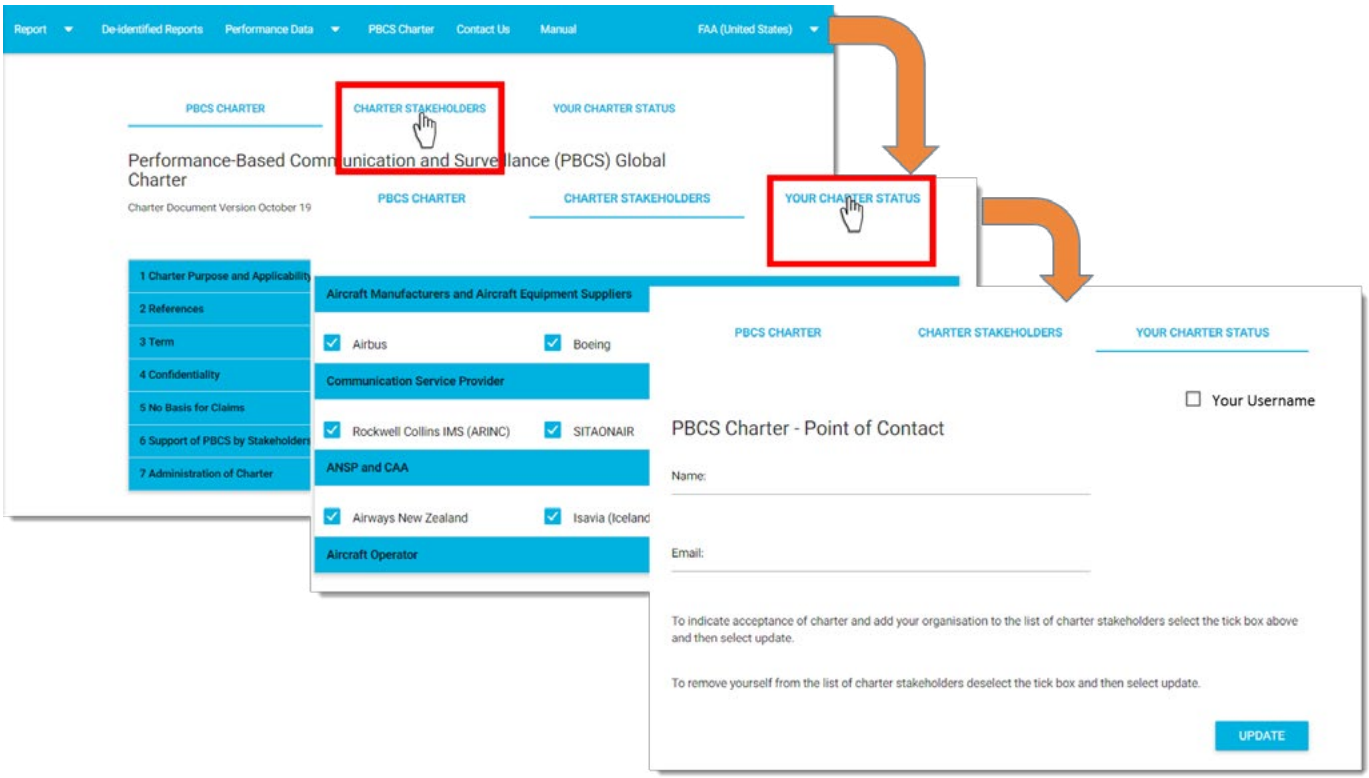


View PBCS Charter



Becoming a Charter Member

Clicking “CHARTER STAKEHOLDERS” results in a list of current charter members. If you are not a charter member, click “YOUR CHARTER STATUS” and enter your name, email, and check the box that shows your username and then click “UPDATE”. When providing documentation of charter membership, provide a screen shot of the charter stakeholders with your name included within the screen capture.



Appendix C

Appendix C: Definitions and Acronyms

Definitions

A

Aircraft Communications Addressing and Reporting System (ACARS). ACARS is a digital datalink system for transmission of short messages between aircraft and ground stations via airband radio or satellite. ACARS as a term refers to the complete air and ground system, consisting of a service provider and aircraft/ground equipment.

Automatic Dependent Surveillance-Contract (ADS-C). ADS-C is a surveillance information system using automated reports. An agreement is established between the ground system and the aircraft via a data link. Without pilot input, the ATSU can establish a "contract" to provide reports of aircraft position, altitude, speed, elements of navigational intent and meteorological data. The system can generate the following types of reports:

- Periodic—The ATSU can set or alter the update rate as needed (a higher update rate is usually required in high traffic areas).
- Event—A change in vertical rate, lateral deviation or altitude automatically triggers a report.
- Demand—An ATSU can request an update as needed, and this does not affect an existing contract preset rate.

Aeronautical Telecommunication Network (ATN). A global internetwork architecture that allows ground, air-ground, and avionic data subnetworks to exchange digital data for the safety of air navigation and for the regular, efficient, and economic operation of air traffic services.

C

Controller-Pilot Data Link Communications (CPDLC). CPDLC is a two-way data-link communication system by which controllers can transmit digital text messages to an aircraft as an alternative to voice communications. Messages from an aircraft to the ATSU may follow a standard format or may be free-text. Messages from a controller normally follow a standard format and usually requiring a response from the flight crew.

CSP Integrity. The CSP must pass messages without manipulating the information that is protected by error detection codes that are used by the aircraft system and the ATSU. In particular, the CSP must not reconstitute or regenerate any of the error detection codes.

F

Future Air Navigation System (FANS). FANS is an avionics system which provides direct data link communication between the pilot and the air traffic controller. The communications include air traffic control clearances, pilot requests and position reporting.

R

Required Communication Performance (RCP). A set of requirements for air traffic service provision, aircraft

capability, and operations needed to support performance-based communication within a defined airspace.

Required Surveillance Performance (RSP). A statement of the performance requirements for operational surveillance in support of specific ATM functions.

Acronyms

Acronym	Meaning
ACARS	Aircraft Communications Addressing and Reporting System
ADS-C	Automatic Dependent Surveillance-Contract
AIM	Aeronautical Information Manual
AFM	Airplane Flight Manual
ATN	Aeronautical Telecommunication Network
ATS	Air Traffic Service
ATSU	Air Traffic Service Unit
CPDLC	Controller-Pilot Data Link Communication
CRA	Central Reporting Agency
CSP	Communication Service Provider
CVDFR	Cockpit Voice and Flight Data Recorder
CVR	Cockpit Voice Recorder
DLMA	Data Link Monitoring Agency
EFB	Electronic Flight Bag
FANS	Future Air Navigation System
HF	High Frequency
HFDL	High Frequency Data Link
ICAO	International Civil Aviation Organization
INTEROP	Interoperability Requirements Standards
LOA	Letter of Authorization
MEL	Minimum Equipment List
MMEL	Master Minimum Equipment List
MSpec	Management Specification
OEM	Original Equipment Manufacturer.
OpSpec	Operation Specification
PAI	Principal Avionics Inspector
PBCS	Performance-based Communication and Surviellance
PI	Principal Inspector
POI	Principal Avionics Inspector
PMI	Principal Maintenance Inspector
RCP	Required Communication Performance
RSP	Required Surveillance Performance
SATCOM	Satellite Communication
SBD	Short Burst Data
SELCAL	Selective-Calling Radio System

Acronym	Meaning
SOC	Statement of Compliance
SSP	Satellite Service Provider
VDL	VHF Data Link
VHF	Very High Frequency