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REVISION TRANSMITTAL

This sheet transmits Revision 2 to SB 34-4171, which:

- A. Removed the references of Centex STC coverage.
- B. Adds note to the Effectivity section for airplanes that already have Proline Fusion Phase 3 installed.
- C. Removed the part number for the laptop and specified it should be a Windows laptop.
- D. Adds the note in the Accomplishment Instructions to update your Rockwell Collins periodic database subscription.
- E. Adds Step 11.E for aircraft audio electrical wiring.
- F. Updated Step 14 to clarify electronic data files needed.
- G. Adds note regarding third party STC's in Step 15.H.(6).
- H. Deletes note "Make sure to procure the activation key from your Rockwell Collins Technical Support Representative" from Step 15.J.(8).
- I. Removes the NAS451-43 Plug Button from the SB 34-4171-0 and SB 34-4171-1 Kits and adds it to the SB 34-4171-3 Kit.
- J. Adds Figure 21 and Step 13.I to modify the SMS alert wiring.
- K. Makes other minor editorial changes throughout the document.

NOTE: This revision replaces the original issue and previous revisions of SB 34-4171 in their entirety.

REVISION COMPLIANCE

NO EFFECT. Airplanes previously modified by this service bulletin are not affected by this revision.

LOG OF REVISIONS

| Original Issue | November 15, 2019 |
|----------------|-------------------|
| Revision 1 | March 12, 2020 |
| Revision 2 | January 12, 2021 |

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TITLE

NAVIGATION - PROLINE FUSION UPGRADE TO PHASE 3 SOFTWARE

EFFECTIVITY

MODEL

SERIAL NUMBERS

BY-207, BY-239, BY-250 thru BY-323

BZ-1

Super King Air Model B200GT

Super King Air Model B200CGT

Super King Air Model B300 Super King Air Model B300C

King Air Model C90GTI

FL-954, FL-1010, FL-1031 thru FL-1139 FM-66 thru FM-75 LJ-2129 thru LJ-2169

NOTE: Textron Aviation-owned or Textron Aviation-authorized Service Centers are the only facilities that can complete this service document.

NOTE: The aircraft listed below have Pro Line Fusion Phase 2 software already installed.

Super King Air Model B200GT serial numbers BY-207, BY-239, BY-250 to BY-284 with Textron Aviation Pro Line Fusion Kit part number 434-3017 installed.

Super King Air Model B200GT serial numbers BY-285 thru BY-323 with ICIT part number 434-310011-0005, Pro Line Phase 2 Fusion software installed.

Super King Air Model B300 serial numbers FL-954, FL-1010, FL-1031 thru FL-1076, FL-1078 and FL-1079 with Textron Aviation Pro Line Fusion Kit part number 434-3014 installed.

Super King Air Model B300 serial numbers FL-1077, FL-1080 thru FL-1139 with ICIT part number 434-310011-0005, Pro Line Phase 2 Fusion software installed.

Super King Air Model B300C serial numbers FM-66 thru FM-70 with Textron Aviation Pro Line Fusion Kit part number 434-3014 installed.

Super King Air Model B300C serial numbers FM-71 thru FM-75 with ICIT part number 434-310011-0005, Pro Line Phase 2 Fusion software installed.

Super King Air Model C90GTI serial numbers LJ-2129 thru LJ-2136 with Textron Aviation Pro Line Fusion Kit part number 434-3019 installed.

Super King Air Model C90GTI serial number LJ-2137 thru LJ-2169 and On with ICIT part number 434-310011-0005, Pro Line Phase 2 Fusion software installed.

NOTE: The aircraft listed below have Pro Line Fusion Phase 3 already installed through Rockwell Collins Supplemental Type Certificate (STC).

Super King Air Model 200GT/200CGT with Rockwell Collins Supplemental Type Certificate (STC) SA01769WI Pro-Line Fusion with ICIT part number RCA-5168-002, or Rockwell Collins STC SA01857WI installed.

Super King Air Model 300/B300C with Rockwell Collins STC SA01784WI Pro-Line Fusion with ICIT part number RCA-5177-002 or Rockwell Collins STC SA01857WI installed.

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Super King Air Model C90GTi with Rockwell Collins STC SA01792WI Pro-Line Fusion with ICIT part number RCA-5205-002 or Rockwell Collins Pro-line Fusion STC SA01857WI installed.

NOTE: The aircraft listed below have Proline Fusion Phase 3 already installed through Beechcraft Field Service Kits.

Super King Air Model B200GT serial numbers BY-207, BY-239, BY-250 thru BY-323 with Textron Aviation Pro Line Fusion Kit part number 130-3093 installed.

Super King Air Model B200CGT serial number BZ-1 with Textron Aviation Pro Line Fusion Kit part number 130-3093 installed.

Super King Air Model B300 serial numbers FL-954, FL-1010, FL-1031 thru FL-1139 with Textron Aviation Pro Line Fusion Kit part number 130-3090 installed.

Super King Air Model B300C serial numbers FM-66 thru FM-75 with Textron Aviation Pro Line Fusion Kit part number 130-3090 installed.

REASON

NOTE: Before incorporation of this service bulletin, make sure the Audio Storage and Playback Unit (ASPU) has been upgraded to modification level MOD 3A. If the ASPU has not been upgraded to MOD 3A, you will not be able to load the new configuration files that are necessary for this service bulletin.

To upgrade current in service-aircraft from Phase 1 and/or Phase 2 to Phase 3 Pro Line Fusion software.

DESCRIPTION

This service bulletin provides parts and instructions to do a modification of existing Pro Line Fusion Phase 1 and/or Phase 2 aircraft and upgrade these aircraft to Pro Line Fusion Phase 3 software.

COMPLIANCE

RECOMMENDED. This service document should be accomplished at a scheduled maintenance period or inspection.

A service bulletin published by Textron Aviation may be recorded as *completed* in an aircraft log only when the following requirements are satisfied:

- 1) The mechanic must complete all of the instructions in the service bulletin, including the intent therein.
- 2) The mechanic must correctly use and install all applicable parts supplied with the service bulletin kit. Only with written authorization from Textron Aviation can substitute parts or rebuilt parts be used to replace new parts.
- 3) The mechanic or airplane owner must use the technical data in the service bulletin only as approved and published.
- 4) The mechanic or airplane owner must apply the information in the service bulletin only to aircraft serial numbers identified in the *Effectivity* section of the bulletin.
- 5) The mechanic or airplane owner must use maintenance practices that are identified as acceptable standard practices in the aviation industry and governmental regulations.

No individual or corporate organization other than Textron Aviation is authorized to make or apply any changes to a Textron Aviation-issued service bulletin, service letter, or flight manual supplement without prior written consent from Textron Aviation.

Textron Aviation is not responsible for the quality of maintenance performed to comply with this document, unless the maintenance is accomplished at a Textron Aviation Authorized Service Center.

APPROVAL

Textron Aviation received FAA approval for the technical data in this publication that changes the airplane type design.



FLIGHT CREW OPERATIONS

Refer to the attached Flight Crew Operations Summary.

CONSUMABLE MATERIAL

You must use the consumable materials that follow, or their equivalent, to complete this service document.

| NAME | NUMBER | MANUFACTURER | USE |
|---------------------|--------------|------------------------|--|
| Adhesive | 608 | Commercially Available | Used to help adhere placards to aircraft structure |
| NAME | | MANUEACTURER | |
| NAME | NUMBER | WANUFACIURER | 03E |
| Adhesive | EA9359.3 | Commercially Available | Used to bond cable tie mount to aircraft structure |
| | | | |
| NAME | NUMBER | MANUFACTURER | USE |
| Lacing Tape/String | A-A52080–B-3 | Commercially Available | Used to tie wire harness together |
| | | | |
| NAME | NUMBER | MANUFACTURER | USE |
| Isopropyl Alcohol I | TT-I-735 | Commercially Available | Used to clean an prepare surfaces for bonding |
| TOOLING | | | |

| NAME | NUMBER | MANUFACTURER | USE |
|---|-----------------------|---|--|
| Beech King Air Maintenance Test Box | TE79–KA- MAINT/935 | Textron Aviation Parts Distribution 7121 Southwest Boulevard Wichita, KS 7215 | This tool is used to set strapping configuration |
| r | | | |
| NAME | NUMBER | MANUFACTURER | USE |

WEIGHT AND BALANCE INFORMATION

Negligible

REFERENCES

Beechcraft Super King Air B200GT/B200CGT Fusion Maintenance Manual

Beechcraft Super King Air B300/B300C Fusion Maintenance Manual

Beechcraft Super King Air C90GTI Fusion Maintenance Manual

NOTE: Make sure all publications used are complete and current. Refer to www.txtavsupport.com.

PUBLICATIONS AFFECTED

Beechcraft B200GT/B200CGT Fusion Wiring Diagram Manual

Beechcraft B300/B300C Fusion Wiring Diagram Manual

Beechcraft King Air C90GTI Fusion Wiring Diagram Manual

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ACCOMPLISHMENT INSTRUCTIONS

- **NOTE:** This Service Bulletin requires the operator to upgrade the 822-1361-620 or 822-1361-621 Input/Output Concentrator (IOC) cards to 822-1361-622 through Rockwell Collins Service Bulletin. The IOC cards may have to be sent to Rockwell Collins for the necessary upgrade, please plan accordingly to prevent aircraft scheduling conflicts.
- **NOTE:** Aircraft upgrading from Phase 1 Fusion to Phase 3 Fusion will require the operator to change their Rockwell Collins periodic database subscription from J42 format to J61 format. You will need to contact Rockwell Collins customer support to have them change your account download settings.
- **NOTE:** This Service Bulletin requires the software that follows. The required software is dependent upon aircraft type and configuration, and can be downloaded at www.txtavsupport.com. (Refer to Steps 14.A thru 14.C for the necessary software for your aircraft.)

| Software Name | Software Number |
|--|-----------------|
| Aural Warning Software | 101-593000-0011 |
| L3 GH-3900 RSU Software | 8010-38001-0101 |
| Adaptive Flight Display (AFD) Software | 434-310011-0019 |
| AFD Software | 434-310011-0021 |
| AFD Software (B200/B200C, C90GT, B300 Hvy Wt | 434-310011-0019 |
| AFD Software for B300 Std Wt | 434-310011-0021 |
| ESIS (Standard Weight) (B300/B300C) | 434-310019-0005 |
| ESIS (Heavy Weight) (B300/B300C) | 434-310019-0007 |
| ESIS (Standard Weight) C90GTi | 434-310017-003 |
| ECL (B300/B300C Std Wt) | 434-590169-0037 |
| ECL (B300/B300C Hvy Wt) | 434-590170-0033 |
| ECL (B200GT/B200CGT) | 434-590168-0035 |
| ECL (C90GTi) | 434-590171-0039 |

- 1. To find the Aircraft Personality Module Strapping Configuration, do the steps that follow:
 - A. <u>On Beechcraft Models C90GTi, B200GT/B200CGT, B300/B300C without Pro Line Fusion Phase 2</u> <u>electrical wiring and software installed</u>, do the steps that follow:
 - (1) Determine which aircraft options are installed and complete the table below:

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| Item Number | Option Strap | Default | Optional |
|-------------|------------------------|---------------------|-----------|
| 1 | ADF 2 Installed No | | Yes |
| 2 | ATT/HDG 3 Installed | No | - |
| 3 | DATALINK Installed | No | Yes |
| 4 | DF 1 Installed | No | - |
| 5 | DME 2 Installed | No | Yes |
| 6 | FDR Installed | No | Yes |
| 7 | GPS 2 Installed | No | Yes |
| 8 | GPS 3 Installed | No | - |
| 9 | HF 1 Installed | No | Yes |
| 10 | IMS Installed | No | Yes |
| 11 | LDS Installed | No | - |
| 12 | TACAN 1 Installed | No | - |
| 13 | AHRS Equipment Type | AHC-3000 | - |
| 14 | IRS Equipment Type | LR5 | - |
| 15 | TCAS Equipment Type | TCAS 1 | TTR-4x00 |
| 16 | TDR 2 Equipment Type | TDR-94D | - |
| 17 | VHF Equipment Type | VHF-40000 | VHF-4000E |
| 18 | WX Equipment Type | RTA-85x | RTA-41xx |
| 19 | ADF Freq Range Extd | Disabled | - |
| 20 | ATN CPDLC | Disabled | - |
| 21 | CAT II Approach | Disabled | - |
| 22 | DME Freq Range Extd | Range Extd Disabled | |
| 23 | FMS Default Hold Speed | FAA-Hold | - |
| 24 | Default Units | Lb | Kg |
| 25 | PED Vspeeds | Disabled | Enable |
| 26 | SELCAL Char 1 | A | B thru Z |
| 27 | SELCAL Char 2 | A | B thru Z |
| 28 | SELCAL Char 3 | A | B thru Z |
| 29 | SELCAL Char 4 | А | B thru Z |

NOTE: Items 1,3,5,6,7,9,10,15,17 and 18 can be identified based on the aircrafts Equipment List.

NOTE: Items 24 through 29 will depend on the operators choice and assigned SELCAL value.

- B. On Beechcraft Models C90GTI, B200GT/B200CGT, B300/B300C with Pro Line Fusion Phase 2 electrical wiring and software installed, do the steps that follow:
 - (1) Connect external electrical power to the aircraft.



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- (2) Connect the TE79-KA-MAINT/935 Beech King Air Test Box to the field load plug in the back of the center pedestal.
- (3) Set the BATT switch to the ON position.
- (4) <u>On the Beechcraft Models B300/B300C and C90GTi</u>, set the EXT PWR switch to the ON position.
- (5) Set the REPORT MODE switch on the test box to ENABLE position.
- (6) Set the DATALOAD switch to ENABLE position on the overhead panel.
 - (a) Make sure the "Aircraft Configuration Parameter" page shows on Primary Flight Display (PFD) PFD 1, PFD 2 and on the Multifunction Display (MFD).

NOTE: On-Screen validation is completed with the MFD only.

- (b) On the MFD, push the down arrow at the top right corner of the screen and select the "Aircraft Option Straps" page.
- (c) Record the optional strap configuration of items 1 through 29 as pertain to your aircraft.

NOTE: Recording the optional strap configuration information will make it easier to verify the Aircraft Personality Module after the new software has been installed on the aircraft.

- (7) Set the DATALOAD switch to the OFF position.
- (8) Set the REPORT MODE switch on the test box to the OFF position.
- (9) Remove the TE79-KA-MAINT/935 Beech King Air Test Box from the aircraft.
- (10) <u>On the Beechcraft Models B300/B300C and C90GTi</u>, set the EXT PWR switch to the OFF position.
- (11) Set the BATT switch to the OFF position.
- 2. Prepare the airplane for maintenance.
 - A. Make sure that the airplane is electrically grounded.
 - B. Make sure that all switches are in the OFF/NORM position.
 - C. Disconnect electrical power from the airplane.
 - (1) Disconnect external electrical power.
 - (2) Disconnect the airplane battery.
 - D. Attach maintenance warning tags to the battery and external power receptacle that have **"DO NOT CONNECT ELECTRICAL POWER MAINTENANCE IN PROGRESS"** written on them.
- 3. Make sure the flight crew receives the *Flight Crew Operations Summary*, which shows the operational changes that are a result of the accomplishment of this service bulletin.
- 4. Remove the right avionics compartment door.
- 5. Remove the left avionics compartment door.
- 6. On Beechcraft Models B200GT/B200CGT with Pro Line Fusion Phase 2 electrical wiring and software installed, go to Step 10.
- 7. On Beechcraft Models B300/B300C with Pro Line Fusion Phase 2 electrical wiring and software installed, go to Step 12.
- 8. On Beechcraft Models C90GTI with Pro Line Fusion Phase 2 Fusion electrical wiring and software installed, go to Step 14.

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9. <u>On Beechcraft Models B200GT/B200CGT without Pro Line Fusion Phase 2 electrical wiring upgrade</u> and software installed, do the steps that follow:

NOTE: The modification requires Service Bulletins Kit numbers SB 34-4171-0 and SB 34-4171-2 to accomplish these work instructions.

- A. (Refer to Figure 1, Detail B.) Remove the 18-285 Panel plug located on the left instrument panel.
- B. Install the 584-RE5-501 Sleeve on the 132516-P2121 SMS Inhibit Switch annunciator. (Refer to the King Air Chapter 20, Standard Practices Airframe.)
- C. Connect electrical connector 3160P9 to the 132516-P2121 SMS Inhibit Switch.
- D. Install the 132516-P2121 SMS Inhibit Switch in the instrument panel.
- E. (Refer to Figure 2, Sheet 1.) Do the modification of the aircraft lighting system electrical wires as follows:
 - (1) Locate capped and stowed electrical wire LH117P22 behind instrument panel.
 - (2) Remove the 3477CAP1 and cut the LH1172P22 Electrical wire to the necessary length.
 - (3) Remove the 3447SP19 Splice that connects electrical wire LH117N22 with electrical connector 3447J3.
 - (4) Splice electrical wires LH177N22 and LH177P22 with electrical wires from electrical connector 3447J3 with one D-436-52 Splice. (Refer to the King Air Chapter 20, Standard Practices -Airframe.)
- F. (Refer to Figure 3, Detail A and B.) Do the modification of No. 1 and No. 2 Distance Measuring Equipment (DME) system electrical wires as follows:
 - (1) If installed, remove the No. 2 Distance Measuring Equipment Transceiver (DME-4000) from the aircraft. (Refer to the Super King Air B200GT/B200CGT Fusion Maintenance Manual, Chapter 34, Distance Measuring Equipment Transceiver (DME-4000) - Removal/Installation.)
 - (2) If installed, loosen/remove the No. 2 DME transceiver equipment tray and related hardware as necessary to gain access to electrical connector 3454P2.
 - (3) Remove the No.1 Distance Measuring Equipment Transceiver (DME-4000) from the aircraft, (Refer to the Super King Air B200GT/B200CGT Fusion Maintenance Manual, Chapter 34, Distance Measuring Equipment Transceiver (DME-4000) Removal/Installation.)
 - (4) Loosen/remove the No.1 Distance Measuring Equipment Transceiver (DME-4000) equipment tray as necessary to gain access to electrical connector 3454P1. (Refer to the Super King Air B200GT/B200CGT Fusion Maintenance Manual, Chapter 34, Distance Measuring Equipment Transceiver (DME-4000) - Removal/Installation.)
 - (5) Remove electrical wire 1RG102A22-WHT from electrical connector 3454P1 pin "1" and install at pin "5".
 - (6) Remove electrical wire 1RG102A22-BLU from electrical connector 3454P1, pin "2" and install at pin "6".
 - (7) If installed, remove electrical wire 2RG102B22-WHT from electrical connector 3454P2 pin "1" and install at pin "5".
 - (8) If installed, remove electrical wire 2RG102B22-BLU from electrical connector 3454P2, pin "2" and install at pin "6"
 - (9) Install the No. 1 DME transceiver equipment tray and related hardware.
 - (10) Install the No.1 Distance Measuring Equipment Transceiver (DME-4000) on the aircraft, (Refer to the Super King Air B200GT/B200CGT Fusion Maintenance Manual, Chapter 34, Distance Measuring Equipment Transceiver (DME-4000) - Removal/Installation.)
 - (11) If removed, install the No. 2 DME transceiver equipment tray and related hardware.

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- (12) If removed, install the No.2 Distance Measuring Equipment Transceiver (DME-4000) on the aircraft. (Refer to the Super King Air B200GT/B200CGT Fusion Maintenance Manual, Chapter 34, Distance Measuring Equipment Transceiver (DME-4000) - Removal/Installation.)
- G. (Refer to Figure 4, Details A and B.) Do the modification of the No. 1 and No, 2 Very High Frequency Communication (VHF) electrical wiring as follows:
 - Remove the No. 1 VHF-4000 transceiver from the aircraft. (Refer to the Super King Air B200GT/B200CGT Fusion Maintenance Manual, Chapter 23, VHF-4000 Transceiver -Removal and Installation.)
 - (2) Loosen/remove the No. 1 VHF-4000 transceiver equipment tray and related hardware as necessary to gain access to electrical connector 2310P1.
 - (3) Remove the No. 2 VHF-4000 transceiver from the aircraft. (Refer to the Super King Air B200GT/B200CGT Fusion Maintenance Manual, Chapter 23, VHF-4000 Transceiver -Removal and Installation.)
 - (4) Loosen/remove the No. 2 VHF-4000 transceiver equipment tray and related hardware as necessary to gain access to electrical connector 2310P2
 - (5) Remove electrical wire 1RV102B22-WHT from electrical connector 2310P1 pin "5" and install at pin "17".
 - (6) Remove electrical wire 1RV102B22-BLU from electrical connector 2310P1, pin "6" and install at pin "18".
 - (7) Remove electrical wire 1RV116A22-WHT from electrical connector 2310P1 pin "11" and install at pin "23".
 - (8) Remove electrical wire 1RV116A22-BLU from electrical connector 2310P1 pin "12" and install at pin "24".
 - (9) Remove electrical wire 1RV108A22 from electrical connector 2310P1 pin "63". Cut the 1RV108A22 electrical wire to remove pin. (Refer to the King Air Chapter 20, Standard Practices - Airframe).
 - (10) Get electrical wire 1RV108B22 from the kit.
 - (11) Install a 372-2514-110 Contact on the 1RV108B22 electrical wire. (Refer to the King Air Chapter 20, Standard Practices Airframe.)
 - (12) Install the 1RV108B22 electrical wire in electrical connector 2310P1 pin "43".
 - (13) Get electrical wire 1RV108C22 from the kit.
 - (14) Install a 372-2514-110 Contact on the 1RV108C22 electrical wire. (Refer to the King Air Chapter 20, Standard Practices Airframe.)
 - (15) Install electrical wire 1RV108C22 in electrical connector 2310P1 pin "63".
 - (16) Splice electrical wires 1RV108A22, 1RV108B22 and 1RC108C22 together with one D-436-60 Splice (2310P1SP13). (Refer to the King Air Chapter 20, Standard Practices Airframe.)
 - (17) Remove electrical wire 2RV102A22-WHT from electrical connector 2310P2 pin "5" and install at pin "17".
 - (18) Remove electrical wire 2RV102A22-BLU from electrical connector 2310P2, pin "6" and install at pin "18".
 - (19) Remove electrical wire 2RV108A22 from electrical connector 2310P2 pin "63".
 - (20) Cut the 2RV108A22 electrical wire to remove pin. (Refer to the King Air Chapter 20, Standard Practices Airframe.)
 - (21) Get electrical wire 2RV108B22 from the kit.

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- (22) Install a 372-2514-110 Contact on the 2RV108B22 electrical wire. (Refer to the King Air Chapter 20, Standard Practices Airframe.)
- (23) Install the 12RV108B22 electrical wire in electrical connector 2310P2 pin "43".
- (24) Get electrical wire 2RV108C22 from the kit.
- (25) Install a 372-2514-110 Contact on the 2RV108C22 electrical wire. (Refer to the King Air Chapter 20, Standard Practices Airframe.)
- (26) Install electrical wire 2RV108C22 in electrical connector 2310P12 pin "63".
- (27) Splice electrical wires 2RV108A22, 2RV108B22 and 2RV108C22 together with one D-436-60 Splice (2310P2SP17). (Refer to the King Air Chapter 20, Standard Practices Airframe.)
- (28) If disassembled, assemble electrical connector 2310P1.
- (29) Install the No. 1 VHF-4000 transceiver equipment tray and related hardware.
- (30) Install the No. 1 VHF-4000 transceiver on the aircraft. (Refer to the Super King Air B200GT/B200CGT Fusion Maintenance Manual, Chapter 23, VHF-4000 Transceiver -Removal and Installation.)
- (31) If disassembled, assemble electrical connector 2310P2.
- (32) Install the No. 2 VHF-4000 transceiver equipment tray and related hardware.
- (33) Install the No. 2 VHF-4000 transceiver on the aircraft. (Refer to the Super King Air B200GT/B200CGT Fusion Maintenance Manual, Chapter 23, VHF-4000 Transceiver -Removal and Installation.)
- H. (Refer to Figure 5, Sheet 1.) Do the modification of the aircraft audio electrical wiring as follows:
 - Remove the audio storage and playback unit (ASPU) (Model 630A-XXX) from the aircraft to access electrical connector 2350P21. (Refer to the Super King Air B200GT/B200CGT Fusion Maintenance Manual, Chapter 23, - Audio Storage and Playback Unit (ASPU) -Removal/Installation.)
 - (2) Disconnect electrical wire NGS303-2350P21SP1-22 from Ground Stud NGS303.
 - (3) Cut and remove the ring tongue terminal from electrical wire NGS303-2350P21SP1-22
 - (4) If necessary, cut the NGS303-2350P21SP1-22 electrical wire to required length.
 - (5) Install the M39029/64-369 Contact on the NGS303-2350P21SP1-22 electrical wire. (Refer to the King Air Chapter 20, Standard Practices Airframe.)
 - (6) Install the NGS303-2350P21SP1-22 in electrical connector 2350P21 pin "17".
 - (7) (Refer to Figure 6, Detail D.)Remove the 130-340683-0399 Placard from the audio storage and playback unit (ASPU).
 - (8) (Refer to Figure 6, Detail D.) Install the 130-340683-0403 Placard on the back of the audio storage and playback unit (ASPU).
 - (9) Install the audio storage and playback unit (ASPU) (Model 630A-XXX) in the aircraft. (Refer to the Super King Air B200GT/B200CGT Fusion Maintenance Manual, Chapter 23, - Audio Storage and Playback Unit (ASPU) - Removal/Installation.)
- I. Install new dash number IOC cards as follows:
 - (Refer to Figure 7, Detail A.) Remove two 822-1361-620 IOC cards from the aircraft. (Refer to Super King Air B200GT/B200CGT Fusion Maintenance Manual, Chapter 31 - Input/Output Concentrator (IOC) - Removal/Installation.)

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- (2) (Refer to Figure 7, Detail A.) Install two 822-1361-622 IOC cards on the aircraft. (Refer to Super King Air B200GT/B200CGT Fusion Maintenance Manual, Chapter 31 - Input/Ouput Concentator (IOC) - Removal/Installation.)
 - **NOTE:** The 822-1361-620 IOC cards can be upgraded to 822-1361-622 Fusion Phase 3 IOC cards with Rockwell Collins Service Bulletin IOC-3100-31-506 and IOC-3100-31-6.
- (3) Go to Step 15.
- 10. On Beechcraft Models B200GT/B200CGT that are upgrading from Pro Line Fusion Phase 2 to Pro Line Fusion Phase 3 software, do as follows:
 - A. (Refer to Figure 7, Detail A.) Remove two 822-1361-621 IOC cards from the aircraft. (Refer to Super King Air B200GT/B200CGT Fusion Maintenance Manual, Chapter 31 - Input/Output Concentrator (IOC) - Removal/Installation.)
 - B. Install two 822-1361-622 IOC cards on the aircraft. (Refer to Super King Air B200GT/B200CGT Fusion Maintenance Manual, Chapter 31 Input/Output Concentrator (IOC) Removal/Installation.)

NOTE: The 822-1361-621 IOC cards can be upgraded to 822-1361-622 Fusion Phase 3 IOC cards with Rockwell Collins Service Bulletin IOC-3100-31-506 and IOC-X100-31-541.

- C. Go to Step 15.
- 11. <u>On Beechcraft Models B300/B300C without Pro Line Fusion Phase 2 electrical wiring upgrade or software installed</u>, do the steps that follow:

NOTE: The modification requires Service Bulletins Kit number SB 34-4171-1 and/or SB 34-4171-2 or SB 34-4171-3 to accomplish these work instructions.

- A. (Refer to Figure 8, Detail B.) Remove the 95-50-17-H6-E1JTT Cabin Altitude Annunciator Switch from the instrument panel.
- B. Disconnect electrical connector 3160DS1 from the cabin altitude annunciator switch.
- C. Install 584-RE5-501 Sleeve on the 132516-P2121 SMS Inhibit Annunciator Switch. (Refer to King Air Standard Practices Manual, Chapter 20, Airframe.)
- D. (Refer to Figure 9, Sheet 1.) Do the modification of the aircraft electrical wires as follows:
 - Remove the primary flight display (PFD) from the aircraft. (Refer to the Super King Air B300/B300C Fusion Maintenance Manual, Chapter 31, Adaptive Flight Displays (AFD-3010) or (DCP-3000) - Removal /Installation.)
 - (2) Get access to electrical connectors 3160P3 and 9183P22.
 - (3) Disconnect electrical connectors 3160P3 and 9183P22.
 - (4) Disassemble electrical connectors 3160P3 and 9183P22 as necessary.
 - (5) Get electrical wire 3FH180A22 from the kit.
 - (6) Install one M39029/57-354 Socket Contact on to electrical wire 3FH180A22. (Refer to the King Air Standard Practices Manual. Chapter 20 Airframe)
 - (7) Install the 3FH180A22 electrical wire in electrical connector 3160P3 pin "23".
 - (8) Assemble electrical connector 3160P3 as necessary.
 - (9) Route electrical wire 3FH180A22 to electrical connector 9183P22. Make sure electrical wire 3FH180A22 follows the wire harness path to electrical connector 9183P22.
 - (10) Attach electrical wire 3FH180A22 to the wire harness with AA-52080-B-3 lacing tape or equivalent. (Refer to the King Air Standard Practices Manual, Chapter 20, Airframe.)
 - (11) Install 66103-4 Contact pin on electrical wire 3FH180A22.

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(12) Remove electrical wire LH123B22 from electrical connector 9183P22 pin "10".

NOTE: Electrical wire LH123B22 will be permanently removed at Step 10.K(7).

- (13) Install electrical wire 3FH180A22 in electrical connector 9183P22 pin "10".
- (14) If necessary, assemble electrical connector 9183P22.
- (15) Install electrical connector 9183P22 to the aircraft.
- (16) Get electrical wire W371A22 from the kit.
- (17) Install 66105-4 Socket Contact on the W371A22 electrical wire. (Refer to the King Air Standard Practices Manual, Chapter 20. -Airframe.)
- (18) Get access to electrical connector J372 as necessary.
- (19) Disassemble electrical connector J372 as necessary.
- (20) Install electrical wire W371A22 in electrical connector J372 pin "10".
- (21) If necessary, assemble electrical connector J372.
- (22) If necessary, remove the environmental control panel (A224) from the aircraft to gain access to electrical wire W66C22. (Refer to the Super King Air B300/B300C Maintenance Manual, Chapter 31, Instrument Subpanel Section and Component Removal/Installation.)
- (23) Remove electrical wire W66C22 from terminal 5 of switch S300 and from switch S121 pin "3". Discard wire.
- (24) Route electrical wire W371A22 to switch S121 of the environmental control panel (A224)
- (25) Install 43-620-952-00 Ring Tongue Terminal on electrical wire W371A22.
- (26) Install electrical wire W371A22 on S121 pin "3".
- (27) If removed, install the environmental control panel (A224) on the aircraft. (Refer to the Super King Air B300/B300C Fusion Maintenance Manual, Chapter 31, - Instrument Subpanel Section and Component - Removal/Installation.)
- (28) Install the primary flight display (PFD) from the aircraft. (Refer to the Super King Air B300/B300C Fusion Maintenance Manual, Chapter 31, Adaptive Flight Displays (AFD-3010) or (DCP-3000) - Removal /Installation.)
- E. Connect electrical connector 3160P9 to the 132516-P2121 SMS Inhibit Annunciator Switch.
- F. Install the 132516-P2121 SMS Inhibit Annunciator Switch in the instrument panel.
- G. (Refer to Figure 10, Detail A.) Do the modification of the cabin altitude annunciator relays and electrical wiring as follows:
 - If necessary, remove the right forward flight compartment equipment panel from the aircraft. (Refer to the Super King Air B300/B300C Fusion Maintenance Manual, Chapter 31, Right Forward Flight Compartment Equipment Panel - Removal/Installation.)
 - (2) Remove the cabin altitude annunciator relays (K146; K147) and related hardware from the right forward flight compartment equipment panel.
 - (3) (Refer to Figure 11, Sheet 1.) Cut and remove electrical wire W380A22 from splice J379SP1 of the K146 Relay.
 - **NOTE:** Splice J379SP1 and Relay K146 will be permanently removed from the aircraft at Step 10.G(14).
 - (4) With an indelible marker and tag, identify the W380A22 electrical wire as W380A22N.
 - **NOTE:** It is permissible to mark the wire number on a piece of heat shrink and install it on the electrical wire.

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- (5) Install a 66105-4 Socket Contact on electrical wire W380A22N. (Refer to the King Air Standard Practices Manual, Chapter 20, Airframe.)
- (6) Disconnect electrical connector P166 from the aircraft and disassemble as necessary.
- (7) Remove electrical wire W369A22N from electrical connector P166 pin "T".
- (8) Cut and remove electrical wire W369A22N from splice J380SP1. Discard electrical wire.
 NOTE: Splice J380SP1 will be permanently removed from the aircraft at Step 10.G(14).
- (9) Install electrical wire W380A22N in electrical connector P166 pin "T".
- (10) If necessary, assembly electrical connector P166.
- (11) Connect electrical connector P166 to the aircraft.
- (12) Remove electrical wire W344A22 from splice J380SP2 of the K147 Relay.

NOTE: Splice J380SP2 and Relay K147 will be permanently removed at Step 10.G(14).

(13) Install a M39029/1-101 Contact Pin on electrical wire W344A22. (Refer to King Air Standard Practices Manual, Chapter 20, - Airframe.)

NOTE: The above electrical wire is connected in Step 10.N(2).

- (14) Permanently remove the following parts, electrical connectors and electrical wires from the aircraft:
 - (a) Remove electrical connectors J379, J380 (K146; K147 Cabin Altitude Annunciator relays) and P378 (DS113 Cabin Altitude Annunciator).
 - (b) Remove the CR120 Diode.
 - (c) Remove electrical connectors J379SP1, J379SP2, P378SP1 and J380SP1, and J380SP2 Splices
 - (d) Remove electrical wires W372A22, W380B22, W246A22, 1FH173E22, W380C22, W370B22, W370C22, W370A22, W370D22, W344D22, W344E22, W245A22, W371B22, W371C22, L127A22, W371D22, W371E22, W371A22, W369A22N, W369B22, W369C22, LH117R22 and LH123B22.

NOTE: It is permissible to remove the noted wires entirely from the aircraft, or cut and remove the pins/contacts on the electrical wires at the terminating connector, and to cap and stow each individual electrical wire as necessary.

- H. Remove the overhead instrument and control panel assembly from the aircraft.
- I. (Refer to Figure 12, Details A and B.) Do the modification of the 434-364074-0001 or 434-364074-0005 Panel assemblies as follows:
 - (1) Install a CB3019CR3N750 Click Bond Cable Tie Mount on the 434-364074-XXXX Panel Assembly as follows:
 - (a) Lightly abrade the area of 434-364074-XXXX Panel Assembly where the click bond cable tie mount is to be installed.
 - (b) After abrading, clean the area with isopropyl alcohol and a lint free cloth. Make sure to remove the isopropyl alcohol before it fully dries.
 - (c) Clean the click bond cable tie mount bonding surface with isopropyl alcohol and a lint free cloth. Make sure to remove the isopropyl alcohol before it fully dries.
 - (d) Apply adhesive to the center of the cable tie mount bonding surface.
 - **NOTE:** Make sure the adhesive build up on the bonding surface is no more than 0.625 inches in diameter. This allows for the correct amount of adhesive squeeze-out to attach the mount to the panel assembly correctly.



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- (e) Remove the backing from the click bond cable tie mount exposing the foam tape.
- (f) Position the click bond cable tie mount in the area to be installed on the 434-364074-XXXX Panel Assembly.
- (g) Push down on the outer body of the click bond cable tie mount. Make sure the foam tape fully attaches to panel assembly.

NOTE: Do not push down on the protruding fastener on the click bond cable tie mount.

- (h) Push down on the inner body of the click bond cable tie mount to engage the over center locking mechanism. This applies pressure to the cable tie mount and holds it in place while the adhesive cures.
- (i) After the adhesive cures, remove the fixture from the mount with pliers.
- (2) (Refer to Figure 13, Sheet 1.) Do the electrical modification of the 434-364074-XXXX Panel Assembly as follows:
 - (a) If necessary, disassemble electrical connector A110J2 on the 434-364074-XXXX Panel Assembly.
 - (b) Remove electrical wire S10-NC-J2-V-20 from electrical connector A110J2 pin "V".
 - (c) With an indelible marker and tag, identify the S10-NC-J2-V-20 electrical wire as S10-NC-R41-2-20.
 - (d) (Refer to Figure 12, Details A and B.) Install one RLR32C9091FR Resistor (R41) on the 434-364074-XXXX Panel Assembly. (Refer to the King Air Standard Practices Manual, Chapter 20, - Airframe.)
 - (e) Route electrical wire S10-NC-R41-2-20 to the RLR32C9091FR Resistor (R41).
 - (f) If necessary, cut electrical wire S10-NC-R41-2-20 to the required length.
 - (g) Solder the positive electrical lead of the M39018/03-0726 Capacitor (C1) and electrical wire S10-NC-R41-2-20 to pin "2" of the RLR32C9091FR Resistor (R41). (Refer to the King Air Standard Practices Manual, Chapter 20, - Airframe)
 - (h) Install B130-20 Sleeving on the M39018/03-0726 Capacitor (C1) exposed positive and negative electrical leads and cut to correct length.
 - (i) Install the M81824/1-1 Splice (A110C1SP1) to the negative electrical lead of the M39018/03-0726 Capacitor (C1).
 - (j) (Refer to Figure 12, Details A and B.) Attach the M39018/03-0726 Capacitor to the cable tie mount with one MS3367-1-9 Tie Wrap.
 - (k) Get electrical wire J2-V-R41-1-20 from the kit.
 - (I) Install one 66103-4 Contact Pin on electrical wire J2-V-R41-1-20. (Refer to the King Air Standard Practices Manual, Chapter 20, Airframe.)
 - (m) Install electrical wire J2-V-R41-1-20 in electrical connector AS110J2 pin "V".
 - (n) Route electrical wire J2-V-R41-1-20 to the RLR32C9091FR Resistor (R41).
 - (o) If necessary, cut electrical wire J2-V-R41-1-20 to the necessary length.
 - (p) Solder electrical wire J2-V-R41-1-20 to pin "1" of the RLR32C90912FR Resistor (R41). (Refer the King Air Standard Practices Manual, Chapter 20, Airframe.)
 - (q) Get electrical wire GS-C1SP1-20 from the kit.
 - (r) Install B130-20 Sleeving over electrical wire GS-C1SP1-20 electrical wire.
 - (s) Install electrical wire GS-1SP1-20 wire in the A110C1SP1 Splice attached to the M39018/03-0726 Capacitor (C1). (Refer to the King Air Standard Practices Manual, Chapter 20, - Airframe)

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- (t) Install a 115110-D10 Ring Tongue Terminal on electrical wire GS-C1SP1-20. (Refer to the King Air Standard Practices Manual, Chapter 20, Airfame.)
- (u) Route electrical wire GS-C1SP1-20 to the A110GS1 ground stud.
- (v) Install electrical wire GS-C1SP1-20 to the A110GS1 ground stud. (Refer to the King Air Standard Practices Manual, Chapter 20, Airframe.)
- (w) (Refer to Figure 14, Detail A.) On aircraft that modified the 434-364074-0001 Panel Assembly, do the steps that follow:
 - 1 Install the 101S-R41 decal/placard on top of the existing "CR6" decal/placard.

NOTE: It is permissible to apply adhesive over the decal/placard to help attach it to the surface of the panel assembly

<u>2</u> Install the 101S-C1 decal/placard between the "R1" and "R33" decals/placards.

NOTE: It is permissible to apply adhesive over the decal/placard to help attach it to the surface of the panel assembly.

- <u>3</u> Go to Step J.
- (x) (Refer to Figure 14, Detail B.) On aircraft that modified the 434-364074-0005 Panel Assembly, do the steps that follow:
 - <u>1</u> Install the 101S-R41 decal/placard above the "CR5" decal/placard.

NOTE: It is permissible to apply adhesive over the decal/placard to help attach it to the surface of the panel assembly

2 Install the 101S-C1 decal/placard between the "R1" and "R33" decals/placards.

NOTE: It is permissible to apply adhesive over the decal/placard to help attach it to the surface of the panel assembly.

- J. Install the overhead instrument and control panel assembly on the aircraft.
- K. (Refer to Figure 15, Sheet 1.) Do the modification of the cabin altitude warning electrical wiring as follows:
 - (1) If necessary, disassemble electrical connector 9183J3 at the forward pressure bulkhead of the aircraft.
 - (2) Remove electrical wire 1FH173A22 from pin "C" of 2133TJ1 Terminal Junction.
 - (3) Cut and remove the terminal from electrical wire 1FH173A22 and install one M39029/5-115 Socket.
 - (4) Install electrical wire 1FH173A22 into electrical connector 9183J3 pin "H".
 - (5) Remove electrical wire 2350P21-17 2350P21SP1-21 from ground stud NGS303.
 - (6) Cut and remove terminal from electrical wire 2350P21-17 and install one M39029/64-369 Contact Pin.
 - (7) Install electrical wire 2350P21-17 2350P21SP1-22 into electrical connector 2350P21 pin "17".
 - (8) Remove the 2133TJ1 terminal junction from the aircraft and discard.
 - (9) Remove electrical wires 1FH173F22, 1FH173E22, 1FH173FG22 and splice 2133TJ1SP1 and discard.

NOTE: You are permitted to cap and stow electrical wires 1FH173F22, 1FH173E22, 1FH173FG22 after removing the 2133TJ1 terminal junction.

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- L. (Refer to Figure 16, Details A and B.) Do the modification of the aircraft lighting electrical wiring as follows:
 - (1) Disconnect electrical connector 9180P2 from the nose junction box assembly.
 - (2) Disconnect electrical connector 9183P4 from the forward pressure bulkhead.
 - (3) If necessary, disassemble electrical connector 9183J4 on the forward pressure bulkhead.
 - (4) Remove electrical wire LH123A22 from pin "CC" of electrical connector 9183P4.
 - (5) Remove electrical wire LH123B22 from pin "CC" of electrical connector 9183J4.
 - (6) Remove electrical wire LH123A22 from pin "e" of electrical connector 9180P2.
 - (7) Remove electrical wire LH123A22 and LH123B22 from the aircraft.

NOTE: Electrical wire LH123B22 was disconnected from electrical connector 9183P22 pin "10 in Step 10.D(12).

- (8) Gain access to electrical connectors 3447P3 and 3447J3 behind the pilots instrument panel.
- (9) Disconnect electrical connector 3447P3 from the aircraft.
- (10) Cut and remove electrical wire LH117R22 and 3447P3SP2 Splice from electrical wire LH117M22.

NOTE: It is permissible to leave the 3477P3SP2 Splice. If the 3477P3SP2 Splice was not removed, go to Step 10.K (13).

- (11) Install on MS39029/63-368 Socket on the LH117MR22.
- (12) Install electrical wire LH117MR22 in to electrical connector 3447P3 pin "1".
- (13) Connect electrical connector 3447P3 behind the pilot's instrument panel.
- (14) Locate cap and stowed electrical wire LH117P22 behind pilots instrument panel.
- (15) Remove the 3447CAP1 from electrical wire LH117P22.
- (16) Route electrical wire LH117P22 to 3447SP19 of electrical connector 3447J3 and cut to correct length.
- (17) Remove the 3447SP19 Splice from electrical wire LH117N22. (Refer to the King Air Chapter 20, Standard Practices -Airframe.)
- (18) Splice electrical wires LH117N22 and LH117P22 together with one D-436-52 Splice. (Refer to the King Air Chapter 20, Standard Practices -Airframe.)
- M. (Refer to Figure 3, Details A and B.) Do the modification of No. 1 and No. 2 Distance Measuring Equipment (DME) system electrical wires as follows:
 - (1) If installed, remove the No. 2 Distance Measuring Equipment Transceiver (DME-4000) from the aircraft, (Refer to the Super King Air B300/B300C Fusion Maintenance Manual, Chapter 34, Distance Measuring Equipment Transceiver (DME-4000) Removal/Installation.)
 - (2) If installed, loosen/remove the No. 2 DME transceiver equipment tray and related hardware as necessary to gain access to electrical connector 3454P2.
 - (3) Remove the No.1 Distance Measuring Equipment Transceiver (DME-4000) from the aircraft, (Refer to the Super King Air B300/B300C Fusion Maintenance Manual, Chapter 34, Distance Measuring Equipment Transceiver (DME-4000) - Removal/Installation.)
 - (4) Loosen/remove the No.1 Distance Measuring Equipment Transceiver (DME-4000) equipment tray as necessary.(Refer to the Super King Air B300/B300C Fusion Maintenance Manual, Chapter 34, Distance Measuring Equipment Transceiver (DME-4000) Removal/Installation.)
 - (5) Remove electrical wire 1RG102A22-WHT from electrical connector 3454P1 pin "1" and install at pin "5".



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- (6) Remove electrical wire 1RG102A22-BLU from electrical connector 3454P1 , pin "2" and install at pin "6".
- (7) If installed, remove electrical wire 2RG102B22-WHT from electrical connector 3454P2 pin "1" and install at pin "5".
- (8) If installed, remove electrical wire 2RG102B22-BLU from electrical connector 3454P2, pin "2" and install at pin "6"
- (9) Install the No. 1 DME transceiver equipment tray and related hardware.
- (10) Install the No.1 Distance Measuring Equipment Transceiver (DME-4000) on the aircraft, (Refer to the Super King Air B300/B300C Fusion Maintenance Manual, Chapter 34, Distance Measuring Equipment Transceiver (DME-4000) - Removal/Installation)
- (11) If removed, install the No. 2 DME transceiver equipment tray and related hardware.
- (12) If removed, install the No.2 Distance Measuring Equipment Transceiver (DME-4000) on the aircraft, (Refer to the Super King Air B300/B300C Fusion Maintenance Manual, Chapter 34, Distance Measuring Equipment Transceiver (DME-4000) - Removal/Installation.)
- N. (Refer to Figure 4, Details A and B.) Do the modification of the No. 1 and No, 2 Very High Frequency Communication (VHF) electrical wiring as follows:
 - Remove the No. 1 VHF-4000 transceiver from the aircraft. (Refer to the Super King Air B300/B300C Fusion Maintenance Manual, Chapter 23, VHF-4000 Transceiver - Removal and Installation)
 - (2) Loosen/remove the No. 1 VHF-4000 transceiver equipment tray and related hardware as necessary to gain access to electrical connector 2310P1.
 - (3) Remove the No. 2 VHF-4000 transceiver from the aircraft. (Refer to the Super King Air B300/B300C Fusion Maintenance Manual, Chapter 23, VHF-4000 Transceiver -Removal and Installation.)
 - (4) Loosen/remove the No. 2 VHF-4000 transceiver equipment tray and related hardware as necessary to gain access to electrical connector 2310P2.
 - (5) Remove electrical wire 1RV102B22-WHT from electrical connector 2310P1 pin "5" and install at pin "17".
 - (6) Remove electrical wire 1RV102B22-BLU from electrical connector 2310P1, pin "6" and install at pin "18".
 - (7) Remove electrical wire 1RV116A22-WHT from electrical connector 2310P1 pin "11" and install at pin "23".
 - (8) Remove electrical wire 1RV116A22-BLU from electrical connector 2310P1 pin "12" and install at pin "24".
 - (9) Remove electrical wire 1RV108A22 from electrical connector 2310P1 pin "63". (Refer to the King Air Chapter 20, Standard Practices Airframe.)
 - (10) Cut the RV108A22 electrical wire to remove pin. (Refer to the King Air Chapter 20, Standard Practices Airframe.)
 - (11) Get electrical wire 1RV108B22 from the kit.
 - (12) Install a 372-2514-110 Contact on the 1RV108B22 electrical wire. (Refer to the King Air Chapter 20, Standard Practices Airframe.)
 - (13) Install the 1RV108B22 electrical wire in electrical connector 2310P1 pin "43".
 - (14) Get electrical wire 1RV108C22 from the kit.
 - (15) Install a 372-2514-110 Contact on the 1RV108C22 electrical wire. (Refer to the King Air Chapter 20, Standard Practices Airframe.)

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- (16) Install electrical wire 1RV108C22 in electrical connector 2310P1 pin "63".
- (17) Splice electrical wires 1RV108A22, 1RV108B22 and 1RC108C22 together with one D-436-60 Splice (2310P1SP13). (Refer to the King Air Chapter 20, Standard Practices Airframe.)
- (18) Remove electrical wire 2RV102A22-WHT from electrical connector 2310P2 pin "5" and install at pin "17".
- (19) Remove electrical wire 2RV102A22-BLU from electrical connector 2310P2, pin "6" and install at pin "18".
- (20) Remove electrical wire 2RV108A22 from electrical connector 2310P2 pin "63". Remove pin from wire.
- (21) Get electrical wire 2RV108B22 from the kit.
- (22) Install a 372-2514-110 Contact on the 2RV108B22 electrical wire. (Refer to the King Air Chapter 20, Standard Practices Airframe.)
- (23) Install the 12RV108B22 electrical wire in electrical connector 2310P2 pin "43".
- (24) Get electrical wire 2RV108C22 from the kit.
- (25) Install a 372-2514-110 Contact on the 2RV108C22 electrical wire. (Refer to the King Air Chapter 20, Standard Practices - Airframe.)
- (26) Install electrical wire 2RV108C22 in electrical connector 2310P2 pin "63".
- (27) Splice electrical wires 2RV108A22, 2RV108B22 and 2RV108C22 together with one D-436-60 Splice. (Refer to the King Air Chapter 20, Standard Practices Airframe.)
- (28) If disassembled, assemble electrical connector 2310P1.
- (29) Install the No. 1 VHF-4000 transceiver equipment tray and related hardware.
- (30) Install the No. 1 VHF-4000 transceiver on the aircraft. (Refer to the Super King Air B300/B300C Fusion Maintenance Manual, Chapter 23, VHF-4000 Transceiver Removal and Installation)
- (31) If disassembled, assemble electrical connector 2310P2.
- (32) Install the No. 2 VHF-4000 transceiver equipment tray and related hardware.
- (33) Install the No. 2 VHF-4000 transceiver on the aircraft. (Refer to the Super King Air B300/B300C Fusion Maintenance Manual, Chapter 23, VHF-4000 Transceiver -Removal and Installation.)
- O. Do the modification of the No. 1 and No. 2 Remote Data Concentrator RDC-4002 electrical wiring as follows:
 - (1) (See Figure 17, Sheet 1.) Disconnect electrical connector P676 from the forward pressure bulkhead.
 - (2) Connect electrical wire W344A22 to the TJSE20702 Terminal Junction (CR264) pin "A".

NOTE: The above wire was terminated at Step 10.G(13).

- (3) Get electrical wire W179A22 from the kit.
- (4) Install one M39029/1-101 Contact Pin on electrical wire W179A22 electrical wire.
- (5) Install electrical wire W179A22 into the TJSE20702 Terminal Junction (CR264) pin "C"
- (6) Install one M39029/5-115 Socket on the other end of electrical wire W179A22.
- (7) Install electrical wire W179A22 in electrical connector P676 pin "p".
- (8) (Refer to Figure 18, Sheet 1.) Locate electrical connector P677 on the forward pressure bulkhead.
- (9) Cut electrical wire D34A22 a minimum of 11.0 inches from the P677SP9 Splice.



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- (10) Install one M39029/1-101 Contact Pin on the remaining electrical wire attached to the P677SP9 splice.
- (11) Identify electrical wire as CR265-C-P677SP9-22.
- (12) Install electrical wire CR265-C-P677SP9-22 in the TJSE20702 Terminal Junction (CR265) pin "C".
- (13) Install one M39029/1-101 Contact Pin on electrical wire D34A22.
- (14) Install electrical wire D34A22 in the TJSE20702 Terminal Junction (CR265) pin "A".
- (15) (Refer to 19, Detail D.) On Beechcraft Models B300/B300C that installed Service Bulletin Kits SB 34-4171-2, do the steps that follow:
 - (a) Remove the 130-340683-0399 placard from the audio storage playback unit.
 - (b) Install one 130-340683-0403 Placard on the audio storage playback unit.
 - (c) Go to Step O.
- (16) (Refer to Figure 19, Detail D.) <u>On Beechcraft Model B300/B300C that installed Service Bulletin</u> <u>kit SB34-4171-3</u>, do the steps that follow:
 - (a) Remove the 130-340683-0399 placard on the audio storage playback unit.
 - (b) Install one 434-3014-0013 placard on the audio storage playback unit.
- P. Install new dash number IOC cards as follows:
 - (Refer to Figure 7, Detail A.) Remove two 822-1361-620 IOC cards from the aircraft. (Refer to Super King Air B300/B300C Fusion Maintenance Manual, Chapter 31 - Input/Output Concentrator (IOC) - Removal/Installation)
 - (2) (Refer to Figure 7, Detail A.) Install two 822-1361-622 IOC cards on the aircraft. (Refer to Super King Air B300/B300C Fusion Maintenance Manual, Chapter 31 - Input/Ouput Concentator (IOC) - Removal/Installation)

NOTE: The 822-1361-620 IOC cards can be upgraded to 822-1361-622 Fusion Phase 3 IOC cards with Rockwell Collins Service Bulletin IOC-3100-31-506 and IOC-3100-31-6.

- (3) Go to Step 15.
- 12. <u>On Beechcraft Models B300/B300C that are upgrading from Pro Line Fusion 2 to Pro Line Fusion Phase</u> <u>3 software</u>, do as follows:
 - A. (Refer to Figure 7, Detail A.) Remove two 822-1361-621 IOC cards from the aircraft. (Refer to Super King Air B300/B300C Fusion Maintenance Manual, Chapter 31 - Input/Output Concentator (IOC) - Removal/Installation)
 - B. (Refer to Figure 7, Detail A.) Install two 822-1361-622 IOC cards on the aircraft. (Refer to Super King Air B300/B300C Fusion Maintenance Manual, Chapter 31 - Input/Output Concentrator (IOC) -Removal/Installation)

NOTE: The 822-1361-621 IOC cards can be upgraded to 822-1361-622 Fusion Phase 3 IOC cards with Rockwell Collins Service Bulletin IOC-3100-31-506 and IOC-X100-31-541.

- C. Go to Step 15.
- 13. <u>On Beechcraft Models C90GTi without Pro Line Fusion Phase 2 electrical wiring upgrade or software installed</u>, do the steps that follow:
 - **NOTE:** The modification requires Service Bulletin Kit numbers SB 34-4171-0 and SB 34-4171-2 to accomplish these work instructions.
 - A. (Refer to Figure 1, Detail B.) Remove the 18-285 Panel plug located on the left instrument panel.
 - B. Install the 584-RE5-501 Sleeve on the 132516-P2121 SMS Inhibit Switch Annunciator. (Refer to the King Air Chapter 20, Standard Practices Airframe.)

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- C. Connect electrical connector 3160P9 to the 132516-P2121 SMS Inhibit Switch.
- D. Install the 132516-P2121 SMS Inhibit Switch Annunciator in the instrument panel.
- E. (Refer to Figure 5, Sheet 1.) Do the modification of the aircraft audio electrical wiring as follows:
 - (1) Remove the audio storage and playback unit (ASPU) (Model 630A-XXX) from the aircraft to access electrical connector 2350P21. (Refer to the Super King Air C90GTi Fusion Maintenance Manual, Chapter 23, Audio Storage and Playback Unit (ASPU) - Removal/Installation.)
 - (2) Disconnect electrical wire NGS303-2350P21SP1-22 from Ground Stud NGS303.
 - (3) Cut and remove the ring tongue terminal from electrical wire NGS303-2350P21SP1-22.
 - (4) If necessary, cut the NGS303-2350P21SP1-22 electrical wire to required length.
 - (5) Install the M39029/64-369 Contact on the NGS303-2350P21SP1-22 electrical wire. (Refer to the King Air Chapter 20, Standard Practices Airframe.)
 - (6) Install the NGS303-2350P21SP1-22 in electrical connector 2350P21 pin "17".
 - (7) (Refer to Figure 6, Detail D.) Remove the 130-340683-0399 Placard from the audio storage and playback unit (ASPU).
 - (8) (Refer to Figure 6, Detail D.) Install the 130-3400683-0403 Placard on the back of the audio storage and playback unit (ASPU).
 - (9) Install the audio storage and playback unit (ASPU) (Model 630A-XXX) in the aircraft. (Refer to the Super King Air C90GTi Fusion Maintenance Manual, Chapter 23, - Audio Storage and Playback Unit (ASPU) - Removal and Installation.)
- F. (Refer to Figure 3, Details A and B.) Do the modification of No. 1 and No. 2 Distance Measuring Equipment (DME) system electrical wires as follows:
 - (1) If installed, remove the No. 2 Distance Measuring Equipment Transceiver (DME-4000) from the aircraft. (Refer to the Super King Air C90GTi Fusion Maintenance Manual, Chapter 34, Distance Measuring Equipment Transceiver (DME-4000) Removal/Installation.)
 - (2) If installed, loosen/remove the No. 2 DME transceiver equipment tray and related hardware as necessary to gain access to electrical connector 3454P2.
 - (3) Remove the No.1 Distance Measuring Equipment Transceiver (DME-4000) from the aircraft, (Refer to the Super King Air C90GTi Fusion Maintenance Manual, Chapter 34, Distance Measuring Equipment Transceiver (DME-4000) - Removal/Installation.)
 - (4) Loosen/remove the No.1 Distance Measuring Equipment Transceiver (DME-4000) equipment tray as necessary. (Refer to the Super King Air C90GTi Fusion Maintenance Manual, Chapter 34, Distance Measuring Equipment Transceiver (DME-4000) Removal/Installation.)
 - (5) Remove electrical wire 1RG102A22-WHT from electrical connector 3454P1 pin "1" and install at pin "5".
 - (6) Remove electrical wire 1RG102A22-BLU from electrical connector 3454P1 , pin "2" and install at pin "6".
 - (7) If installed, remove electrical wire 2RG102B22-WHT from electrical connector 3454P2 pin "1" and install at pin "5".
 - (8) If installed, remove electrical wire 2RG102B22-BLU from electrical connector 3454P2, pin "2" and install at pin "6"
 - (9) Install the No. 1 DME transceiver equipment tray and related hardware.
 - (10) Install the No.1 Distance Measuring Equipment Transceiver (DME-4000) on the aircraft, (Refer to the Super King Air C90GTI Fusion Maintenance Manual, Chapter 34, Distance Measuring Equipment Transceiver (DME-4000) - Removal/Installation.)
 - (11) If removed, install the No. 2 DME transceiver equipment tray and related hardware.

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- (12) If removed, install the No.2 Distance Measuring Equipment Transceiver (DME-4000) on the aircraft, (Refer to the Super King Air C90GTi Fusion Maintenance Manual, Chapter 34, Distance Measuring Equipment Transceiver (DME-4000) - Removal/Installation.)
- G. (Refer to Figure 4, Details A and B.) Do the modification of the No. 1 and No, 2 Very High Frequency Communication (VHF) electrical system as follows:
 - (1) Remove the No. 1 VHF-4000 transceiver from the aircraft. (Refer to the Super King Air C90GTi Fusion Maintenance Manual, Chapter 23,VHF-4000 Transceiver Removal and Installation.)
 - (2) Loosen/remove the No. 1 VHF-4000 transceiver equipment tray and related hardware as necessary to gain access to electrical connector 2310P1.
 - (3) Remove the No. 2 VHF-4000 transceiver from the aircraft. (Refer to the Super King Air C90GTi Fusion Maintenance Manual, Chapter 23,VHF-4000 Transceiver Removal and Installation.)
 - (4) Loosen/remove the No. 2 VHF-4000 transceiver equipment tray and related hardware as necessary to gain access to electrical connector 2310P2
 - (5) Remove electrical wire 1RV102B22-WHT from electrical connector 2310P1 pin "5" and install at pin "17".
 - (6) Remove electrical wire 1RV102B22-BLU from electrical connector 2310P1, pin "6" and install at pin "18".
 - (7) Remove electrical wire 1RV116A22-WHT from electrical connector 2310P1 pin "11" and install at pin "23".
 - (8) Remove electrical wire 1RV116A22-BLU from electrical connector 2310P1 pin "12" and install at pin "24".
 - (9) Remove electrical wire 1RV108A22 from electrical connector pin "63". Remove pin from wire.
 - (10) Get electrical wire 1RV108B22 from the kit.
 - Install a 372-2514-110 Contact on the 1RV108B22 electrical wire. (Refer to the King Air Chapter 20, Standard Practices - Airframe.)
 - (12) Install the 1RV108B22 electrical wire in electrical connector 2310P1 pin "43".
 - (13) Get electrical wire 1RV108C22 from the kit.
 - (14) Install a 372-2514-110 Contact on the 1RV108C22 electrical wire. (Refer to the King Air Chapter 20, Standard Practices Airframe.)
 - (15) Install electrical wire 1RV108C22 in electrical connector 2310P1 pin "63".
 - (16) Splice electrical wires 1RV108A22, 1RV108B22 and 1RC108C22 together with one D-436-60 Splice (2310P1SP13). (Refer to the King Air Chapter 20, Standard Practices Airframe.)
 - (17) Remove electrical wire 2RV102A22-WHT from electrical connector 2310P2 pin "5" and install at pin "17".
 - (18) Remove electrical wire 2RV102A22-BLU from electrical connector 2310P2, pin "6" and install at pin "18".
 - (19) Remove electrical wire 2RV108A22 from electrical connector pin "63". Remove pin from wire.
 - (20) Get electrical wire 2RV108B22 from the kit.
 - (21) Install a 372-2514-110 Contact on the 2RV108B22 electrical wire. (Refer to the King Air Chapter 20, Standard Practices Airframe)
 - (22) Install the 12RV108B22 electrical wire in electrical connector 2310P2 pin "43".
 - (23) Get electrical wire 2RV108C22 from the kit.
 - (24) Install a 372-2514-110 Contact on the 2RV108C22 electrical wire. (Refer to the King Air Chapter 20, Standard Practices Airframe.)

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- (25) Install electrical wire 2RV108C22 in electrical connector 2310P12 pin "63".
- (26) Splice electrical wires 2RV108A22, 2RV108B22 and 2RV108C22 together with one D-436-60 Splice. (Refer to the King Air Chapter 20, Standard Practices Airframe.)
- (27) If disassembled, assemble electrical connector 2310P1.
- (28) IInstall the No. 1 VHF-4000 transceiver equipment tray and related hardware.
- (29) Install the No. 1 VHF-4000 transceiver on the aircraft. (Refer to the Super King Air C90GTi Fusion Maintenance Manual, Chapter 23,VHF-4000 Transceiver Removal and Installation.)
- (30) If disassembled, assemble electrical connector 2310P2.
- (31) Install the No. 2 VHF-4000 transceiver equipment tray and related hardware.
- (32) Install the No. 2 VHF-4000 transceiver on the aircraft. (Refer to the Super King Air C90GTi Fusion Maintenance Manual, Chapter 23, VHF-4000 Transceiver -Removal and Installation.)
- H. (Refer to Figure 5, Sheet 1.) Do the modification of the aircraft audio system electrical wires as follows:
 - (1) Remove the audio storage and playback unit (ASPU) (Model 630A-XXX) from the aircraft to access electrical connector 2350P21. (Refer to the Super King Air C90GTi Fusion Maintenance Manual, Chapter 23, - Audio Storage and Playback Unit (ASPU) - Removal/Installation.)
 - (2) Disconnect electrical wire NGS303-2350P21SP1-22 from Ground Stud NGS303.
 - (3) If necessary, cut the NGS303-2350P21SP1-22 electrical wire to correct length.
 - (4) Install the M39029/64-369 Contact on the NGS303-2350P21SP1-22 electrical wire. (Refer to the King Air Chapter 20, Standard Practices - Airframe.)
 - (5) Install the NGS303-2350P21SP1-22 in electrical connector 2350P21 pin "17".
 - (6) (Refer to Figure 6, Detail D.) Remove the 130-340683-0399 Placard from the audio storage and playback unit (ASPU).
 - (7) (Refer to Figure 6, Detail D.) Install the 130-340683-0403 Placard on the back of the audio storage and playback unit (ASPU).
 - (8) Install the audio storage and playback unit (ASPU) (Model 630A-XXX) in the aircraft. (Refer to the Super King Air C90GTi Fusion Maintenance Manual, Chapter 23, - Audio Storage and Playback Unit (ASPU) - Removal/Installation).
- I. (Refer to Figure 21, Sheet 1.) Do the modification of the SMS alert wiring as follows:
 - (1) Locate capped and stowed electrical wires 1FH168C22 and 1FH172C22.
 - (2) Remove the 2350P11CAP1 and cut the 1FH168C22 Electrical wire to the necessary length.
 - (3) Remove the 2350P11CAP2 and cut the 1FH172C22 Electrical wire to the necessary length.
 - (4) Connect the 1FH168C22 Electrical wire to 2350P11 pin 4 using one M39029/63-368 Pin Contact.
 - (5) Connect the 1FH172C22 Electrical wire to 2350P11 pin 1 using one M39029/63-368 Pin Contact.
- J. Install new dash number IOC cards as follows:
 - (Refer to Figure 7, Detail A.) Remove two 822-1361-620 IOC cards from the aircraft. (Refer to Super King Air C90GTI Fusion Maintenance Manual, Chapter 31 - Input/Output Concentrator (IOC) - Removal/Installation.)

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- (Refer to Figure 7, Detail A.) Install two 822-1361-622 IOC cards on the aircraft. (Refer to Super King Air C90GTi Fusion Maintenance Manual, Chapter 31 - Input/Ouput Concentator (IOC) - Removal/Installation.)
 - **NOTE:** The 822-1361-620 IOC cards can be upgraded to 822-1361-622 Fusion Phase 3 IOC cards with Rockwell Collins Service Bulletin IOC-3100-31-506 and IOC-3100-31-6.
- (3) Go to Step 15.
- 14. <u>On Beechcraft Models C90GTi that are upgrading from Pro Line Fusion Phase 2 to Pro Line Fusion</u> <u>Phase 3 software</u>, do as follows:
 - A. (Refer to Figure 7, Detail A.) Remove two 822-1361-621 IOC cards on the aircraft. (Refer to Super King Air C90GTi Fusion Maintenance Manual, Chapter 31 - Input/Ouput Concentator (IOC) -Removal/Installation.)
 - B. (Refer to Figure 7, Detail A.) Install two 822-1361-622 IOC cards on the aircraft. (Refer to Super King Air C90GTi Fusion Maintenance Manual, Chapter 31 - Input/Output Concentrator (IOC) -Removal/Installation.)

NOTE: The 822-1361-621 IOC cards can be upgraded to 822-1361-622 Fusion Phase 3 IOC cards with Rockwell Collins Service Bulletin IOC-3100-31-506 and IOC-X100-31-541.

- C. Install the cover on the integrated card cage with related hardware.
- 15. <u>On Beechcraft Models B200GT/B200CGT, B300/B300C and C90GTi that do not have the Information</u> Management System (IMS-3500) installed on the aircraft.
 - A. Go to Step 17.
- 16. <u>On Beechcraft Models B200GT/B200CGT, B300/B300C and C90GTi that have the Information</u> <u>Management System (IMS-3500) installed</u>, do the steps that follow:
 - A. Remove the information management system (IMS-3500) unit from the aircraft. (Refer to Super King Air B200GT/B200CGT, B300/B300C or C90GTi Fusion Maintenance Manual, Chapter 46 Information Management System (IMS-3500) Unit Removal/Installation.)
 - B. Bag and stow applicable IMS electrical wiring as necessary.
 - C. On Beechcraft Models B200GT/B200CGT, do the steps that follow:
 - (1) Remove the five screws that attach the overlay panel to the circuit breaker panel.
 - (2) Remove the overlay panel from the circuit breaker panel.

NOTE: The overlay is easy to break. Care should be used during removal from the circuit breaker panel.

(3) Remove the three screws at the top of the circuit breaker panel.

NOTE: Use a pad to prevent damage to the circuit breaker panel during removal.

(4) Lower the top of the circuit breaker panel away from the sidewall.

NOTE: Make sure not to damage wires and electrical components behind the circuit breaker panel.

- (5) Remove Circuit Breaker (CB) CB355 from the right circuit breaker panel.
- (6) Cap and stow electrical wire CB355-J29-9-22. (Refer to the King Air Standard Practice Manual, Chapter 20 Airframe.)
- (7) Install heat shrink over the circuit breaker terminal lugs.
- (8) Lift the circuit breaker panel into correct position and attach with the three screws.



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(9) Install the circuit breaker overlay.

NOTE: The overlay is easy to break. To prevent damage, care should be used during installation of the overlay.

- (10) Install the five screws that attach the overlay to the circuit breaker panel.
- (11) Install one NAS451-43 Plug Button in the circuit breaker panel in place of CB355.
- (12) Go to Step 17.
- D. On Beechcraft Models B300/B300C, do the steps that follow:
 - Remove Circuit Breaker (CB) CB17 from the fuel control panel. (Refer to the Super King Air B300/B300C Fusion Maintenance Manual, Chapter 31 - Fuel Control Panel Circuit Breaker -Removal/Installation.)
 - (2) Cap and stow electrical wire CB17-J9-9-22. (Refer to King Air Chapter 20 Standard Practices Manual Airframe.)
 - (3) Install heat shrink over the circuit breaker terminal lugs.
 - (4) Install one NAS451-43 Plug Button in the circuit breaker panel in place of CB17.
 - (5) Go to Step 17.
- E. On Beechcraft Models C90GTi, do the steps that follow:
 - Remove Circuit Breaker (CB) CB51 from the fuel control panel. (Refer to the Super King Air C90GTi Fusion Maintenance Manual, Chapter 31 -Fuel Control Panel Circuit Breaker -Removal/Installation.)
 - (2) Cap and stow electrical wire CB51-J9-9-22 as necessary. (Refer to the King Air Chapter 20 Standard Practices Manual Airframe.)
 - (3) Install heat shrink over the circuit breaker terminal lugs.
- 17. Get the necessary Fusion upgrade software as follows:
 - A. <u>On Beechcraft Models B200GT/B200CGT that are upgrading from Pro Line Fusion Phase 1 to Pro</u> Line Fusion Phase 3 get the necessary electronic data files as follows:

NOTE: The electronic data files can be downloaded at www.txtavsupport.com..

- (1) 101-593000-0011 Aural Warning software.
 - (2) 434-310011-0019 AFD software.
 - (3) 8010-38001-0101 L3 GH-3900 RSU software.
 - (4) 434-310018-0003 ESIS Configuration (standard weight) software.
 - (5) 434-590168-0035 Electronic Checklist.
 - (6) Go to Step 18.
- B. On Beechcraft Models B300/B300C that are upgrading from Pro Line Fusion Phase 1 to Pro Line Fusion Phase 3 software get the necessary electronic data files as follows:

NOTE: The electronic data files can be downloaded at www.txtavsupport.com.

- (1) 101-593000-0011 Aural Warning software.
- (2) 434-310011-0019 AFD software (for heavy weight aircraft).
- (3) 434-310011-0021 AFD Software (for standard weight aircraft).
- (4) 8010-38001-0101 L3 GH-3900 RSU software.
- (5) 101-593000-001 ASU Configuration software.

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- (6) 434-310019-0005 ESIS Configuration (standard weight)" software.
- (7) 434-310019-0007 ESIS Configuration (heavy weight) software.
- (8) 434-590169-0037 Electronic Checklist (Standard Weight).
- (9) 434-590170-0033 Electronic Checklist (Heavy Weight).
- (10) Go to Step 18.
- C. <u>On Beechcraft Models C90GTi upgrading from Pro Line Fusion Phase 1 to Pro Line Fusion Phase 3</u> software get the necessary electronic data files as follows:

NOTE: The electronic data files can be downloaded at www.txtavsupport.com..

- (1) 101-593000-0011 Aural Warning software.
- (2) 434-310011-0019 AFD software.
- (3) 8010-38001-0101 L3 GH-3900 RSU software.
- (4) 434-310017-0003 ESIS Configuration software.
- (5) 434-590171-0039 Electronic Checklist.
- (6) Go to Step 18.
- D. <u>On Beechcraft Models B200GT/B200CGT, B300/B300C and C90GTi that are upgrading from</u> <u>Pro Line Fusion Phase 2 to Pro Line Fusion Phase 3 software get the necessary electronic data</u> <u>files as follows</u>:
 - (1) Beechcraft Models B200GT/B200CGT (IGW), B300/B300C (heavy weight) and C90GTi get 434-310011-0019 AFD Software.
 - (2) Beechcraft Models B300/B300C (standard weight) get 434-310011-0021 AFD Software.
- E. Download each of the necessary electronic files on its own USB flashdrive.

NOTE: Each USB flashdrive should be 2.0 compatible with between 4 and 32 gigabytes and formatted to FAT 32.

- F. Using a marker, write the name and number of the electronic data file on each flashdrive.
- 18. To install the Pro Line Fusion Phase 3 software, do the steps that follow:
 - A. Connect the aircraft battery.
 - B. Connect external electrical power to the aircraft.
 - C. Install the Adaptive Flight Display (AFD) software as follows:
 - (1) Set the BATT switch to the ON position.
 - (2) On Beechcraft Models B300/B300C and C90GTi, set the EXT PWR switch to the ON position.
 - (3) Set the AVIONICS MASTER switch to the ON position.
 - (4) Connect the TE79-KA-MAINT/935 Maintenance Test Box to the field load plug in the back of the center pedestal.
 - (a) Make sure all switches on the maintenance test box are in the NORMAL position.
 - (5) On the overhead panel, set the DATALOAD switch to the ENABLE position.
 - (6) On the maintenance test box, set the APP LOAD switch to the ENABLE position.
 - (7) On the aircraft reversionary panel, set the PFD 1, PFD 2 and MFD reversion switches to the OFF position.
 - (8) Put the USB flashdrive marked "434-310011-0019 or 434-310011-0021 AFD Software" into USB port on the front of the MFD.



- (9) On the reversionary panel, set the MFD reversion switch to the NORM position. The field load should automatically start.
- (10) Make sure "USB Device Found, Do Not remove" shows in the USB status message area of the MFD and the Side Straps shows 1011.
 - **NOTE:** Target messages will update during the field load of the software. When Target 1 is loaded the MFD will go dark for a couple of seconds as the processor restarts. When the field load has reached its completion, the Target status will show "Complete". Once the field load is complete, the system will prompt you to exit the "field load" mode.
- (11) Remove the USB flashdrive from the USB port on the front of the MFD.
- (12) Cycle the electrical power to the MFD as follows:
 - (a) On the reversionary panel, set the MFD reversion switch to the OFF position and then back to the NORM position.
- (13) Put the flashdrive marked "434-310011-0019 (heavy weight) or 434-310011-0021 (standard weight) AFD Software" into the USB port on the front of PFD 1.
- (14) On the reversionary panel, set the PFD 1 reversion switch to the NORM position. The field load should automatically start.
- (15) Make sure "USB Device Found, Do Not remove" shows in the USB status message area of the PFD 1 and the Side Straps shows 0001.
 - **NOTE:** Target messages will update during the field load of the software. When Target 1 is loaded the PFD 1 will go dark for a couple of seconds as the processor restarts. When the field load has reached its completion, the Target status will show "Complete". Once the field load is complete, the system will prompt you to exit the "field load" mode.
- (16) Remove the USB flashdrive from the USB port on the front of PFD 1.
- (17) Cycle the electrical power to PFD 1 as follows:
 - (a) On the reversionary panel, set the PFD 1 reversion switch to the OFF position and then back to the NORM position.
- (18) Put the flashdrive marked "434-310011-0019 (heavy weight) or 434-310011-0021 (standard weight) AFD Software" into the USB port on the front of PFD 2.
- (19) On the reversionary panel, set the PFD 2 reversion switch to the NORM position. The field load should automatically start.
- (20) Make sure "USB Device Found, Do Not remove" shows in the USB status message area of the PFD 2 and the Side Straps shows 0010.
 - **NOTE:** Target messages will update during the field load of the software. When Target 1 is loaded the PFD 2 will go dark for a couple of seconds as the processor restarts. When the field load has reached its completion, the Target status will show "Complete". Once the field load is complete, the system will prompt you to exit the "field load" mode.
- (21) Cycle the electrical power to PFD 2 as follows:
 - (a) On the reversionary panel, set the PFD 2 reversion switch to the OFF position and then back to the NORM position.
- (22) On the overhead panel, set the DATALOAD switch to the OFF position.
- D. Do the AFD software configuration validation as follows:
 - (1) On the reversionary panel, set the PFD 1, MFD, and PFD 2 reversion switches to the NORM position.
 - (2) On the MFD, touch the "Home" button located at the upper left corner of the MFD.
 - (3) Touch the "Maint" button located near the left corner of the MFD, then touch "Done".



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- (4) On the MFD, touch the "Adv" mode button located near the upper right corner of the MFD.
- (5) On the MFD, touch the "System" button locate in the upper center section of the MFD.
 - (a) Make sure the IMA system configuration format page shows.

NOTE: The IMA "Sys" tab will be selected by default.

(6) Wait for the (white) "No Report" status to change to a (green) "Pass" status in the IMA System field.

NOTE: It could take up to five seconds for the format to update from the white "No Report" to the green "Pass" indication. If the IMA system is configured correctly, the IMA system field on the MFD will report a status of a green "Pass", for all three AFD-3700 units.

- (7) Touch the "i" icon next to the LEFT position in the IMA System field.
 - (a) (For ICIT file 434-310011-0019 Refer to Figure 20, Sheet 1, For ICIT file 434-310011-0021 Refer to Figure 20 Sheet 2.) Make sure the necessary nameplates show on PFD 1.
- (8) Touch "X" to close.
- (9) Touch the "i" icon next to the RIGHT position in the IMA System field.
 - (a) (For ICIT file 434-310011-0019 Refer to Figure 20, Sheet 1, For ICIT file 434-310011-0021 Refer to Figure 20 Sheet 2.) Make sure the necessary nameplates show on PFD 2.
- (10) Touch "X" to close.
- (11) Touch the "i" icon next to the CENTER position in the IMA System field.
 - (a) (For ICIT file 434-310011-0019 Refer to Figure 20, Sheet 1, For ICIT file 434-310011-0021 Refer to Figure 20 Sheet 2.) Make sure the necessary nameplates show on MFD.
- (12) Touch "X" to close.
- E. Enter or Validate the Aircraft Personality Module (APM) Settings as follows:
 - **NOTE:** On Beechcraft Models B300/B300C, B200GT/B200CGT, C90GTi upgrading from Pro Line Fusion Phase 2 to Pro Line Fusion Phase 3 these settings were recorded in Step 1.
 - (1) On the TE79-KA-MAINT/935 Maintenance Test Box, set the REPORT MODE switch to the ENABLE position.
 - (2) On the overhead panel, set the DATALOAD switch to the ENABLE position. Make sure the "Aircraft Configuration Parameters" page shows on PFD 1, PFD 2 and the MFD.
 - (3) On the MFD, push the down arrow located at the upper right corner of the MFD screen and select the "Aircraft Option Strap" page.
 - (4) Make sure the "Aircraft Option Strap" page shows on the MFD.
 - (5) In the "Aircraft Serial" field of the "Aircraft Option Straps" page, enter or validate the appropriate aircraft prefix along with the aircraft serial number. Make sure to include leading zeros in the serial number if necessary. (Example: FL-0009).

| Aircraft Model | Aircraft Prefix | |
|----------------|-----------------|--|
| B300 B300ER | FL- | |
| B300C | FM- | |
| B200GT | BY- | |
| B200CGT | BZ- | |
| C90GTi | LJ- | |

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(6) In the "Aircraft Subtype" field of the "Aircraft Option Straps" page, enter or validate the aircraft subtype.

| Aircraft Model | Aircraft Subtype |
|--|---------------------|
| B200GT/B200CGT | 4 |
| B200GT/B200CGT (Increased Gross Weight (IWG) with High Float Gear) | 59 |
| B200GT/200CGT (Increased Gross Weight (IWG) without High Float Gear) | 60 |
| B300/B300C (Extended Range/Heavy Weight) | 1 |
| B300/B300C (Standard Weight) | 26 |
| C90GTi | 19 |

NOTE: Third Party STC's may utilize an Aircraft Subtype not listed here. Refer to STC Installation Manuals for correct Subtype value.

- (7) In the lower left corner of the "Aircraft Option Straps" page, push the "Save to APM" button
 - (a) Make sure the "AC Prefix", "AC Serial Number", and "AC Subtype" fields have updated.
 - (b) Make sure the "Last Saved" date and time have updated.
- (8) Program the "Aircraft Option Straps" for Items 1 through 29 using the values determined or recorded in Step 1.
 - **NOTE:** The remaining "Aircraft Option Straps" may be programmed by the operator as necessary. These additional option straps set MAP themes one through seven. These option straps give the on and off state for the MAP symbols and overlays menus. If you set these options to OFF it does not prevent the operator from using the MAP symbol or overlay menus.
- (9) After entering the optional strap information, push the "Save to APM" button.
- (10) After the APM strapping is complete and successful, on the overhead panel, set the DATALOAD switch to the OFF position.
- (11) On the TE79-KA-MAINT/935 Maintenance Test Box, set the REPORT MODE switch to the OFF position.
- F. On Beechcraft Models B200GT/B200CGT, B300/B300C and C90GTi that are upgrading from Pro Line Fusion Phase 1 to Prop Line Fusion Phase 3, install the Electronic Standby Instrument System (ESIS) software as follows:
 - (1) On the overhead panel, make sure the Standby display knob is at the mid-range position.
 - (2) On the TE79-KA-MAINT/935 Maintenance Test Box, set the ESIS COMP switch to the ENABLE position.
 - (3) On the TE79-KA-MAINT/935 Maintenance Test Box, set the RS232 SELECT switch to the ESIS position.
 - (4) Connect the laptop to the maintenance test box.
 - (5) Turn the laptop on.
 - (6) On the laptop, double click on the "RSU Fieldloader" icon. This will load the 576-6209-01 RSU Field Loadable window.
 - (7) Make sure the serial port is set to "COM 1" and the baud rate is set to 115200.
 - (8) On the left outboard subpanel, set the STBY DISPLAY switch to the ON position.



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- (9) On the laptop, in the RSU Fieldfolder tool, click the "Connect" button and then click on the "Retrieve Mode" button.
 - **NOTE:** You have 60 seconds from the time the standby display is turned on to connect to the RSU retrieve mode.
 - (a) Make sure the "RSU Bootloader Mode" message shows below the "Retrieve Mode" button
 - **NOTE:** If the "Cannot Retrieve RSU Mode" message shows below the "Retrieve Mode" button, the retrieve mode must be retrieved within 60 seconds after the standby display is turned on. If the "Unavailable" message shows below the "Retrieve Mode" button, click on the "Connect" button to start the "Bootloader Mode"
- (10) Put the USB flashdrive marked "8010-38001-0101 L3 GH-300 RSU Software" that contains the 8010-38001-0101 that contains electronic data file in the USB port of the laptop.
- (11) Click on the "Browse" button on the "Field Loader" screen.
- (12) Locate the electronic date file 8010-38001-0101.
- (13) Click on the electronic data file 8010-38001-0101.
- (14) Click on the "Load Image" button.

NOTE: The "Update of RSU Image Successful" message will show in the "Load System" area of the RSU Fieldloader Tool when the upload is successful.

- (15) Remove the flashdrive "8010-38001-0101 L3 GH-300 RSU Software" from the laptop.
- (16) On Beechcraft Model B200GT/B200CGT install the ESIS Configuration software as follows:
 - (a) On aircraft that are standard weight, do the steps that follow:
 - <u>1</u> Install the flashdrive marked "434-310018-0003 ESIS Configuration (standard weight)" that contains electronic data file 434-310018-0003
 - 2 Click the browse button on the "Fieldloader" screen and find electronic data file 434-310018-0003 and click the "Load Image" button.
 - **NOTE:** The "Update of RSU Image Successful" message will show in the "Load System" area of the RSU Fieldloader Tool when the upload is successful.
 - <u>3</u> Go to Step 15.F(18)
- (17) On Beechcraft Model B300/B300C install the ESIS Configuration software as follows:
 - (a) On aircraft that are standard weight, do the steps that follow:
 - <u>1</u> Install the flashdrive marked "434-310019-0005 ESIS Configuration (standard weight)" that contains electronic data file 434-310019-0005 into the laptop.
 - 2 Click the browse button on the "Fieldloader" screen and find electronic data file 434-310019-0005 and click the "Load Image" button.
 - **NOTE:** The "Update of RSU Image Successful" message will show in the "Load System" area of the RSU Fieldloader Tool when the upload is successful.
 - <u>3</u> Go to Step 15.F(18).



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- (b) On aircraft that are heavy weight, do the steps that follow:
 - <u>1</u> Install the flashdrive marked "434-310019-0007 ESIS Configuration (heavy weight)" that contains electronic data file 434-310019-0007 into the laptop.
 - 2 Click the browse button on the "Fieldloader" screen and find electronic data file 434-310019-0007 and click the "Load Image" button.
 - **NOTE:** The "Update of RSU Image Successful" message will show in the "Load System" area of the RSU Fieldloader Tool when the upload is successful.
 - <u>3</u> Go to Step 15.F(18).
- (18) On Beechcraft Model C90GTi install the ESIS Configuration software as follows:
 - (a) Install the flashdrive marked "434-310017-0003 ESIS Configuration (standard weight)" that contains electronic data file 434-310017-0003 into the laptop.
 - (b) Click the browse button on the "Fieldloader" screen and find electronic data file 434-310017-0003 and click the "Load Image" button.

NOTE: The "Update of RSU Image Successful" message will show in the "Load System" area of the RSU Fieldloader Tool when the upload is successful.

- (19) Set the ESIS COMP switch on the TE79-KA-MAINT/935 Maintenance Test Box to the NORMAL position.
- (20) Cycle the electrical power to the remote sensor unit (GH-3900RSU) as follows:
 - (a) On the outboard sub-panel, set the STBY DISPLAY switch to the OFF position, and then back to the ON position.
- (21) On the laptop, in the RSU Fieldfolder tool, click the "Connect" button and then click on the "Retrieve Mode" button.
 - **NOTE:** You have 60 seconds from the time the standby display is turned on to connect to the RSU retrieve mode.
- (22) Make sure the necessary information shows on the "System Information Page" as follows:
 - (a) On Beechcraft Model B200GT/B200CGT.
 - <u>1</u> Software Part Number: 8010-38001-0101.
 - 2 Configuration File Name: 434-310018-0003 (for standard weight aircraft).
 - 3 Aircraft Type: B200.
 - <u>4</u> Go to Step 15.F(22).
 - (b) On Beechcraft Model B300/B300C.
 - <u>1</u> Software Part Number: 8010-38001-0101.
 - 2 Configuration File Name:434-310019-0005 R1 (for standard weight aircraft).
 - 3 Configuration File Name: 434-310019-0007 (for heavy weight aircraft)
 - Aircraft Type: B300/B300C.
 - 5 Go to Step 15.F(22).
 - (c) On Beechcraft Model C90GTi.
 - <u>1</u> Software Part Number: 8010-38001-0101.
 - 2 Configuration File Name: 434-310017-0003.
 - 3 Aircraft Type: C90GTi
- (23) On the laptop, click the "Disconnect" button.

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- (24) Close all programs on the laptop.
- (25) On the right sub-panel, set the STBY DISPLAY switch to the OFF position.
- (26) On the ESIS display, push and hold the BARO and MENU buttons at the same time while setting the STBY DISPLAY switch to the ON position on the left sub-panel.
- (27) Once the ESIS display shows "Aligning" message, release the "BARO" and "MENU" buttons.

NOTE: This puts the system into "Maintenance" mode and gives you the "Sensor ID" menu

- (28) On the "Sensor ID" menu, make sure the system software and ESIS Configuration file are as follows:
 - (a) On Beechcraft Model B200GT/B200CGT.
 - <u>1</u> System Software Part Number: 8010-38001-0101.
 - 2 ESIS Configuration File Number: 434-310018-0003 (for standard weight aircraft.
 - 3 Go to Step 15.G.
 - (b) On Beechcraft Model B300/B300C.
 - <u>1</u> System Software Part Number: 8010-38001-0101.
 - 2 ESIS Configuration File Number: 434-310019-0005 (for standard weight aircraft).
 - 3 ESIS Configuration File Number: 434-310019-0007 (for heavy weight aircraft).
 - 4 Go to Step 15.G.
 - (c) On Beechcraft Model C90GTi.
 - 1 System Software Part Number: 8010-38001-0101.
 - 2 ESIS Configuration File Number: 434-310017-0003.
- G. <u>On Beechcraft Models B200GT/B200CGT, B300/B300C, C90GTi that are upgrading from Pro</u> <u>Line Fusion Phase 1 to Pro Line Fusion Phase 3</u>, activate the Surface Management System and validate as follows:
 - (1) On the reversionary panel, make sure that PFD 1, PFD 2, and MFD reversion switches are in the NORM position.
 - (2) On the Cursor Control Panel (CCP), push and release the "MFD" button. Make sure the cursor shows on the center AFD.
 - (3) Push and release the "MENU" button. Make sure the "Format Selections" page shows on the MFD.
 - (4) On the "Format Selection" page, select the 1/2 page format icon at the top of the menu bar. Make sure the 1/2 page format show on the "Format Selections" page.
 - (5) Select the MAINT icon, then select DONE button.
 - (6) On the "Maintenance Menu", select the "License" icon. Make sure the "Application License Management" page shows on the MFD.
 - (7) Make sure the APM-5000 serial number shown on the "Application License Management" page matches the APM serial number listed on the certification of software product authenticity.
 - (8) Activate the "Takeoff and Landing Awareness" key as follows:
 - (a) On the "Application License Management" page, select the "Activation Key" button.
 - (b) Select the "Activation Key" data field. Make sure the "Activation Key" data field is highlighted.

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- (c) Using the Multifunction Keypad Panel (MKP), type in the Takeoff and Landing Awareness Key Authorization code listed on the certification of software product authenticity.
- (d) Push the ENTER button. Make sure "Processing" shows on the "Application License Management" page. Indicating a valid Electronic Authorization Key (EAK).
- (9) Do a validation of the SMS as follows:
 - (a) Go back to the "Format Selections" page.
 - (b) Select the MFD 1/2 page format icon from the menu bar. Make sure the 1/2 page format show on the "Format Selections" page.
 - (c) Select the "MAINT" icon, then select the "DONE" button.
 - (d) On the "Maintenance Menu", select the "License" icon. Make sure the "Application License Management" page shows on the MFD.
 - (e) On the "Applications License Management" page, use the CCP to move the cursor over the scrolling bar. The scrolling icons should turn a Cyan (blue) color. Rotate the CCP knob to move through the list that shows. Make sure the keys that follow show (green):

NOTE: Purchased options may also be shown on the display along with the keys below.

| Туре No. | Part No. | Statusy |
|---|--------------|---------|
| ECH-3500 Electronic Charts | 810-0361-001 | Enabled |
| FSAX-3500 Map and Weather Extension | 810-0345-001 | Enabled |
| OVL-3500 Enhanced Maps and Overlays | 810-0360-001 | Enabled |
| TLAF-5000 Takeoff and Landing Awareness | 810-0165-001 | Enabled |

- H. On Beechcraft Models B200GT/B200CGT, B300/B300C, C90GTi that are upgrading from Pro Line Fusion Phase 1 to Pro Line Fusion Phase 3, install the Aural Warning software as follows:
 - (1) On the right circuit breaker panel, make sure the AURAL WARN circuit breaker is disengaged.
 - (2) On the pilot's and co-pilot's audio panels, set the PHONE/SPKR to the ON position.
 - (3) Set the volume control knob to the mid-range position.
 - (4) If necessary, push and release the MASTER CAUTION/WARNING to cancel any EICAS messages that exist.
 - (5) Connect the TE79-KA-MAINT/935 Maintenance Test Box to the maintenance plug 3456J2 in the aft pedestal.
 - (6) Set the maintenance test box switches as follows:
 - (a) Set the RS232 switch to the AURAL WARN position.
 - (b) Set the AURAL WARN APP LOAD switch to the ENABLE position.
 - (c) Set all other switches on the maintenance test box to the NORMAL position.
 - (7) Connect the laptop to the aircraft.
 - (8) Turn the laptop on. Make sure to wait for the laptop to completely initialize and boot before going to the next step.
 - (9) On the laptop, double click on the "ASPU-CS icon.
 - (10) From the program menu bar, click "Tools > Application Settings".
 - (11) From the left side of the "Applications Setting" pop-up window, click "Connection".

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- (12) From the "Connection" tab, make sure the messages show as follows.
 - (a) "Connect to ASPU" check box is marked.
 - (b) COM Port: COM1.
 - (c) "Auto-Select COM Port: check box, is not marked.
 - (d) If necessary, change settings to the settings shown above.
 - (e) Click the "OK" button.
- (13) Install the Aural Warning software as follows:
 - (a) On Beechcraft Model B200GT/B200CGT, B300/B300C and C90GTi.
 - <u>1</u> Install flashdrive marked "101-593000-0011 Aural Warning" that contains electronic data file "101-593000-0011" into the laptop.
 - 2 Click the browse button, and find electronic data file "101-593000-0011.xml" saved on the flashdrive and click the OPEN button.
- (14) From the "Program" menu bar on the "ASPU-CS window, click "File > open".
- (15) On the right circuit breaker panel, engage the AURAL WARN circuit breaker.

NOTE: The electronic data file should automatically connect to the ASPU. If it does not automatically connect, from the "Program" menu bar, click "Program> Connect".

- (16) Make sure the TE79-TSC1012/935 Test laptop shows the messages as follows:
 - (a) The top area of the program shows "ASPU" connected.
 - (b) The bottom area of the program shows connection activity.
 - (c) "Done" shows when download is complete.
- (17) From the program menu bar, click "Program > Program Device".
- (18) Click "Yes" to override the existing electronic data files.
 - **NOTE:** The program will show a status bar as the ASPU programs. This will take approximately five minutes to complete. After the program is installed, the "Programming and Validation Operations Have Succeeded".
- (19) Click "OK" to acknowledge the "Programming and Validation Operations Have Succeeded" message.

NOTE: The program will disconnect and connect to the ASPU. Make sure the "Done" message shows at the bottom of the screen before you go to the next step.

- (20) Disengage the AURAL WARN circuit breaker on the right circuit breaker panel.
- (21) Close all programs on the laptop.
- (22) Disconnect the laptop and the TE79-KA-MAINT/935 Maintenance Test Box from the back of the center pedestal.
- (23) Turn the laptop off.
- (24) On the right circuit breaker panel, engage the AURAL WARN circuit breaker.
 - (a) Make sure the AURAL SYSTEM FAIL message does not show on the Engine Indicating and Crew Alerting System (EICAS) window.
- (25) Locate the AURAL WARN TEST SW located in the left nose equipment bay upper shelf.
- (26) Actuate the and release the AURAL WARN TEST SW. Make sure the audible alerts that follow are heard on the cockpit speakers:
 - (a) Overspeed Alert "Overspeed" Sweep tone, approximately three seconds.

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- (b) Stall Warning Alert "Stall" Continuous tone, approximately 12 seconds.
- (c) Master Warning Attention Alert "Warning" Triple Chime (ding-ding-ding), approximately two seconds.
- (d) Left Engine Alert "Left Engine" Male Voice, approximately two seconds.
- (e) Right Engine Alert "Right Engine" Male Voice, approximately two seconds.
- (f) Autopilot Disconnect Alert "Autopilot Disconnect" Warble tone, approximately three seconds.
- (g) Cabin Altitude Advisory "Cabin Altitude" Male Voice, approximately two seconds.
- (h) Cabin Altitude Warning "Cabin Altitude" Male Voice, approximately two seconds.
- (i) Landing Gear Alert "Landing Gear" Pulse tone, approximately three seconds.
- (j) Surface Management System (SMS) Mode 1/4 Alert "Not a Runway" Male Voice, approximately two seconds.
- (k) SMS Mode 3 Alert "Runway Disagree" Male Voice, approximately two seconds.
- (I) PFD Alert "Display" Male Voice, approximately two seconds.
- (m) Altitude Alert "Altitude Alert C chord, 3 tones, approximately three seconds.
- Decision Height Alert "Decision Height" Decay Resweep tone, approximately two seconds.
- (o) Master Caution Attention Alert "Caution" Single Chime (ding), approximately one second.
- (p) Controller Data Link Communication (CPDLC) Alert ATC Message Female Voice, approximately two seconds.
- (q) Sel-Call Alert "Sel-Call" Male Voice, approximately one second.
- (r) Cockpit Call Alert "Cockpit Call" Decaying tone, approximately two seconds.
- I. On Beechcraft Models B300/B300C do the cabin altitude functional test as follows:
 - **NOTE:** During the cabin altitude functional test, when a Crew Alerting System (CAS) shows a "Red" or Yellow" message. It will also make the related "MASTER CAUTION/WARNING to flash on the glareshield. Reset the "MASTER CAUTION/WARNING" lights as necessary. It may to necessary to push and release the MKP button to expand the CAS window in order to see all the messages. The CAS message colors are as follows:

Warning - Red Caution - Amber (yellow) Advisory - Cyan (blue) Status - White Master Warning Audio Alert - Triple Chime (ding - ding - ding) Master Caution Audio Alert - Single Chime (ding)

- **NOTE:** During the cabin altitude functional test you may receive multiple warnings or CAS messages. Unless otherwise noted in the functional test procedure, ignore all warnings and CAS messages.
- (1) Lower the overhead instrument and control panel assembly.
- (2) Make sure PFD 1, PFD 2 and MFD are on.
- (3) On the overhead panel, using a jumper, jump across the "C" and "NO" terminals of the cabin altitude pressure switch (S10). Make sure the CAS messages are shown and audio is heard as follows:
 - (a) The chime (ding-ding-ding) can be heard from the cockpit speakers.

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- (b) The (red) CABIN ALTITUDE HIGH CAS message shows.
- (c) The (white) CABIN ALTITUDE CAS message does not show.
- (d) The CABIN ALTITUDE aural (male voice) can be heard from the cockpit speaker continuously.
- (4) Push and release the copilot (red) Master Warning switch.
 - (a) Make sure the pilot's and copilot's (red) master warning switch extinguishes.
 - (b) Make sure the CABIN ALTITUDE aural (male voice) is not heard from the cockpit speakers.
- (5) On the right circuit breaker panel, disengage the circuit breakers that follow:
 - (a) CAS1 (CB24)
 - (b) CAS 1 SEC (CB87)
 - (c) If necessary, push and release the Master Caution/Warning switch as needed to reset the Master Caution/Warning light.
 - <u>1</u> Make sure the (amber) CAS 1 CAS message shows and the (red) CABIN ALTITUDE HIGH CAS message remains.
- (6) On the right circuit breaker panel, engage the circuit breakers that follow:
 - (a) CAS1 (CB24)
 - (b) CAS 1 SEC (CB87)
 - <u>1</u> Make sure the (amber) CAS 1 CAS message does not show, and the (red) CABIN ALTITUDE HIGH CAS message remains.
- (7) On the right circuit breaker panel, disengage the circuit breakers that follow:
 - (a) CAS 2 (CB26)
 - (b) CAS 2 SEC (CB121)
 - (c) If necessary, push and release the Master Caution/Warning switch as needed to reset the Master Caution/Warning light.
 - <u>1</u> Make sure the (amber) CAS 2 CAS message shows and the (red) CABIN ALTITUDE HIGH CAS message remains.
- (8) On the right circuit breaker panel, engage the circuit breakers that follow:
 - (a) CAS 2 (CB26)
 - (b) CAS 2 SEC (CB121)
 - <u>1</u> Make sure the (amber) CAS 2 CAS message does not show, and the (red) CABIN ALTITUDE HIGH CAS message remains.
- (9) On the inboard right sub-panel, push the CABIN ALT WARN SILENCE button momentarily to stop the aural warning because of the (white) CABIN ALTITUDE CAS message.
- (10) Remove the jumper from terminals "C" and "NO" of the cabin altitude pressure switch (S10).
- (11) On the inboard right sub-panel, Put the CABIN PRESSURE TEST switch to the CABIN ALT position and hold until sequence occurs as follows:
 - (a) The chime (ding-ding-ding) can be heard from the cockpit speakers.
 - (b) The (white) CABIN ALTITIUDE CAS message shows for two seconds. Followed by a (red) CABIN ALTITUDE HIGH CAS message.

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- (c) The CABIN ALTITUDE aural (male voice) can be heard from the cockpit speakers continuously.
- (12) Release the CABIN PRESSURE TEST switch. Make sure no cabin related CAS messages show or audio can be heard from the cockpit speakers.
- (13) On the inboard right sub-panel, push the CABIN ALT WARN SILENCE button momentarily to stop the aural warning because of the (white) CABIN ALTITUDE CAS message.
- (14) Push and release "Master Caution/Warning" switch to stop the aural alert because of the (red) CABIN ALTITUDE HIGH CAS message. Make sure the CABIN ALTITUDE aural (male voice) can not be heard from the cockpit speakers.
- (15) Disengage the CABIN ALT-HIGH (CB54) circuit breaker. Make sure the (red) CABIN ALTITUDE HIGH CAS message does not show.
- (16) If necessary remove the carpet from the center floorboard between Fuselage Stations (FS) FS143.00 and 158.00.
- (17) Remove center floorboard between FS 143.00 and 158.00. Retain all related hardware for installation.
- (18) On the (S510) "Cabin Altitude" switch, using a jumper, jump across the "C" and "NO" terminals. Make sure the (white) "CABIN ALTITUDE" CAS message shows.
- (19) On the right circuit breaker panel, disengage ANN IND (CB4). Make sure the (white) CABIN ALTITUDE CAS message does not show.
- (20) On the right circuit breaker panel, engage the ANN IND (CB4).
- (21) Remove the jumper from terminals "C" and "ON" of the "Cabin Altitude" switch (S510).
- (22) Install the center floorboard between FS 143.00 and 158.00 with retained related hardware.
- (23) If necessary, install the carpet on the center floorboard between FS 143.00 and 158.00.
- J. Do the SMS functional test as follows:
 - (1) Make sure the avionics master switch is in the ON position.
 - (2) On the overhead panel, make sure the ANNUN PUSH-BRT swtich is pushed and set to the BRIGHT position.
 - (3) On the right circuit breaker panel, disengage the TAWS (CB292) B200GT/B200CGT, (CB104)
 B300/B300C and (CB327) C90GTi) circuit breaker.
 - (4) On the pilot's instrument panel, make sure the system annunciator lights that follow show brightly.
 - (a) A (white) TERR INHIB annunciator switch.
 - (b) A (white) G/S INHIB annunciator switch.
 - (c) A (white) FLAP OVRD annunciator switch.
 - (d) A (white) STEEP APPR annunciator switch (if installed).
 - (e) A (white) SMS INHIB annunciator switch.
 - (5) On the overhead panel, push and hold the ANNUNCIATOR test switch. On the instrument panel, make sure the system annunciator switch lights that follow show brightly.
 - (a) The TERR INHIB annunciator switch (amber) ACTIVE.
 - (b) The G/S INHIB annunciator switch (amber) ACTIVE.
 - (c) The FLAP OVRD annunciator switch (amber) ACTIVE.
 - (d) The STEEP APPR annunciator switch a (green) ACTIVE (if installed).

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- (e) The SMS INHIB annunciator switch (amber) ACTIVE.
- (6) On the overhead panel, make sure the ANNUN PUSH_BRT switch is pulled and set to the DIM position.
- (7) Adjust the DIM knob and make sure the TERR INHIB, G/S INHIB, FLAP OVRD, STEEP APPR (if installed) and the SMS INHIB annunciator lights change brightness during the adjustment of the DIM knob.
- (8) Push the ANNUNCIATOR PUSH-BRT switch. Make sure the TERR INHIB, G/S INHIB, FLAP OVRD, STEEP APPR and the SMS INHIB annunciator switch lights show brightly.
- (9) Release the ANNUNCIATOR test switch. On the pilots instrument panel, make sure the system annunciator lights go off.
 - (a) The TERR INHIB annunciator switch (amber) ACTIVE.
 - (b) The G/S INHIB annunciator switch (amber) ACTIVE.
 - (c) The FLAP OVRD annunciator switch an (amber) ACTIVE.
 - (d) The STEEP APPR annunciator switch a (green) ACTIVE (if installed).
 - (e) The SMS INHIB annunciator switch an (amber) ACTIVE.
- (10) On the right circuit breaker panel, engage the TAWS (CB292) B200GT/B200CGT, (CB104) B300/B300C and (CB327) C90GTi) circuit breaker.
- (11) On the pilots instrument panel, push and release the TERR INHIB annunciator switch. Make sure the TERR INHIB annunciator switch latches and the (amber) ACTIVE light comes on.
- (12) Push and release the TERR INHIB annunciator switch. Make sure the TERR INHIB annunciator switch unlatches and the (amber) ACTIVE light goes off.
- (13) If installed, on the pilots instrument panel, push and release the STEEP APPR annunciator switch. Make sure the STEEP APPR annunciator switch latches and the (green) ACTIVE light comes on.
- (14) If installed, push and release the STEEP APPR annunciator switch. Make sure the STEEP APPR annunciator switch unlatches and the (green) ACTIVE light goes off.
- (15) On the pilot's instrument panel, push and release the FLAP OVRD annunciator switch. Make sure the FLAP OVRD annunciator switch latches and the (amber) ACTIVE light comes on.
- (16) Push and release the FLAP OVRD annunciator switch. Make sure the FLAP OVRD annunciator switch unlatches and the (amber) ACTIVE light goes off.
- (17) On the Multi-Function Keypad Panel (MKP), push the FMS key. Make sure the FMS window shows on the MFD along with the pilots cursor.
- (18) From the FMS Menu Bar, select the Setup icon.
- (19) Select the Sensors tab. Make sure the FMS Sensors page shows on the MFD and has a valid Global Positioning System (GPS) signal.
- (20) Make and activate a Flight Management System (FMS) flight plan as follows:
 - (a) On the MKP, push the FMS key. Make sure the FMS window shows on the MFD along with the pilots cursor.
 - (b) From the FMS Menu Bar, select the Plan icon.
 - (c) If necessary, select the Flight Plan tab. Make sure the FMS Flight Plan page shows on the MFD.
 - (d) If necessary, select the Load/Store button. Make sure the Load/Store page shows on the MFD.
 - (e) On the FMS Flight plan page, select the Orig box.

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- (f) Using the MKP, type the current airport ICAO at your location and push the enter button. Make sure the Orig field shows the current airport ICAO.
- (g) On the FMS Flight Plan page, select the Dest box.
- (h) Using the MKP, type the current airport ICAO and push the enter button. Make sure the Dest field shows the current airport chart departure runway.
- (i) On the MKP, push the EXEC button.
- (j) On the FMS Flight plan page, select the Depart button and select any shown departure runway.
- (k) On the FMS Flight plan page, select the Arrivals button and select any runway from the Appr column.
- (I) On the MKP, push and release the CHART button.
- (m) From the Charts Menu Bar, select the Orig icon.
 - <u>1</u> Make sure the origin airport chart shows on the MFD.
 - <u>2</u> Make sure the origin runway shows a Cyan arrow in the direction of the runway heading.
- (n) Disconnect the left and right main landing gear squat switch electrical connectors to put the aircraft in the air mode.
- (o) On the Charts Menu Bar, select the Dest icon. After selecting the Dest icon, wait at least two minutes.
 - <u>1</u> Make sure the destination airport shows on the MFD.
 - <u>2</u> Make sure the destination runway shows a Magenta arrow in the direction of the runway heading.
 - <u>3</u> Make sure the NOT A RUNWAY or RUNWAY DISAGREE (male voice) is heard on the cockpit speakers and the pilot's and copilot's headsets
 - <u>4</u> Make sure the (red) RUNWAY message flashes for five seconds on PFD 1 and PFD 2 and then stays on.
- (p) Push and release the SMS INHIB annunciator switch.
 - <u>1</u> Make sure the SMS INHIB annunciator switch (amber) ACTIVE comes on.
 - <u>2</u> Make sure the (red) RUNWAY message does not show on PFD 1 or PFD 2.
- (q) Push and release the SMS INHIB annunciator switch.
 - 1 Make sure the SMS INHIB annunciator switch (amber) ACTIVE goes off.
 - <u>2</u> Make sure the NOT A RUNWAY or RUNWAY DISAGREE (male voice) is heard on the cockpit speaker and the pilot's and copilot's headsets.
 - <u>3</u> Make sure the (red) RUNWAY message flashes for five seconds on PFD 1 and PFD 2 and then stays on.
- 19. Set the BATT switch to the OFF position.
- 20. On Beechcraft Models B300/B300C and C90GTI, set the EXT PWR switch to the OFF position.
- 21. Connect the left and right main landing gear squat switch electrical connectors.
- 22. Install the right avionics compartment door.
- 23. Install the left avionic compartment door.
- 24. Remove the maintenance warning tags and if not already done, connect the aircraft battery.

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- 25. Update the Pilot's Operating Handbook and FAA Approved Flight Manual.
 - A. For Beechcraft Model C90GTi upgrading from Pro Line Fusion Phase 1 to Pro Line Fusion Phase 3:
 - (1) Make sure Revision A1 (or later) is incorporated into 434-590171-0003 King Air GTx (Model C90GTi) Pilot's Operating Handbook.
 - (2) Operational limitations in 434-590171-0003 King Air GTx (Model C90GTi) Pilot's Operating Handbook for aircraft with this service bulletin installed are equivalent to aircraft with Textron Aviation Pro Line Fusion Kit part number 434-3019 installed.
 - (3) Make sure Supplement 434-590171-0021, Original Issue or later is inserted into the 434-590171-0003 King Air GTx (Model C90GTi) Pilot's Operating Handbook.
 - B. For Beechcraft Model C90GTi upgrading from Pro Line Fusion Phase 2 to Pro Line Fusion Phase 3:
 - (1) Make sure Revision A1 (or later) is incorporated into 434-590171-0003 King Air GTx (Model C90GTi) Pilot's Operating Handbook.
 - (2) Make sure Revision A1 (or later) is incorporated into 434-590171-0003 King Air GTx (Model C90GTi) Pilot's Operating Handbook.
 - (3) Make sure Supplement 434-590171-0021, Revision 1 or later is inserted into the 434-590171-0003 King Air GTx (Model C90GTi) Pilot's Operating Handbook.
 - C. For Beechcraft Model B200GT/B200CGT upgrading from Pro Line Fusion Phase 1 to Pro Line Fusion Phase 3:
 - Make sure Reissue B (or later) is incorporated into 434-590168-0003 King Air 250/250C (B200GT/B200CGT) Pilot's Operating Handbook.
 - (2) Operational limitations in 434-590168-0003 King Air 250/250C (B200GT/B200CGT) Pilot's Operating Handbook for aircraft with this service bulletin installed are equivalent to aircraft with Textron Aviation Pro Line Fusion Kit part number 434-3017 installed.
 - (3) Make sure Supplement 434-590168-0031, Revision 1 or later is inserted into the 434-590168-0003 King Air 250/250C (Model B200GT/B200CGT) Pilot's Operating Handbook.
 - D. For Beechcraft Model B200GT/B200CGT upgrading from Pro Line Fusion Phase 2 to Pro Line Fusion Phase 3:
 - (1) Make sure Reissue B (or later) is incorporated into 434-590168-0003 King Air 250/250C (B200GT/B200CGT) Pilot's Operating Handbook.
 - (2) Make sure Supplement 434-590168-0031, Original Issue or later is inserted into the 434-590168-0003 King Air 250/250C (Model B200GT/B200CGT) Pilot's Operating Handbook.
 - E. For Beechcraft Model B300/B300C upgrading from Pro Line Fusion Phase 1 to Pro Line Fusion Phase 3:
 - Make sure Reissue B (or later) is incorporated into 434-590169-0003 King Air 350/350C (B300/B300C) Pilot's Operating Handbook.
 - (2) Operational limitations in 434-590169-0003 King Air 350/350C (B300/B300C) Pilot's Operating Handbook for aircraft with this service bulletin installed are equivalent to aircraft with Textron Aviation Pro Line Fusion Kit part number 434-3014 installed.
 - (3) Make sure Supplement 434-590169-0033, Original Issue or later is inserted into the 434-590169-0003 King Air 350/350C (Model B300/B300C) Pilot's Operating Handbook.
 - F. For Beechcraft Model B300/B300C Heavy Weight airplanes upgrading from Pro Line Fusion Phase 1 to Pro Line Fusion Phase 3:
 - (1) Make sure Reissue B (or later) is incorporated into 434-590170-0003 King Air 350/350ER/350C/350CER (with or without Extended Fuel Capability) Pilot's Operating Handbook.



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- (2) Operational limitations in 434-590170-0003 King Air 350/350ER/350C/350CER (with or without Extended Fuel Capacity) Pilot's Operating Handbook for airplanes with this service bulletin installed are equivalent to airplanes with Textron Aviation Pro Line Fusion Kit part number 434-3014 installed.
- (3) (1) Make sure Supplement 434-590169-0033, Original Issue or later is inserted into the 434-590170-0003 King Air 350/350ER/350C/350CER (with or without Extended Fuel Capability) Pilot's Operating Handbook.
- 26. Make an entry in the airplane logbook that states compliance and method of compliance with this service document.

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Figure 1. B200GT/B200CGT, C90GTi Installation of the SMS Inhibit Annunciator Switch (Sheet 1)

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Figure 2. Modification of the B200GT/B200CGT Aircraft Lighting System Electrical Wires (Sheet 1)

434-3017

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TEXTRON AVIATION



E72596



------ Represents Components Deleted from The Before Modifcation Detail

434-3017

Figure 4. Modification of the No. 1 and No. 2 VHF Communication System Electrical Wires (Sheet 1)



434-3017

Figure 5. Modification of the Aircraft Audio System Electrical Wires (Sheet 1)

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Figure 6. Removal of the 130-340683-0399 Placard and Installation of the 130-340683-0403 Placard (Sheet 1)

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FM31B 133599AA.PDF

Figure 7. Installation of the Pro Line Fusion Phase 3 Input/Output Concentrator (IOC) Card (Sheet 1)

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Figure 8. B300/B300C Installation of the SMS Inhibit Annunciator Switch (Sheet 1)



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Figure 10. Modification of the Cabin Altitude Electrical Relays and System (Sheet 1)

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Figure 11. Modification of the Cabin Altitude Electrical Wires (Sheet 1)

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Figure 12. Modification of the 434-364074-0001 or 4340364074-0005 Panel Assemblies (Sheet 1)

434-3014-4

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E72605



Before Modifcation Detail 33-01-03 Wiring Diagram (Reference)







434-3014-3

Figure 13. Electrical Modification of the 434-36074-XXX Panel Assembly (Sheet 1)



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434-3014-4

Figure 14. Installation of the 101S-R41 and 101S-C1 Placards (Sheet 1)

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Figure 15. Modification of the Cabin Altitude Warning electrical wiring (Sheet 1)

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After Modifcation Detail 33-10-04 Wiring Diagram (Reference)





After Modifcation Detail 91-80-03 Wiring Diagram (Reference)





434-3014-3

Figure 16. Modification of the B300/B300C Aircraft Lighting System Electrical Wires (Sheet 1)

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Figure 17. Modification of the No. 1 and No. 2 Remote Data Concentrator RDC-4002 electrical wiring (Sheet 1)

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Detail 31-51-12 Wiring Diagram (Reference)



After Modifcation Detail 31-51-12 Wiring Diagram (Reference)



434-3014-2

Figure 18. Modification of the No. 1 and No. 2 Remote Data Concentrator RDC-4002 electrical wiring (Sheet 1)





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| Type AFDR-3700 FAA TSO C113A DO-178B LEVEL A/D MFR 0EFD0 PNR 810-0346-002 DMF 2017-03-13 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 7E45386B | Type PMA-6000 FAA TSO C146c Class Delta 4 SEE INSTL MNL DO-178B Level B MFR 0EFD0 PNR 810-0192-100 DMF 2014-10-20 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 C163C526 |
|---|--|
| TYPE APCT-3700FAA TSO C113a SEE INSTL MNLDO-178C Level AMFR 0EFD0PNR 810-0422-200DMF 2017-04-03Rockwell Collins Inc. Cedar Rapids, IA 52498 USCRC-32 DCB8C8EF | Type FDSA-6500 FAA TSO C113 SEE INSTL MNL DO-178B Level A MFR 0EFD0 PNR 810-0234-1H0103 DMF 2014-04-11 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 838E3722 |
| 434-310011-0019 ICIT-434-310011-0019 BLACK LABEL ICIT ASSEMBLY MFR 0EFD0 434-310011-0019 R1 DMF 2014-09-26 FUSION SOFTWARE VERSION 3 CRC-32 AD3C187B | Type FSA-6000 FAA TSO C165 SEE INSTL MNL DO-178B Level C MFR 0EFD0 PNR 810-0072-302 DMF 2014-09-29 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 25765997 |
| Type IMAT-3700 FAA TSO C113a SEE INSTL MNL DO-178B Level A MFR 0EFD0 PNR 810-0352-004 DMF 2017-04-11 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 D5BBAD7B | Type EICAS-6000 FAA TSO C113 SEE INSTL MNL DO-178B Level B MFR 0EFD0 PNR 810-0245-1H0010 DMF 2017-07-12 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 2CC6A0E3 |
| Type ECDA-6000 FAA TSO C113a SEE INSTL MNL DO-178B Level B MFR 0EFD0 PNR 810-0233-100 DMF 2014-08-21 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 4C3CA1E6 | Type OMSA-6000 FAA TSO C113a SEE INSTL MNL DO-178B Level C/D MFR 0EFD0 PNR 810-0106-251 DMF 2017-03-15 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 2137DB81 |
| Type ODLA-3500 FAA TSO C113a SEE INSTL MNL DO-178B Level B MFR 0EFD0 PNR 810-0345-1R0001 DMF 2016-09-07 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 937FF091 | Type ATF-3510 FAA TSO C151c DO-178C Level C MFR 0EFD0 PNR 810-0391-001 DMF 2017-04-04 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 BB23B3CA |
| Type RTSA-3700 FAA TSO C169a SEE INSTL MNL DO-178B Level B MFR 0EFD0 PNR 810-0048-702 DMF 2017-02-21 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 7416098 | Type OMST-6000 FAA TSO C113a SEE INSTL MNL DO-178C Level C/D MFR 0EFD0 PNR 810-0099-1H0003 DMF 2017-03-15 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 D9E5BCF9 |
| Type FMSA-6010 FAA TSO C146c Class Gamma 3 SEE INSTL MNL DO-178B Level B FR 0EFD0 PNR 810-0163-1R0001 DMF 2016-09-19 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 5B829061 | |

Figure 20. AFD Configuration Nameplates For PFD1, PFD2 and MFD (Sheet 1)



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E72612

| Type AFDR-3700 FAA TSO C113A DO-178B LEVEL A/D MFR 0EFD0 PNR 810-0346-002 DMF 2017-03-13 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 7E45386B | Type PMA-6000 FAA TSO C146c Class Delta 4 SEE INSTL MNL DO-178B Level B MFR 0EFD0 PNR 810-0192-100 DMF 2014-10-20 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 C163C526 |
|---|---|
| Type APCT-3700 FAA TSO C113a SEE INSTL MNL DO-178C Level A MFR 0EFD0 PNR 810-0422-003 DMF 2017-10-24 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 28097F94 | Type FDSA-6500 FAA TSO C113 SEE INSTL MNL DO-178B Level A MFR 0EFD0 PNR 810-0234-1H0103 DMF 2014-04-11 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 838E3722 |
| 434-310011-0021 ICIT-434-310011-0021 BLACK LABEL ICIT ASSEMBLY MFR 0EFD0 434-310011-0021 R1 DMF 2014-09-26 FUSION SOFTWARE VERSION 3 CRC-32 50D35771 | Type FSA-6000 Karal FAA TSO C165 SEE INSTL MNL MFR 0EFD0 DO-178B Level C MFR 0EFD0 PNR 810-0072-302 DMF 2014-09-29 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 25765997 |
| Type IMAT-3700 FAA TSO C113a SEE INSTL MNL DO-178B Level A MFR 0EFD0 PNR 810-0352-004 DMF 2017-04-11 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 D5BBAD7B | Type EICAS-6000 FAA TSO C113 SEE INSTL MNL DO-178B Level B MFR 0EFD0 PNR 810-0245-1H0010 DMF 2017-07-12 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 2CC6A0E3 |
| Type ECDA-6000 FAA TSO C113a SEE INSTL MNL DO-178B Level B MFR 0EFD0 PNR 810-0233-100 DMF 2014-08-21 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 4C3CA1E6 | Type OMSA-6000 FAA TSO C113a SEE INSTL MNL DO-178B Level C/D MFR 0EFD0 PNR 810-0106-251 DMF 2017-03-15 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 2137DB81 |
| Type ODLA-3500 FAA TSO C113a SEE INSTL MNL DO-178B Level B MFR 0EFD0 PNR 810-0345-1R0001 DMF 2016-09-07 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 937FF091 | Type ATF-3510 FAA TSO C151c DO-178C Level C MFR 0EFD0 PNR 810-0391-001 DMF 2017-04-04 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 BB23B3CA |
| Type RTSA-3700 FAA TSO C169a SEE INSTL MNL DO-178B Level B MFR 0EFD0 PNR 810-0048-702 DMF 2017-02-21 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 7416098 | Type OMST-6000 FAA TSO C113a SEE INSTL MNL DO-178C Level C/D MFR 0EFD0 PNR 810-0099-1H0003 DMF 2017-03-15 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 D9E5BCF9 |
| Type FMSA-6010 FAA TSO C146c Class Gamma3 SEE INSTL MNL DO-178B Level B MFR 0EFD0 PNR 810-0163-1R0001 DMF 2016-09-19 Rockwell Collins Inc. Cedar Rapids, IA 52498 US CRC-32 5B829061 | |

Figure 20. AFD Configuration Nameplates For PFD1, PFD2 and MFD (Sheet 2)

SERVICE BULLETIN

Beechcraft **Hawker**

TEXTRON AVIATION





SERVICE BULLETIN

Reechcraft

SB 34-4171

MATERIAL INFORMATION

NOTE: This Material Information section has multiple parts kits that all aircraft will need to order to install this service bulletin. These kits are separated by aircraft type and configuration. All aircraft that have not been upgraded to Pro Line Fusion Phase 2 will order at the minimum two separate kits, the first being the SB 34-4171-0 or SB 34-4171-1 electrical wire kit and either SB 34-4171-2 or SB 34-4171-3 kits.

SB This electrical wire kit is for Beechcraft Model B200GT/B200CGT and C90GTi that have not

- 34-4171-0 been upgraded to Pro Line Fusion Phase 2. This kit includes marked electrical wires with all the necessary splices, contacts, contact pins common across both aircraft configurations. This kit is applicable to all B200GT/B200CGT and C90GTi serial number on this service bulletin.
- SB This electrical wire kit is for Beechcraft Model B300/B300C that have not been upgraded to Pro 34-4171-1 Line Fusion Phase 2. This kit includes marked electrical wires with all the necessary splices, contacts, contact pins, contact sockets and terminal junctions common across the B300/B300C configurations. This kit is applicable to all B300/B300C serial numbers on this service bulletin
- SB This parts kit is for Beechcraft Models B200GT/B200CGT, B300/B300C and C90GTi that have 34-4171-2 not been upgraded to Pro Line Fusion Phase 2. This kit includes placards, sleeving, and annunciator switch common across all aircraft configurations. This kit is applicable to B300 serial numbers FL-954, FL-1031, thru FL-1076, FL-1078 and FL-1079 and B300C serial number FM-66 thru FM-70 in standard weight configurations, or with kit 130-3420-0003 or productions modification 13M000030-0015 already install in the heavy weight configuration. C90GTi serial numbers LJ-2129 thru LJ-2136.
- SB This parts kit is for Beechcraft Model B300/B300C that have not been upgraded to Pro 34-4171-3 Line Fusion Phase 2. This kit includes placards, sleeving, and annunciator switch. This kit is applicable to B300 serial number FL-1010 in the standard weight configuration, or with kit 130-3420-0003 or production modification 13M00003-0015 already in the heavy weight configuration.

| NEW P/N | QUANTITY | KEY WORD | OLD P/N | INSTRUCTIONS/ DISPOSITION/ REFERENCE- DESIGNATION |
|---------------|-----------|--|---------|--|
| SB 34-4171-0 | 1 | Kit, consisting of the following parts: | | |
| D436-52 | 1 | Splice | N/A | Install |
| D-436-60 | 2 | Splice | N/A | Install |
| M39029/63-368 | 2 | Pin Contact | N/A | Install |
| M39029/64-369 | 4 | Pin Contact | N/A | Install |
| 131681AJ22-9 | 10 inches | Electrical Wire 1RV108C22 | N/A | 2310P1 |
| 131681AJ22-9 | 10 inches | Electrical Wire 1RV108B22 | N/A | 2310P1 |
| 131681AJ22-9 | 7 inches | Electrical Wire 2RV108B22 | N/A | 2310P2 |
| 131681AJ22-9 | 7 inches | Electrical Wire 2RV108C22 | N/A | 2310P2 |
| 372-2514-110 | 4 | Contact | N/A | Install |
| SB 34-4171 | 1 | Instructions | N/A | Install |

SERVICE BULLETIN

Beechcraft **Harwker**

TEXTRON AVIATION

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| NEW P/N | QUAN- TITY | KEY WORD | OLD P/N | INSTRUCTIONS/ DISPOSITION |
|----------------|---------------|--|---------|------------------------------|
| SB 34-4171-1 | 1 | Kit, consisting of the following parts: | | |
| 56-075-650-02 | 2 feet | Sleeving | N/A | Install |
| CB3019CR3N750 | 1 | Mount Cable Tie | N/A | Install |
| D-436-52 | 1 | Splice | N/A | Install |
| D-436-60 | 2 | Splice | N/A | Install |
| D-436-36 | 1 | Splice | N/A | Install |
| MS3367-1-9 | 1 | Tie Wrap | N/A | Install |
| M39018/03-0726 | 1 | Capacitor | N/A | Install |
| M39029/1-101 | 4 | Pin Contact | N/A | Install |
| M39029/57-354 | 1 | Socket Contact | N/A | Install |
| M39029/5-115 | 2 | Socket | N/A | Install |
| M39029/63-368 | 1 | Socket Contact | N/A | Install |
| M39029/64-369 | 1 | Pin Contact | N/A | Install |
| M81824/1-2 | 3 | Splice | N/A | Install |
| RLR32C9091FR | 1 | Resistor | N/A | Install |
| TJSE20702 | 2 | Terminal Junction | N/A | Install |
| 101S-C1 | 1 | Decal | N/A | Install |
| 101S-R41 | 1 | Decal | N/A | Install |
| 115110-D10 | 1 | Ring Tongue Terminal | N/A | Install |
| 131681AJ22-9 | 6 feet | Electrical Wire W371A22 | N/A | J372 |
| 131681AJ22-9 | 10 feet | Electrical Wire 3FH180A22 | N/A | P3160P3, P9183P22 |
| 131681AJ22-9 | 2 feet | Electrical Wire J2-VR41-1-20 | N/A | A110J2 |
| 131681AJ22-9 | 9 inches | Electrical Wire GS-C1SP1-20 | N/A | A110J2 |
| 131681AJ22-9 | 10 inches | Electrical Wire 1RV108B22 | N/A | 2310P1 |
| 131681AJ22-9 | 11 inches | Electrical Wire W179A22 | N/A | P676 |
| 131681AJ22-9 | 10 inches | Electrical Wire 1RV108C22 | N/A | 2310P1 |
| 131681AJ22-9 | 7 inches | Electrical Wire 2RV10CB22 | N/A | 2310P2 |
| 131681AJ22-9 | 7 inches | Electrical Wire 2RV108B22 | N/A | 2310P2 |
| 43-620-952-00 | 2 | Ring Tongue Terminal | N/A | Install |
| 372-2514-110 | 4 | Contact | N/A | Install |
| 60939-2 | 1 | Socket Contact | N/A | Install |
| 66103-4 | 2 | Pin Contact | N/A | Install |
| 66105-4 | 2 | Socket Contact | N/A | Install |
| SB 34-4171 | 1 | Instructions | N/A | Install |

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SB 34-4171

| NEW P/N | QUANTITY | KEY WORD | OLD P/N | INSTRUCTIONS/ DISPOSITION |
|---|-------------------------------------|---|------------------------------|------------------------------|
| SB 34-4171-2 | 1 | Kit , consisting of the following parts: | | |
| 130-340683-0403 | 1 | Pro Line Fusion Avionic Placard | N/A | Install |
| 132516-P2121 | 1 | SMS Inhibit Switch | N/A | Install |
| 584-RE5-501 | 1 | Sleeve | N/A | Install |
| SB 34-4171 | 1 | Instructions | N/A | Install |
| | | | | |
| NEW P/N | QUANTITY | KEY WORD | OLD P/N | INSTRUCTIONS/ DISPOSITION |
| NEW P/N SB 34-4171-3 | QUANTITY 1 | KEY WORD Kit , consisting of the following parts: | OLD P/N | INSTRUCTIONS/ DISPOSITION |
| NEW P/N SB 34-4171-3 132516-P2121 | QUANTITY 1 1 | KEY WORD Kit, consisting of the following parts: SMS Inhibit Switch | old P/N | INSTRUCTIONS/ DISPOSITION |
| NEW P/N SB 34-4171-3 132516-P2121 434-3014-0013 | QUANTITY 1 1 1 | KEY WORD Kit, consisting of the following parts: SMS Inhibit Switch Placard | OLD P/N N/A N/A | INSTRUCTIONS/ DISPOSITION |
| NEW P/N SB 34-4171-3 132516-P2121 434-3014-0013 584-RE5-501 | QUANTITY 1 1 1 1 | KEY WORD Kit, consisting of the following parts: SMS Inhibit Switch Placard Sleeve | old P/N N/A N/A N/A | INSTRUCTIONS/ DISPOSITION |

Airplanes that currently have an IMS-3500 installed will also need the part that follows:

| NEW P/N | QUANTITY | KEY WORD | OLD P/N | INSTRUCTIONS/ DISPOSITION |
|-----------|----------|--------------|---------|------------------------------|
| NAS451-43 | 1 | Plug, Button | N/A | Install |

Contact the Textron Aviation Parts Distribution Repair Team to schedule your unit at citationrepair@txtav.com available 8:00 - 4:30 CST weekdays. Advance notification and coordination is required for Textron Aviation Parts Distribution Repair Team to effectively schedule units, ship to supplier and arrange return. A Customer Repair Request Form is available online at ww2.txtav.com/Parts that is required to ship with every repair. The expected turn time for the supplier supporting this service document is 14 days.

Beechcraft

ATTACHMENT



SB 34-4171

FLIGHT CREW OPERATIONS SUMMARY

This summary provides additional information for the flight crew regarding operational changes as a result of accomplishment of this service bulletin. Please remove this summary from the service bulletin and give it to the flight crew. This summary is *informational only* and does not supersede any information in the FAA-approved airplane flight manual.

- Beechcraft Model C90GTi upgrading from Pro Line Fusion Phase 1 to Phase 3, refer to Pilot's Operating Handbook 434-590171-0003 for aircraft with Kit 434-3019 installed and Pro Line Fusion Software Upgrade Supplement 434-590171-0021 Original Issue or later for operational changes.
- Beechcraft Model C90GTi upgrading from Pro Line Fusion Phase 2 to Phase 3, refer to Proline Fusion
 Software Upgrade Supplement 434-590171-0021 Revision 1 or Later for operational changes.
- Beechcraft Model C90GTi can also use the electronic checklist part number 434-590171-0039.
- Beechcraft Model B200GT/B200CGT upgrading from Pro Line Fusion Phase 1 to Phase 3, refer to Pilot's Operating Handbook 434-590168-0003 for aircraft with Kit 434-3017 installed and Pro Line Fusion Software Upgrade Supplement 434-590168-0031, Original Issue or Later for operational changes.
- Beechcraft Model B200GT/B200CGT upgrading from Pro Line Fusion Phase 2 to Phase 3, refer to Pro Line Fusion Software Upgrade Supplement 434-590168-0031, Original Issue or Later for operational changes.
- Beechcraft Model B200GT/B200CGT can also use the electronic checklist part number 434-590168-0035.
- Beechcraft Model B300/B300C upgrading from Pro Line Fusion Phase 1 to Phase 3, refer to Pilot's Operating Handbook 434-590169-0003 or 434-590170-0003 for aircraft with Kit 434-3014 installed and Pro Line Fusion Software Upgrade Supplement 434-590169-0033, Original Issue or Later for operational changes.
- Beechcraft Model B300/B300C upgrading from Pro Line Fusion Phase 2 to Phase 3, refer to Pro Line Fusion Software Upgrade Supplement 434-590169-0033, Original Issue or Later for operational changes.
- Beechcraft Model B300/B300C can also use the electronic checklist part number 434-590169-0037 (standard weight airplanes) or 434-590170-0033 (heavy weight airplanes).





TITLE

NAVIGATION - PROLINE FUSION UPGRADE TO PHASE 3 SOFTWARE

TO:

Beehcraft Models B200GT/B200CGT, B300/B300C and C90GTi Aircraft Owners

REASON

To upgrade current in-service aircraft from Phase 1 and/or Phase 2 to Phase 3 Pro Line Fusion software.

COMPLIANCE

RECOMMENDED. This service document should be accomplished at a scheduled maintenance period or inspection.

LABOR HOURS

| WORK PHASE | LABOR-HOURS | |
|--|-------------|--|
| Pro Line Fusion Phase 1 to Phase 3 Wiring Modification and Software Upgrade (B300/B300C) | 95.0 | |
| Pro Line Fusion Wiring Modification and Phase 3 Software Upgrade (B200GT/B200CGT and C90GTi) | 20.0 | |
| Pro Line Fusion Phase 2 to Phase 3 IOC and Software Upgrade (B200GT/B200CGT, B300/B300C and C90GTi) | 8.0 | |

MATERIAL AVAILABILITY

| PART NUMBER | AVAILABILITY | COST |
|--------------|--------------|------|
| SB 34-4171-0 | * | * |
| SB 34-4171-1 | * | * |
| SB 34-4171-2 | * | * |
| SB 34-4171-3 | * | * |
| NAS451-43 | * | * |

* Please contact a Textron Aviation Authorized Service Facility for current cost and availability of parts listed in this service document.

WARRANTY

This service document is *recommended*. Eligible airplanes may qualify for parts and labor coverage to the extent noted in the *Labor Hours* and *Material Availability* sections of this document.

| Original Issue - November 15, 2019 | SB 34-4171 |
|------------------------------------|-------------|
| Revision C - January 12, 2021 | Page 1 of 2 |

Textron Aviation Customer Service, P.O. Box 7706, Wichita, KS 67277, U.S.A. 1-316-517-5800

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OWNER ADVISORY

Beechcraft

EXTRON AVIATION



Eligibility: Airplanes identified within the serial number effectivity of this service document.

- **Parts Coverage:** Textron Aviation-owned and Textron Aviation-authorized Service Facilities, operators may submit a claim for the parts required to accomplish this service document as defined in the *Material Availability* section of this document.
- **Labor Coverage:** Textron Aviation-owned and Textron Aviation-authorized Service Facilities rated to perform maintenance on the specific model of Beechcraft Aircraft may submit a claim for the labor necessary to accomplish this service document as defined in the *Labor Hours* section of this document.

Credit After this service document has been accomplished, a claim must be submitted to Textron **Application:** Aviation within 30 days of the service document completion. Claims for compliance of this service document are to be filed as a W4 type claim.

Please submit your claim form online at *ww2.txtav.com/Parts* or email the completed Textron Aviation Claim Form to *warranty@txtav.com*. If submitted on-line a Return Authorization will be provided. If a paper claim is submitted your claim will be entered into the system and a Return Authorization will be sent to you.

The Return Authorization must accompany any required return parts (see *Material Availability*), to the point of purchase.

Parts to be returned to Textron Aviation Parts Distribution should be forwarded to:

Textron Aviation Parts Distribution Warranty Administration 285 South Greenwich Road Bldg B89, Docks 1-4 Wichita, KS 67206 USA

Expiration: December 31, 2021

Textron Aviation reserves the right to void continued airplane warranty coverage for the parts affected by this service document until the service document is accomplished.

NOTE: As a convenience, service documents are now available online to all our customers through a simple, free-of-charge registration process. If you would like to sign up, please visit the Customer Access link at www.txtavsupport.com to register.