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Technical Bulletin

Eagle Single Pilot and Copilot Lighting Upgrade

Bell 212

TBN-212-004

Revision A

February 18, 2025

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Reviewed: _____
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Released: _____
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Revision Record

Rev	Date	Description of Revision
A	See Cover Page	Initial Release

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1. Introduction

1.1. Approval

This Technical Bulletin is approved data in accordance with the following STC:

TCCA STC: SH07-28

FAA STC: SR02831NY

1.2. Purpose

This Technical Bulletin provides instructions for the Pilot and Copilot Lighting upgrade.

1.3. Effectivity

TBN-212-004-011 MSN	TBN-212-004-013 MSN
30544	30576
30599	30676
30640	30759
30687	30826
30817	30882
30866	30931
31105	31265
31118	
31218	

1.4. Compliance

Optional

1.5. Description

This Technical Bulletin provides information required for the Pilot and Copilot Lighting Upgrade on the instrument panel. These upgrades include the addition of transistors and their brackets, additional resistors and changes to the Circuit Breaker amperage value.

The -011 and -013 configuration of this Technical Bulletin provides instructions for the Pilot and Copilot Lighting Upgrade with different types of terminal modules used. The -011 configuration is using M81714/2-XXX terminal modules, while the -013 configuration is using M81714/60-XX-XX terminal module series. Verify the installed terminal modules for proper wiring interconnections.

1.6. Manpower

The hours below are the approximate time required to complete this bulletin. Man-hours are based on direct labour performed by experienced persons and do not include planning, familiarization, part fabrication, time to acquire tools or lost time.

Item	Task	Man-hours	Max. Person	Elapsed Time
1	Job Set-Up	1	2	0.5
2	Installation	14	2	7
3	Close Out	1	2	0.5
	Total	16		8

Table 1 – Manpower

2. Installation Data

2.1. Parts and Materials

The Parts and Materials required for the installation are defined in document KIT-212-006 Kit List, Eagle Single Pilot and Copilot Lighting Upgrade.

Part Number	Description	Note
KIT-212-006-001	Installation Kit	TBN-212-004-011

Table 2 – KIT-212-006 Installation Kit

2.2. Removed Parts

The following parts are removed from the aircraft:

Qty	Reference Designator	Part Number	Description
2	-	7274-11-3	Circuit Breaker, 3A

Table 3 – Removed Parts

2.3. Locally Supplied Parts

The following parts are to be obtained from local sources by the installer:

Qty	Reference Designator	Part Number	Description
AR	-	C-317	Adhesive
AR	-	130-005-2N Alt: M23053/8-002-C	Plastic Tube
AR	-	C-406	Aluminum Oxide Abrasive Paper
AR	-	C-426	Masking Tape

Table 4 – Locally Supplied Parts

2.4. Weight and Balance

The incorporation of this Technical Bulletin has a negligible effect on the rotorcraft's weight and balance. Therefore, no weight and balance amendment is needed.

2.5. Electrical Loads

The incorporation of this Technical Bulletin has no effect on the electrical load. Therefore, no electrical load analysis amendment is needed.

3. Installation Procedure

3.1. TBN-212-004-011 Installation Procedure

1. Disconnect the battery and external power in accordance with ICA-D212-725.

WARNING:
OBEY ALL THE SAFETY PRECAUTIONS WHEN PERFORMING MAINTENANCE ON OR NEAR ELECTRICAL/ELECTRONIC EQUIPMENT.

2. Remove the upper nose door to access the Upper Nose Shelf in accordance with Bell Helicopter Maintenance Manual BHT-212-MM.
3. Locate the Upper Shelf and install Inserts and Transistor Brackets in accordance with BHT-ALL-SRM-3-2-12 Application A and Figure 1.
4. Install transistors, Q10, Q11, Q12 and Q13 as shown on Figure 1.
5. On the Overhead Circuit Breaker Panel, locate Rheostat R1 connection 5. Extract and cap and stow wire L49A22-CB.
6. From the Overhead Circuit Breaker Panel, Rheostat R1, route and terminate wires to TB3 and P9001 as shown on Figure 3, sheet 1.
7. Install Resistor R65 as shown on Figure 3, sheet 1.
8. From connector J9001, route and terminate wires to the transistor, Q10 as shown on Figure 3, sheet 1.
9. From transistor, Q10, route and terminate wires to the transistor Q11 as shown Figure 3, sheet 1.
10. From transistors, Q10 and Q11, route and terminate wires to the connector, J33 as shown on Figure 3, sheet 1.
11. From connector, P33, route and terminate wire to the terminal module, 27TB1 as shown on Figure 3, sheet 1.
12. From the Overhead Circuit Breaker Panel, Rheostat R2, route and terminate wires to TB2 and P9001 as shown on Figure 3, sheet 2.
13. Install Resistor R66 as shown on Figure 3, sheet 2.
14. From connector P9001, route and terminate wires to the Rheostat R2 as shown on Figure 3, sheet 2.
15. From connector J9001, route and terminate wires to the transistor, Q12 as shown on Figure 3, sheet 2.
16. Extract L56A22 from the connector, J9001 pin N, relocate and terminate L56A22 to the transistor, Q12 as shown on Figure 3, sheet 2.
17. From transistor, Q12, route and terminate wires to the transistor, Q13 as shown Figure 3, sheet 2.
18. From transistors and Q13, route and terminate wire to the connector, J34 as shown on Figure 3, sheet 2.
19. From connector, P34, route and terminate wires to the terminal module, 27TB1 as shown on Figure 3, sheet 2.

20. If required, extract and cap and stow L52A20-CB from connector P9003 pin J as shown on Figure 3, sheet 2.

21. If required, route and terminate wire L58L20 from connector P9003 to, J34 as shown on Figure 3, sheet 2.

22. If required, route and terminate wire L58H20 from connector, P34 to terminal module 27TB1 as shown on Figure 3, sheet 2.

23. Install S201 Outside Air Temperature Light Switch on the Overhead Console as shown on Figure 5.

24. From the Outside Air Temperature Post Light, DS26, extract and cap and stow wire L51Y20.

25. From the Outside Air Temperature Post Light, DS26, route and terminate wire L147A20 to the Outside Air Temperature Light Switch, S201 as shown on Figure 3, sheet 3.

26. From the Outside Air Temperature Light Switch, S201, route and terminate wire L146A20 to the Terminal Board, TB2 as shown on Figure 3, sheet 3.

27. Access Overhead Circuit Breaker Panel left and right hand side in accordance with Bell Maintenance Manual BHT-212-MM.

28. On the Overhead Circuit Breaker Panel right hand side, locate and remove LT INST PILOT 3A circuit breaker. Install and terminate wiring to the new 5A circuit breaker as shown on Figure 2 and Figure 3, sheet 1.

29. On the Overhead Circuit Breaker Panel left hand side, locate and remove LT INST COPLT 3A circuit breaker. Install and terminate wiring to the new 5A circuit breaker as shown on Figure 2 and Figure 3, sheet 1.

30. Close out and secure Overhead Circuit Breaker Panel left and right hand side in accordance with Bell Maintenance Manual BHT-212-MM.

3.2. TBN-212-004-013 Installation Procedure

1. Disconnect the battery and external power in accordance with ICA-D212-725.

WARNING:
OBEY ALL THE SAFETY PRECAUTIONS WHEN PERFORMING MAINTENANCE ON OR NEAR ELECTRICAL/ELECTRONIC EQUIPMENT.

2. Remove the upper nose door to access the Upper Nose Shelf in accordance with Bell Helicopter Maintenance Manual BHT-212-MM.
3. Locate the Upper Shelf and install Inserts and Transistor Brackets in accordance with BHT-ALL-SRM-3-2-12 Application A and Figure 1.
4. Install transistors, Q10, Q11, Q12 and Q13 as shown on Figure 1.
5. On the Overhead Circuit Breaker Panel, locate Rheostat R1 connection 5. Extract and cap and stow wire L49A22-CB.
6. From the Overhead Circuit Breaker Panel, Rheostat R1, route and terminate wires to TB3 and P9001 as shown on Figure 4, sheet 1.
7. Install Resistor R65 as shown on Figure 4, sheet 1.
8. From connector J9001, route and terminate wires to the transistor, Q10 as shown on Figure 4, sheet 1.
9. From transistor, Q10, route and terminate wires to the transistor Q11 as shown Figure 4, sheet 1.
10. From transistors, Q10 and Q11, route and terminate wires to the connector, J33 as shown on Figure 4, sheet 1.
11. From connector P33, route and terminate wire to the terminal module, 27TB1 as shown on Figure 4, sheet 1.
12. From the Overhead Circuit Breaker Panel, Rheostat R2, route and terminate wires to TB2 and P9001 as shown on Figure 4, sheet 2.
13. Install Resistor R66 as shown on Figure 4, sheet 2.
14. From connector J9001, route and terminate wires to the transistor, Q12 as shown on Figure 4, sheet 2.
15. Extract L56A22 from the connector, J9001 pin N, relocate and terminate L56A22 to the transistor, Q12 as shown on Figure 4, sheet 2.
16. From transistor, Q12, terminate wires to the transistor, Q13 as shown on Figure 4, sheet 2.
17. From transistors, Q13, route and terminate wire to the connector, J34 as shown on Figure 4, sheet 2.
18. On the Overhead Disconnect P9003, extract and cap and stow wire L52A20-CB as shown on Figure 4, sheet 2.
19. Route and terminate wire L58J20 from the Overhead Disconnect P9003 to the connector, J34 as shown on Figure 4, sheet 2.
20. From connector P34, route and terminate wires to the terminal module, 27TB1 as shown on Figure 4, sheet 2.

21. Install S201 Outside Air Temperature Light Switch on the Overhead Console as shown on Figure 5.

22. From the Outside Air Temperature Post Light, DS26, extract and cap and stow wire L51Y20.

23. From the Outside Air Temperature Post Light, DS26, route and terminate wire L147A20 to the Outside Air Temperature Light Switch, S201 as shown on Figure 4, sheet 3.

24. From the Outside Air Temperature Light Switch, S201, route and terminate wire L146A20 to the Terminal Board, TB2 as shown on Figure 4, sheet 3.

25. Access Overhead Circuit Breaker Panel left and right hand side in accordance with Bell Maintenance Manual BHT-212-MM.

26. On the Overhead Circuit Breaker Panel right hand side, locate and remove LT INST PILOT 3A circuit breaker. Install and terminate wiring to the new 5A circuit breaker as shown on Figure 2 and Figure 4, sheet 1.

27. On the Overhead Circuit Breaker Panel left hand side, locate and remove LT INST COPLT 3A circuit breaker. Install and terminate wiring to the new 5A circuit breaker as shown on Figure 2 and Figure 4, sheet 2.

28. Close out and secure Overhead Circuit Breaker Panel left and right hand side in accordance with Bell Maintenance Manual BHT-212-MM.

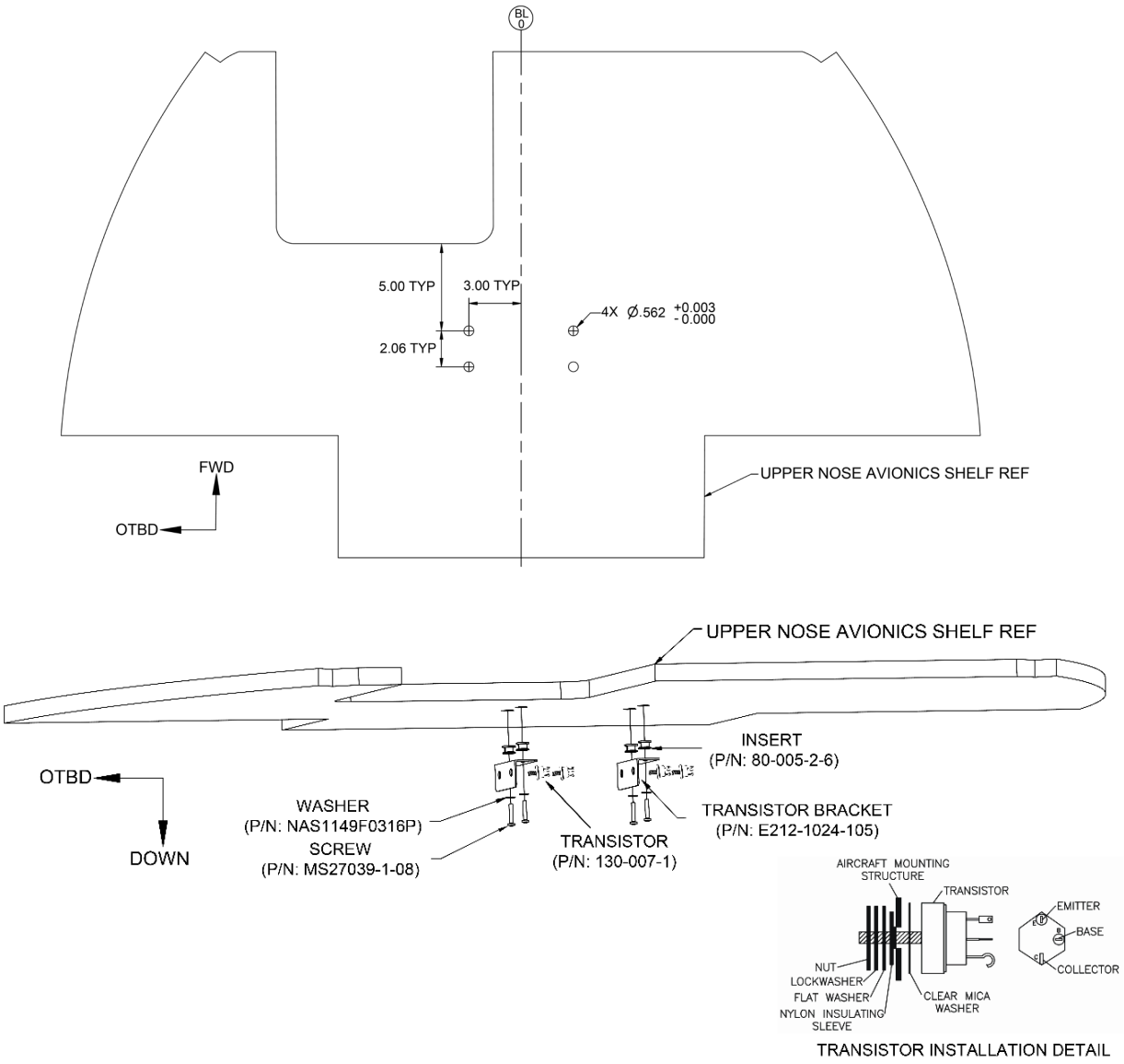


Figure 1 – Transistor Bracket Installation

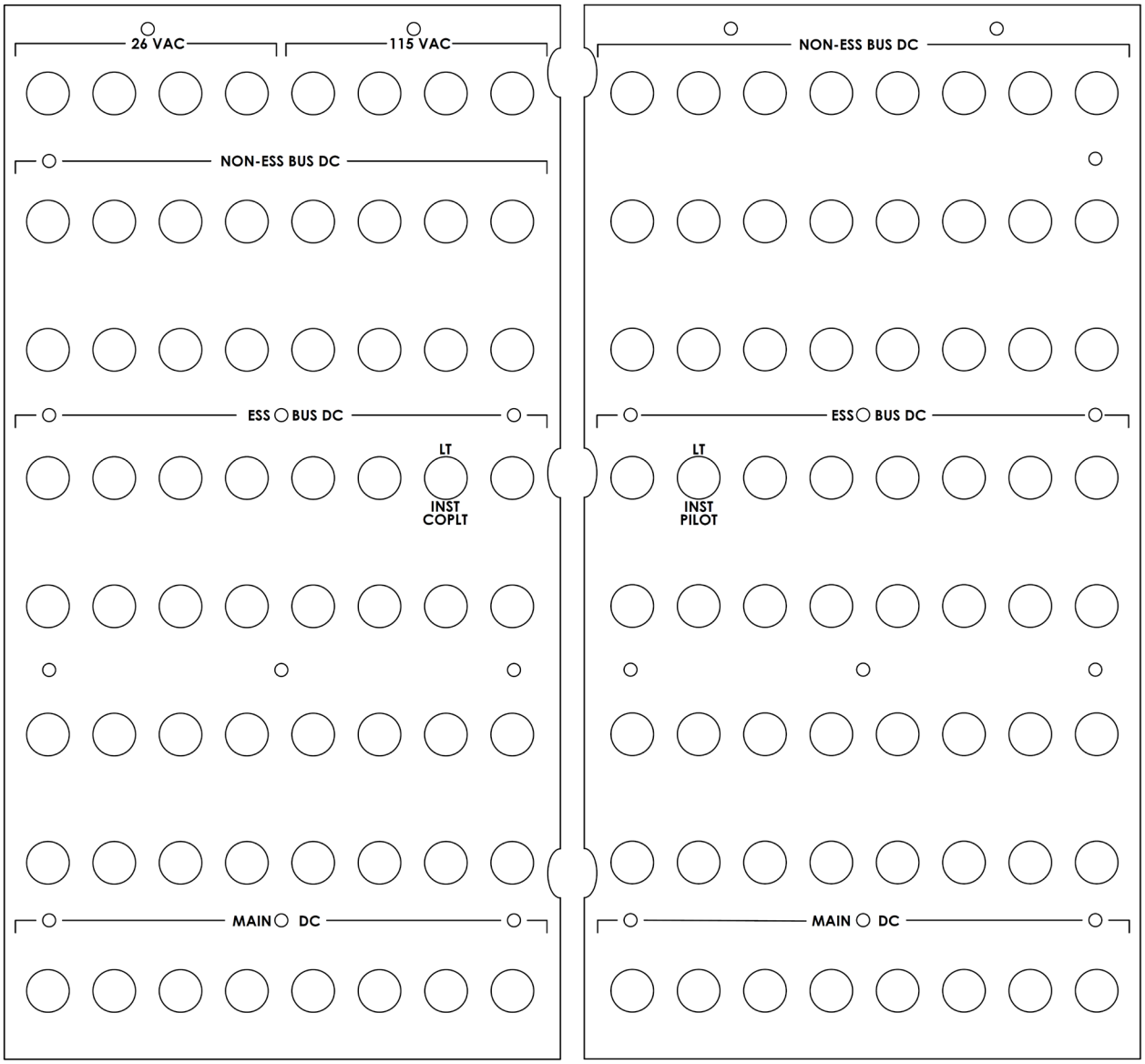
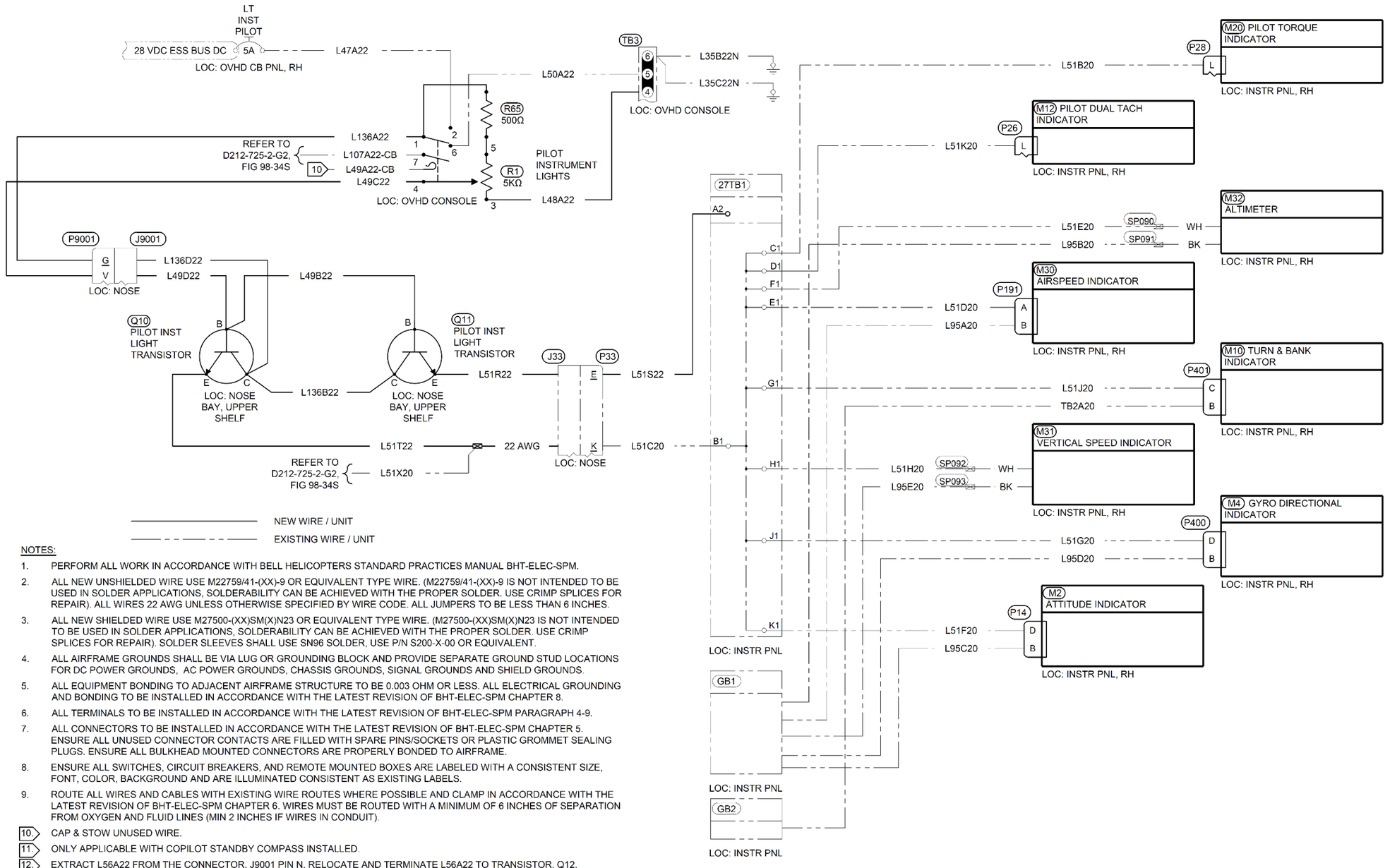


Figure 2 – Circuit Breaker Installation, Overhead Panel

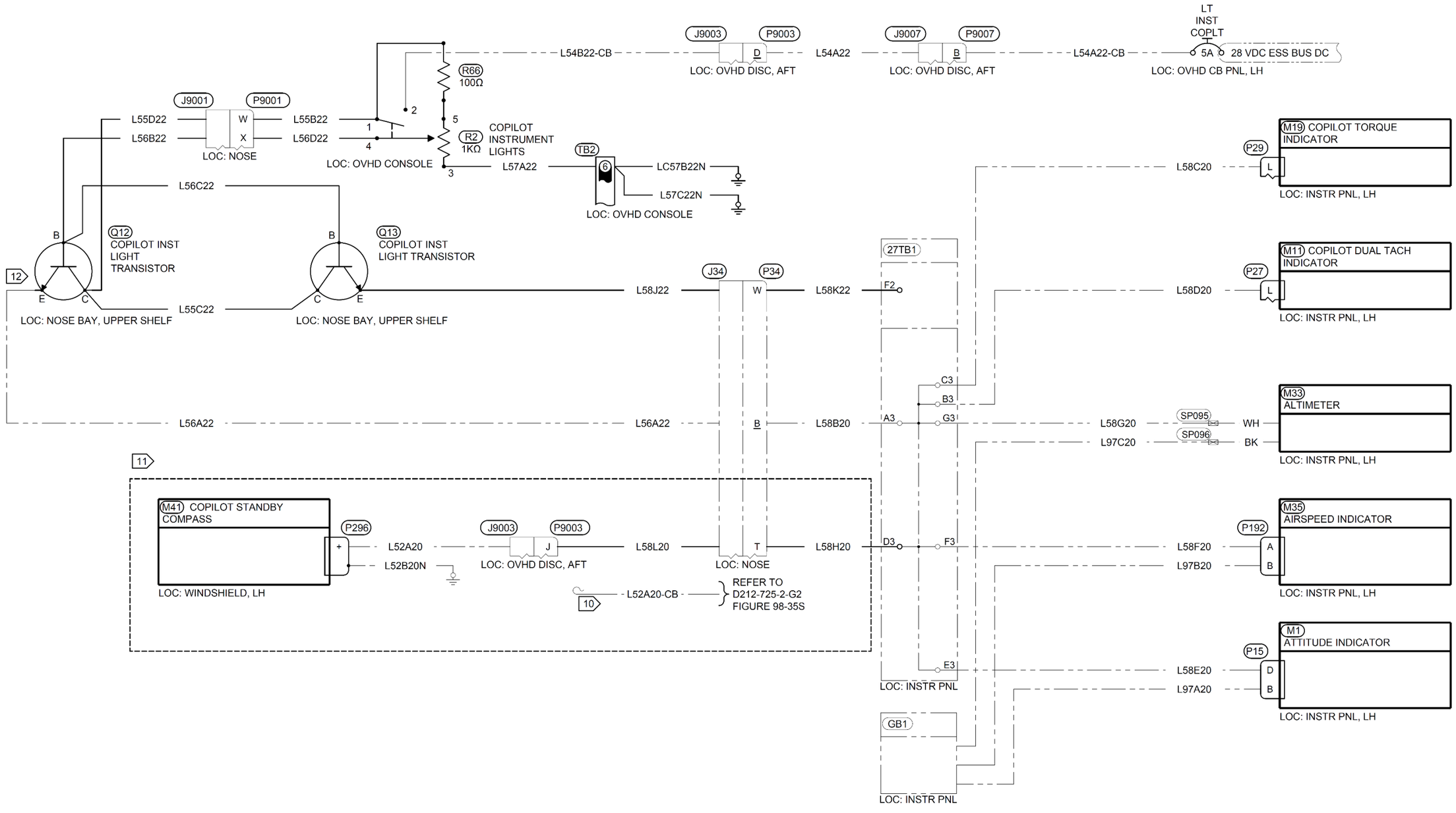


NOTES:

1. PERFORM ALL WORK IN ACCORDANCE WITH BELL HELICOPTERS STANDARD PRACTICES MANUAL BHT-ELEC-SPM.
2. ALL NEW UNSHIELDED WIRE USE M22759/41-(XX)-9 OR EQUIVALENT TYPE WIRE. (M22759/41-(XX)-9 IS NOT INTENDED TO BE USED IN SOLDER APPLICATIONS, SOLDERABILITY CAN BE ACHIEVED WITH THE PROPER SOLDER. USE CRIMP SPLICES FOR REPAIR). ALL WIRES 22 AWG UNLESS OTHERWISE SPECIFIED BY WIRE CODE. ALL JUMPERS TO BE LESS THAN 6 INCHES.
3. ALL NEW SHIELDED WIRE USE M27500-(XX)SM(X)N23 OR EQUIVALENT TYPE WIRE. (M27500-(XX)SM(X)N23 IS NOT INTENDED TO BE USED IN SOLDER APPLICATIONS, SOLDERABILITY CAN BE ACHIEVED WITH THE PROPER SOLDER. USE CRIMP SPLICES FOR REPAIR). SOLDER SLEEVES SHALL USE SN96 SOLDER, USE P/N S200-X-00 OR EQUIVALENT.
4. ALL AIRFRAME GROUNDS SHALL BE VIA LUG OR GROUNDING BLOCK AND PROVIDE SEPARATE GROUND STUD LOCATIONS FOR DC POWER GROUNDS, AC POWER GROUNDS, CHASSIS GROUNDS, SIGNAL GROUNDS AND SHIELD GROUNDS.
5. ALL EQUIPMENT BONDING TO ADJACENT AIRFRAME STRUCTURE TO BE 0.003 OHM OR LESS. ALL ELECTRICAL GROUNDING AND BONDING TO BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF BHT-ELEC-SPM CHAPTER 8.
6. ALL TERMINALS TO BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF BHT-ELEC-SPM PARAGRAPH 4-9.
7. ALL CONNECTORS TO BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF BHT-ELEC-SPM CHAPTER 5. ENSURE ALL UNUSED CONNECTOR CONTACTS ARE FILLED WITH SPARE PINS/SOCKETS OR PLASTIC GROMMET SEALING PLUGS. ENSURE ALL BULKHEAD MOUNTED CONNECTORS ARE PROPERLY BONDED TO AIRFRAME.
8. ENSURE ALL SWITCHES, CIRCUIT BREAKERS, AND REMOTE MOUNTED BOXES ARE LABELED WITH A CONSISTENT SIZE, FONT, COLOR, BACKGROUND AND ARE ILLUMINATED CONSISTENT AS EXISTING LABELS.
9. ROUTE ALL WIRES AND CABLES WITH EXISTING WIRE ROUTES WHERE POSSIBLE AND CLAMP IN ACCORDANCE WITH THE LATEST REVISION OF BHT-ELEC-SPM CHAPTER 6. WIRES MUST BE ROUTED WITH A MINIMUM OF 6 INCHES OF SEPARATION FROM OXYGEN AND FLUID LINES (MIN 2 INCHES IF WIRES IN CONDUIT).
10. CAP & STOW UNUSED WIRE.
11. ONLY APPLICABLE WITH COPILOT STANDBY COMPASS INSTALLED.
12. EXTRACT L56A22 FROM THE CONNECTOR, J9001 PIN N, RELOCATE AND TERMINATE L56A22 TO TRANSISTOR, Q12.

-011 PILOT INSTRUMENT LIGHTS (1 OF 3)

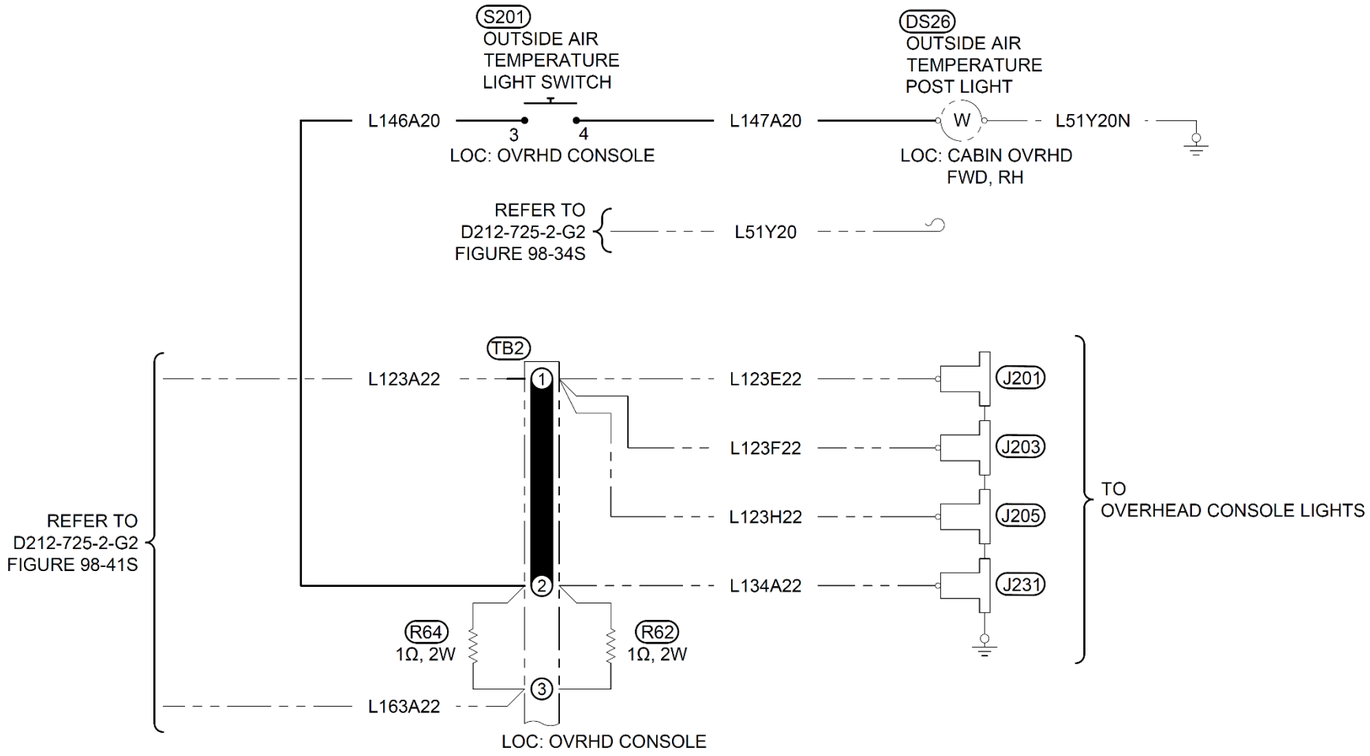
Figure 3 – TBN-212-004-011 Wiring Diagram



-011 COPILOT INSTRUMENT LIGHTS (2 OF 3)

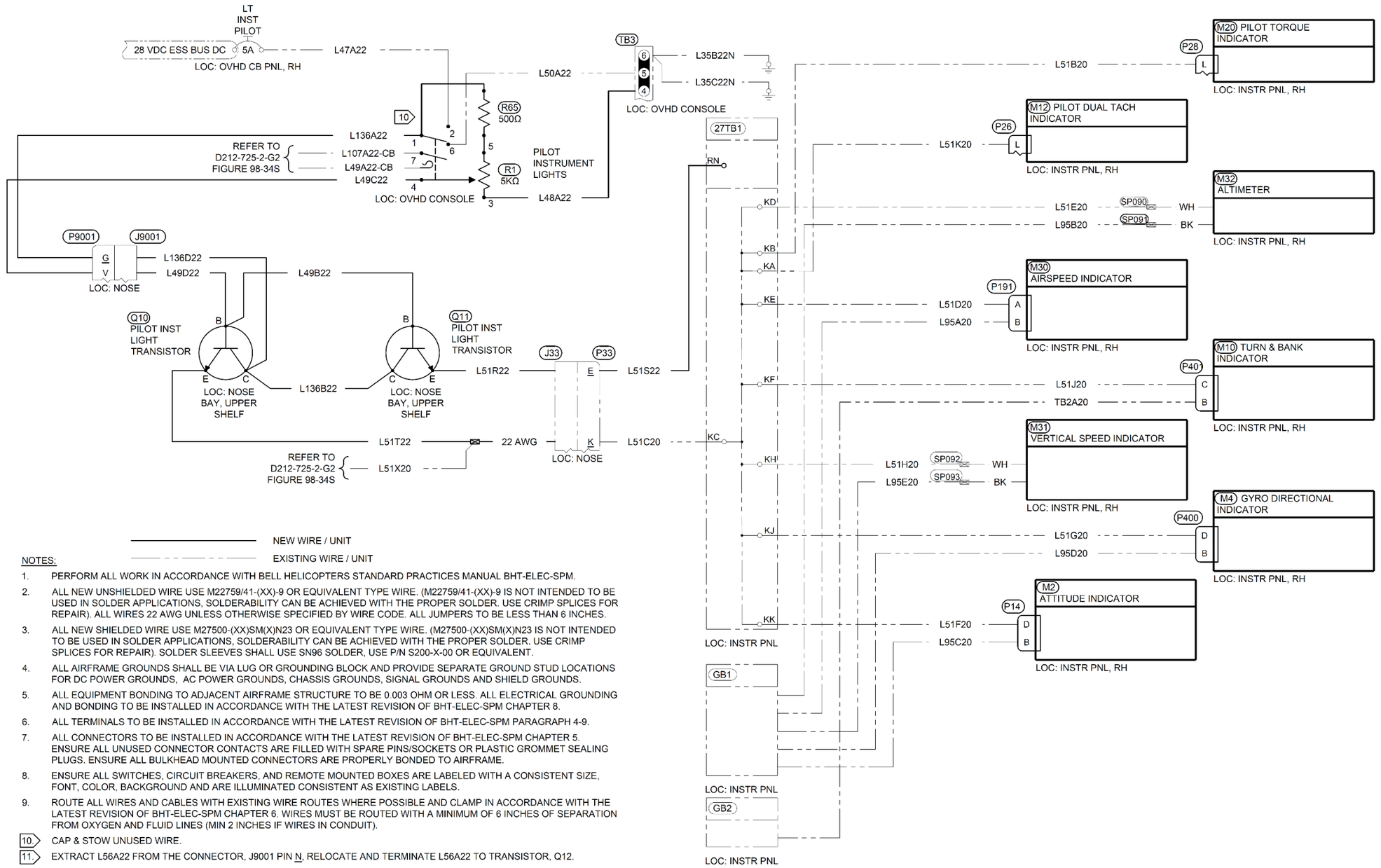
Figure 3 – TBN-212-004-011 Wiring Diagram

Reference Designator	Part Number	Description
-	7274-11-5	Circuit Breaker, 5A
27TB1-2	M39029/1-101	Contacts, Pin
27TB1-3	M39029/1-101	Contacts, Pin
J33	D-436-82	Splice
J33	M39029/5-115	Contacts, Socket
J34	M39029/5-115	Contacts, Socket
J9001	M39029/29-212	Contacts, Pin
P33	M39029/4-110	Contacts, Pin
P34	M39029/4-110	Contacts, Pin
P9001	M39029/30-218	Contacts, Socket
Q10	130-007-1	Transistor
Q11	130-007-1	Transistor
Q12	130-007-1	Transistor
Q13	130-007-1	Transistor
R65	RCR32G501JS ALT: RWR89S5000FRB12	Resistor, 500Ω
R66	RCR32101JS	Resistor, 100Ω
S201	MS25089-3C	Switch, OAT Light
TB2	MS25036-102	Ring Terminal
TB3	MS25036-102	Ring Terminal



-011 OUTSIDE AIR TEMPERATURE POST LIGHT (3 OF 3)

Figure 3 – TBN-212-004-011 Wiring Diagram



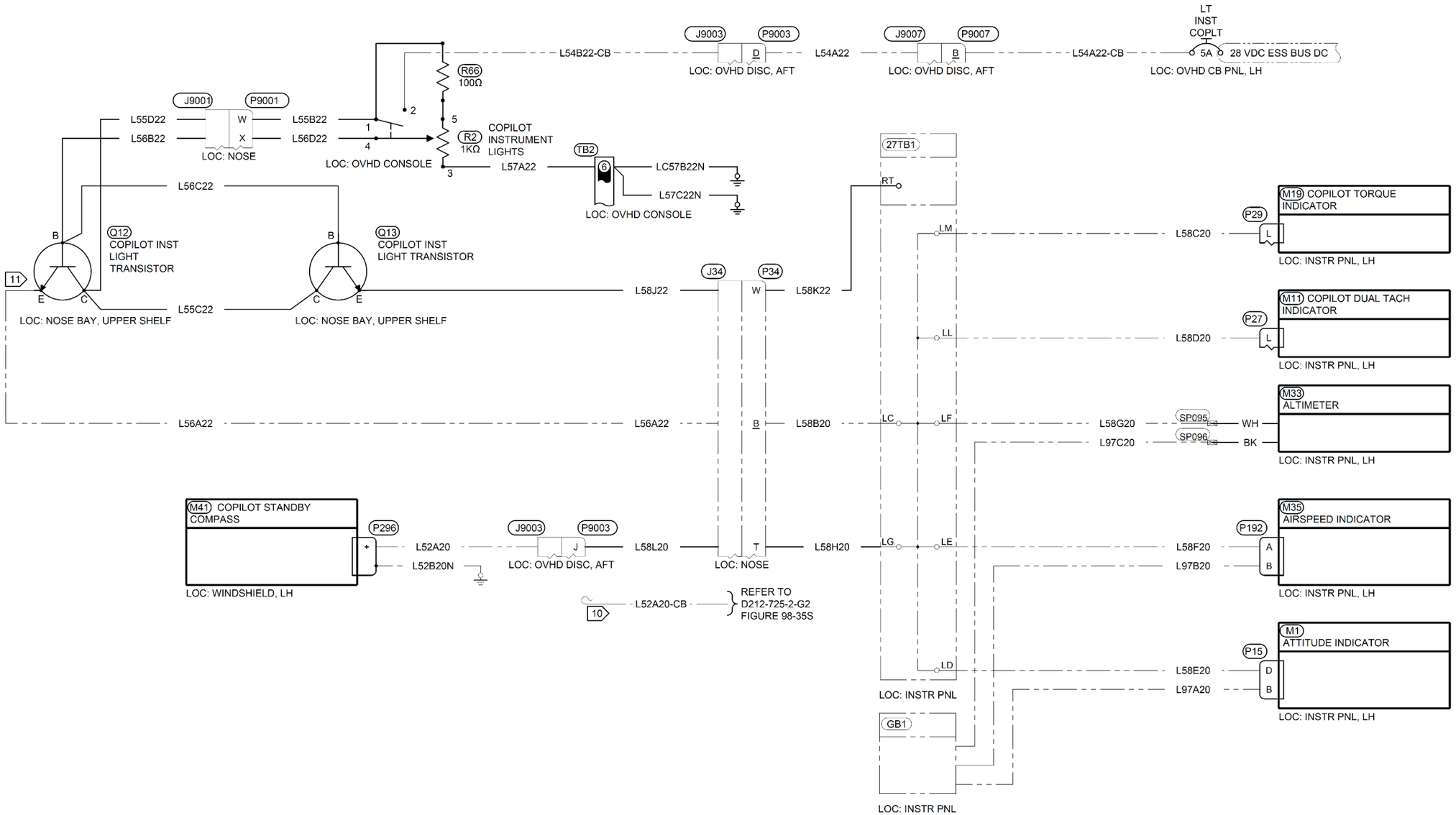
NOTES:

1. PERFORM ALL WORK IN ACCORDANCE WITH BELL HELICOPTERS STANDARD PRACTICES MANUAL BHT-ELEC-SPM.
2. ALL NEW UNSHIELDED WIRE USE M22759/41-(XX)-9 OR EQUIVALENT TYPE WIRE. (M22759/41-(XX)-9 IS NOT INTENDED TO BE USED IN SOLDER APPLICATIONS, SOLDERABILITY CAN BE ACHIEVED WITH THE PROPER SOLDER. USE CRIMP SPLICES FOR REPAIR). ALL WIRES 22 AWG UNLESS OTHERWISE SPECIFIED BY WIRE CODE. ALL JUMPERS TO BE LESS THAN 6 INCHES.
3. ALL NEW SHIELDED WIRE USE M27500-(XX)SM(X)N23 OR EQUIVALENT TYPE WIRE. (M27500-(XX)SM(X)N23 IS NOT INTENDED TO BE USED IN SOLDER APPLICATIONS, SOLDERABILITY CAN BE ACHIEVED WITH THE PROPER SOLDER. USE CRIMP SPLICES FOR REPAIR). SOLDER SLEEVES SHALL USE SN96 SOLDER, USE P/N S200-X-00 OR EQUIVALENT.
4. ALL AIRFRAME GROUNDS SHALL BE VIA LUG OR GROUNDING BLOCK AND PROVIDE SEPARATE GROUND STUD LOCATIONS FOR DC POWER GROUNDS, AC POWER GROUNDS, CHASSIS GROUNDS, SIGNAL GROUNDS AND SHIELD GROUNDS.
5. ALL EQUIPMENT BONDING TO ADJACENT AIRFRAME STRUCTURE TO BE 0.003 OHM OR LESS. ALL ELECTRICAL GROUNDING AND BONDING TO BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF BHT-ELEC-SPM CHAPTER 8.
6. ALL TERMINALS TO BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF BHT-ELEC-SPM PARAGRAPH 4-9.
7. ALL CONNECTORS TO BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF BHT-ELEC-SPM CHAPTER 5. ENSURE ALL UNUSED CONNECTOR CONTACTS ARE FILLED WITH SPARE PINS/SOCKETS OR PLASTIC GROMMET SEALING PLUGS. ENSURE ALL BULKHEAD MOUNTED CONNECTORS ARE PROPERLY BONDED TO AIRFRAME.
8. ENSURE ALL SWITCHES, CIRCUIT BREAKERS, AND REMOTE MOUNTED BOXES ARE LABELED WITH A CONSISTENT SIZE, FONT, COLOR, BACKGROUND AND ARE ILLUMINATED CONSISTENT AS EXISTING LABELS.
9. ROUTE ALL WIRES AND CABLES WITH EXISTING WIRE ROUTES WHERE POSSIBLE AND CLAMP IN ACCORDANCE WITH THE LATEST REVISION OF BHT-ELEC-SPM CHAPTER 6. WIRES MUST BE ROUTED WITH A MINIMUM OF 6 INCHES OF SEPARATION FROM OXYGEN AND FLUID LINES (MIN 2 INCHES IF WIRES IN CONDUIT).

10. CAP & STOW UNUSED WIRE.
11. EXTRACT L56A22 FROM THE CONNECTOR, J9001 PIN N, RELOCATE AND TERMINATE L56A22 TO TRANSISTOR, Q12.

-013 PILOT INSTRUMENT LIGHTS (1 OF 3)

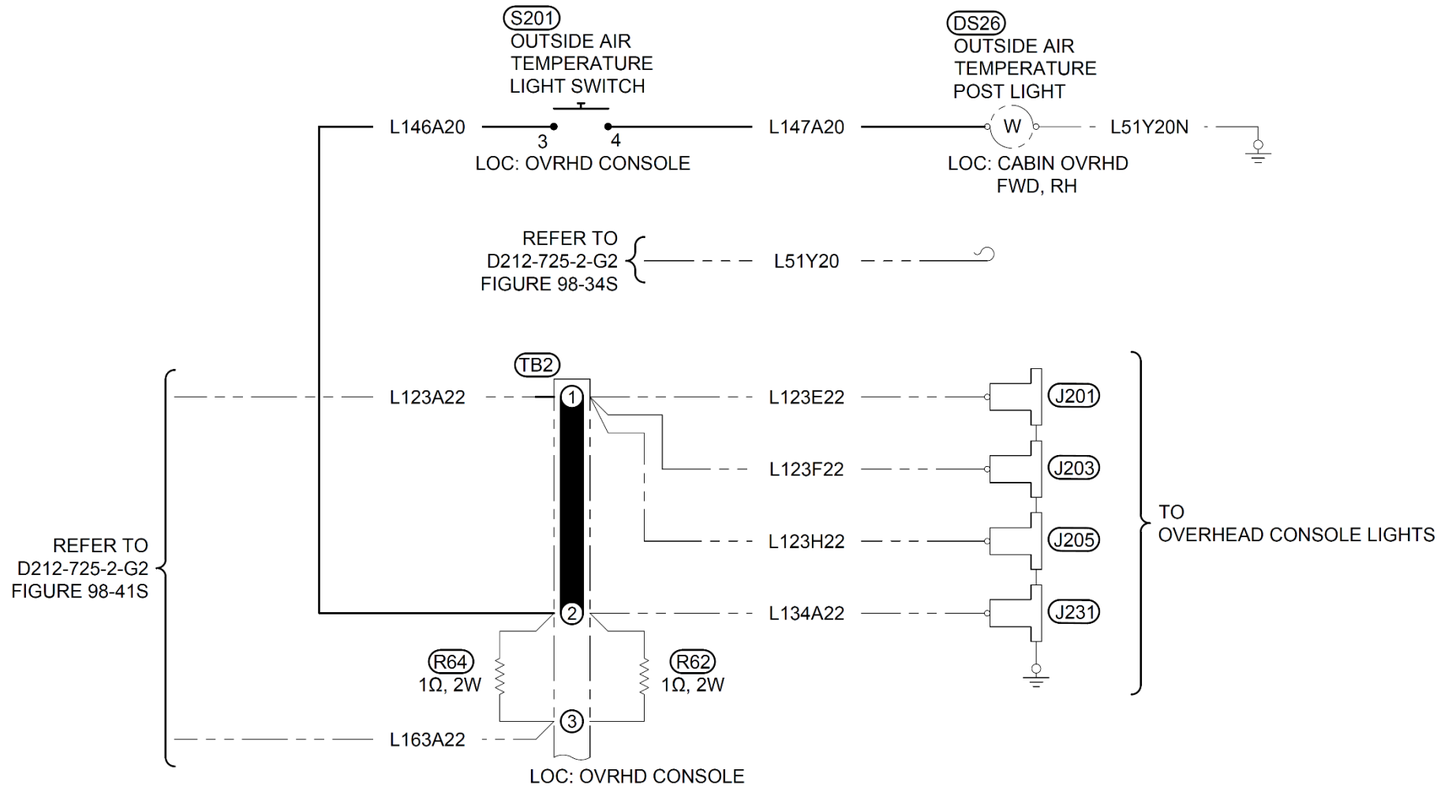
Figure 4 – TBN-212-004-013 Wiring Diagram



-013 COPILOT INSTRUMENT LIGHTS (2 OF 3)

Figure 4 – TBN-212-004-013 Wiring Diagram

Reference Designator	Part Number	Description
-	7274-11-5	Circuit Breaker, 5A
27TB1-L	M39029/22-192	Contacts, Socket
27TB2-N	M39029/22-192	Contacts, Socket
J33	D-436-82	Splice
J33	M39029/5-115	Contacts, Socket
J34	M39029/5-115	Contacts, Socket
J9001	M39029/29-212	Contacts, Pin
P33	M39029/4-110	Contacts, Pin
P34	M39029/4-110	Contacts, Pin
P9001	M39029/30-218	Contacts, Socket
Q10	130-007-1	Transistor
Q11	130-007-1	Transistor
Q12	130-007-1	Transistor
Q13	130-007-1	Transistor
R65	RCR32G501JS ALT: RWR89S5000FRB12	Resistor, 500Ω
R66	RCR32101JS	Resistor, 100Ω
S201	MS25089-3C	Switch, OAT Light
TB2	MS25036-102	Ring Terminal
TB3	MS25036-102	Ring Terminal



-013 OUTSIDE AIR TEMPERATURE POST LIGHT (3 OF 3)

Figure 4 – TBN-212-004-013 Wiring Diagram

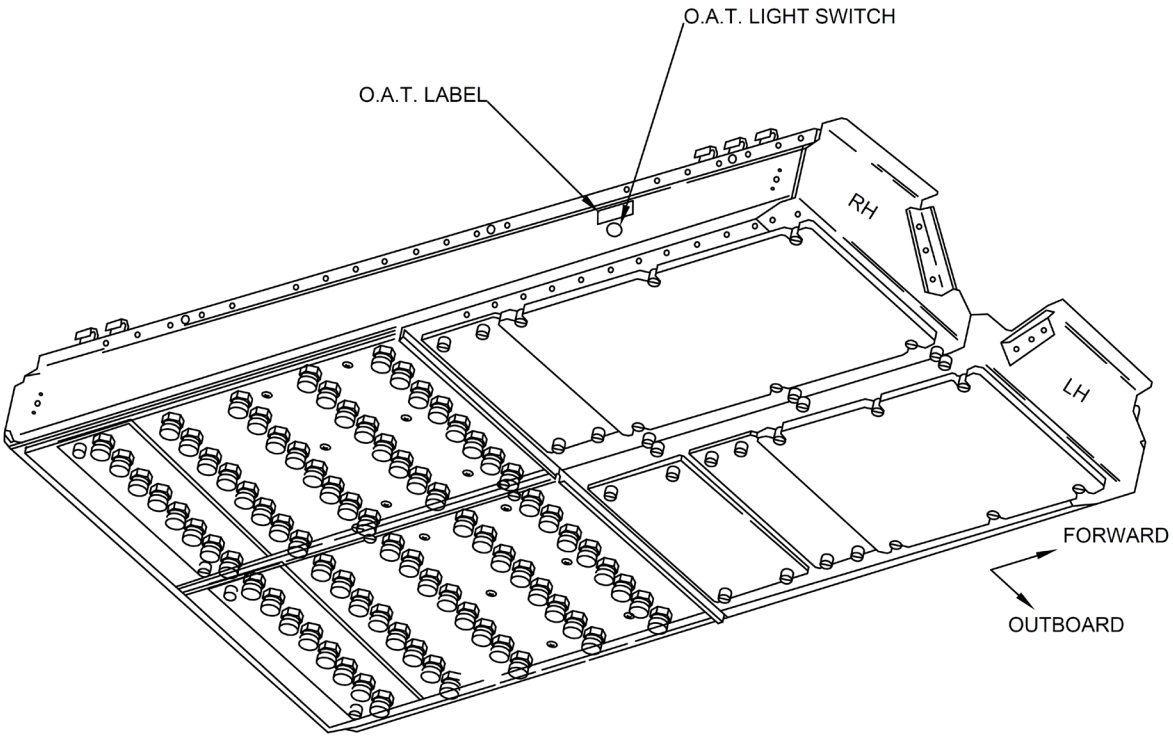


Figure 5 – O.A.T Light Switch

4. Test Procedure

1. Ensure that the circuit breakers for Pilot and Copilot Instrument Light (LT INST PILOT and LT INST COPLT) are pulled and collared.
2. Perform continuity tests for the newly installed wires in accordance with Figure 3 or Figure 4, sheets 1, 2 and 3.
3. Ensure that all cables are properly secured in accordance with Figure 3 or Figure 4, sheets 1, 2 and 3.
4. On the Nose Compartment, locate and disconnect connectors P/J33 and P/J34.
5. Connect ground power and turn on aircraft power in accordance with ICA-D212-725.

WARNING:
OBEY ALL THE SAFETY PRECAUTIONS WHEN PERFORMING MAINTENANCE ON OR NEAR ELECTRICAL/ELECTRONIC EQUIPMENT.

6. Remove collars and push in 'LT INST PILOT' Pilot Instrument Light and 'LT INST COPLT' Copilot Instrument Light circuit breakers on the Overhead Circuit Breaker Panel.
7. On connector J33, check the following pins:

PIN	MEASUREMENT	PASS/FAIL
E	Voltage varies with PILOT INSTRUMENT LT dial	Pass: ☐ Fail: ☐ Initial: _____
K	Voltage varies with PILOT INSTRUMENT LT dial	Pass: ☐ Fail: ☐ Initial: _____

Table 5 – Pilot Disconnect Power Check Results

8. On connector J34, check the following pins:

PIN	MEASUREMENT	PASS/FAIL
W	Voltage varies with COPILOT INSTRUMENT LT dial	Pass: ☐ Fail: ☐ Initial: _____
B	Voltage varies with COPILOT INSTRUMENT LT dial	Pass: ☐ Fail: ☐ Initial: _____

Table 6 – Copilot Disconnect Power Check Results

9. Pull and collar 'LT INST PILOT' Pilot Instrument Light and 'LT INST COPLT' Copilot Instrument Light circuit breakers on the Overhead Circuit Breaker Panel.
10. Reconnect both connectors P/J33 and P/J34 connectors.
11. Re-install the Upper Nose Door in accordance with Bell Maintenance Manual BHT-212-MM.
12. Remove collars and push in 'LT INST PILOT' Pilot Instrument Light and 'LT INST COPLT' Copilot Instrument Light circuit breakers on the Overhead Circuit Breaker Panel.
13. On the Overhead Panel, locate Lighting/ Electrical Control Panel and rotate PILOT INSTR LT and COPLT INSTR LT control to OFF Position.
14. Rotate PILOT INSTR LT control slightly clockwise until the switch just closes. Verify instrument lights on the pilot instrument panel are illuminated dimly.

15. Rotate PILOT INSTR LT control in clockwise direction. Verify instrument lights on the pilot instrument panel increase in brightness and are brightest when control is at extreme clockwise position.

16. Rotate PILOT INSTR LT control in counterclockwise direction. Verify instrument lights on the pilot instrument panel decrease in brightness.

17. Rotate PILOT INSTR LT control to OFF. Verify instrument lights on the pilot instrument panel extinguish.

18. Rotate COPLT INSTR LT control slightly clockwise until the switch just closes. Verify instrument lights on the copilot instrument panel are illuminated dimly.

19. Rotate COPLT INSTR LT control in a clockwise direction. Verify instrument lights on the copilot instrument panel increase in brightness and are brightest when control is at extreme clockwise position.

20. Rotate COPLT INSTR LT control in counterclockwise direction. Verifying instrument lights on the copilot instrument panel decrease in brightness.

21. Rotate COPLT INSTR LT control to OFF. Verify instrument lights on the copilot instrument panel extinguish.

22. Press and hold the O.A.T Light Switch and rotate CONSOLE LT control slightly clockwise until switch just closes. Verify lights on the overhead console and OAT post light are illuminated dimly.

23. Press and hold the O.A.T Light Switch and rotate CONSOLE LT control in a clockwise direction. Verify lights on the Overhead Console and O.A.T post light increases in brightness and are brightest when control is at extreme clockwise position.

24. Rotate CONSOLE LT control to OFF. Verify lights extinguish.

25. Ensure that all avionics systems, communications systems, and aircraft instruments are in a serviceable condition.

    The objective of the Electromagnetic Compatibility test (EMC) is to ensure there is no Electromagnetic Interference (EMI) by observing the operation of the aircraft systems and recording the results.

    The test procedure will be conducted as follows:

    a. Ensure all systems are installed and functioning correctly. All previous steps in this section must be successfully completed before beginning EMI / EMC checks.

    b. Ensure the aircraft is in a normal flight configuration. For example: all doors and windows are closed.

    c. Using ground power, test each system outlined in Table 7 and record any aircraft abnormality that would indicate whether each system is a source or victim of EMI. Evaluate all possible scenarios and ensure that as many possible system settings are tested. Repeatedly perform tasks to ensure EMC (ex, turn equipment on and off and adjust any user interfaces).

       For the specific VHF COMM tests, open the squelch of the VHF COMM #1 and VHF COMM #2 receiver and tune it to each frequency listed below (low / mid / high) and

sample various combinations of MHz / KHz frequencies across the band. Change the frequency between 118.000 to 135.975 (or 136.975 if equipped), by increasing the whole MHz and next KHz selection (ex. 118.000, 119.025, 120.050, 121.075, 122.100, 123.200 … 131.975, 132.000, 133.250, 134.500, 135.975). Listen for any potential interference caused by the newly installed units. If interference is noticed, pull the suspected system circuit breakers to verify that the suspected system is the source.

NOTE: If other radio systems that can be channeled through a frequency band are installed, they should be tested in a similar manner to the VHF COMM (for example VHF NAV receivers and certain VHF FM transceivers). If a radio system is preprogramed and only able to be tuned to pre-defined channels, test the low, middle and high bands of the available frequencies as best as possible.

d. Using engine driven generators as the power source, complete testing of any systems that could not be tested on ground power (ex. engine indications) and verify the evaluation performed in step c. Ensure that all systems are tested and any potential EMI that was noted is investigated further.

NOTE:

START AND SHUTDOWN ENGINE IN ACCORDANCE WITH FMS-D212-725-1.

26. Turn off aircraft power and disconnect ground power in accordance with ICA-D212-725.

Aircraft Systems	EMI Source: Pilot Instrument Lights		EMI Source: Copilot Instrument Lights		EMI Victim: Pilot Instrument Lights		EMI Victim: Copilot Instrument Lights		Notes
	YES	NO	YES	NO	YES	NO	YES	NO	
VHF COMM 1, 118.000 MHz									
VHF COMM 1, 127.500 MHz									
VHF COMM 1, 135.975 MHz									
VHF COMM 2, 118.000 MHz									
VHF COMM 2, 127.500 MHz									
VHF COMM 2, 135.975 MHz									
NAV (VOR/ILS) NO. 1, 108.000 MHz									
NAV (VOR/ILS) NO. 1, 108.100 MHz									
NAV (VOR/ILS) NO. 1, 113.500 MHz									
NAV (VOR/ILS) NO. 1, 117.975 MHz									
NAV (VOR/ILS) NO. 2, 108.000 MHz									
NAV (VOR/ILS) NO. 2, 108.100 MHz									
NAV (VOR/ILS) NO. 2, 113.500 MHz									
NAV (VOR/ILS) NO. 2, 117.975 MHz									
GPS1									
GPS2									
PILOT AUDIO									
COPILOT AUDIO									
PUBLIC ADDRESS SYSTEM									
PILOT PFD/MFD									
COPILOT PFD/MFD									
ADAHRS 1									
ADAHRS 2									
HSVT									
STANDBY INSTRUMENT									
STANDBY COMPASS									
TCAS I									
RADIO ALTIMETER									
TRANSPONDER									
DME									
ELT									
GENERATOR / INVERTER									
EXTERIOR LIGHTS									
INTERIOR LIGHTS									
PUMPS / MOTORS									
PILOT TORQUE									
FM 1									
FM 2									
PILOT DUAL TACH									
COPILOT DUAL TACH									
NG									
MGT									
FUEL QUANTITY									
FUEL PRESSURE									
ENG OIL TEMP AND PRESS									
XMSN OIL TEMP AND PRESS									
HYD 1 OIL TEMP AND PRESS									
HYD 2 OIL TEMP AND PRESS									
GENERATOR VOLTMETER AND AMMETER									
MASTER CAUTION PANEL									
FIRE DETECTION AND WARNING									
OTHER:									

Table 7 – EMI / EMC Check Sheet

5. Aircraft Record Set Update and Eagle Notification

1. Make an entry in the aircraft record set that TBN-212-004-011 or TBN-212-004-013 has been incorporated, as applicable.

2. Update the aircraft's Weight and Balance and Electrical Loads records with the values in Section 2 as required.

3. Notify Eagle Copters that TBN-212-004 Revision A has been incorporated by emailing the below information to customersupport@eaglecopters.com:

   Aircraft Serial Number

   Aircraft Owner

   Date Incorporated

   Configuration Incorporated