

SERVICE BULLETIN REVISION TRANSMITTAL SHEET

MODEL BD-100-1A10 (CH-350)

Discard the Revision 05 of this Service Bulletin dated Aug 10/2023 and replace in its entirety with this Revision 06.

Service Bulletin No.	<u>350-23-011</u>		
Date of Basic Issue	<u>Jun 25/2014</u>		
Revision No.	<u>01</u>	Dated	<u>May 31/2016</u>
Revision No.	<u>02</u>	Dated	<u>Nov 30/2017</u>
Revision No.	<u>03</u>	Dated	<u>Mar 07/2018</u>
Revision No.	<u>04</u>	Dated	<u>Jan 30/2023</u>
Revision No.	<u>05</u>	Dated	<u>Aug 10/2023</u>
Revision No.	<u>06</u>	Dated	<u>Dec 19/2024</u>

This revision has no effect for aircraft on which the Basic Issue or Revision 01, Revision 02, Revision 03, Revision 04 or Revision 05 of this Service Bulletin was done thus no other action is necessary. Do not sign the log book if you have not done this revision. Keep the previous log book entry. You may make an entry as "Not Applicable" for this revision.

This revision is issued to:

1. Change, in Paragraph A of the Pilots Information Sheet, to update information in Note 2.
2. Change, in Paragraph J of the Pilots Information Sheet, to update the Service Bulletin revision number.
3. Change, in Paragraph 1, to update information in Note 5.
4. Make miscellaneous minor changes, as necessary, with no change of context.

PILOTS INFORMATION SHEET

MODEL BD-100-1A10 (CH-350)

ATA 23-15

COMMUNICATIONS

MODIFICATION – COMMUNICATIONS – INTRODUCTION OF FUTURE AIR NAVIGATION SYSTEM (FANS) 1/A+ OPTION (C23-600)
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A. Objective

This Service Bulletin gives instructions to install a FANS 1/A+ system with a CVR capable of datalink recording. The installation of the FANS 1/A+ compatible datalink system introduced by Bombardier service bulletins is a prerequisite. The data-capable third VHF installed with the datalink system will be used by FANS 1/A+ in lieu of Satcom in VHF coverage areas.

The FANS 1/A+ system for data-link communication includes the Controller-Pilot Data-Link Communications (CPDLC) and the Automatic Dependent Surveillance – Contract (ADS-C) applications. With this system, the operator will be able to access better routes in the airspaces that support FANS 1/A+ usage, such as the North Atlantic and some Pacific regions. It allows the flight crew to reduce the usage of poor HF communications normally used in oceanic and remote flights. Instead, they can rely on automated position reporting by the FMS and datalink systems and exchange digital communications with the Air Traffic Control (ATC) for routine communications.

- NOTES:**
1. This Service Bulletin only install FANS capability. Operators still need to get operational approval from the appropriate authorities.
 2. In order to participate in U.S. Domestic En Route CPDLC, aircrafts avionics configuration must be is verified against the published “En-Route CPDLC Participation List” configuration to avoid interoperability issues and ensure operationally acceptable performance is maintained. Operators should refer to FAA DataComm website for latest details. The URL is as follows:

https://www.faa.gov/air_traffic/technology/DataComm

B. System(s) Impacted

Not Applicable.

C. Flight Compartment Procedures Impacted

Not Applicable.

D. Passenger Compartment Procedures Impacted

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Not Applicable.

E. Pilot Training

Training is available from Bombardier. Go to www.batraining.com for more details.

F. AFM References

The publication that follows is required after the Service Bulletin has been incorporated:

- CH 350 Airplane Flight Manual (AFM), Revision 37 or later approved revisions as applicable.

G. Additional Information

Not Applicable.

H. Flight Planning Information

Not Applicable.

J. Recording

- After Service Bulletin 350-23-011 is incorporated, make sure to update the aircraft logbook to show that Service Bulletin 350-23-011 (Revision 05) as incorporated and if applicable provide a copy of the Pilot Information Sheet to the flight crew.

BOMBARDIER

SERVICE BULLETIN SUMMARY

This Service Bulletin is available at:
my.businessaircraft.bombardier.com

MODEL BD-100-1A10 (CH-350)

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COMMUNICATIONS

MODIFICATION – COMMUNICATIONS – INTRODUCTION OF FUTURE AIR NAVIGATION SYSTEM (FANS) 1/A+ OPTION (C23-600)
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The information below is provided for your reference. For full details, including labor and part coverage, please see corresponding paragraph contained within this bulletin.

OPTIONAL OPERATIONAL ENHANCEMENT	COMPLIANCE TIME Not applicable	
EFFECTIVITY: BD-100-1A10 aircraft, Serial No. 20501 to 22999		
MANPOWER: Refer to Paragraph 1.F.		
CONTINUED AIRWORTHINESS (CAW) FLEET CAMPAIGN	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
TLMC, CH 5 AFFECTED	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
KITS and/or PARTS	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
TOOLING/GSE	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
PLANNING INFORMATION: See important information at the start of Paragraph 1.	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
DEDICATED SCHEDULE	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
PREREQUISITE SERVICE BULLETINS: SB 350-23-012 or SB 350-23-013 is a prerequisite to this Service Bulletin.		

To place an order for parts or kits, please call Bombardier Parts Services at:

514-855-2999 or 1-866-538-1247

SERVICE BULLETIN

This Service Bulletin is available at:
my.businessaircraft.bombardier.com

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COMMUNICATIONS

**MODIFICATION – COMMUNICATIONS – INTRODUCTION OF FUTURE AIR
NAVIGATION SYSTEM (FANS) 1/A+ OPTION (C23-600)**

1. PLANNING INFORMATION

NOTES: 1. **Before you do this Service Bulletin, examine all STC, STA or equivalent action changes to make sure that this Service Bulletin can be completed.**

2. This Service Bulletin is covered by a dedicated schedule. Dedicated schedules are used to reserve and manage inventory due to limited availability of rotatable stock, parts and/or kits. Parts are limited, therefore, advance part scheduling with our In-Service Implementation Team (ISIT) is recommended prior to a maintenance visit. They can be reached at bacs_isit@aero.bombardier.com. The parts will be allocated on a first come first serve basis.

Should you require additional information, please contact your Regional Sales Manager (RM) or Field Service Representative (FSR).

For more information on dedicated schedules, refer to SB 350-00-002.

3. Due to the lead-time required for obtaining kits and parts, operators are advised to order the kits and parts in advance before scheduling the incorporation of this Service Bulletin. Please contact Bombardier Parts Services, in Montreal, for delivery lead times and confirmation of prices.

Refer to applicable governmental agency regulations and requirements and make sure that the work described in this Service Bulletin is performed in compliance with manufacturer's recommendations and/or acceptable industry standards.

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4. SB 350-23-012 or SB 350-23-13 is a prerequisite and must be done before or at the same time as this Service Bulletin. SB 350-23-004 is prerequisite to SB 350-23-012 or SB 350-23-013. An equivalent STA/STC can be substituted to the prerequisite SB 350-23-012 or SB 350-23-13, but then SB 350-23-004 becomes a prerequisite to this Service Bulletin.

Any SATCOM system other than the Bombardier Approved SB used for FANS must meet the following requirements:

For Inmarsat SATCOM (Inmarsat, i.e., Data 2):

- TSO-C132
- ARINC 618-6, Section 7
- ARINC 741P2-10, Sections 3.2, 3.6, 4.2 and Attachment 2F-44.

For Iridium SATCOM (i.e., Short Burst Data, SBD).

- TSO-C159a

This SB does not provide any approval for installation or use of a different SATCOM system for FANS, as it is out of its scope. The SATCOM interface with the Data Link system, as well as its performance must be verified for all required operating conditions and documented outside of this SB and is subject to approval by the appropriate authority.

5. In order to participate in U.S. Domestic En Route CPDLC, aircrafts avionics configuration must be is verified against the published "En-Route CPDLC Participation List" configuration to avoid interoperability issues and ensure operationally acceptable performance is maintained. Operators should refer to FAA DataComm website for latest details. The URL is as follows:

https://www.faa.gov/air_traffic/technology/DataComm

A. Effectivity

BD-100-1A10 aircraft, Serial No. **20501** to **22999**.

NOTE: The instructions given in this Service Bulletin are only applicable to the systems and parts installed at the time of delivery of the aircraft or as changed by Bombardier Service Bulletin(s).

B. Reason

This Service Bulletin gives instructions to install a FANS 1/A+ system with a CVR capable of datalink recording. The installation of the FANS 1/A+ compatible datalink system introduced by Bombardier service bulletins is a prerequisite. The data-capable third VHF installed with the datalink system will be used by FANS 1/A+ in lieu of Satcom in VHF coverage areas.

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The FANS 1/A+ system for data-link communication includes the Controller-Pilot Data-Link Communications (CPDLC) and the Automatic Dependent Surveillance – Contract (ADS-C) applications. With this system, the operator will be able to access better routes in the airspaces that support FANS 1/A+ usage, such as the North Atlantic and some Pacific regions. It allows the flight crew to reduce the usage of poor HF communications normally used in oceanic and remote flights. Instead, they can rely on automated position reporting by the FMS and datalink systems and exchange digital communications with the Air Traffic Control (ATC) for routine communications.

C. Description

For aircraft PRE SB 350-23-010, this Service Bulletin gives instructions to:

- Remove the lower access panels 221EZ and 222EZ from the left and right equipment racks,
- Connect capped and stowed wiring to the Radio Interface Unit (RIU) 1 tray connector and to the Cockpit Voice Recorder (CVR) connector,
- Do the configuration setting of the Configuration Strapping Units (CSU),
- Do the loading of two Encrypted Application Keys (EAK),
- Do the necessary tests to activate the system and to make sure that it operates correctly, and
- Install the lower access panels 221EZ and 222EZ to the left and right equipment racks.

For aircraft POST SB 350-23-010, this Service Bulletin gives instructions to:

- Do the loading of two Encrypted Application Keys (EAK), and
- Do the necessary tests to activate the system and to make sure that it operates correctly.

D. Compliance

Optional – Operational Enhancement

NOTES: 1. If it is not possible to complete all the instructions in this Service Bulletin because of the aircraft configuration, submit an SRPSA for analysis and to get an approved disposition to complete this Service Bulletin. Standard SRPSA fees may apply. Refer to the Services section of myBombardier for the latest prices, rates and fees.

2. When this Service Bulletin is done, the latest issue of the Airplane Flight Manual must be used.

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E. Approval

The technical content of this Service Bulletin has been approved under the authority of Transport Canada Civil Aviation (TCCA) Design Approval Organization (DAO) No. DAO #93-Q-02.

- NOTES:
1. The technical content of this Service Bulletin is accepted by the FAA under the Canada/USA bilateral Aviation Safety Agreement.
 2. The technical content of this Service Bulletin is accepted by EASA under the Canada/EU bilateral Aviation Safety Agreement.

F. Manpower

- NOTES:
1. The hours given are to help you schedule the tasks given in this Service Bulletin. The hours are for direct labor performed by an experienced crew and do not include the time for familiarization, planning, aircraft preparation in hangar such as towing and positioning of scaffolds, removal of interior furnishings, repainting, supervision and inspection.

For more information related to the manpower, refer to SB 350-00-002.

2. This Service Bulletin may require consumable materials that have specific curing times (refer to Paragraph 3). The accumulated curing time is not included in the hours and should be considered for planning purposes before you schedule this Service Bulletin.

13 hours are necessary to do this Service Bulletin on aircraft PRE SB 350-23-010.

2 hours are necessary to do this Service Bulletin on aircraft POST SB 350-23-010.

Bombardier does not pay for the labor to do this modification.

G. Material – Cost and Availability

Kit 100K23-22A is necessary to do this Service Bulletin for aircraft PRE SB 350-23-010.

KIT NO.	PRICE
100K23-22A	Please contact Bombardier Parts Services, in Montreal, for delivery lead times and confirmation of prices.

In addition to the kit shown above, the parts in Paragraph 3 are necessary to do this Service Bulletin.

Bombardier does not pay for the kits and parts to do this Service Bulletin.

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The kit and parts can be purchased by sending a purchase order to Bombardier Parts Service, Montreal.

NOTE: Due to the lead-time required for obtaining kits and parts, operators are advised to order the kits and parts in advance before scheduling the incorporation of this Service Bulletin. Please contact Bombardier Parts Services, in Montreal, for delivery lead times and confirmation of prices.

This Service Bulletin is covered by a dedicated schedule. Dedicated schedules are used to reserve and manage inventory due to limited availability of rotatable stock, parts and/or kits. Parts are limited, therefore, advance part scheduling with our In-Service Implementation Team (ISIT) is recommended prior to a maintenance visit. They can be reached at bacs_isit@aero.bombardier.com. The parts will be allocated on a first come first serve basis.

Should you require additional information, please contact your Regional Sales Manager (RM) or Field Service Representative (FSR).

For more information on dedicated schedules, refer to SB 350-00-002.

For all parts transactions, Bombardier's current Spare Parts and Component Repair Price Catalogue General Terms and Conditions apply. These terms and conditions are found on myBombardier at:

my.businessaircraft.bombardier.com

H. Tooling (Applicable to Aircraft PRE SB 350-23-010)

The equipment and tools listed below are necessary to do this modification:

GSE REFERENCE NO.	PART NO.	DESCRIPTION
23X-51-01	H10-30	Ground Crew Interphone Headset
24-00-24	S4933959-501	Tag, Circuit Breaker

Refer to the Standard Practices Manual (SPM), Wiring Manual (WM), Chapter 20, and the table that follows for the tools applicable to the wiring modification:

LUG/CONTACT	WIRING TOOL (SEE NOTE 3)			
	CRIMP	POSITIONER	INSERTION	EXTRACTION
031-9134-001	M22520/2-01	Standard Locator	CIET-20 (274-70001-000) (ITT Cannon)	CIET-20 (274-70001-000) (ITT Cannon)

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LUG/CONTACT	WIRING TOOL (SEE NOTE 3)			
	CRIMP	POSITIONER	INSERTION	EXTRACTION
372-2514-110	359-0697-010 or 623-8579-001 (Rockwell-Collins) or GMT221 (Daniels)	-	359-0697-050 or 359-0829-010 (Rockwell-Collins) or DAK188 (Daniels)	359-0697-020 or DRK230 (Daniels)
B0808005-006N	AMP69692-1	-	-	-

- NOTES:**
1. Refer to the BD-100 Illustrated Tool and Equipment Manual (ITEM) to make sure that you use the correct equipment configuration.
 2. Refer to the Liability Statement in the ITEM for acceptable GSE equivalents.
 3. This list is provided for a quick reference. In case of discrepancy between this list and the tool called out in the SPM-WM, Chapter 20, then the tool called in the SPM-WM will prevail. Other approved alternative tools are acceptable and can also be used.

I. Weight and Balance

No change.

J. Electrical Load Data

No change.

K. References

- Bombardier, Modification Summary, 100T090080, Rev. E-1.
- Bombardier, Modification Summary, 100T090130, Rev. E.
- Bombardier, Modification Summary, 100T091442, Rev. B.
- Bombardier, Modification Summary, 100T091467, Rev. A.
- Bombardier, Modification Summary, 100T091468, Rev. A.
- Bombardier, Modification Summary, BH100T090132, Rev. A.
- Bombardier, Kit Drawing K1002370003, Rev. --.
- Bombardier, Standard Practices Manual (SPM), Chapters 20 and 51.
- CH 350 Aircraft Maintenance Manual (AMM), Chapters 6, 23, 24, 25, 31 and 52.
- CH 350 Airplane Flight Manual (AFM), Latest Issue.
- Bombardier, SB 350-00-002, Service Bulletin Description and Policy.

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- Bombardier, SB 350-23-004, "Modification – Datalink and SELCAL System – Installation of Datalink with Selective Calling (SELCAL) Option (C23-406)".
- Bombardier, SB 350-23-010, "Modification – Datalink System – Upgrade the Datalink System to Meet the EUROCONTROL's LINK 2000+ Requirement Option (C23-440)".
- Bombardier, SB 350-23-012, "Modification – Communications – Installation of Inmarsat Satellite Communication (SATCOM) System Option (C23-435)".

L. Other Publications Affected

- CH 350 Airplane Flight Manual (AFM).

M. Equivalent Service Bulletin

- For the Challenger 300 aircraft, use SB 100-23-22.

2. ACCOMPLISHMENT INSTRUCTIONS

NOTES: 1. All TASKs given in the procedures that follow are from the BD-100, Aircraft Maintenance Manual unless otherwise specified.

2. All references made to zones, access panels and/or doors, are from the BD-100, Aircraft Maintenance Manual, Chapter 6.

A. Aircraft Setup

- (1) Obey all electrical/electronic safety precautions. Refer to AMM 24-00-00-910-801.

CAUTION: OBEY ALL ELECTROSTATIC DISCHARGE-SENSITIVE (ESDS) PRECAUTIONS. STATIC VOLTAGES CAN CAUSE DAMAGE TO ESDS COMPONENTS.

- (2) Obey all electrostatic-discharge safety precautions. Refer to AMM 24-00-00-910-802.

- (3) For aircraft PRE SB 350-23-010, open and tag the circuit breakers that follow:

LOCATION	CB NO.	NAME	ZONE
LCBP	B4	RIU 1B/ AURAL	211
LCBP	B5	RIU 1A	211
LCBP	D6	CVR	211

NOTE: For aircraft POST SB 350-23-010, make sure that the above circuit breakers are closed.

- (4) For aircraft PRE SB 350-23-010, remove the lower access panels 221EZ and 222EZ from the left and right equipment racks. Refer to AMM 25-72-01-000-803.

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- (5) For aircraft PRE SB 350-23-010, open the aft equipment compartment door 182GL. Refer to AMM 52-41-00-010-801.

B. Modification (Applicable to Aircraft PRE SB 350-23-010 Only)

NOTES: 1. If it is not possible to complete all the instructions in this Service Bulletin because of the configuration of the aircraft, submit an SRPSA for analysis and to get an approved disposition to complete this Service Bulletin. Standard SRPSA fees may apply. Refer to the Services section of myBombarider for the latest prices, rates and fees

2. For aircraft POST SB 350-23-010, go directly to Paragraph 2.D.

- (1) In the left equipment rack, remove the RIU 1 connector A17P2 (1) from the RIU tray (4) as follows. Refer to Figure 1.

- (a) Remove the RIU 1. Refer to AMM 23-51-21-000-801.
- (b) Record the position of the indexing key (3) on the connector A17P2 (1).
- (c) Remove the indexing key (3).
- (d) Remove the screws (2) and keep for later installation.
- (e) Remove the electrical connector A17P2 (1) from the tray (4).

- (2) Connect the CVR to the RIU 1 as follows:

- (a) Connect the CVR wiring to the RIU 1 connector A17P2 as follows. Refer to Kit Drawing K1002370003.

- (i) Unstow and remove the caps from the wire MAG5675W/B.
- (ii) Install contacts Part No. 372-2514-110 on wires MAG5675W and MAG5675B. Refer to SPM-WM 20-21-01.
- (iii) Connect wire MAG5675W to pin 5 of RIU 1 connector A17P2.
- (iv) Connect wire MAG5675B to pin 6 of RIU 1 connector A17P2.

- (b) Connect the RIU wiring to the CVR connector A129P1 as follows. Refer to Kit Drawing K1002370003.

- (i) Remove the CVR. Refer to AMM 23-71-01-000-801.
- (ii) Unstow and remove the caps from the wire RBG5675.
- (iii) Install contacts Part No. 031-9134-001 on wires RBG5675W and RBG5675B. Refer to SPM-WM 20-20-10.
- (iv) Connect wire RBG5675W to pin 34 of CVR connector A129P1.
- (v) Connect wire RBG5675B to pin 33 of CVR connector A129P1.
- (vi) Trim the conduit, Part No. S10155H23 to the correct length and install on the wire RGB5676N.
- (vii) Install terminal lug Part No. B0808005-006N on wire RBG5676N.

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(viii) Connect wire RBG5676N to ground stud GS4216, with washer, Part No. AN960JD10L, lockwasher, Part No. MS35338-43 and nut, Part No. MS35650-302. Refer to SPM-MM 51-80-00-910-803.

(c) In the left equipment rack, install the RIU 1 connector A17P2 (1) in the RIU tray (4) as follows. Refer to Figure 1.

(i) Put the electrical connector A17P2 (1) in position on the tray (4).

(ii) Install the screws (2) previously removed.

(iii) Torque the screws from 13 to 16 lbf in (1.47 to 1.8 Nm). Refer to SPM-MM 20-21-00-910-801.

(iv) Install the indexing key (3) in the same configuration as recorded during removal.

(v) Install the RIU 1. Refer to AMM 23-51-21-400-801.

(d) Install the CVR. Refer to AMM 23-71-01-400-801.

(3) Remove the tags and close the circuit breakers that follow:

LOCATION	CB NO.	NAME	ZONE
LCBP	B4	RIU 1B/ AURAL	211
LCBP	B5	RIU 1A	211
LCBP	D6	CVR	211

C. Configuration Setting (Applicable to Aircraft PRE SB 350-23-010 Only)

(1) Change the configuration settings in the CSUs as follows:

(a) Remove the CSU No. 1 and No. 2. Refer to AMM 31-45-17-000-801.

(b) Set the switch for bit 5 of word 14 to the down position in the two CSUs. Refer to AMM 31-45-17-280-801.

(c) Install the CSU No. 1 and No. 2. Refer to AMM 31-45-17-400-801.

NOTE: Do not do the operational test of the CSUs at this time.

D. Loading of EAKs

(1) Connect and energize the external dc power. Refer to AMM 24-41-00-861-801.

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- (2) Do the loading of the dual FANS 1A+ EAKs DLC-6200 and FAN-6200 as follows:

NOTE: An EAK is an alphanumeric string that must be entered in the RIU External Compensation Unit (ECU) to unlock – option related – application software already resident in the system. EAKs are unique and can only be used in the aircraft for which they were purchased (they will not work on other aircraft). For flexibility, EAKs are stored in the ECU. This way, the RIU can be removed from the aircraft without losing option information.

When an operator purchases an option, he is provided with the EAKs for that option. EAKs are created externally from a PC based computer system that is part of the Rockwell Collins Order Administration/Factory.

NO.	STEP	EXPECTED RESULT
1	On the CDU, press the IDX key.	INDEX menu page 1/2 is shown.
2	Push the line-select key (LSK) next to DATALINK.	DATALINK MENU is shown.
3	Push the LSK next to TECHNICAL.	DL – APPLICATION MENU is shown.
4	Push the LSK next to PASSWORD.	PASSWORD page is shown.
5	Enter password with the keyboard. NOTE: The password is the time of the day shown on the PASSWORD page.	PROTECTED MENU page is shown.
6	Push the LSK next to APM MENU.	APM MENU page is shown.
7	Push the LSK next to LICENCE MGR.	DL – LICENSE MGR page is shown.
8	Enter the FAN-6200 key provided then push the LSK next to VALIDATE.	The MSG line shows KEY ADDED and the TYPE line shows FANS ATC DATA LINK.
9	Enter the DLC-6200 key provided then push the LSK next to VALIDATE.	The MSG line shows KEY ADDED and the TYPE line shows DUAL FANS ATC DATA LINK.

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E. Testing

(1) Do the step that follows to make sure that the modifications are enabled:

NO.	STEP	EXPECTED RESULT
1	From the TECHNICAL MENU, press the LSK next to LICENSE.	The FANS line shows the status ENABLED. The FANS-DUAL line shows the status ENABLED

(2) For aircraft PRE SB 350-23-010, do as follows:

- (a) Do the operational test of the Configuration Strapping Units (CSU). Refer to AMM 31-45-17-710-801.
- (b) Do the operational test of the RIU 1. Refer to AMM 23-51-21-710-801
- (c) Do the operational test of the CVR. Refer to AMM 23-71-00-710-801.

(3) Do the operational test of the FANS 1/A+ as follows:

NOTE: The operational test of the Satcom System or Satcom Iridium System must be done before this test. Refer to AMM 23-15-00-710-801 or AMM 23-15-00-710-802.

- (a) On the Pilot and copilot Control Display Units (CDU) 1 and 2, push the IDX button and make sure that the FANS prompt is shown on the INDEX page 1.
- (b) On the Engine Indication and Crew Alerting System (EICAS), make sure there are no messages related to the systems/components that follow:
 - Satcom
 - RIU 1 (CMU)
 - CVR
- (c) On the EICAS, make sure that the messages that follow are not shown:
 - DATALINK ACARS
 - DATALINK CPDLC ATN (Aircraft POST SB 350-23-010, Link 2000+)
 - DATALINK CPDLC FANS
- (d) On the CDU 1 and CDU 2 INDEX page 1/3 (or 1/2), do as follows:

NO.	STEP	EXPECTED RESULT
1	Push the Line Select Key (LSK) adjacent to FANS.	The FANS MAIN MENU page is shown. <u>NOTE:</u> If FANS MAIN MENU is not shown, push the LSK next to RETURN until page is shown.

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NO.	STEP	EXPECTED RESULT
2	On the FANS MAIN MENU page, push the LSK adjacent to REQUESTS.	Make sure that for any CPDLC message selected, the PRINT command is not shown on the LSK.

NOTE: If the PRINT command is shown, refer to the procedure that follows to configure the printer to NOT INSTALLED:

NO.	STEP	EXPECTED RESULT
1	On the CDU 1 INDEX page 1, select DATALINK.	The DL APPLICATION page is shown.
2	On the DL APPLICATION page, select TECHNICAL.	The DL TECHNICAL MENU page is shown.
3	On the DL TECHNICAL MENU page, select PASSWORD with the Line Select Key (LSK) 5R.	The PROTECTED MENU page is shown.
4	On the PROTECTED MENU page, select APM MENU.	The APM MENU is shown.
5	On the APM MENU page, select OPTS BLK PGM.	The OPTS BLK PGM page 1 is shown.
6	On the OPTS BLK PGM page 1, enter the information that follows: MCDU 1: DEFAULT. MCDU 2: DEFAULT. MCDU 3: DEFAULT. PRINTER: NOT INSTALLED.	

- (e) Make sure that the Maintenance Diagnostic Computer (MDC) does not report related faults as follows:

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NO.	STEP	EXPECTED RESULT
1	On the copilot Cursor Control Panel (CCP) 2, push the A/ICE, ECS, and FUEL pushbuttons at the same time.	The MAINTENANCE MAIN MENU page is shown on the MFD 2 (copilot).
2	Use the CCP 2 joystick to select CURRENT FAULTS, push the ENTER button and wait one minute.	The CURRENT FAULTS page is shown on the MFD 2. Make sure that no faults related to the systems/components that follow are shown: – Satcom Receiver/Transmitter (SRT) 1 – RIU 1 – CVR 1
3	Push the LWR FRMT pushbutton.	The MAINTENANCE MAIN MENU is shown on the MFD 2.

- (f) Make sure that the L-RIU-CVR bus from RIU 1 is correctly received by the CVR as follows:

NO.	STEP	EXPECTED RESULT
1	Use the CCP 2 joystick to select LRU INDEX/OPERATIONS, push the ENTER button and wait one minute.	The LRU INDEX page is shown on the MFD 2. By default, the LRU INDEX pages show the Line Replaceable Units (LRU) in alphabetical order.
2	On the LRU INDEX page, put the cursor on the CKPIT VOICE REC (ATA 23) LRU and push the ENTER button.	The LRU OPERATIONS page is shown for the COCKPIT VOICE RECORDER.
3	In the LRU OPERATIONS page, press SKIP button to put cursor on Label 350 and push ENTER button.	The word labels and bits 9 to 31 are shown. Make sure that bit 18 of label L350 DATALINK INTERFACE FAIL has a value=0.

- (g) Open and tag the circuit breaker that follows:

CHALLENGER 350

MODEL BD-100-1A10 (CH-350)

LOCATION	CB NO.	NAME	ZONE
LCBP	B5	RIU 1A	211

(h) Make sure of the change that follows:

NO.	STEP	EXPECTED RESULT
1	In the DATA READER page, look for the diagnostic word L-RIU-CVR bus from CKPIT VOICE REC.	Make sure that bit 18 of label L350 DATALINK INTERFACE FAIL has a value=1.

(i) Remove the tag and close the circuit breaker that follows:

LOCATION	CB NO.	NAME	ZONE
LCBP	B5	RIU 1A	211

(j) Make sure of the change that follows:

NO.	STEP	EXPECTED RESULT
1	In the DATA READER page, look for the diagnostic word L-RIU-CVR bus from CKPIT VOICE REC.	Make sure that bit 18 of label L350 DATALINK INTERFACE FAIL has a value=0.

(k) Exit the DATA READER page as follows:

NO.	STEP	EXPECTED RESULT
1	Push the LWR FRMT pushbutton.	The MAINTENANCE MAIN MENU is shown on the MFD 2.
2	Push the TFC button.	The usual page is shown on the MFD 2.

(l) Remove the external dc power. Refer to AMM 24-41-00-861-802.

F. Close-out

- (1) Remove all tools, equipment and unwanted materials from the aircraft.
- (2) For aircraft PRE SB 350-23-010, install the lower access panels 221EZ and 222EZ to the left and right equipment racks. Refer to AMM 25-72-01-400-803.
- (3) For aircraft PRE SB 350-23-010, close the aft equipment compartment door 182GL. Refer to AMM 52-41-00-410-801.

CHALLENGER ³⁵⁰
MODEL BD-100-1A10 (CH-350)

G. Recording

When this Service Bulletin is completed, make an entry in the aircraft log and send the attached Incorporation Sheet to Bombardier.

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bbad_SBgroup@aero.bombardier.com

3. MATERIAL INFORMATION

A. Kit

Kit 100K23-22A is necessary to do this Service Bulletin on aircraft PRE SB 350-23-010 only and contains the parts that follow:

NEW PART NO.	QTY	ITEM	USED PART NO.	INSTRUCTIONS - DISPOSITION
031-9134-001	3	Contact	-	-
372-2514-110	3	Contact	-	-
AN960JD10L or NAS1149D0332J	1	Washer	-	-
B0808005-006N	2	Terminal Lug #10	-	-
MS35338-43	1	Lockwasher	-	-
MS35650-302	1	Nut	-	-
S10155H23 or S10155M23	36 in. (0.91 m)	Conduit	-	-

- NOTES:**
1. In case of discrepancy between this list and the Service Bulletin Kit Parts List contained in the respective kit, then the later list prevails.
 2. The actual quantity for some of the hardware contained in the kit can be greater than the amount shown in the table as these items are supplied in prepackaged quantities.

B. Parts

The parts that follow are necessary to do this Service Bulletin and are available from Bombardier Parts Services, Montreal:

CHALLENGER ³⁵⁰
MODEL BD-100-1A10 (CH-350)

ITEM	PART NUMBER	QUANTITY
Encrypted Application Key (EAK) DLC-6200	810-0185-100	1
Encrypted Application Key (EAK) FAN-6200	810-0186-100	1

NOTE: The part numbers for the items listed above are subject to change without revision to this Service Bulletin. In case of discrepancy between this list and any other list, the Illustrated Parts Catalog prevails and shall be used to determine the latest part number.

C. Material

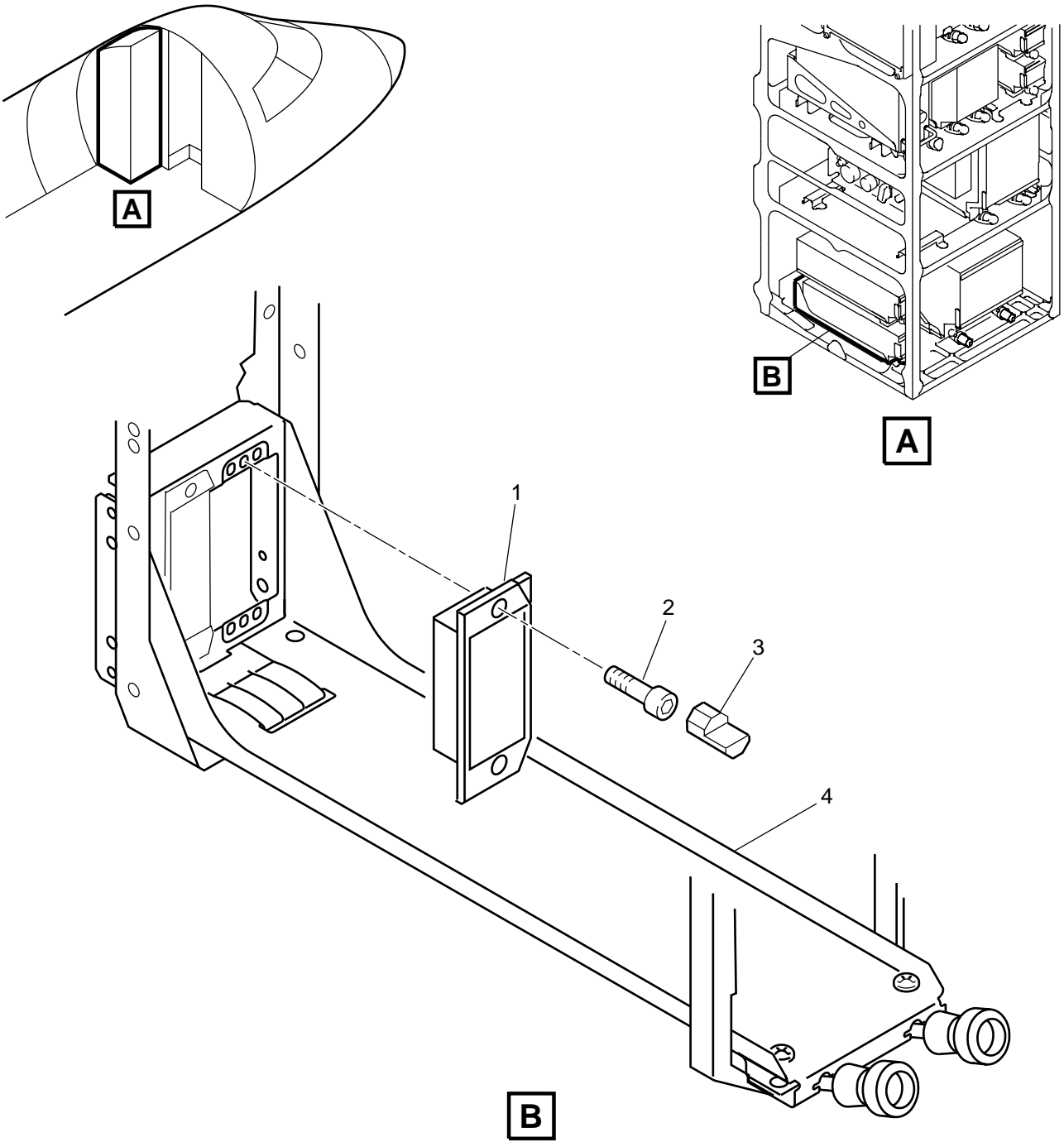
No materials required.

D. Publications

The publication that follows is required after the Service Bulletin has been incorporated:

- CH 350 Airplane Flight Manual (AFM), Revision 37 or later approved revisions as applicable.

CHALLENGER 350
MODEL BD-100-1A10 (CH-350)



BSB2310_004

RIU 1 Connector A17P2 – Removal/Installation
Figure 1

REFERENCE DRAWINGS:

WQ SEE COCKPIT VOICE RECORDER DATALINK SYSTEM 1002379004.

NOTES:

1. INSTALL WIRING PER BAPS145-003.
2. IDENTIFY WIRING PER BAPS145-005.
3. TERMINATION OF SHIELD FINISH PER BAPS145-006.
4. RETERMINATE EXISTING WIRES PER WIRELIST REPORT.
5. FOR MA WIRE HARNESS REPORT REFER TO 1009109201
FOR RB WIRE HARNESS REPORT REFER TO 1009109404
6. WIRE LENGTH FOR WIRES WITHOUT FOURTH LETTER "J" IS FOR REFERENCE ONLY.

CORES MARKED ----- ARE EXISTING WIRES

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F. 8944-3 REV 89/10 /MOD 4

4

3

THIS IS A CAD DRAWING

1

REVISIONS			
1	2	3	4
REWORKABLE	NON-REWORKABLE	NOTED	NA
ZONE	REV	DESCRIPTION	
	--	SEE EDNR	

SEE MODSUM 2012-05-17	EFFECTIVITY	APPROVED
SEE E.D.R.N.	DISP/DATE	DESIGN
	DESIGN	STRESS
	STRESS	WEIGHT
	WEIGHT	M & P

PART LIST			
PART NUMBER	DESCRIPTION	QUANTITY	CAGE CODE
B0808005-006N	TERMINAL LUG, #10	1	3AB48
031-9134-001	CONTACT	2	71468
372-2514-110	CONTACT	2	13499

WIRELIST REPORT										
NUMBER	GA	TYP	FROM		TO (1S)			TO (WAS)		WIRE LENGTH INCHES
			IDENT	PIN	IDENT	PIN	TERM	IDENT	PIN	
RBG5675W	22	B0801691-22	J630	X	A129P1	34	031-9134-001	A129P1	C&S	360
RBG5675B	22	B0801691-22	J630	Y	A129P1	33	031-9134-001	A129P1	C&S	360
MAG5675W	22	B0801691-22	P273	61	A17P2	5	372-2514-110	A17P2	C&S	230
MAG5675B	22	B0801691-22	P273	62	A17P2	6	372-2514-110	A17P2	C&S	230
RBG5676N	20	B0801220-20-9	A129P1	56	GS4216	GND	B0808005-006N	GS4216	C&S	48

401	DASH NO.
--	REVISION SHEET
2	1

SOLE AUTHORITY FILE USED:
K1002370003-M01 --
DATE - 2012-05-17
STATUS - RL

401	SEE EDNR	1	BD100
DASH NO.	NEXT ASSY	QTY PER ASST	MODEL

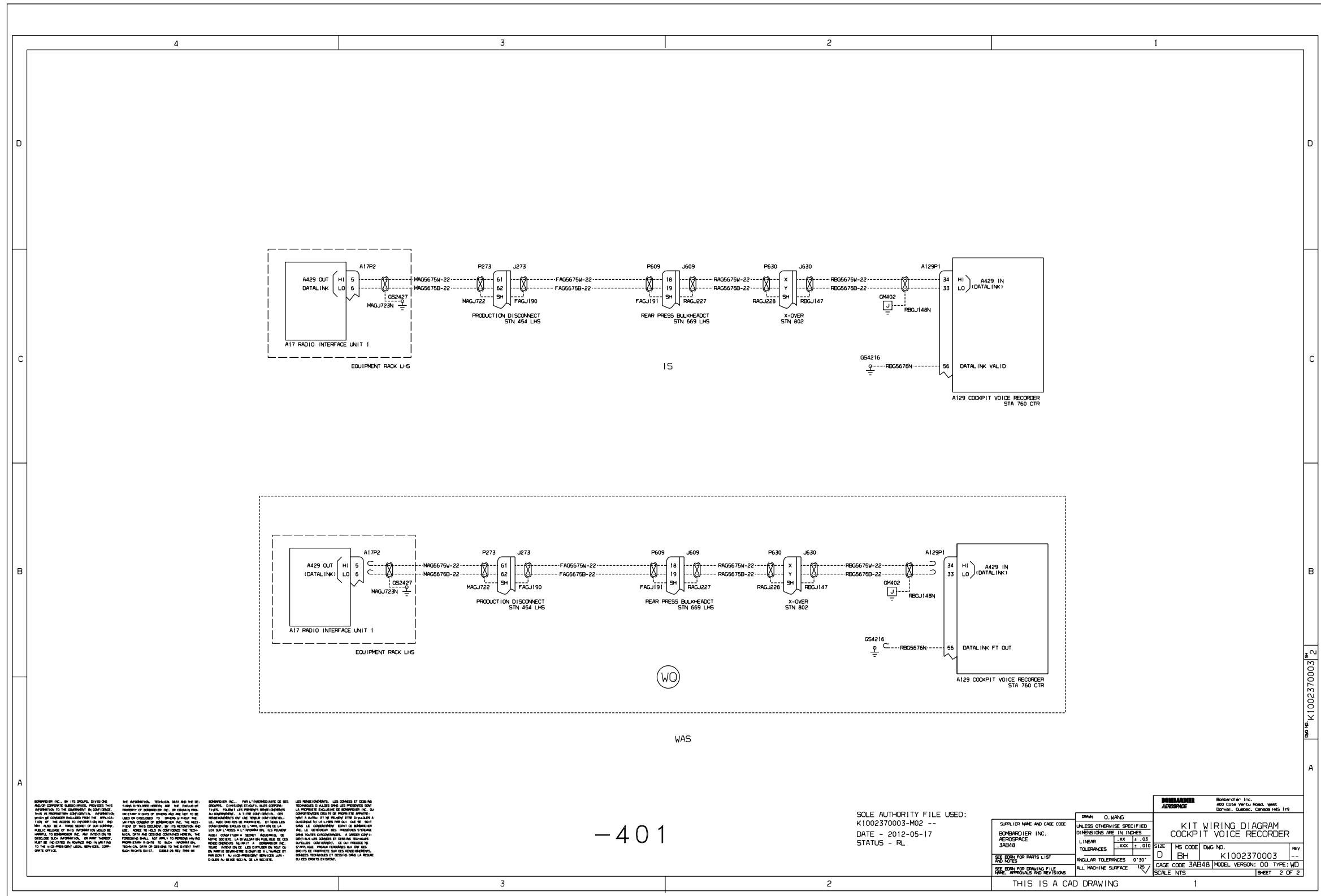
LIST OF ACTIVE SHEETS		PARTS LIST	
DRAWN O. WANG MAY/2012		BOMBARDIER Aerospace	
SUPPLIER NAME AND CAGE CODE		Bombardier Inc. 123 Gerratt Boulevard Downsview, Ontario, Canada 71867	
SEE EDNR FOR PARTS LIST AND NOTES		KIT WIRING DIAGRAM COCKPIT VOICE RECORDER	
SIZE	MS CODE	DWG NO.	REV
D	BH	K1002370003	--
CAGE CODE 3AB48		MODEL VERSION: 00	TYPE: WD
SCALE NTS		SHEET 1 OF 2	

K1002370003 – Kit – Wiring Diagram – CVR/RIU 1 Wiring for FANS 1/A+
(Sheet 1 of 2, Rev. --)

Basic Issue: Jun 25/2014
Revision 06: Dec 19/2024

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Page 18 of 19

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SOLE AUTHORITY FILE USED:
K1002370003-M02 --
DATE - 2012-05-17
STATUS - RL

SUPPLIER NAME AND CAGE CODE BOEING INC. AEROSPACE 3AB48		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES L INCHES TOLERANCES SIZE MS CODE DWG NO. K1002370003 CAGE CODE 3AB48 MODEL VERSION: 00 TYPE: WD SCALE: NTS SHEET 2 OF 2	
SEE LIST FOR PARTS LIST AND NOTES		THIS IS A CAD DRAWING	

SB100-23-010-70003-NC-S2

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SERVICE BULLETIN EVALUATION FORM

(Your ideas will help us provide better bulletins)

SERVICE BULLETIN: 350-23-011 **ISSUE:** Rev. 06 **DATED:** Dec 19/2024

TITLE: MODIFICATION – COMMUNICATIONS – INTRODUCTION OF FUTURE
AIR NAVIGATION SYSTEM (FANS) 1/A+ OPTION (C23-600)

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NOTE: Please use Salesforce **only** for troubleshooting issues or when Engineering deviation is necessary to accomplish the Service Bulletin modification.

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SERVICE BULLETIN INCORPORATION SHEET – "350–23–011"

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----------------------------------	--

Service Bulletin Number	Rev.	* Parts Completed	<u>COMPLIED WITH</u>			Remarks/Reason (Mandatory if N/A)
			YES	NO	N/A	
350–23–011	06	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
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_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Actual hours to accomplish Service Bulletin: _____

- * NOTES:
1. Where the Service Bulletin is divided into a number of parts (e.g., PARTS A, B, C, D, etc.) which can be carried out separately, indicate only those parts completed at this time.
 2. For repetitive checks (usually PART A) only the initial check should be reported unless otherwise stated in the Service Bulletin.
 3. When more than one part is carried out at the same time, each part should be reported.
 4. Fill in 'Remark/Reason' to explain compliance method when N/A is selected. (E.g. Part not installed, N/A by effectivity, N/A by Part Serial Number, etc.)
 5. PCW means 'Previously Complied With'.

Aircraft Serial No. _____	Aircraft Reg. No. _____
Airframe Hours: _____	Airframe Landings _____
S.B. Incorporation Date _____ (dd/mm/yy)	Service Order No. _____
Facility incorporating S.B. _____	
Name _____	Signature _____ Date _____ (dd/mm/yy)
Signature not required if sent by E-Mail	