

REV	DESCRIPTION	DATE
A	NEW ISSUE	09-09-2021
B	ITEM 1 PN CHANGED, NOTE 17 REMOVED, TCAS COMPONENTS DESCRIPTION AND CB LABEL CHANGED FROM TAS TO TCAS. ADDED -013 NO DME INSTALLED CONFIGURATION	17-12-2022
C	MINOR EDITORIAL CHANGES AND REPLACED ETHERNET CABLE WITH E40424 FOR -013 CONFIGURATION AND ADDED -015 CONFIGURATION	20-08-2024

_____ NEW WIRE / UNIT
 - - - - - EXISTING WIRE / UNIT

NOTES:

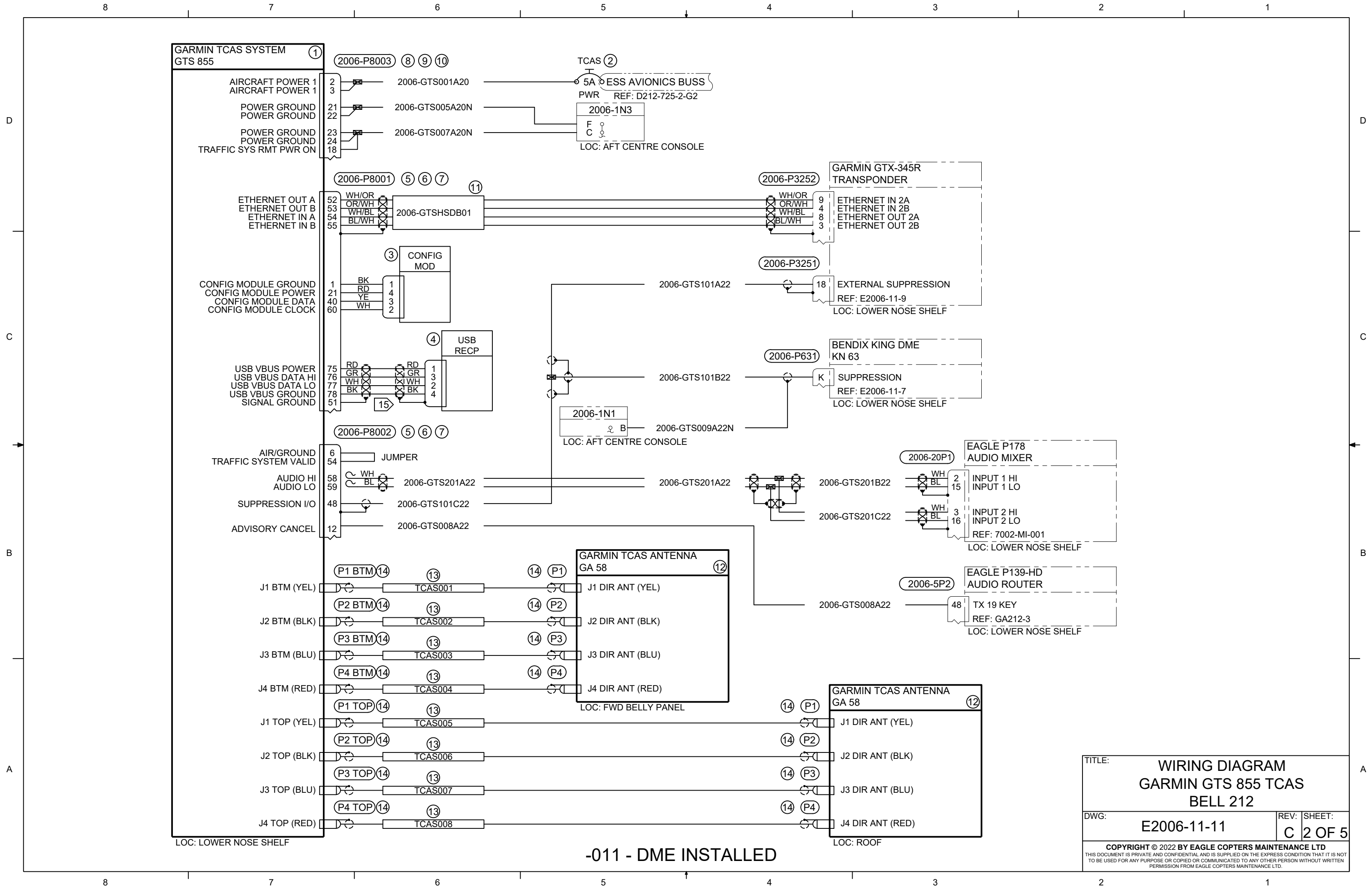
- PERFORM ALL WORK IN ACCORDANCE WITH BELL HELICOPTER STANDARD PRACTICES MANUAL BHT-ELEC-SPM.
- ALL NEW UNSHIELDED WIRE USE M22759/41-(XX)-9 OR EQUIVALENT TYPE WIRE. (M22759/41-(XX)-9 IS NOT INTENDED TO BE USED IN SOLDER APPLICATIONS, SOLDERABILITY CAN BE ACHIEVED WITH THE PROPER SOLDER. USE CRIMP SPLICES FOR REPAIR). ALL WIRES 22 AWG UNLESS OTHERWISE SPECIFIED BY WIRE CODE. ALL JUMPERS TO BE LESS THAN 6 INCHES.
- 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.
- ALL SHIELD TERMINATIONS SHALL BE INSTALLED PER MIL-S-83519 OR EQUIVALENT. SHIELD TERMINATIONS SHOWN AS "DAISY-CHAINED" ARE FOR DRAWING CLARITY ONLY. INDIVIDUAL SHIELD EXTENSIONS SHALL BE SPLICED AT A COMMON TIE POINT TO THE TERMINATING WIRES. THE BACK SHELL OR AIRFRAME GROUND MAY BE USED.
- ALL AIRFRAME GROUNDS SHALL BE VIA AMP LUG OR GROUNDING BLOCK AND PROVIDE SEPARATE GROUND STUD LOCATIONS FOR DC POWER GROUNDS, AC POWER GROUNDS, CHASSIS GROUNDS, SIGNAL GROUNDS AND SHIELD GROUNDS.
- 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.
- ALL TERMINALS TO BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF BHT-ELEC-SPM CHAPTER 4 PARAGRAPH 4-9.
- 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.
- 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.
- 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).
- INSTALL SYSTEM IN ACCORDANCE WITH THE LATEST REVISION OF THE MANUFACTURERS INSTALLATION MANUAL.
- LOWERCASE LETTER CONNECTOR PIN DESIGNATORS ARE SHOWN AS UNDERLINED UPPERCASE LETTERS.
- AS THE DRAIN WIRE IS UN-INSULATED, A TEFLON SLEEVE (18 AWG OR HIGHER) IS REQUIRED OVER THE EXPOSED AREA BACK TO THE OUTER INSULATION OF THE CABLE. REFERENCE GARMIN GTS 855 INSTALLATION MANUAL, PN: 190-00587-50 REV. M, APPENDIX B, PAGE B-6, NOTE 5.
- EACH SET OF COAX CABLE MUST BE A MATCHING SET WITH EACH INDIVIDUAL CABLE THE SAME LENGTH (WITHIN +/- 6 INCHES) AND THE LENGTH BETWEEN LRU AND ANTENNA NOT TO EXCEED 35 FT.
- INCLUDED IN KIT PN: 011-01360-01
- POWER WIRES NOT TO EXCEED 20 FT FROM A 5A CIRCUIT BREAKER.

4	--	--	18	190109	CONNECTOR, 90° STRAIGHT, TNC MALE	PIC
--	16	--	17	190508	CONNECTOR, STRAIGHT, TNC MALE	PIC
--	AR (200)	--	16	S67163	CABLE, COAX	PIC
--	AR	--	15	E40424	CABLE, ETHERNET	PIC
12	--	16	14	190108	CONNECTOR, STRAIGHT, TNC MALE	PIC
AR (200)	--	AR (200)	13	S44193	CABLE, COAX	PIC
REF	REF	REF	12	011-01346-02	GA 58 DIRECTIONAL ANTENNA	GARMIN
AR	--	AR	11	392404	CABLE, ETHERNET	CARLISLE
15	1	1	10	011-01855-03	BACKSHELL	GARMIN
15	1	1	9	330-00853-37	CONNECTOR, PLUG (J8003)	GARMIN
15	AR (9)	AR (9)	8	336-00022-00	CONTACT, SOCKET	ALT P/N: M39029/63-368
15	2	2	7	011-01855-04	BACKSHELL	GARMIN
15	2	2	6	330-00776-78	CONNECTOR, PLUG (J8001/J8002)	GARMIN
15	AR (19)	AR (19)	5	336-00021-00	CONTACT, PIN	ALT: P/N M39029/58-360
15	1	1	4	011-01782-00	USB-B PIGTAIL	GARMIN
	1	1	3	011-00979-20	CONFIGURATION MODULE	GARMIN
	1	1	2	MS26574-5	CIRCUIT BREAKER, 5A	MIL SPEC
	1	1	1	010-00962-10	GTS 855	GARMIN
				-015	NO DME INSTALLED	CARLISLE ETHERNET CABLE
				-013	NO DME INSTALLED	PIC ETHERNET CABLE
				-011	DME INSTALLED	
<u>-015 QTY</u>	<u>-013 QTY</u>	<u>-011 QTY</u>	ITEM	PART NUMBER	DESCRIPTION	REMARKS

BILL OF MATERIALS

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REVIEWED	NF	
RELEASED	JP	
SCALE:	NTS	
TITLE:	WIRING DIAGRAM GARMIN GTS 855 TCAS BELL 212	
REV:	C	DWG: E2006-11-11
		SHEET: 1 OF 5

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GARMIN TCAS SYSTEM GTS 855 ①

AIRCRAFT POWER 1
AIRCRAFT POWER 1

POWER GROUND
POWER GROUND

POWER GROUND
POWER GROUND
TRAFFIC SYS RMT PWR ON

ETHERNET OUT A
ETHERNET OUT B
ETHERNET IN A
ETHERNET IN B

CONFIG MODULE GROUND
CONFIG MODULE POWER
CONFIG MODULE DATA
CONFIG MODULE CLOCK

USB VBUS POWER
USB VBUS DATA HI
USB VBUS DATA LO
USB VBUS GROUND
SIGNAL GROUND

AIR/GROUND
TRAFFIC SYSTEM VALID

AUDIO HI
AUDIO LO

SUPPRESSION I/O

ADVISORY CANCEL

J1 BTM (YEL)
J2 BTM (BLK)
J3 BTM (BLU)
J4 BTM (RED)
J1 TOP (YEL)
J2 TOP (BLK)
J3 TOP (BLU)
J4 TOP (RED)

⑧ ⑨ ⑩

2006-GTS001A20

2006-GTS005A20N

2006-GTS007A20N

⑤ ⑥ ⑦ ⑪

2006-GTSHSDB01

③

CONFIG MOD

④

USB RECP

⑤ ⑥ ⑦

2006-P8002

JUMPER

2006-GTS201A22

2006-GTS101C22

2006-GTS008A22

⑭ ⑬

TCAS001

TCAS002

TCAS003

TCAS004

TCAS005

TCAS006

TCAS007

TCAS008

②

TCAS

5A ESS AVIONICS BUSS

PWR REF: D212-725-2-G2

2006-1N3

F
C

LOC: AFT CENTRE CONSOLE

⑨

2006-P3252

WH/OR
OR/WH
WH/BL
BL/WH

9
4
8
3

GARMIN GTX-345R
TRANSPONDER

ETHERNET IN 2A
ETHERNET IN 2B
ETHERNET OUT 2A
ETHERNET OUT 2B

⑫

2006-P3251

18

EXTERNAL SUPPRESSION

REF: E2006-11-9

LOC: LOWER NOSE SHELF

⑬

2006-P631

K

BENDIX KING DME
KN 63

SUPPRESSION

REF: E2006-11-7

LOC: LOWER NOSE SHELF

⑭

2006-1N1

B

2006-GTS101A22

2006-GTS101B22

2006-GTS009A22N

LOC: AFT CENTRE CONSOLE

⑭ ⑬

GA 58

J1 DIR ANT (YEL)
J2 DIR ANT (BLK)
J3 DIR ANT (BLU)
J4 DIR ANT (RED)

LOC: FWD BELLY PANEL

⑭ ⑬

GA 58

J1 DIR ANT (YEL)
J2 DIR ANT (BLK)
J3 DIR ANT (BLU)
J4 DIR ANT (RED)

LOC: ROOF

⑤

2006-P3252

WH/OR
OR/WH
WH/BL
BL/WH

9
4
8
3

GARMIN GTX-345R
TRANSPONDER

ETHERNET IN 2A
ETHERNET IN 2B
ETHERNET OUT 2A
ETHERNET OUT 2B

⑫

2006-P3251

18

EXTERNAL SUPPRESSION

REF: E2006-11-9

LOC: LOWER NOSE SHELF

⑬

2006-P631

K

BENDIX KING DME
KN 63

SUPPRESSION

REF: E2006-11-7

LOC: LOWER NOSE SHELF

⑮

2006-20P1

WH
BL

2
15

EAGLE P178
AUDIO MIXER

INPUT 1 HI
INPUT 1 LO

⑮

2006-20P1

WH
BL

3
16

EAGLE P178
AUDIO MIXER

INPUT 2 HI
INPUT 2 LO

REF: 7002-MI-001

LOC: LOWER NOSE SHELF

⑯

2006-5P2

48

EAGLE P139-HD
AUDIO ROUTER

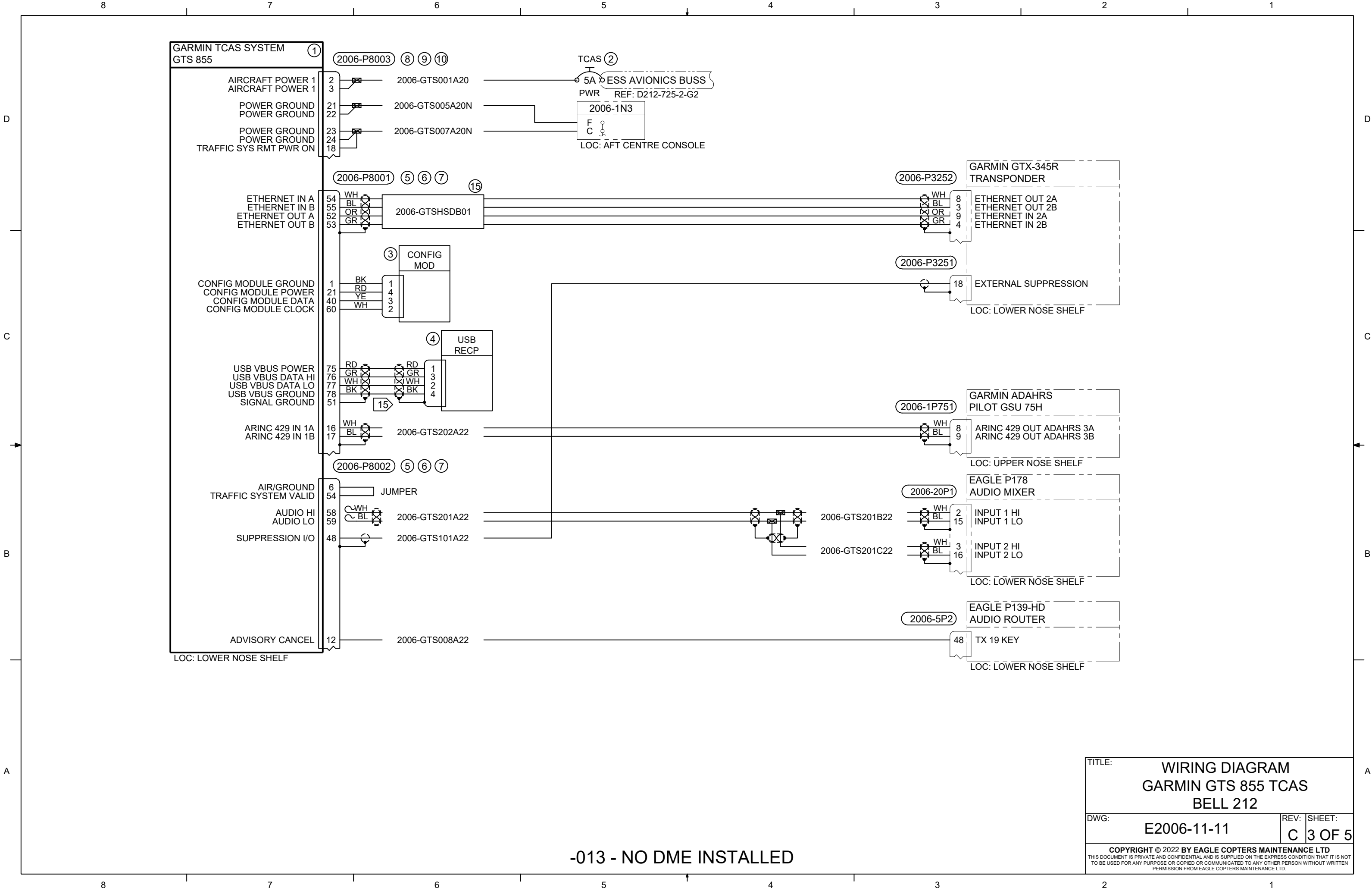
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REF: GA212-3

LOC: LOWER NOSE SHELF

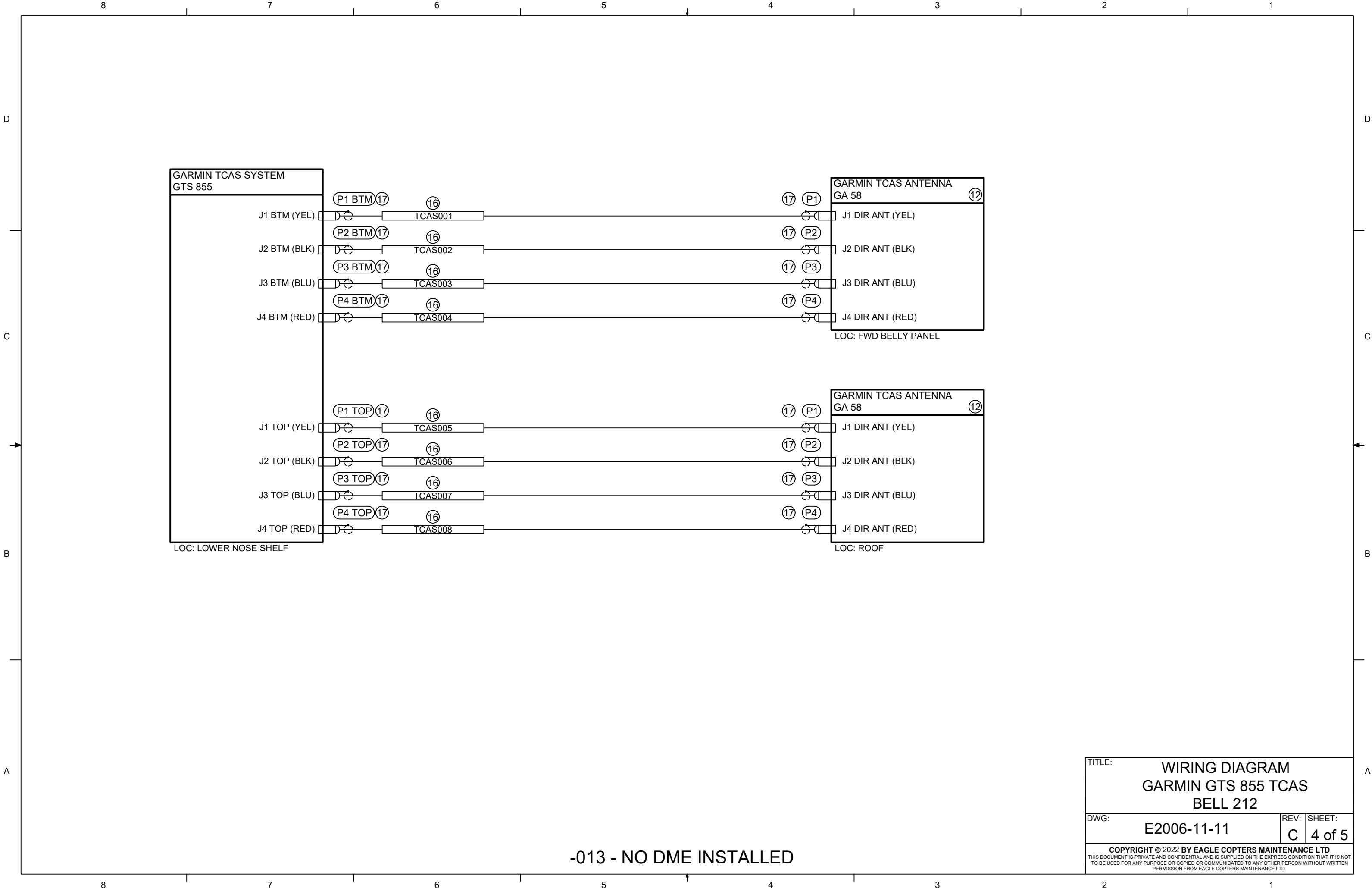
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DWG:	E2006-11-11	REV:	SHEET: C 2 OF 5
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-011 - DME INSTALLED

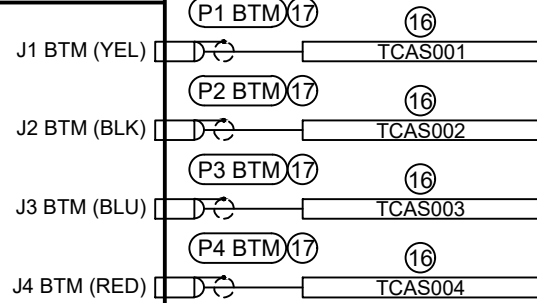


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DWG:	E2006-11-11	REV:	C
SHEET:		3 OF 5	
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-013 - NO DME INSTALLED

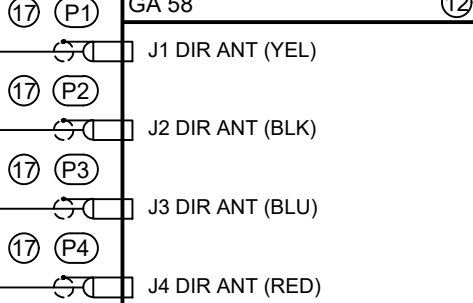


GARMIN TCAS SYSTEM
GTS 855



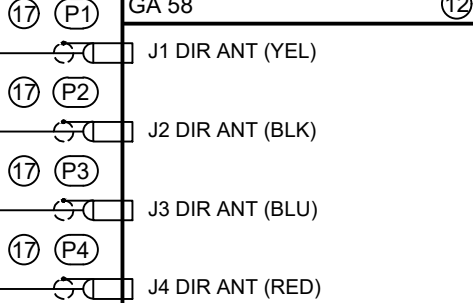
LOC: LOWER NOSE SHELF

GARMIN TCAS ANTENNA
GA 58



LOC: FWD BELLY PANEL

GARMIN TCAS ANTENNA
GA 58

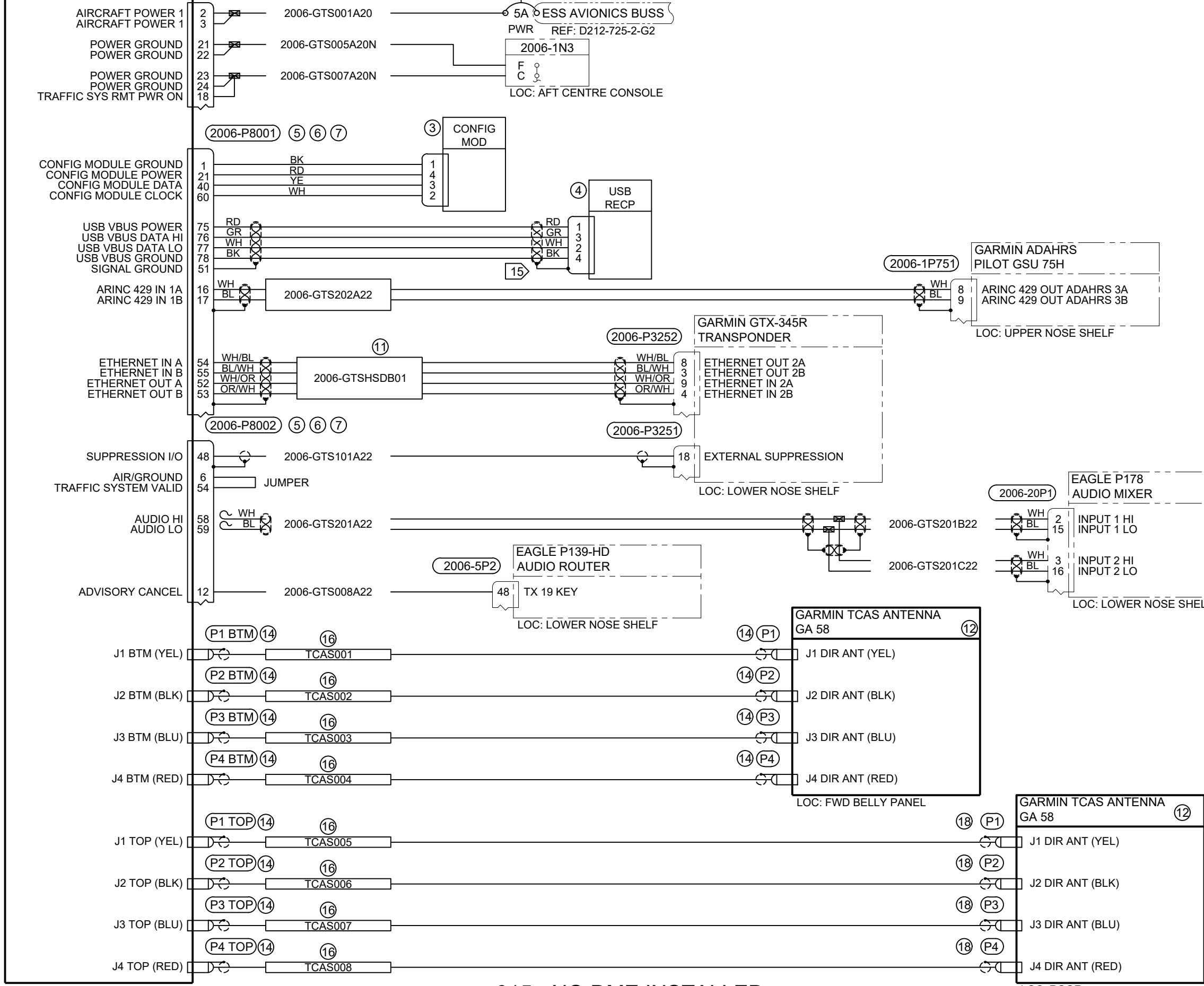


LOC: ROOF

TITLE:			WIRING DIAGRAM GARMIN GTS 855 TCAS BELL 212		
DWG:	E2006-11-11	REV:	C	SHEET:	4 of 5
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-013 - NO DME INSTALLED

**GARMIN TCAS SYSTEM
GTS 855**



LOC: LOWER NOSE SHELF

-015 - NO DME INSTALLED

LOC: ROOF

TITLE:		WIRING DIAGRAM GARMIN GTS 855 TCAS BELL 212	
DWG:	E2006-11-11	REV:	C
SHEET:		5 of 5	
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