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AgustaWestland Products

SERVICE BULLETIN

N° 139-271

DATE: July 25, 2013

REV. : A - July 9, 2021

TITLE

ATA 23 - INSTALLATION OF KIT RADIO V/UHF FLEXCOMM II P/N 3G2310F00111

REVISION LOG

Revision A is issued to:

- Extend effectivity to helicopters AW139 Long Nose Enhanced and Long Nose Enhanced Plus.
- Update the procedure to subdivide the SB in three parts:
  - Part I: complete provision for helicopters Long Nose
  - Part II: complete provision for helicopters Long Nose Enhanced and Long Nose Enhanced Plus
  - Part III: equipment installation (the same for all the helicopters).

Revision bars in the left margin identify changes.

1. PLANNING INFORMATION

A. EFFECTIVITY

Part I:

AW139 helicopters from S/N 31201 to S/N 31398 and from S/N 41201 to S/N 41293.

Part II:

AW139 helicopters from S/N 31400 onwards, from S/N 41300 onwards.

Part III:

AW139 helicopters from S/N 31201 onwards, from S/N 41201 onwards.

B. COMPLIANCE

At Customer's option.

C. CONCURRENT REQUIREMENTS

N.A.

D. REASON

This Service Bulletin is issued in order to provide the necessary instruction on how to perform the installation of the kit radio V/UHF Flexcomm II P/N 3G2310F00111.

E. DESCRIPTION

The V/UHF Flexcomm II AM/FM analog/digital radio communication system consists of one RT- 5000 transceiver, one C-5000 communication management controller and one antenna with a dedicated logic control unit.

The signals from and to the headsets are analogical, so the ICS Panels (AV-900) is used as analog to digital converters. A double digital audio bus connects the pilot and copilot ICS panel on COM 3 (pilot MRC2). The pilot MRC2 module is connected to the control panel C-5000 (analogue audio signals). The C-5000 control head controls the RT-5000. The RT-5000 is connected to the logic converter unit FC-5000 for tuning control and to the active antenna AT-5000.

Part I of this Service Bulletin describes the installation of V/UHF Flexcomm II complete provision P/N 4G2310A01511 (structural and electrical).

Part II of this Service Bulletin describes the installation of V/UHF Flexcomm II complete provision P/N 4G2310A01512 (structural and electrical).

Part III of this Service Bulletin describes the installation of V/UHF Flexcomm II equipment installation P/N 4G2310A01611.

F. APPROVAL

The technical content of this Service Bulletin is approved under the authority of DOA nr. EASA.21.J.005. For helicopters registered under other Aviation Authorities, before applying the Service Bulletin, applicable Aviation Authority approval must be checked within Leonardo Helicopters customer portal.

EASA states mandatory compliance with inspections, modifications or technical directives and related time of compliance by means of relevant Airworthiness Directives.

If an aircraft listed in the effectivity embodies a modification or repair not LH certified and affecting the content of this Service Bulletin, it is responsibility of the Owner/Operator to obtain a formal approval by Aviation Authority having jurisdiction on the aircraft, for any adaptation necessary before incorporation of the present Service Bulletin.

G. MANPOWER

PART I

To comply with this Service Bulletin eighty (80) MMH are deemed necessary.

MMH are based on hands-on time and can change with personnel and facilities available.

PART II

To comply with this Service Bulletin one hundred (100) MMH are deemed necessary.

MMH are based on hands-on time and can change with personnel and facilities available.

PART III

To comply with this Service Bulletin twenty (20) MMH are deemed necessary.

MMH are based on hands-on time and can change with personnel and facilities available.

H. WEIGHT AND BALANCE

PART I

WEIGHT (Kg)	3.790	
	ARM (mm)	**MOMENT (Kgmm)**
LONGITUDINAL BALANCE	5914	22414
LATERAL BALANCE	40	152

PART II

WEIGHT (Kg)	4,5	
	ARM (mm)	**MOMENT (Kgmm)**
LONGITUDINAL BALANCE	5895	26527.5
LATERAL BALANCE	49	220.5

PART III

WEIGHT (Kg)	12.400	
	ARM (mm)	**MOMENT (Kgmm)**
LONGITUDINAL BALANCE	6718	83303.2
LATERAL BALANCE	-382	4736.8

I. REFERENCES

1) PUBLICATIONS

Following Data Modules refer to AMP:

DATA MODULE		DESCRIPTION	PART
DM01	39-A-00-20-00-00A-120A-A	Helicopter on ground for a safe maintenance	I, II, III
DM02	39-A-11-00-01-00A-720A-A	Decal - Install procedure	I, III
DM03	39-A-20-10-08-00A-622A-A	Electrical contacts - Crimp	I, II
DM04	39-A-23-13-00-00A-340A-K	V/UHF system - Function test	III
DM05	39-A-46-20-00-00A-750A-A	Processing and integrating - Optio and setting file - Load software procedure	III
DM06	39-A-45-45-00-00A-752A-A	Central maintenance system (CMS - Aircraft personality module (APM Data loading	III

2) ACRONYMS & ABBREVIATIONS

AM	Amplitude Modulation
AMDI	Aircraft Material Data Information
AMP	Aircraft Maintenance Publication
C/A	Cable Assy
DM	Data Module
DOA	Design Organization Approval

EASA	European Aviation Safety Agency
FM	Frequency Modulation
GS	Ground Stud
ICS	InterCommunication System
IPD	Illustrated Parts Data
ITEP	Illustrated Tool and Equipment Publication
LHD	Leonardo Helicopters
MMH	Maintenance Man Hours
MRC	Modular Radio Cabinet
P/N	Part Number
S/N	Serial Number
TB	Terminal Board
V/UHF	Very Ultra High Frequency

3) ANNEX

N.A.

J. PUBLICATIONS AFFECTED

AW139 Aircraft Material Data Information (AMDI)

AW139 Aircraft Material Publications (AMP)

AW139 Illustrated Parts Data (IPD).

K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.

2. MATERIAL INFORMATION

A. REQUIRED MATERIALS

1) PARTS

PART I

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
1	**3G2310F00111**		**KIT V/UHF FLEXCOMM II**	**REF**	**.**		
2	**4G2310A01511**		**V/UHF FLEXCOMM II COMPLETE PROVISION**	**REF**	**..**		
3	**3G5310A03111**		**V/UHF FLEXCOMM II STRUCTURAL PROVISION**	**REF**	**…**	**(1)**	
4	3G5315A09232		Flexcomm II support assy	2	….		139-271L1
5	3G5315A30251		Cover	1	….		139-271L1
6	MS20426AD3-5		Rivet	0,1 Kg	….		139-271L1
7	MS20426AD3-4		Rivet	0,1 Kg	….		139-271L1
8	MS20426AD4-4		Rivet	0,1 Kg	….		139-271L1
9	MS20470AD4-5		Rivet	0,1 Kg	….		139-271L1
10	MS27039-1-05		Screw	6	….		139-271L1
11	NAS1149D0332K		Washer	6	….		139-271L1
12	MS21069L3		Nut plate	4	….		139-271L1
13	NAS1832-3-3		Insert	6	….		139-271L1
14	**4G2310A00711**		**V/UHF FLEXCOMM II ELECTRICAL PROVISION**	**REF**	**…**		
15	3G9A01B26601	4G2310A00711A10R	V/UHF Flexcomm II C/A (A1B266)	1	….	(2)	139-271L1
16	3G9A02B24201		V/UHF Flexcomm II C/A (A2B242)	1	….		139-271L1
17	3G9B01B27801		V/UHF Flexcomm II C/A (B1B278)	1	….		139-271L1
18	3G9B02B22001		V/UHF Flexcomm II C/A (B2B220)	1	….		139-271L1
19	3G9C01B22101		V/UHF Flexcomm II C/A (C1B221)	1	….		139-271L1
20	3G9C02B21701		V/UHF Flexcomm II C/A (C2B217)	1	….		139-271L1
21	3G9C03B20201	4G2310A00711A1R	V/UHF Flexcomm II C/A (C3B202)	1	….	(3)	139-271L1
22	3G9C03B20301		V/UHF Flexcomm II C/A (C3B203)	1	….		139-271L1
23	A363A01		Stud	1	….		139-271L1
24	A366A3E18C		Stud	4	….		139-271L1
25	A630A31	AW001CL000A-X3	Support	9	….		139-271L1
26	A630A3BT	AW001TL3A08T	Nut plate	1	….		139-271L1
27	DCC-14		Cover	2	….		139-271L1
28	ED300GS310		Decal	1	….		139-271L1
29	M39012/25-0009		Cap	4	….		139-271L1
30	MS21042L3		Nut	4	….		139-271L1
31	AS21919WDG04		Clamp	10	….		139-271L1
32	AS21919WDG05		Clamp	5	….		139-271L1
33	MS90376-12R		Cap	1	….		139-271L1
34	MS90376-12Y		Cap	2	….		139-271L1
35	MS90376-20R		Cap	1	….		139-271L1
36	MS90376-8Y		Cap	1	….		139-271L1
37	NAS1149D0332J		Washer	5	….		139-271L1

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
38	NAS1801-3-20		Screw	1	….		139-271L1
39	NAS43DD3-12N		Spacer	4	….		139-271L1
40	NAS43DD3-16N		Spacer	4	….		139-271L1
41	NAS43DD3-37N		Spacer	1	….		139-271L1
42	A608A01		Plate	1	….		139-271L1
43	M39029/56-351		Electrical contact	5	.		139-271L1
44	M39029/58-360		Electrical contact	31	.		139-271L1
45	M39029/58-363		Electrical contact	3	.		139-271L1
46	M39029/56-348		Electrical contact	36	.		139-271L1
47	M39029/56-352		Electrical contact	1	.		139-271L1
48	M39029/58-364		Electrical contact	2	.		139-271L1
49	M39029/5-115		Electrical contact	18	.		139-271L1
50	A523A-A02		Electrical contact	1	.		139-271L1
51	A523A-A05		Electrical contact	1	.		139-271L1
52	FC8122D		Electrical contact	5	.		139-271L1
53	A523A-A03		Electrical contact	6	.		139-271L1
54	MS25036-103		Terminal lug	2	.		139-271L1

PART II

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
55	**3G2310F00111**		**KIT V/UHF FLEXCOMM II**	**REF**	**.**		
56	**4G2310A01512**		**V/UHF FLEXCOMM II COMPLETE PROVISION**	**REF**	**..**		
57	**3G5310A03112**		**V/UHF FLEXCOMM II STRUCTURAL PROVISION**	**REF**	**…**	**(4)**	
58	3G5315A09232		Flexcomm II support assy	2	….		139-271L2
59	3G5315A30252		Cover	1	….		139-271L2
60	MS20426AD3-2		Rivet	0,1 Kg	….		139-271L2
61	MS20470AD4-2		Rivet	0,1 Kg	….		139-271L2
62	MS27039-1-07		Screw	6	….		139-271L2
63	NAS1149D0332K		Washer	6	….		139-271L2
64	MS21069L3		Nut plate	10	….		139-271L2
65	**4G2310A00712**		**V/UHF FLEXCOMM II ELECTRICAL PROVISION**	**REF**	**...**		
66	3G9A01B26601	4G2310A00712A1R	V/UHF Flexcomm II C/A (A1B266)	1	….	(5)	139-271L2
67	3G9A02B24201		V/UHF Flexcomm II C/A (A2B242)	1	….		139-271L2
68	3G9B01B27801	4G2310A00712A2R	V/UHF Flexcomm II C/A (B1B278)	1	….	(6)	139-271L2
69	3G9B02B22001		V/UHF Flexcomm II C/A (B2B220)	1	….		139-271L2
70	3G9C01B22101	4G2310A00712A3R	V/UHF Flexcomm II C/A (C1B221)	1	….	(7)	139-271L2
71	3G9C02B21701		V/UHF Flexcomm II C/A (C2B217)	1	….		139-271L2
72	3G9C03B20201	4G2310A00712A4R	V/UHF Flexcomm II C/A (C3B202)	1	….	(8)	139-271L2
73	3G9C03B20301		V/UHF Flexcomm II C/A (C3B203)	1	….		139-271L2
74	A363A01		Stud	1	….		139-271L2
75	A366A3E18C		Stud	3	….		139-271L2
76	AW001CL000A-X3		Support	5	….		139-271L2
77	AW001CL510B-N6		Support	1	….		139-271L2
78	DCC-14		Cover	2	….		139-271L2
79	M39012/25-0009		Cap	4	….		139-271L2
80	AW001TL3A08T		Nut plate	1	….		139-271L2

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
81	MS21043-3		Nut	3	….		139-271L2
82	AW001CB04H		Clamp	8	….		139-271L2
83	AW001CB05H		Clamp	4	….		139-271L2
84	AW001CB10H		Clamp	12	….		139-271L2
85	MS90376-12R		Cap	1	….		139-271L2
86	MS90376-12Y		Cap	2	….		139-271L2
87	MS90376-20R		Cap	1	….		139-271L2
88	MS90376-8Y		Cap	1	….		139-271L2
89	NAS1149D0332J		Washer	4	….		139-271L2
90	NAS1802-3-20		Screw	1	….		139-271L2
91	NAS43DD3-12N		Spacer	3	….		139-271L2
92	NAS43DD3-16N		Spacer	3	….		139-271L2
93	NAS43DD3-37N		Spacer	1	….		139-271L2
94	M39029/56-351		Electrical contact	5	.		139-271L2
95	M39029/58-360		Electrical contact	31	.		139-271L2
96	M39029/58-363		Electrical contact	3	.		139-271L2
97	M39029/56-348		Electrical contact	36	.		139-271L2
98	M39029/56-352		Electrical contact	1	.		139-271L2
99	M39029/58-364		Electrical contact	2	.		139-271L2
100	M39029/5-115		Electrical contact	18	.		139-271L2
101	A523A-A02		Electrical contact	1	.		139-271L2
102	A523A-A05		Electrical contact	1	.		139-271L2
103	FC8122D		Electrical contact	5	.		139-271L2
104	A523A-A03		Electrical contact	6	.		139-271L2
105	MS25036-103		Terminal lug	2	.		139-271L2

PART III

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
106	**3G2310F00111**		**KIT V/UHF FLEXCOMM II**	**REF**	**.**		
107	**4G2310A01611**		**V/UHF FLEXCOMM II EQUIPMENT INSTALLATION**	**REF**	**..**		
108	12-224		Antenna	1	…		139-271L3
109	300-316605-01		Support	1	…		139-271L3
110	31300-0101-1200	31300-0201-1200	Control panel	1	…	(9)	139-271L3
111	400-015525-0501		Transceiver	1	…		139-271L3
112	6930A/12-224		Gasket	1	…		139-271L3
113	7-119PIN9		Converter	1	…		139-271L3
114	ED300A81		Decal	1	…		139-271L3
115	ED300A82		Decal	1	…		139-271L3
116	ED300A83		Decal	1	…		139-271L3
117	ED300E21		Decal	1	…		139-271L3
118	MS35207-266		Screw	10	…		139-271L3
119	MS35207-263		Screw	4	…		139-271L3
120	NAS1149D0332J		Washer	8	…		139-271L3

Refer also to IPD for the spares materials required to comply with the AMP DMs referenced in the accomplishment instructions.

2) CONSUMABLES

The following consumable materials, or equivalent, are necessary to accomplish this Service Bulletin:

#	SPEC./LHD CODE NUMBER	DESCRIPTION	Q.TY	NOTE	PART
121	199-05-002 Type II Class II	Adhesive EA934NA (C397)	AR	(10)	I
122	199-05-002 Type I Class II	Adhesive EA9309.3NA (C021)	AR	(10)	I
123	199-05-004 Type II Class B2	Sealant Proseal 890 (C153)	AR	(10)	I
124	900005845	Hexcel fiberglass	AR	(10)	I
125	199-50-002 Type II	Hardener HY5173	AR	(10)	I
126	199-50-002 Type I	Araldit resin LY5138-2	AR	((10)	I
127	199-05-003 Type I, Class I, Shape IIB	Teflon tape (C405)	AR	(10)	I
128	MIL-S-8802 Type II, Class B4	Sealing compound (C252)	AR	(10)	III
129	TT-N-95-B	Aliphatic Naphta (C059)	AR	(10)	I, II
130	A582A32 or EN6049-006-32-5	Nomex sleeving	2 m	(10)	I
131	900004953 or AW001CK03LC	Lacing cord	2 m	(10)	I, II
132	EN6049-006-25-5	Nomex sleeving	3 m	(10)	II

Refer also to AMDI for the consumable materials required to comply with the AMP DM referenced in the accomplishment instructions.

3) LOGISTIC MATRIX

In order to apply this Service Bulletin, the following Logistic P/N can be ordered in accordance with the applicable notes:

LOGISTIC P/N	Q.TY (PER HELO)	NOTE	PART
139-271L1	1	-	Part I
139-271L2	1	-	Part II
139-271L3	1	-	Part III

NOTE

(1) Applicable only to helicopters equipped with lower panel P/N 3P5340A01731.

(2) Production P/N 4G2310A00711A10R is composed of:

- Q.ty 1 P/N 3G9A01B26601
- Q.ty 1 P/N 3G9A02B24201
- Q.ty 1 P/N 3G9B01B27801,
- Q.ty 1 P/N 3G9B02B22001,
- Q.ty 1 P/N 3G9C01B22101,
- Q.ty 1 P/N 3G9C02B21701

(3) Production P/N 4G2310A00711A1R is composed of:

- Q.ty 1 P/N 3G9C03B20201,
- Q.ty 1 P/N 3G9C03B20301

(4) Applicable only to helicopters equipped with lower panel P/N 3P5340A01732.

(5) Production P/N 4G2310A00712A1R is composed of:

- Q.ty 1 P/N 3G9A01B26601,

-Q.ty 1 P/N 3G9A02B24201

(6) Production P/N 4G2310A00712A2R is composed of:

- Q.ty 1 P/N 3G9B01B27801,
- Q.ty 1 P/N 3G9B02B22001

(7) Production P/N 4G2310A00712A3R is composed of:

- Q.ty 1 P/N 3G9C01B22101,,
- Q.ty 1 P/N 3G9C02B21701

(8) Production P/N 4G2310A00712A4R is composed of:

- Q.ty 1 P/N 3G9C03B20201,
- Q.ty 1 P/N 3G9C03B20301

(9) Control panel P/N 31300-0101-1200 is applicable when NVG is not installed. Otherwise install control panel P/N 31300-0201-1200.

(10) Item to procured as local supply.

B. SPECIAL TOOLS

Refer to ITEP for the special tools required to comply with the AMP DM referenced in the accomplishment instructions.

C. INDUSTRY SUPPORT INFORMATION

Customization.

3. ACCOMPLISHMENT INSTRUCTIONS

GENERAL NOTES

a) Place an identification tag on all components that are re-usable, including the attaching hardware that has been removed to gain access to the modification area and adequately protect them until their later re-use.

b) Shape the cables in order to prevent interference with the structure and the other existing installations, using where necessary suitable lacing cords and plastic cable tiedown.

c) Exercise extreme care during drilling operations to prevent instruments, cables and hoses damage.

d) After drilling, remove all swarf and sharp edges. Apply on bare metal a light film of primer unless the hole is used for ground connection.

e) During the installation of bonding braids or components requiring grounding, clean the surface structure in order to obtain a good ground contact.

f) Use aliphatic naphta to degrease. Cleaned surfaces shall be allowed to air dry for at least 30 minutes before bonding.

g) Let adhesive cure at room temperature for at least 24 hours unless otherwise specified.

h) All lengths are in mm.

PART I

1. In accordance with AMP DM 39-A-00-20-00-00A-120A-A, prepare the helicopter on ground for a safe maintenance. Disconnect the battery, all electrical power sources and/or the external power supply.
2. With reference to Figures 1 and 3, gain access to the area affected by the installation and install the V/UHF Flexcomm II complete provision P/N 4G2310A01511 as described in the following procedure:

   2.1 Install the V/UHF Flexcomm II structural provision P/N 3G5310A03111 as described on the following procedure.

2.1.1 With reference to Figure 3 Section A-A, Section F-F and Detail D, perform the cut-out 1 and the cut-out 2 on the lower panel assy P/N 3P5340A01731.

2.1.2 With reference to Figure 3 Detail D and Section F-F, fill the cut-out edge by means of adhesive EA934NA (C397) and apply n°2 plies of Hexcel fiberglass all around the cut-out by means of Araldit resin LY5138-2 and Hardener HY5173.

2.1.3 With reference to Figure 3 Section A-A and Detail D drill n°6 holes Ø 14.25÷14.38 through upper skin and core of lower panel assy P/N 3P5340A01731 and install n°6 inserts P/N NAS1832-3-3 by means of adhesive EA934NA (C397).

2.1.4 With reference to Figure 3 Section B-B, install n°2 Flexcomm II support assemblies P/N 3G5315A09232 by means of n°34 rivets P/N MS20470AD4-5.

NOTE

Coordinate pilot holes on support assemblies P/N 3G5315A09232 with holes existing on the structure).

2.1.5 With reference to Figure 3 Section C-C, drill n°4 holes Ø 5.15÷5.28 through the STA 7200 lower frame and install n°4 nut plates P/N MS21069L3 by means of n°8 rivets P/N MS20426AD3-4.

NOTE

Perform the following step only if Part III of this Service Bulletin is not intended to be embodied immediately after Part I.

2.1.6 With reference to Figure 3 Detail D and Section E-E, install the cover P/N 3G5315A30251 by means of n°6 screws P/N MS27039-1-05 and n°6 washers P/N NAS1149D0332K. Seal the edge by means of Teflon tape (C405).

2.2 Install the V/UHF Flexcomm II electrical provision P/N 4G2310A00711 as described on the following procedure.

2.2.1 With reference to Figure 5 Interseat Console Isoview, install in indicated position a support P/N A630A31 by means of adhesive EA9309.3NA (C021).

2.2.2 With reference to Figure 7 Floor Isoview, install n°3 supports P/N A630A31 in indicated positions by means of adhesive EA9309.3NA (C021).

2.2.3 With reference to Figure 7 Floor Isoview, install in indicated positions n°4 studs P/N A366A3E18C by means of adhesive EA9309.3NA (C021).

2.2.4 With reference to Figure 7 Floor Isoview, install in indicated positions n°8 clamps P/N AS21919WDG04 and n°4 clamps P/N AS21919WDG05 by means of n°4 spacers P/N NAS43DD3-12N, n°4 spacers P/N NAS43DD3-16N, n°4 washers P/N NAS1149D0332J and n°4 nuts P/N MS2104L3.

2.2.5 With reference to Figure 7 Rear Isoview, install in indicated position a nut plate P/N A630A3BT by means of adhesive EA9309.3NA (C021).

2.2.6 With reference to Figure 7 Rear Isoview, install in indicated position a clamp P/N AS21919WDG05 and n°2 clamps P/N AS21919WDG04 by means of spacer P/N NAS43DD3-37N, a washer P/N NAS1149D0332J and a screw P/N NAS1801-3-20.

2.2.7 With reference to Figure 7 Rear Isoview, install in indicated position a plate P/N A608A01 by means of n°8 rivets P/N MS20426AD4-4 and the relevant stud P/N A363A01. In accordance with AMP DM 39-A-11-00-01-00A-720A-A, install in an adjacent area a decal P/N ED300GS310.

2.2.8 With reference to Figure 7 Detail L and Detail H, install in indicated positions n°5 supports P/N A630A31 by means of adhesive EA9309.3NA (C021).

2.2.9 With reference to Figure 5, connect the cable assy A1B266 from the installation position of the connector PL82P500 in the interseat console to the cockpit terminal board connectors TB136-3, TB128P1 and TB134P1, to the terminal board TB154 and to the connector P102 in the cockpit floor, following existing route. Secure the cable by means of existing hardware and lacing cord.

2.2.10 With reference to Figure 5, route the cable assy A2B242 from the installation position of the connector PL82P501 in the interseat console to the nose avionic bay connector TB104P1 and to the connectors P108 and P110 in the cockpit floor, following existing route. Secure the cable and connector by means of existing hardware and lacing cord.

2.2.11 With reference to Figures 5 and 6, route the cable assy B1B278 from the sectioning connector J102 in the cockpit floor to the circuit breaker

connector PL1P4 in the cockpit roof and to the sectioning connector J204 in the rear, following existing route. Secure the cable by means of existing hardware and lacing cord.

2.2.12 With reference to Figures 5 and 6, route the cable assy B2B220 from the sectioning connectors J108 and J110 in the cockpit floor to the sectioning connectors J206 and J208 in the rear, following the route B2B2. Secure the cable by means of existing hardware and lacing cord.

2.2.13 With reference to Figures 6 and 7, route the cable assy C1B221 from installation position of the connector A83P2 to the terminal board TB312 and to the sectioning connector P204 in the rear, following existing routes. Secure the cable and relevant connector by means of existing hardware and lacing cord.

2.2.14 With reference to Figures 6 and 7, route the cable assy C2B217 from installation position of the connectors A83P1, A83P3 and A81P101 to sectioning connectors P206 and P208 in the rear and to the installation position of the connector E21P401, following existing route. Secure the cable and connectors by means of existing hardware and lacing cord.

2.2.15 With reference to Figure 7, route the coax cable assemblies C3B202 and C3B203 from installation position of the relevant connectors A81P102 and A81P103 to the installation position of the connectors E21P402 and E21P403. Secure the cables and connectors by means of existing hardware and lacing cord.

2.2.16 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figure 11 Wiring Diagram and Figure 14 Table 1, install the electrical connections of the cable assy B1B278 between the circuit breaker control panel connector PL1P4 and sectioning connectors J102 and J204.

2.2.17 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figures 11 and 13 Wiring Diagrams and Figure 14 Table 1 and Table 3, perform the electrical connections of the cable assy C1B221 between the transceiver connector A81P101, terminal board TB312 and sectioning connector P204.

2.2.18 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figures 11 and 13 Wiring Diagrams and Figure 14 Table 1 and Table 3, perform the electrical connections of the cable assy C1B221 between the logistic converter unit connector A83P2, transceiver connector A81P101 and terminal board TB310.

2.2.19 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figure 11 Wiring Diagram and Figure 14 Table 1, perform the electrical connections of the cable assy B2B220 between sectioning connectors J110 and J208 and between sectioning connectors J108 and J206.

2.2.20 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figure 12 Wiring Diagram and Figure 14 Table 2, perform the electrical connections of the cable assy A1B266 between control panel connector PL82P50, sectioning connector P102 and terminal boards TB128, TB134, TB136-3 and TB154.

2.2.21 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figure 12 Wiring Diagram and Figure 14 Table 2, perform the electrical connections of the cable assy A2B242 between control panel connector PL82P500 and terminal boards TB104P1 and TB130.

2.2.22 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figure 12 Wiring Diagram and Figure 14 Table 2, perform the electrical connections of the cable assy A2B242 between control panel connector PL82P501 and sectioning connectors P108 and P110.

2.2.23 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figures 11 and 13 Wiring Diagrams and Figure 14 Table 1 and Table 3, perform the electrical connections of the cable assy C2B217 between transceiver connector A81P101 and sectioning connectors P206 and P208.

2.2.24 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figures 11 and 13 Wiring Diagrams and Figure 14 Table 1 and Table 3, perform the electrical connections of the cable assy C2B217 between logic converter unit connector A83P1 and transceiver connector A81P101 and between logic converter unit connector A83P3 and antenna connector E21P401 and ground stud GS310.

2.2.25 With reference to Figure 13 Wiring Diagram, install the electrical connections of the cable assy C3B202 between transceiver connector A81P102 and antenna connector E21P402.

2.2.26 With reference to Figure 13 Wiring Diagram, install the electrical connections of the cable assy C3B203 between transceiver connector A81P103 and antenna connector E21P403.

2.3 Perform a pin to pin test of all electrical connections performed.

NOTE

Perform the following step only if Part III of this Service Bulletin is not intended to be embodied immediately after Part I.

2.4 Perform the stowage of previously installed connectors as described in the following procedure:

2.4.1 With reference to Figure 5 Detail F, install n°2 covers P/N DCC-14 on the connectors PL82P500 and PL82P501. For a better storage of connector PL82P500 use nomex sleeving P/N A582A25 and lacing cord P/N 900004953.

2.4.2 With reference to Figure 7 Detail L and Detail H, install a cap P/N MS90376-8Y on connector A83P2, a cap P/N MS90376-12R on connector A83P1, a cap P/N MS90376-12Y on connector A83P3, n°2 caps P/N M39012/25-0009 on connectors A81P102 and A81P103 and a cap P/N MS90376-20R on connector A81P101. For a better storage of connectors use nomex sleeving P/N A582A32 and lacing cord P/N 900004953.

2.4.3 With reference to Figure 7 Floor Isoview, install a cap P/N MS90376-12Y on connector E21P401 and n°2 caps P/N M39012/25-0009 on connectors E21P402 and E21P403. For a better storage of connectors use nomex sleeving P/N A582A32 and lacing cord P/N 900004953.

3. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
4. Return the helicopter to flight configuration and record for compliance with Part I of this Service Bulletin on the helicopter logbook.
5. Send the attached compliance form to the following mail box:

   engineering.support.lhd@leonardocompany.com

   As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART II

1. In accordance with AMP DM 39-A-00-20-00-00A-120A-A, prepare the helicopter on ground for a safe maintenance. Disconnect the battery, all electrical power sources and/or the external power supply.
2. With reference to Figures 2 and 4, gain access to the area affected by the installation and install the V/UHF Flexcomm II complete provision P/N 4G2310A01512 as described on the following procedure:

   2.1 Install the V/UHF Flexcomm II structural provision P/N 3G5310A03112 as described in the following procedure.

   2.1.1 With reference to Figure 4 Section A-A, Detail D and View F, perform the cut-out 1 and the cut-out 2 on the lower panel assy P/N 3P5340A01732.

   2.1.2 With reference to Figure 4 Section A-A and Detail D, drill n°6 holes Ø 5.15 ÷ 5.28 through lower panel assy P/N 3P5340A01732 and install n°6 nut plates P/N MS21069L3 by means of n°12 rivets P/N MS20426AD3-2.

   2.1.3 With reference to Figure 4 Section B-B, install n°2 Flexcomm II support assemblies P/N 3G5315A09232 by means of n°34 rivets P/N MS20470AD4-2.

   NOTE

   Coordinate pilot holes on support assemblies P/N 3G5315A09232 with holes existing on the structure.

   2.1.4 With reference to Figure 4 Section C-C, drill n°4 holes Ø 5.15 ÷ 5.28 through the lower frame STA 7200 and install n°4 nut plates P/N MS21069L3 by means of n°8 rivets P/N MS20426AD3-2.

   NOTE

   Perform the following step only if Part III of this Service Bulletin is not intended to be embodied immediately after Part II.

   2.1.5 With reference to Figure 4 Section A-A and Section E-E, install the cover P/N 3G5315A30252 by means of n°6 screws P/N MS27039-1-07 and n°6 washers P/N NAS1149D0332K.

   2.2 Install the V/UHF Flexcomm II electrical provision P/N 4G2310A00712 as described in the following procedure.

2.2.1 With reference to Figure 10 Detail E and Detail F, install n°5 electrical support P/N AW001CL000A-X3 in the indicated position.

2.2.2 With reference to Figure 10 View Looking Down Floor, install the electrical support P/N AW001CL510B-N6 in the indicated position.

2.2.3 With reference to Figure 10 View Looking Down Floor, install n°3 studs P/N A366A3E18C in the indicated position.

2.2.4 With reference to Figure 10 View Looking Down Floor, install the nut plate P/N AW001TL3A08T in the indicated position.

2.2.5 With reference to Figure 10 View Looking Rear, install the stud P/N A363A01 in the indicated position.

2.2.6 With reference to Figure 10 View Looking Down Floor, install in indicated positions n°2 clamps P/N AW001CB04H and the clamp P/N AW001CB05H by means of the spacer P/N NAS43DD3-37N, the washer P/N NAS1149D0332J and the screw P/N NAS1802-3-20.

2.2.7 With reference to Figure 10 View Looking Down Floor, install in indicated positions n°6 clamps P/N AW001CB04H and n°3 clamps P/N AW001CB05H by means of n°3 spacers P/N NAS43DD3-12N, n°3 spacers P/N NAS43DD3-16N, n°3 washers P/N NAS1149D0332J and n°3 nuts P/N MS21043-3.

2.2.8 With reference to Figure 8 View Looking Up Floor WL 1050, remove the existing clamps and install n°3 clamps P/N AW001CB10H.

2.2.9 With reference to Figure 9 View Looking Down Floor RH Side, remove the existing clamps and install n°9 clamps P/N AW001CB10H.

2.2.10 With reference to Figure 8, route the cable assy A1B266 from the installation position of the connector PL82P500 in the interseat console to the cockpit terminal board connectors TB136-3, TB128P1 and TB134P1, to the terminal board TB154 and to the connector P102 in the cockpit floor, following existing route. Secure the cable by means of existing hardware and lacing cord.

2.2.11 With reference to Figure 8, route the cable assy A2B242 from the installation position of the connector PL82P501 in the interseat console to the nose avionic bay connector TB104P1 and to the connectors P108 and P110 in the cockpit floor, following existing route. Secure the cable and connector by means of existing hardware and lacing cord.

2.2.12 With reference to Figures 8 and 9, route the cable assy B1B278 from the sectioning connector J102 in the cockpit floor to the circuit breaker connector PL1P4 in the cockpit roof and to the sectioning connector

J204 in the rear, following existing route. Secure the cable by means of existing hardware and lacing cord.

2.2.13 With reference to Figures 8 and 9, route the cable assy B2B220 from the sectioning connectors J108 and J110 in the cockpit floor to the sectioning connectors J206 and J208 in the rear, following the route B2B2. Secure the cable by means of existing hardware and lacing cord.

2.2.14 With reference to Figures 9 and 10, route the cable assy C1B221 from installation position of the connector A83P2 to the terminal board TB312 and to the sectioning connector P204 in the rear, following existing routes. Secure the cable and relevant connector by means of existing hardware and lacing cord.

2.2.15 With reference to Figures 9 and 10, route the cable assy C2B217 from installation position of the connectors A83P1, A83P3 and A81P101 to sectioning connectors P206 and P208 in the rear and to the installation position of the connector E21P401, following existing route. Secure the cable and connectors by means of existing hardware and lacing cord.

2.2.16 With reference to Figure 10, route the coax cable assemblies C3B202 and C3B203 from installation position of the relevant connectors A81P102 and A81P103 to the installation position of the connectors E21P402 and E21P403. Secure the cables and connectors by means of existing hardware and lacing cord.

2.2.17 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figure 11 Wiring Diagram and Figure 14 Table 1, perform the electrical connections of the cable assy B1B278 between the circuit breaker control panel connector PL1P4 and sectioning connectors J102 and J204.

2.2.18 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figures 11 and 13 Wiring Diagrams and Figure 14 Table 1 and Table 3, perform the electrical connections of the cable assy C1B221 between the transceiver connector A81P101, terminal board TB312 and sectioning connector P204.

2.2.19 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figures 11 and 13 Wiring Diagrams and Figure 14 Table 1 and Table 3, perform the electrical connections of the cable assy C1B221 between the logistic converter unit connector A83P2, transceiver connector A81P101 and terminal board TB310.

2.2.20 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figure 11 Wiring Diagram and Figure 14 Table 1, perform the electrical connections of the cable assy B2B220 between sectioning connectors J110 and J208 and between sectioning connectors J108 and J206.

2.2.21 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figure 12 Wiring Diagram and Figure 14 Table 2, perform the electrical connections of the cable assy A1B266 between control panel connector PL82P50, sectioning connector P102 and terminal boards TB128, TB134, TB136-3 and TB154.

2.2.22 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figure 12 Wiring Diagram and Figure 14 Table 2, perform the electrical connections of the cable assy A2B242 between control panel connector PL82P500 and terminal boards TB104P1 and TB130.

2.2.23 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figure 12 Wiring Diagram and Figure 14 Table 2, perform the electrical connections of the cable assy A2B242 between control panel connector PL82P501 and sectioning connectors P108 and P110.

2.2.24 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figures 11 and 13 Wiring Diagrams and Figure 14 Table 1 and Table 3, perform the electrical connections of the cable assy C2B217 between transceiver connector A81P101 and sectioning connectors P206 and P208.

2.2.25 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figures 11 and 13 Wiring Diagrams and Figure 14 Table 1 and Table 3, perform the electrical connections of the cable assy C2B217 between logic converter unit connector A83P1 and transceiver connector A81P101 and between logic converter unit connector A83P3 and antenna connector E21P401 and ground stud GS310.

2.2.26 With reference to Figure 13 Wiring Diagram, perform the electrical connections of the cable assy C3B202 between transceiver connector A81P102 and antenna connector E21P402.

2.2.27 With reference to Figure 13 Wiring Diagram, perform the electrical connections of the cable assy C3B203 between transceiver connector A81P103 and antenna connector E21P403.

2.3 Perform a pin to pin test of all electrical connections performed.

NOTE

Perform the following step only if Part III of this Service Bulletin is not intended to be embodied immediately after Part II.

2.4 Perform the stowage of previously installed connectors as described in the following procedure:

2.4.1 With reference to Figure 8 Detail A, install n°2 covers P/N DCC-14 on the connectors PL82P500 and PL82P501. For a better storage of connectors, use nomex sleeving P/N EN6049-006-25-5 and lacing cord P/N AW001CK03LC.

2.4.2 With reference to Figure 10 Detail E, install the cap P/N MS90376-8Y on the connector A83P2, the cap P/N MS90376-12R on the connector A83P1 and the cap P/N MS90376-12Y on the connector A83P3. For a better storage of connectors, use nomex sleeving P/N EN6049-006-25-5 and lacing cord P/N AW001CK03LC.

2.4.3 With reference to Figure 10 Detail F, install n°2 caps P/N M39012/25-0009 on the connector A81P102 and on the connector A81P103 and the cap P/N MS90376-20R on the connector A81P101. For a better storage of connectors, use nomex sleeving P/N EN6049-006-25-5 and lacing cord P/N AW001CK03LC.

2.4.4 With reference to Figure 10 View Looking Down Floor, install n°2 caps P/N M39012/25-0009 on the connector E21P402 and on the connector E21P403 and the cap P/N MS90376-12Y on the connector E21P401. For a better storage of connectors, use nomex sleeving P/N EN6049-006-25-5 and lacing cord P/N AW001CK03LC.

3. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
4. Return the helicopter to a ready to flight condition and record for compliance with Part II of this Service Bulletin on the helicopter logbook.
5. Send the attached compliance form to the following mail box:

   engineering.support.lhd@leonardocompany.com

   As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART III

1. In accordance with AMP DM 39-A-00-20-00-00A-120A-A, prepare the helicopter on ground for a safe maintenance. Disconnect the battery, all electrical power sources and/or the external power supply.
2. With reference to Figure 15, gain access to the area affected by the installation and perform the V/UHF Flexcomm II equipment installation P/N 4G2310A01611 as described in the following procedure:
   - 2.1 With reference to Figure 16 View Looking Forward, remove the plate assembly P/N 999-0500-85-237 from the interseat console and, if installed, remove n°2 covers P/N DCC-14 from the stowed connectors PL82P500 and PL82P501.
   - 2.2 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 16 View Looking Forward (from STA 1500 to STA 3120), install the V/UHF Flexcomm II control panel P/N 31300-0101-1200 and the relevant decal P/N ED300A82.
   - 2.3 With reference to Figure 16 View Looking Forward (from STA 6700 to STA 7200), install the converter P/N 7-119PIN9 by means of n°4 screws P/N MS35207-263 and n°4 washers P/N NAS1149D0332J.
   - 2.4 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 16 View Looking Forward (from STA 6700 to STA 7200), install the decal P/N ED300A83 in indicated position.
   - 2.5 With reference to Figure 16 View Looking Forward (from STA 6700 to STA 7200), remove, if installed, the caps P/N MS90376-12R, P/N MS90376-8Y and P/N MS90376-12Y from connectors A83P1, A83P2 and A83P3 then plug them into the relevant connectors of the converter P/N 7-119PIN9.
   - 2.6 With reference to Figure 16 View Looking Forward (from STA 6700 to STA 7200), install the transceiver P/N 400-015525-0501 and relevant support P/N 300-316605-01 by means of n°4 screws P/N MS35207-266 and n°4 washers P/N NAS1149D0332J.
   - 2.7 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 16 View Looking Forward (from STA 6700 to STA 7200), install the decal P/N ED300A81 in indicated position.
   - 2.8 With reference to Figure 16 View Looking Forward (from STA 6700 to STA 7200), remove, if installed, a cap P/N MS90376-20R and n°2 caps P/N M39012/25-0009 from the stowed connectors A81P101, A81P102 and A81P103 then plug them into relevant connectors of transceiver P/N 400-015525-0501.

NOTE

Perform the following step only if Part III of this Service Bulletin is not performed immediately after Part I.

2.9 With reference to Figure 16 View B, remove, if installed, the cover P/N 3G5315A30251 and relevant fixing hardware from the helicopter.

NOTE

Perform the following step only if Part III of this Service Bulletin is not performed immediately after Part II.

2.10 With reference to Figure 16 View B, remove, if installed, the cover P/N 3G5315A30252 and relevant fixing hardware from the helicopter.

2.11 With reference to Figure 16 View Looking Rear, remove, if installed, a cap P/N MS90376-12Y and n°2 caps P/N M39012/25-0009 from connectors E21P401, E21P401 and E21P401 then plug them into the relevant connectors of the antenna P/N 12-224.

2.12 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 16 View Looking Rear, install the decal P/N ED300E21 on the internal side of the antenna.

2.13 With reference to Figure 16 View Looking Rear, install the antenna P/N 12-224 and relevant gasket P/N 6930A/12-224 by means of n°6 screws P/N MS35207-266. Seal the edge by means of sealing compound (C252).

2.14 With reference to Figure 16 Section A-A remove n°2 lock rings P/N Y30700501 from indicated circuit breaker on the main overhead C/B panel.

3. In accordance with AMP DM 39-A-46-20-00-00A-750A-A (load software procedure) and 39-A-45-45-00-00A-752A-A (central maintenance system - data loading), enable Flexcomm II transceiver by enabling XCVR A2 COM3 from APM setting tool.
4. In accordance with AMP DM 39-A-23-13-00-00A-340A-K, perform a functional test of the Flexcomm II V/UHF radio system.
5. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
6. Return the helicopter to a ready to flight condition and record for compliance with Part III of this Service Bulletin on the helicopter logbook.
7. Send the attached compliance form to the following mail box:

   engineering.support.lhd@leonardocompany.com

   As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

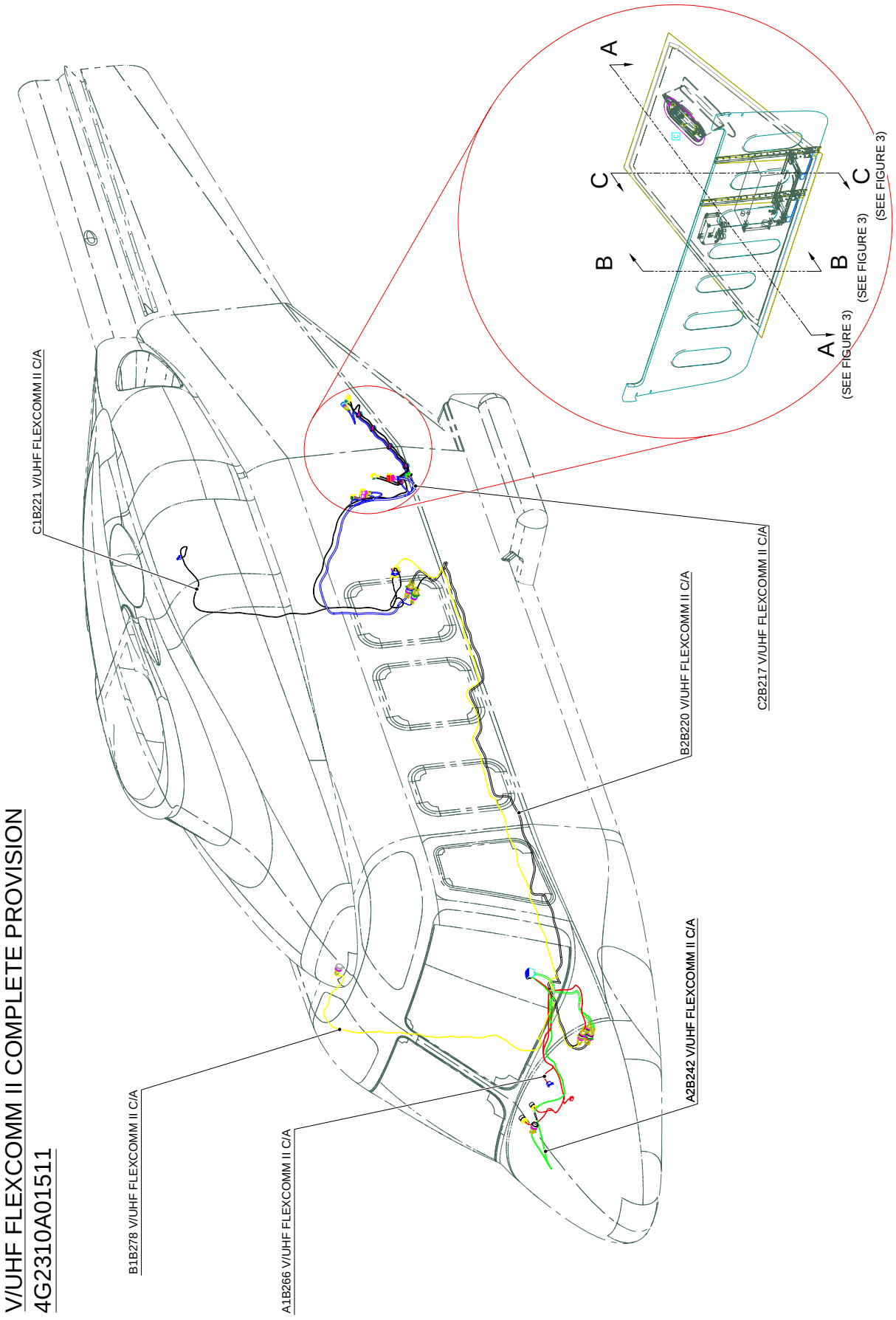
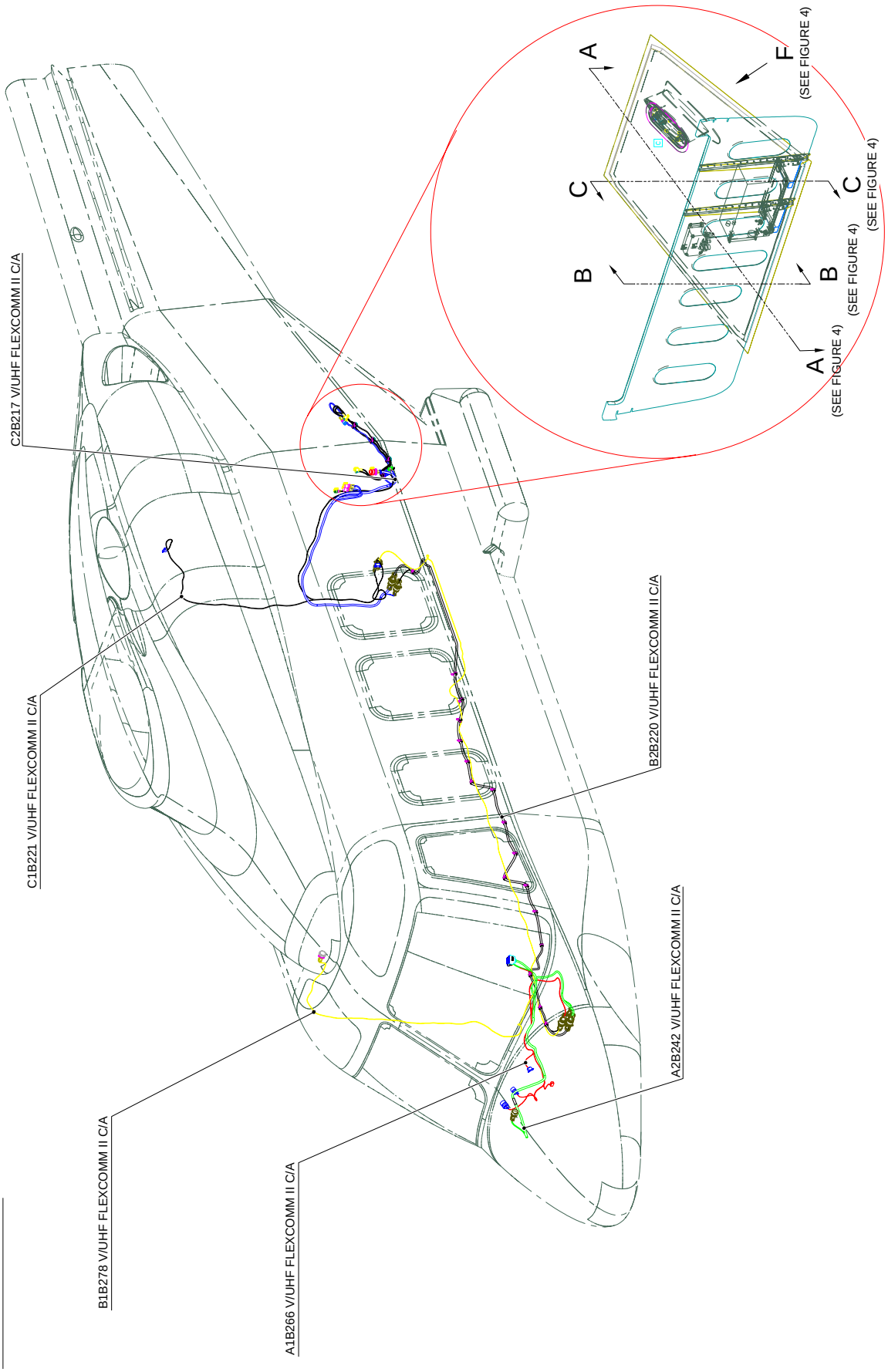

V/UHF FLEXCOMM II COMPLETE PROVISION
4G2310A01511
C1B221 V/UHF FLEXCOMM II C/A
B1B278 V/UHF FLEXCOMM II C/A
A1B266 V/UHF FLEXCOMM II C/A
A2B242 V/UHF FLEXCOMM II C/A
B2B220 V/UHF FLEXCOMM II C/A
C2B217 V/UHF FLEXCOMM II C/A
A
B
C
(SEE FIGURE 3)

Figure 1

V/UHF FLEXCOMM II COMPLETE PROVISION
4G2310A01512



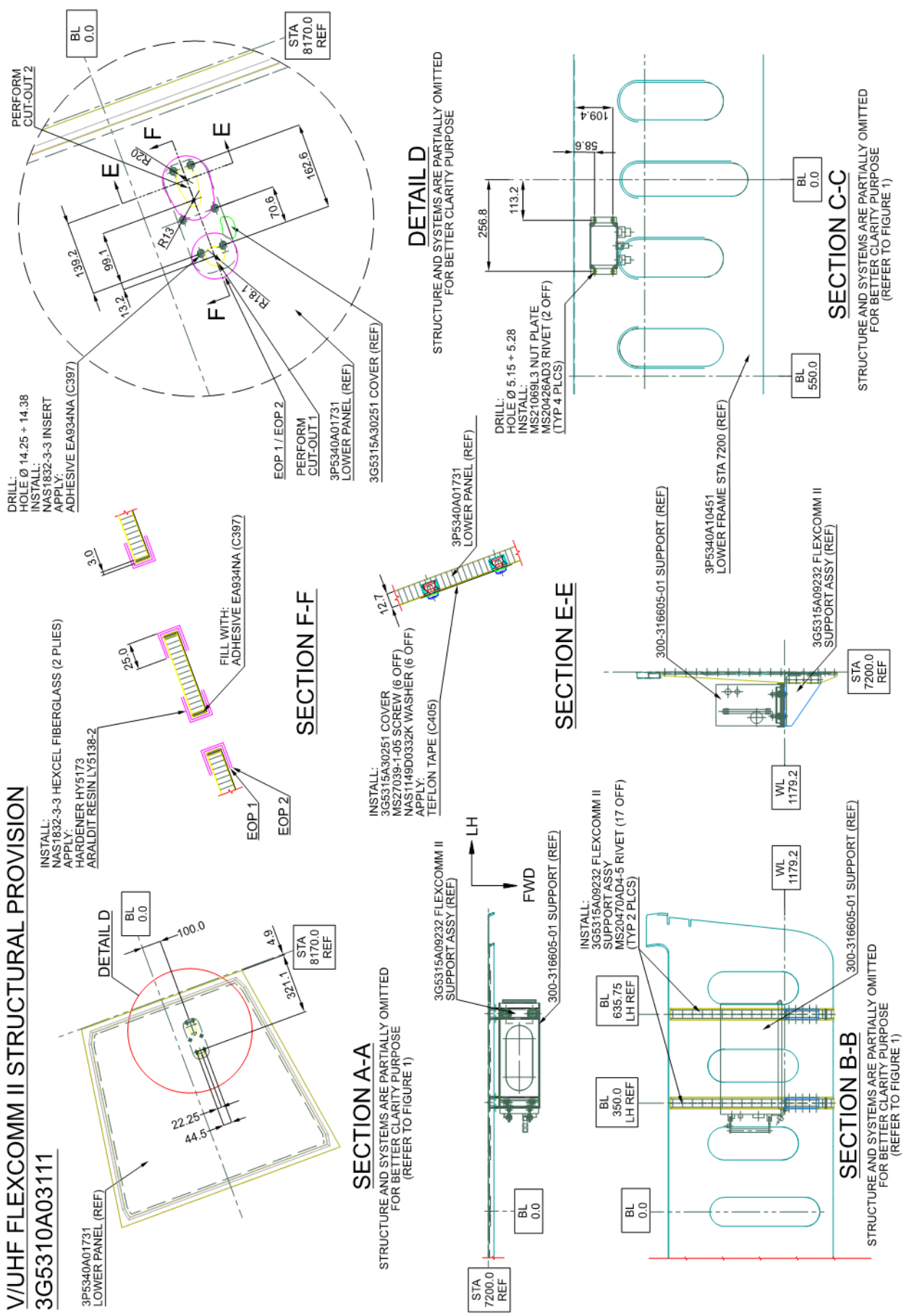
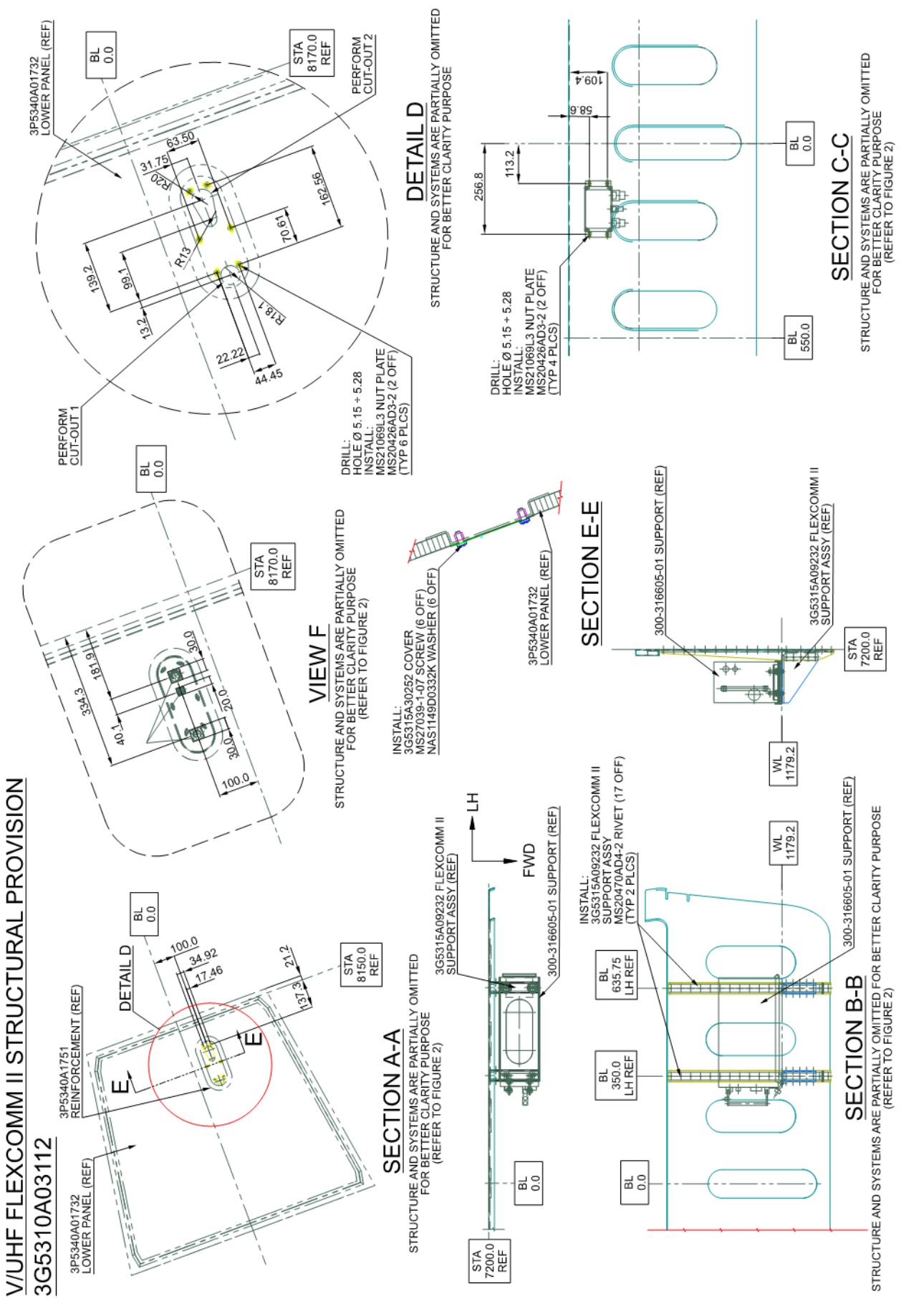

V/UHF FLEXCOMM II STRUCTURAL PROVISION
3G5310A03111
DETAIL D
SECTION A-A
SECTION F-F
SECTION E-E
DETAIL D
SECTION C-C
SECTION B-B
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE (REFER TO FIGURE 1)
DRILL: HOLE Ø 14.25 ÷ 14.38
INSTALL: NAS1832-3-3 INSERT
APPLY: ADHESIVE EA934NA (C397)
INSTALL: NAS1832-3-3 HEXCEL FIBERGLASS (2 PLIES)
APPLY: HARDENER HY5173
ARALDIT RESIN LY5138-2
FILL WITH: ADHESIVE EA934NA (C397)
PERFORM CUT-OUT 2
EOP 1 / EOP 2
PERFORM CUT-OUT 1
3P5340A01731 LOWER PANEL (REF)
3G5315A30251 COVER (REF)
INSTALL: 3G5315A30251 COVER MS27039-1-05 SCREW (6 OFF) NAS1149D0332K WASHER (6 OFF)
APPLY: TEFLON TAPE (C405)
DRILL: HOLE Ø 5.15 ÷ 5.28
INSTALL: MS21069L3 NUT PLATE MS20426AD3 RIVET (2 OFF) (TYP 4 PLCS)
3P5340A10451 LOWER FRAME STA 7200 (REF)
300-316605-01 SUPPORT (REF)
3G5315A09232 FLEXCOMM II SUPPORT ASSY (REF)
INSTALL: 3G5315A09232 FLEXCOMM II SUPPORT ASSY MS20470AD4-5 RIVET (17 OFF) (TYP 2 PLCS)
LH
FWD
BL 0.0
STA 8170.0 REF
STA 7200.0 REF
WL 1179.2
BL 635.75 LH REF
BL 350.0 LH REF
BL 550.0

Figure 3


V/UHF FLEXCOMM II STRUCTURAL PROVISION
3G5310A03112
3P5340A01732 LOWER PANEL (REF)
3P5340A1751 REINFORCEMENT (REF)
DETAIL D
SECTION A-A
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE (REFER TO FIGURE 2)
VIEW F
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE (REFER TO FIGURE 2)
INSTALL: 3G5315A30252 COVER MS27039-1-07 SCREW (6 OFF) NAS1149D0332K WASHER (6 OFF)
3P5340A01732 LOWER PANEL (REF)
PERFORM CUT-OUT 1
PERFORM CUT-OUT 2
DRILL: HOLE Ø 5.15 ÷ 5.28 INSTALL: MS21069L3 NUT PLATE MS20426AD3-2 (2 OFF) (TYP 6 PLCS)
DETAIL D
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
DRILL: HOLE Ø 5.15 ÷ 5.28 INSTALL: MS21069L3 NUT PLATE MS20426AD3-2 (2 OFF) (TYP 4 PLCS)
SECTION C-C
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE (REFER TO FIGURE 2)
SECTION E-E
3G5315A09232 FLEXCOMM II SUPPORT ASSY (REF)
300-316605-01 SUPPORT (REF)
INSTALL: 3G5315A09232 FLEXCOMM II SUPPORT ASSY MS20470AD4-2 RIVET (17 OFF) (TYP 2 PLCS)
SECTION B-B
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE (REFER TO FIGURE 2)
LH
FWD
BL 0.0
BL 350.0 LH REF
BL 635.75 LH REF
BL 550.0
STA 8150.0 REF
STA 8170.0 REF
STA 7200.0 REF
WL 1179.2

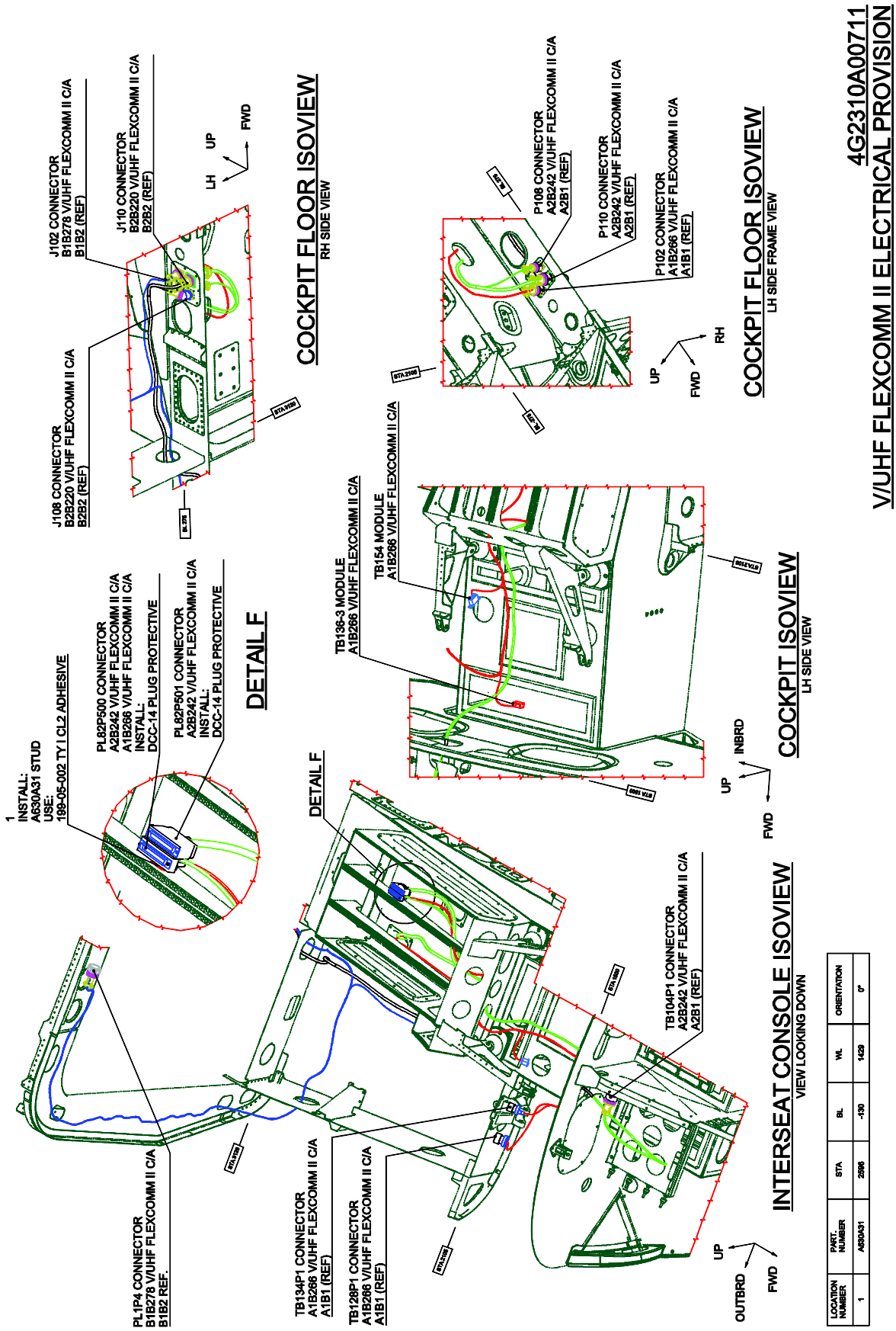
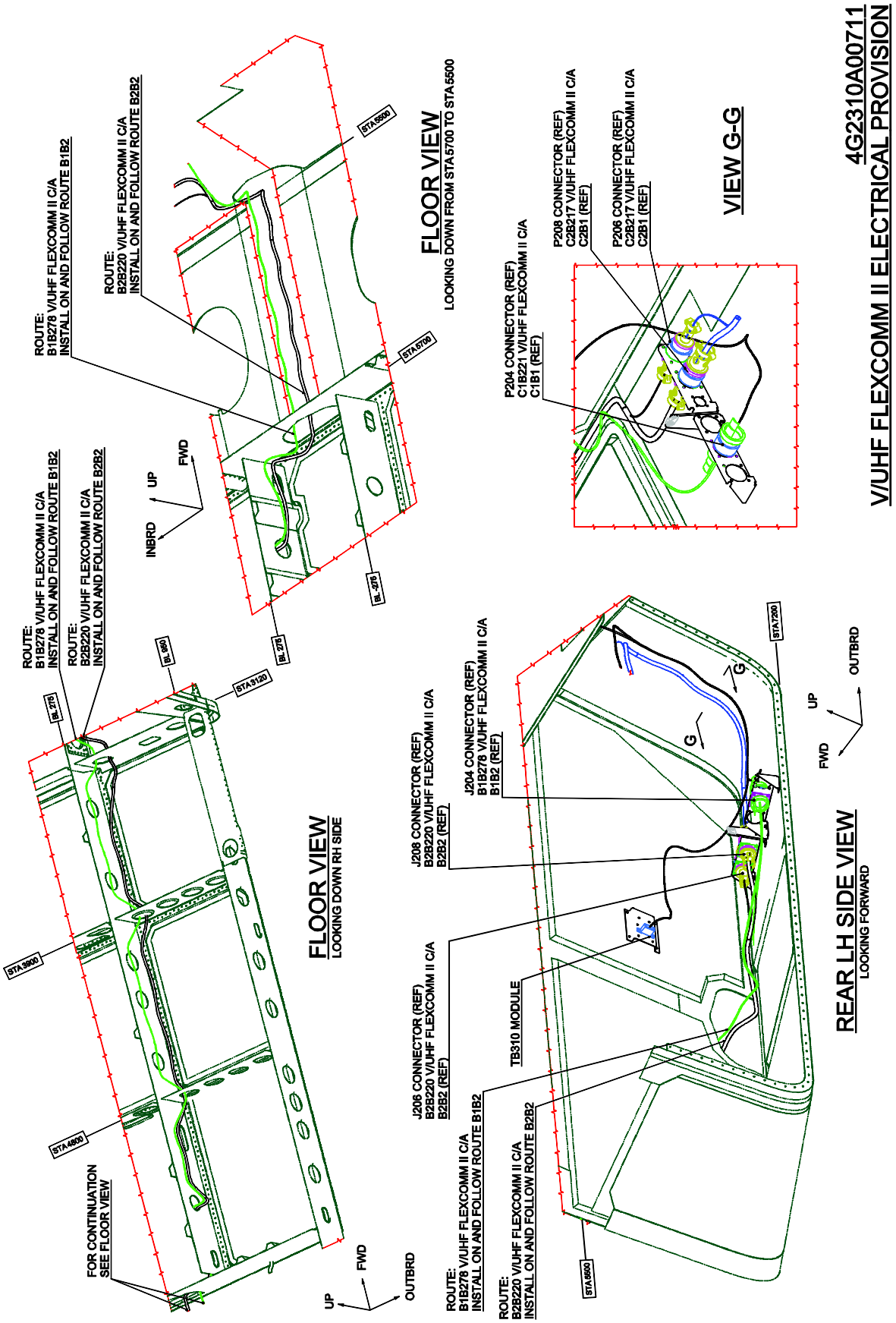
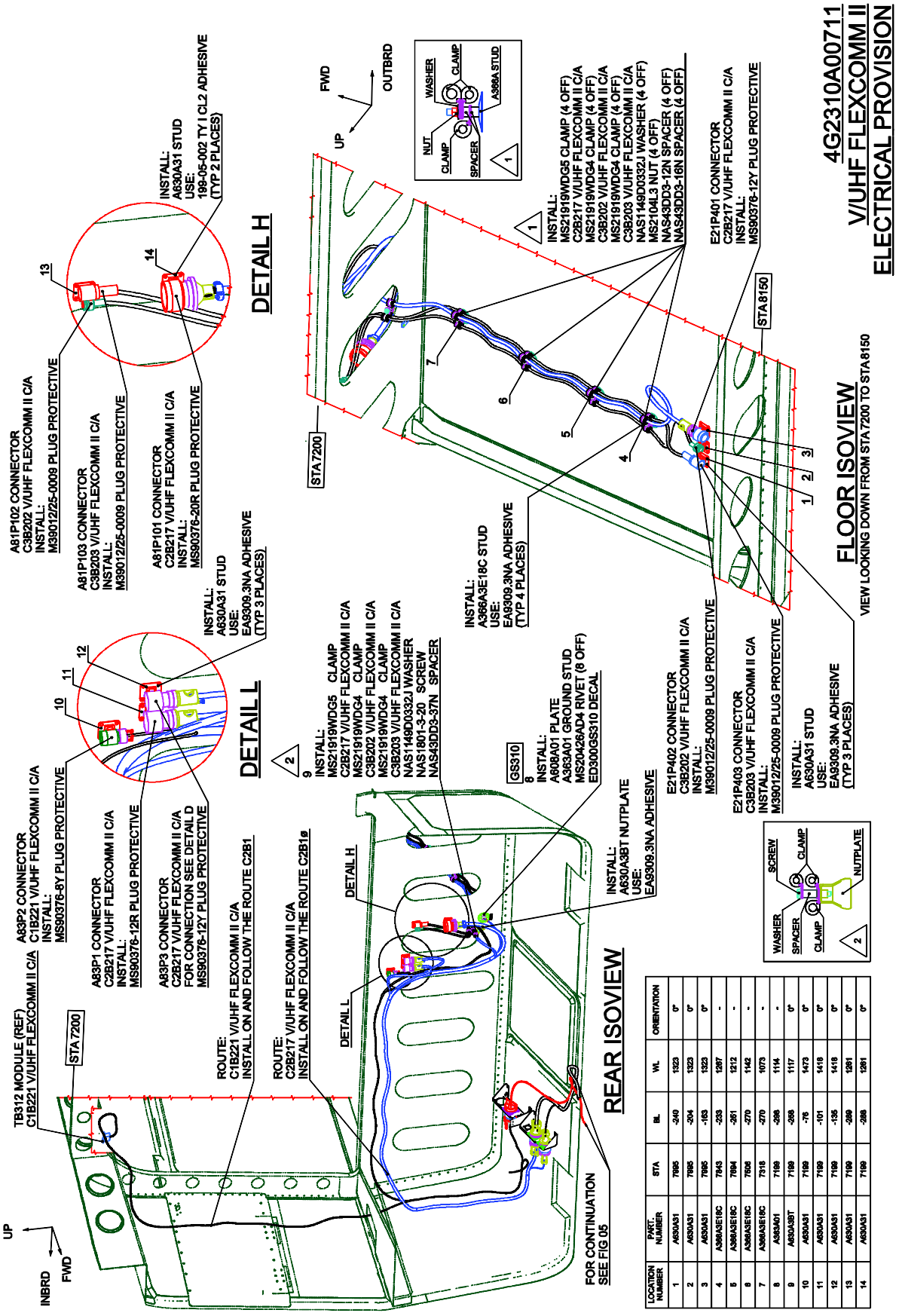

4G2310A00711
V/UHF FLEXCOMM II ELECTRICAL PROVISION
COCKPIT FLOOR ISOVIEW
RH SIDE VIEW
J102 CONNECTOR
B1B278 V/UHF FLEXCOMM II C/A
B1B2 (REF)
J110 CONNECTOR
B2B220 V/UHF FLEXCOMM II C/A
B2B2 (REF)
J108 CONNECTOR
B2B220 V/UHF FLEXCOMM II C/A
B2B2 (REF)
LH
UP
FWD
COCKPIT FLOOR ISOVIEW
LH SIDE FRAME VIEW
P108 CONNECTOR
A2B242 V/UHF FLEXCOMM II C/A
A2B1 (REF)
P110 CONNECTOR
A2B242 V/UHF FLEXCOMM II C/A
A2B1 (REF)
P102 CONNECTOR
A1B266 V/UHF FLEXCOMM II C/A
A1B1 (REF)
UP
FWD
RH
DETAIL F
1
INSTALL:
A630A31 STUD
USE:
199-05-002 TY I CL2 ADHESIVE
PL82P500 CONNECTOR
A2B242 V/UHF FLEXCOMM II C/A
A1B266 V/UHF FLEXCOMM II C/A
INSTALL:
DCC-14 PLUG PROTECTIVE
PL82P501 CONNECTOR
A2B242 V/UHF FLEXCOMM II C/A
INSTALL:
DCC-14 PLUG PROTECTIVE
DETAIL F
TB136-3 MODULE
A1B266 V/UHF FLEXCOMM II C/A
TB154 MODULE
A1B266 V/UHF FLEXCOMM II C/A
COCKPIT ISOVIEW
LH SIDE VIEW
UP
INBRD
FWD
INTERSEAT CONSOLE ISOVIEW
VIEW LOOKING DOWN
TB104P1 CONNECTOR
A2B242 V/UHF FLEXCOMM II C/A
A2B1 (REF)
PL1P4 CONNECTOR
B1B278 V/UHF FLEXCOMM II C/A
B1B2 REF.
TB134P1 CONNECTOR
A1B266 V/UHF FLEXCOMM II C/A
A1B1 (REF)
TB128P1 CONNECTOR
A1B266 V/UHF FLEXCOMM II C/A
A1B1 (REF)
UP
OUTBRD
FWD
LOCATION NUMBER
PART NUMBER
STA
BL
WL
ORIENTATION
1
A630A31
2886
-130
1429
0°

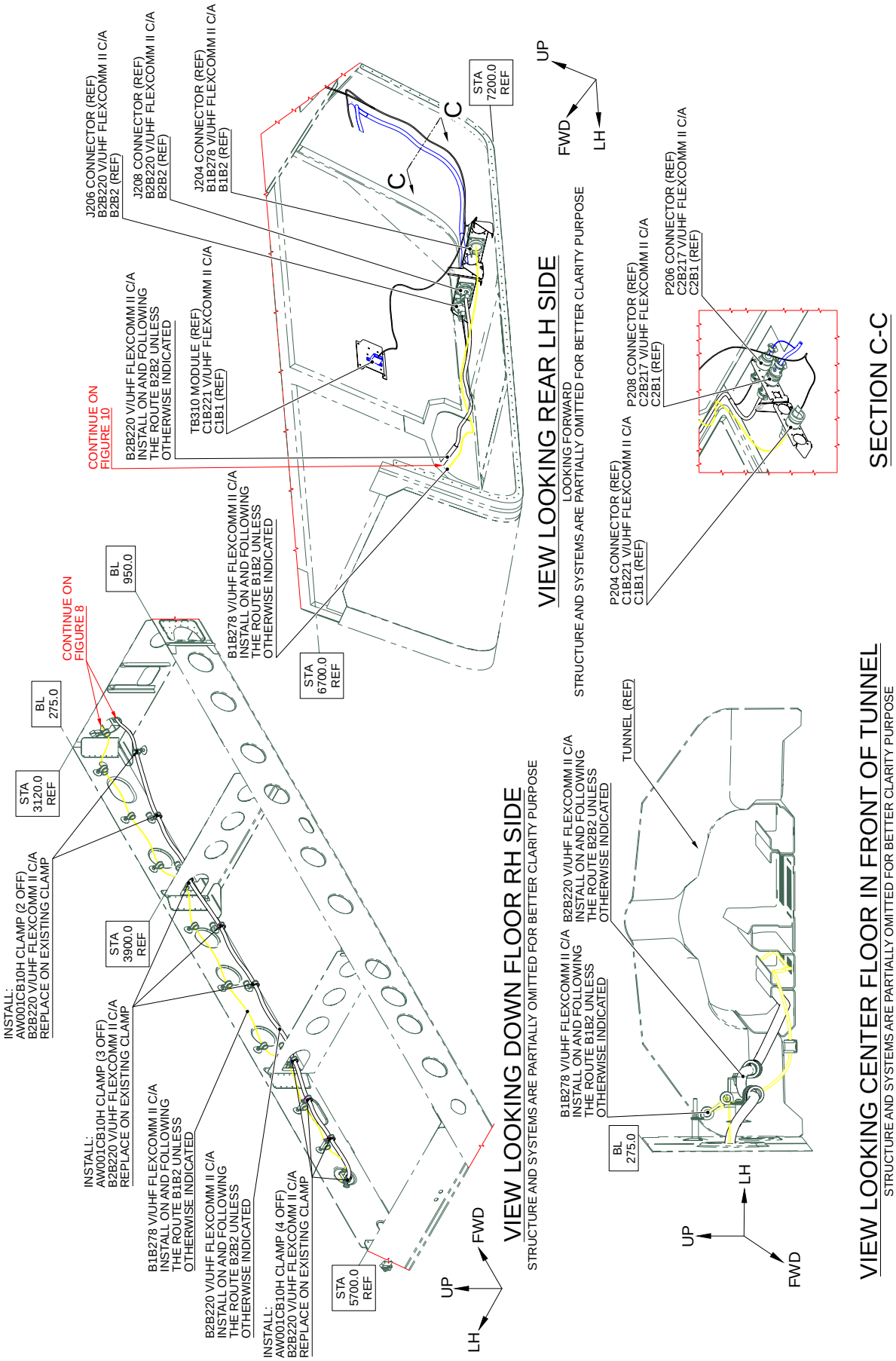
Figure 5


4G2310A00711
V/UHF FLEXCOMM II ELECTRICAL PROVISION
FLOOR VIEW
LOOKING DOWN FROM STA 5700 TO STA 5500
ROUTE:
B1B278 V/UHF FLEXCOMM II C/A
INSTALL ON AND FOLLOW ROUTE B1B2
ROUTE:
B2B220 V/UHF FLEXCOMM II C/A
INSTALL ON AND FOLLOW ROUTE B2B2
STA 5500
STA 5700
BL 276
INBRD
UP
FWD
VIEW G-G
P204 CONNECTOR (REF)
C1B221 V/UHF FLEXCOMM II C/A
C1B1 (REF)
P208 CONNECTOR (REF)
C2B217 V/UHF FLEXCOMM II C/A
C2B1 (REF)
P206 CONNECTOR (REF)
C2B217 V/UHF FLEXCOMM II C/A
C2B1 (REF)
FLOOR VIEW
LOOKING DOWN RH SIDE
ROUTE:
B1B278 V/UHF FLEXCOMM II C/A
INSTALL ON AND FOLLOW ROUTE B1B2
ROUTE:
B2B220 V/UHF FLEXCOMM II C/A
INSTALL ON AND FOLLOW ROUTE B2B2
BL 275
BL 980
STA 5120
STA 4900
STA 4800
FOR CONTINUATION
SEE FLOOR VIEW
UP
FWD
OUTBRD
REAR LH SIDE VIEW
LOOKING FORWARD
J208 CONNECTOR (REF)
B2B220 V/UHF FLEXCOMM II C/A
B2B2 (REF)
J204 CONNECTOR (REF)
B1B278 V/UHF FLEXCOMM II C/A
B1B2 (REF)
J206 CONNECTOR (REF)
B2B220 V/UHF FLEXCOMM II C/A
B2B2 (REF)
TB310 MODULE
ROUTE:
B1B278 V/UHF FLEXCOMM II C/A
INSTALL ON AND FOLLOW ROUTE B1B2
ROUTE:
B2B220 V/UHF FLEXCOMM II C/A
INSTALL ON AND FOLLOW ROUTE B2B2
STA 7200
STA 5500
G
UP
FWD
OUTBRD



LOCATION NUMBER	PART NUMBER	STA	BL	WL	ORIENTATION
1	A630A31	7985	-240	1323	0°
2	A630A31	7985	-204	1323	0°
3	A630A31	7985	-163	1323	0°
4	A366A3E18C	7643	-233	1267	-
5	A366A3E18C	7694	-261	1212	-
6	A366A3E18C	7636	-270	1142	-
7	A366A3E18C	7318	-270	1073	-
8	A365A01	7199	-268	1114	-
9	A630A3BT	7199	-268	1117	0°
10	A630A31	7199	-76	1473	0°
11	A630A31	7199	-101	1418	0°
12	A630A31	7199	-135	1418	0°
13	A630A31	7199	-289	1281	0°
14	A630A31	7199	-268	1281	0°

Figure 7


CONTINUE ON FIGURE 10
J206 CONNECTOR (REF)
B2B220 V/UHF FLEXCOMM II C/A
B2B2 (REF)
J208 CONNECTOR (REF)
B2B220 V/UHF FLEXCOMM II C/A
B2B2 (REF)
J204 CONNECTOR (REF)
B1B278 V/UHF FLEXCOMM II C/A
B1B2 (REF)
B2B220 V/UHF FLEXCOMM II C/A
INSTALL ON AND FOLLOWING
THE ROUTE B2B2 UNLESS
OTHERWISE INDICATED
TB310 MODULE (REF)
C1B221 V/UHF FLEXCOMM II C/A
C1B1 (REF)
B1B278 V/UHF FLEXCOMM II C/A
INSTALL ON AND FOLLOWING
THE ROUTE B1B2 UNLESS
OTHERWISE INDICATED
STA 6700.0 REF
STA 7200.0 REF
C
C
UP
FWD
LH
VIEW LOOKING REAR LH SIDE
LOOKING FORWARD
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
P204 CONNECTOR (REF)
C1B221 V/UHF FLEXCOMM II C/A
C1B1 (REF)
P208 CONNECTOR (REF)
C2B217 V/UHF FLEXCOMM II C/A
C2B1 (REF)
P206 CONNECTOR (REF)
C2B217 V/UHF FLEXCOMM II C/A
C2B1 (REF)
SECTION C-C
CONTINUE ON FIGURE 8
BL 950.0
BL 275.0
STA 3120.0 REF
INSTALL:
AW001CB10H CLAMP (2 OFF)
B2B220 V/UHF FLEXCOMM II C/A
REPLACE ON EXISTING CLAMP
STA 3900.0 REF
INSTALL:
AW001CB10H CLAMP (3 OFF)
B2B220 V/UHF FLEXCOMM II C/A
REPLACE ON EXISTING CLAMP
B1B278 V/UHF FLEXCOMM II C/A
INSTALL ON AND FOLLOWING
THE ROUTE B1B2 UNLESS
OTHERWISE INDICATED
B2B220 V/UHF FLEXCOMM II C/A
INSTALL ON AND FOLLOWING
THE ROUTE B2B2 UNLESS
OTHERWISE INDICATED
INSTALL:
AW001CB10H CLAMP (4 OFF)
B2B220 V/UHF FLEXCOMM II C/A
REPLACE ON EXISTING CLAMP
STA 5700.0 REF
UP
FWD
LH
VIEW LOOKING DOWN FLOOR RH SIDE
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
B1B278 V/UHF FLEXCOMM II C/A
INSTALL ON AND FOLLOWING
THE ROUTE B1B2 UNLESS
OTHERWISE INDICATED
B2B220 V/UHF FLEXCOMM II C/A
INSTALL ON AND FOLLOWING
THE ROUTE B2B2 UNLESS
OTHERWISE INDICATED
TUNNEL (REF)
BL 275.0
UP
LH
FWD
VIEW LOOKING CENTER FLOOR IN FRONT OF TUNNEL
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

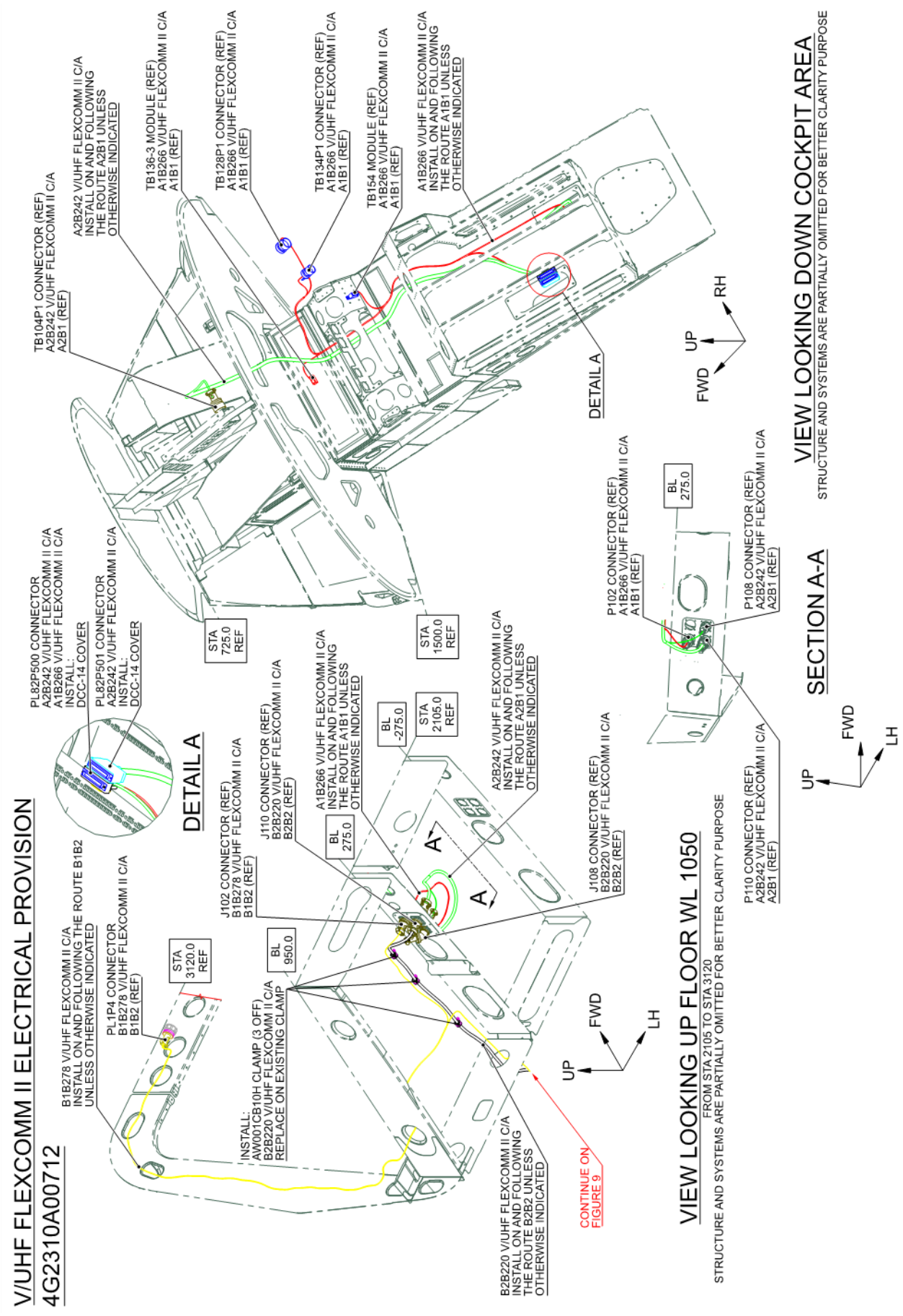
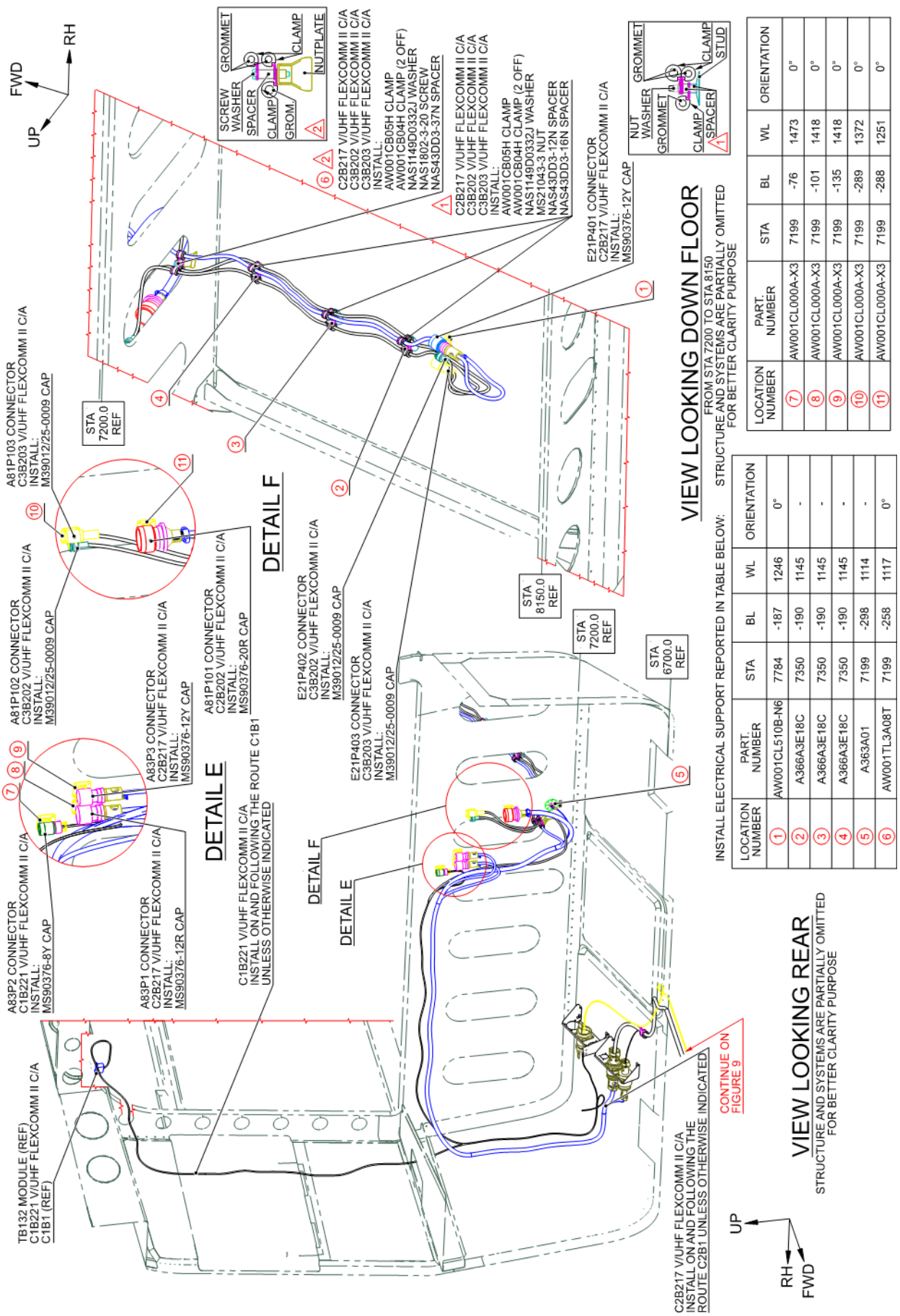

V/UHF FLEXCOMM II ELECTRICAL PROVISION
4G2310A00712
VIEW LOOKING UP FLOOR WL 1050
FROM STA 2105 TO STA 3120
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
VIEW LOOKING DOWN COCKPIT AREA
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
SECTION A-A
DETAIL A
DETAIL A
TB104P1 CONNECTOR (REF) A2B242 V/UHF FLEXCOMM II C/A A2B1 (REF)
A2B242 V/UHF FLEXCOMM II C/A INSTALL ON AND FOLLOWING THE ROUTE A2B1 UNLESS OTHERWISE INDICATED
TB136-3 MODULE (REF) A1B266 V/UHF FLEXCOMM II C/A A1B1 (REF)
TB128P1 CONNECTOR (REF) A1B266 V/UHF FLEXCOMM II C/A A1B1 (REF)
TB134P1 CONNECTOR (REF) A1B266 V/UHF FLEXCOMM II C/A A1B1 (REF)
TB154 MODULE (REF) A1B266 V/UHF FLEXCOMM II C/A A1B1 (REF)
A1B266 V/UHF FLEXCOMM II C/A INSTALL ON AND FOLLOWING THE ROUTE A1B1 UNLESS OTHERWISE INDICATED
PL82P500 CONNECTOR A2B242 V/UHF FLEXCOMM II C/A A1B266 V/UHF FLEXCOMM II C/A INSTALL: DCC-14 COVER
PL82P501 CONNECTOR A2B242 V/UHF FLEXCOMM II C/A INSTALL: DCC-14 COVER
STA 725.0 REF
STA 1500.0 REF
STA 2105.0 REF
STA 3120.0 REF
BL -275.0
BL 275.0
BL 950.0
J102 CONNECTOR (REF) B1B278 V/UHF FLEXCOMM II C/A B1B2 (REF)
J110 CONNECTOR (REF) B2B220 V/UHF FLEXCOMM II C/A B2B2 (REF)
A1B266 V/UHF FLEXCOMM II C/A INSTALL ON AND FOLLOWING THE ROUTE A1B1 UNLESS OTHERWISE INDICATED
A2B242 V/UHF FLEXCOMM II C/A INSTALL ON AND FOLLOWING THE ROUTE A2B1 UNLESS OTHERWISE INDICATED
J108 CONNECTOR (REF) B2B220 V/UHF FLEXCOMM II C/A B2B2 (REF)
P102 CONNECTOR (REF) A1B266 V/UHF FLEXCOMM II C/A A1B1 (REF)
P108 CONNECTOR (REF) A2B242 V/UHF FLEXCOMM II C/A A2B1 (REF)
P110 CONNECTOR (REF) A2B242 V/UHF FLEXCOMM II C/A A2B1 (REF)
B1B278 V/UHF FLEXCOMM II C/A INSTALL ON AND FOLLOWING THE ROUTE B1B2 UNLESS OTHERWISE INDICATED
PL1P4 CONNECTOR B1B278 V/UHF FLEXCOMM II C/A B1B2 (REF)
INSTALL: AW001CB10H CLAMP (3 OFF) B2B220 V/UHF FLEXCOMM II C/A REPLACE ON EXISTING CLAMP
B2B220 V/UHF FLEXCOMM II C/A INSTALL ON AND FOLLOWING THE ROUTE B2B2 UNLESS OTHERWISE INDICATED
CONTINUE ON FIGURE 9
A
A
UP
FWD
LH
RH
UP
FWD
UP
FWD
LH

Figure 9



INSTALL ELECTRICAL SUPPORT REPORTED IN TABLE BELOW:

LOCATION NUMBER	PART NUMBER	STA	BL	WL	ORIENTATION
1	AW001CL510B-N6	7784	-187	1246	0°
2	A366A3E18C	7350	-190	1145	-
3	A366A3E18C	7350	-190	1145	-
4	A366A3E18C	7350	-190	1145	-
5	A363A01	7199	-298	1114	-
6	AW0011TL3A08T	7199	-258	1117	0°

LOCATION NUMBER	PART NUMBER	STA	BL	WL	ORIENTATION
7	AW001CL000A-X3	7199	-76	1473	0°
8	AW001CL000A-X3	7199	-101	1418	0°
9	AW001CL000A-X3	7199	-135	1418	0°
10	AW001CL000A-X3	7199	-289	1372	0°
11	AW001CL000A-X3	7199	-288	1251	0°

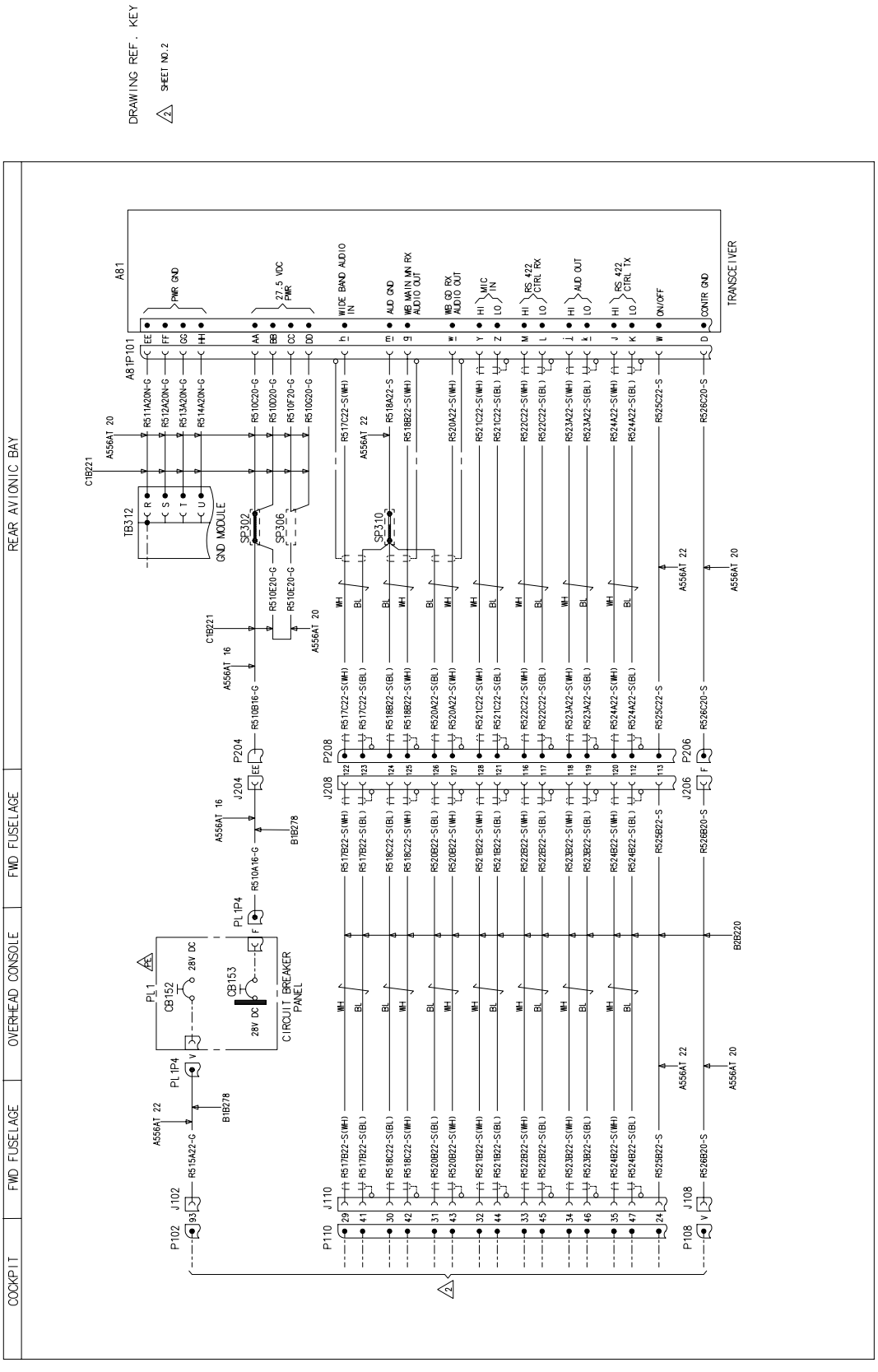
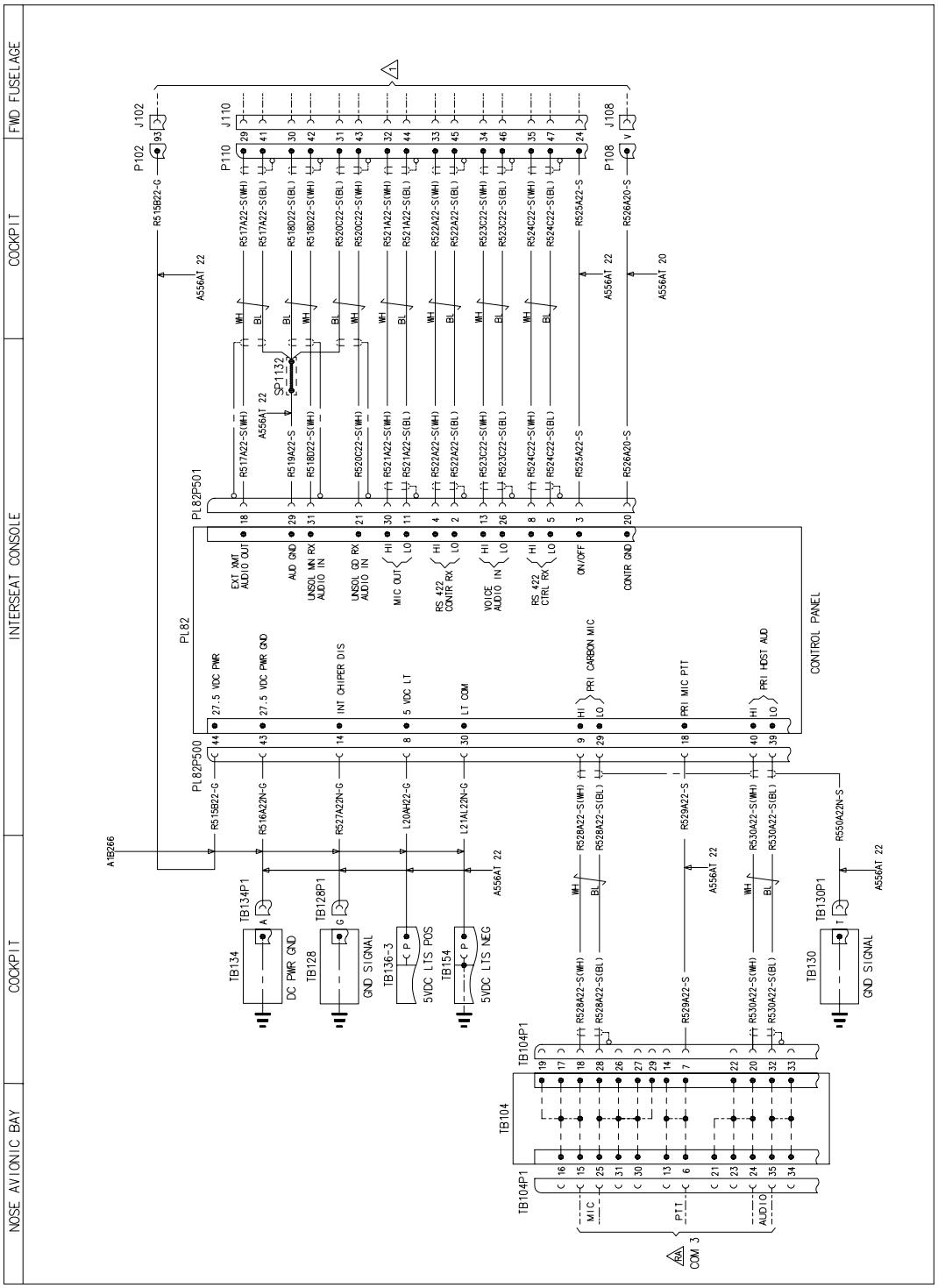
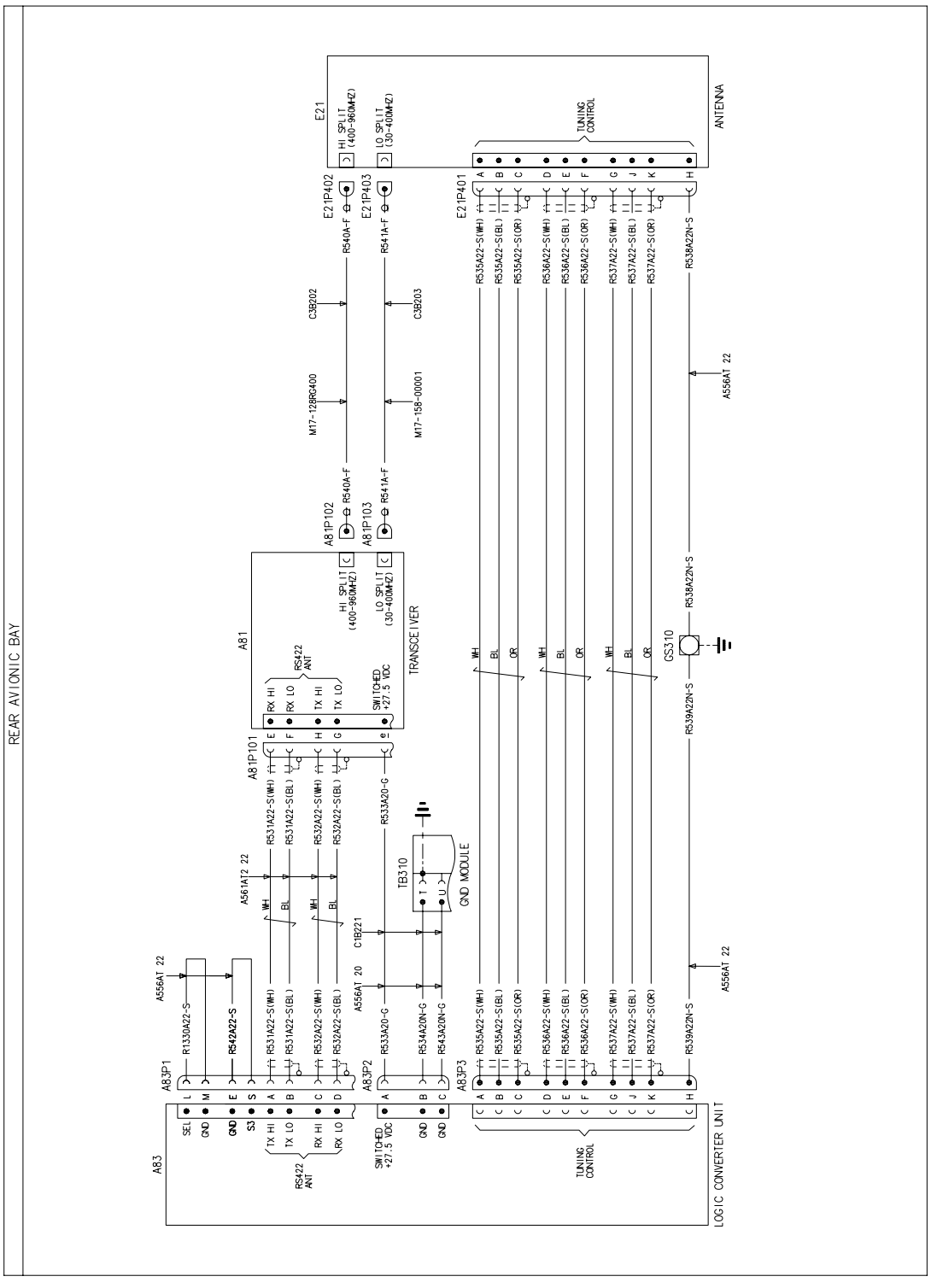

COCKPIT
FWD FUSELAGE
OVERHEAD CONSOLE
FWD FUSELAGE
REAR AVIONIC BAY
DRAWING REF. KEY
SHEET NO.2
A81
A81P101
TRANSCEIVER
WIDE BAND AUDIO IN
ALD GND
WB MAIN VHF RX AUDIO OUT
WB CD RX AUDIO OUT
HI MIC IN
LO MIC IN
HI RS 422 CTRL RX
LO RS 422 CTRL RX
HI ALD OUT
LO ALD OUT
HI RS 422 CTRL TX
LO RS 422 CTRL TX
ON/OFF
CONTR GND
PWR GND
27.5 VDC PWR
TB312
GND MODULE
SP302
SP306
SP310
C1B221
CB152
CB153
28V DC
CIRCUIT BREAKER PANEL
PL1
PL1P4
B1B278
B2B220
P102
J102
P110
J110
P204
J204
P208
J208
P206
J206
P108
J108
FUNCTIONAL NOTES
ALL CABLES ARE IN LOOM C2B217 UNLESS SPECIFIED
ALL CABLES ARE OF TYPE A561A12 22 UNLESS SPECIFIED

Figure 11

3G2310W00111
WIRING DIAGRAM V/UHF FLEXCOMM II
SHEET 2



S.B. N°139-271
DATE: July 25, 2013
REVISION: A - July 9, 2021



FUNCTIONAL NOTES

ALL CABLES ARE IN LOOM C2B217 UNLESS SPECIFIED
ALL CABLES ARE OF TYPE A561A13 22 UNLESS SPECIFIED

Figure 13

CABLE ASSY	REF-DES	PIN	CONTACT P/N	INSULATION SLEEVING
B1B278	J102	93	M39029/56-348	-
B1B278	J204	EE	M39029/56-352	-
B1B278	PL1P4	F	M39029/58-364	-
B1B278	PL1P4	V	M39029/58-363	-
B2B220	J108	V	M39029/56-351	-
B2B220	J206	F	M39029/56-351	-
B2B220	J110	29	M39029/56-348	HT20-15BLACK
B2B220	J110	41	M39029/56-348	HT20-15BLACK
B2B220	J110	30	M39029/56-348	HT20-15BLACK
B2B220	J110	42	M39029/56-348	HT20-15BLACK
B2B220	J110	31	M39029/56-348	HT20-15BLACK
B2B220	J110	43	M39029/56-348	HT20-15BLACK
B2B220	J110	32	M39029/56-348	HT20-15BLACK
B2B220	J110	44	M39029/56-348	HT20-15BLACK
B2B220	J110	33	M39029/56-348	HT20-15BLACK
B2B220	J110	45	M39029/56-348	HT20-15BLACK
B2B220	J110	34	M39029/56-348	HT20-15BLACK
B2B220	J110	46	M39029/56-348	HT20-15BLACK
B2B220	J110	35	M39029/56-348	HT20-15BLACK
B2B220	J110	47	M39029/56-348	HT20-15BLACK
B2B220	J110	24	M39029/56-348	-
B2B220	J208	122	M39029/56-348	HT20-15BLACK
B2B220	J208	123	M39029/56-348	HT20-15BLACK
B2B220	J208	124	M39029/56-348	HT20-15BLACK
B2B220	J208	125	M39029/56-348	HT20-15BLACK
B2B220	J208	126	M39029/56-348	HT20-15BLACK
B2B220	J208	127	M39029/56-348	HT20-15BLACK
B2B220	J208	128	M39029/56-348	HT20-15BLACK
B2B220	J208	121	M39029/56-348	HT20-15BLACK
B2B220	J208	116	M39029/56-348	HT20-15BLACK
B2B220	J208	117	M39029/56-348	HT20-15BLACK
B2B220	J208	118	M39029/56-348	HT20-15BLACK
B2B220	J208	119	M39029/56-348	HT20-15BLACK
B2B220	J208	120	M39029/56-348	HT20-15BLACK
B2B220	J208	112	M39029/56-348	HT20-15BLACK
B2B220	J208	113	M39029/56-348	-
C1B221	P204	EE	M39029/58-364	-
C1B221	TB312	R	A523A-A03	-
C1B221	TB312	S	A523A-A03	-
C1B221	TB312	T	A523A-A03	-
C1B221	TB312	U	A523A-A03	-
C2B217	A81P101	h	M39029/5-115	HT20-15BLACK
C2B217	A81P101	q	M39029/5-115	HT20-15BLACK
C2B217	A81P101	w	M39029/5-115	HT20-15BLACK
C2B217	A81P101	Y	M39029/5-115	HT20-15BLACK
C2B217	A81P101	Z	M39029/5-115	HT20-15BLACK
C2B217	A81P101	L	M39029/5-115	HT20-15BLACK
C2B217	A81P101	M	M39029/5-115	HT20-15BLACK
C2B217	A81P101	j	M39029/5-115	HT20-15BLACK
C2B217	A81P101	k	M39029/5-115	HT20-15BLACK
C2B217	A81P101	J	M39029/5-115	HT20-15BLACK
C2B217	A81P101	K	M39029/5-115	HT20-15BLACK
C2B217	A81P101	W	M39029/5-115	-
C2B217	A81P101	D	M39029/5-115	-
C2B217	A81P101	m	M39029/5-115	-
C2B217	P206	F	M39029/58-363	-
C2B217	P208	122	M39029/58-360	HT20-15BLACK
C2B217	P208	125	M39029/58-360	HT20-15BLACK
C2B217	P208	127	M39029/58-360	HT20-15BLACK
C2B217	P208	128	M39029/58-360	HT20-15BLACK
C2B217	P208	121	M39029/58-360	HT20-15BLACK
C2B217	P208	117	M39029/58-360	HT20-15BLACK
C2B217	P208	116	M39029/58-360	HT20-15BLACK
C2B217	P208	118	M39029/58-360	HT20-15BLACK
C2B217	P208	119	M39029/58-360	HT20-15BLACK
C2B217	P208	120	M39029/58-360	HT20-15BLACK
C2B217	P208	112	M39029/58-360	HT20-15BLACK
C2B217	P208	113	M39029/58-360	-
C2B217	P208	123	M39029/58-360	HT20-15BLACK
C2B217	P208	124	M39029/58-360	HT20-15BLACK
C2B217	P208	126	M39029/58-360	HT20-15BLACK

TABLE 1

CABLE ASSY	REF-DES	PIN	CONTACT P/N	INSULATION SLEEVING
A1B266	P102	93	M39029/58-360	-
A1B266	TB128P1	G	M39029/56-351	-
A1B266	TB134P1	A	M39029/56-351	-
A1B266	TB136/3	P	001104-202-02	-
A1B266	TB154	P	001104-200-02	-
A2B242	P108	V	M39029/58-363	-
A2B242	P110	29	M39029/58-360	HT20-15BLACK
A2B242	P110	41	M39029/58-360	HT20-15BLACK
A2B242	P110	30	M39029/58-360	HT20-15BLACK
A2B242	P110	42	M39029/58-360	HT20-15BLACK
A2B242	P110	31	M39029/58-360	HT20-15BLACK
A2B242	P110	43	M39029/58-360	HT20-15BLACK
A2B242	P110	44	M39029/58-360	HT20-15BLACK
A2B242	P110	32	M39029/58-360	HT20-15BLACK
A2B242	P110	45	M39029/58-360	HT20-15BLACK
A2B242	P110	33	M39029/58-360	HT20-15BLACK
A2B242	P110	34	M39029/58-360	HT20-15BLACK
A2B242	P110	46	M39029/58-360	HT20-15BLACK
A2B242	P110	47	M39029/58-360	HT20-15BLACK
A2B242	P110	35	M39029/58-360	HT20-15BLACK
A2B242	P110	24	M39029/58-360	-
A2B242	PL82P500	39	FC8122D	M23053/8-004C
A2B242	PL82P500	40	FC8122D	M23053/8-004C
A2B242	PL82P500	9	FC8122D	M23053/8-004C
A2B242	PL82P500	29	FC8122D	M23053/8-004C
A2B242	PL82P500	18	FC8122D	-
A2B242	TB104P1	32	M39029/56-348	M23053/8-004C
A2B242	TB104P1	20	M39029/56-348	M23053/8-004C
A2B242	TB104P1	18	M39029/56-348	M23053/8-004C
A2B242	TB104P1	28	M39029/56-348	M23053/8-004C
A2B242	TB104P1	7	M39029/56-348	-
A2B242	TB130P1	T	M39029/56-351	-

TABLE 2

CABLE ASSY	REF-DES	PIN	CONTACT P/N	INSULATION SLEEVING
C1B221	TB310	T	A523A-A03	-
C1B221	TB310	U	A523A-A03	-
C2B217	A81P101	E	M39029/5-115	HT20-15BLACK
C2B217	A81P101	F	M39029/5-115	HT20-15BLACK
C2B217	A81P101	H	M39029/5-115	HT20-15BLACK
C2B217	A81P101	G	M39029/5-115	HT20-15BLACK
C2B217	GS310	*	MS25036-103	HT20-15BLACK
C2B217	GS310	*	MS25036-103	HT20-15BLACK

TABLE 3

V/UHF FLEXCOMM II EQUIPMENT INSTALLATION
4G2310A01611

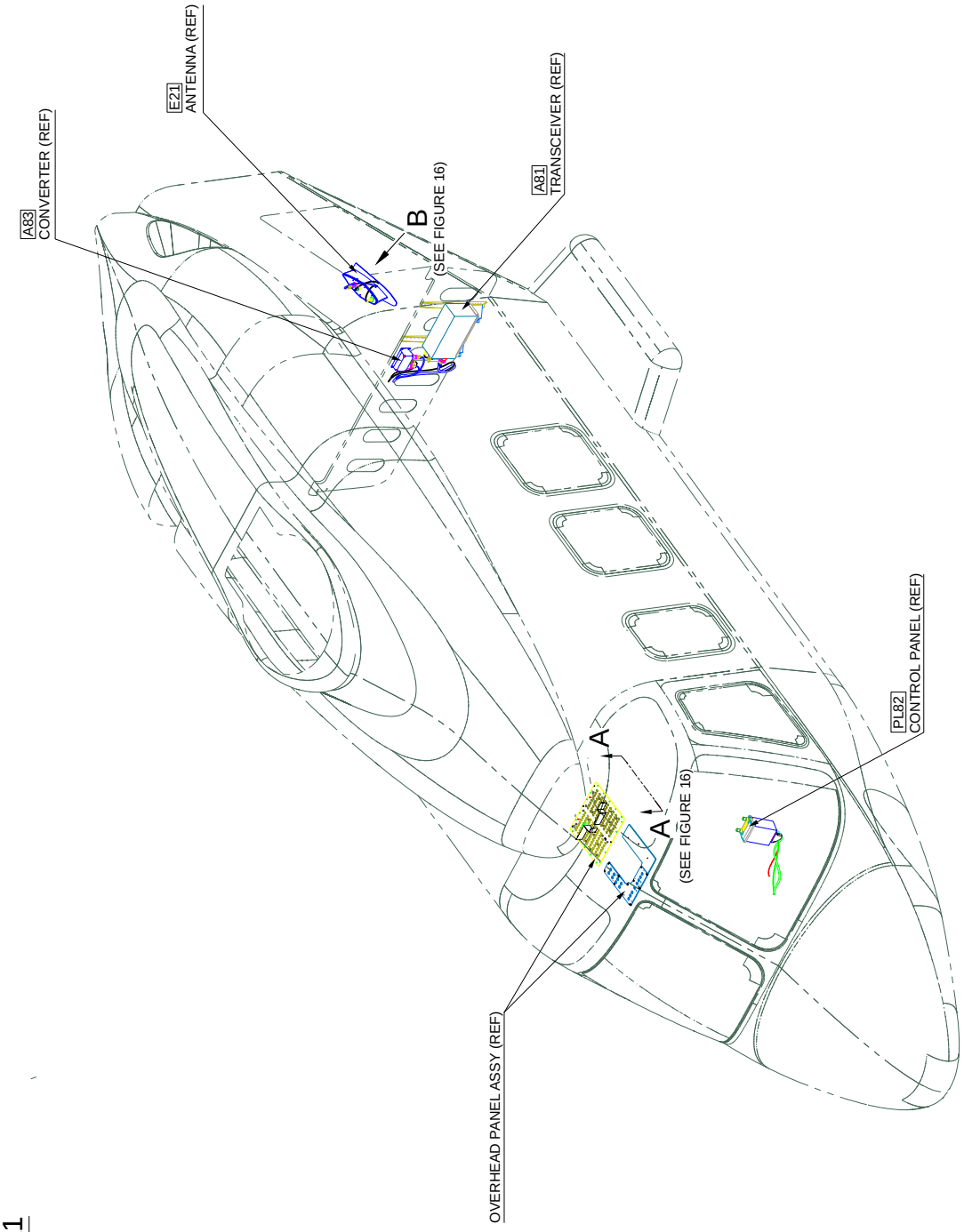
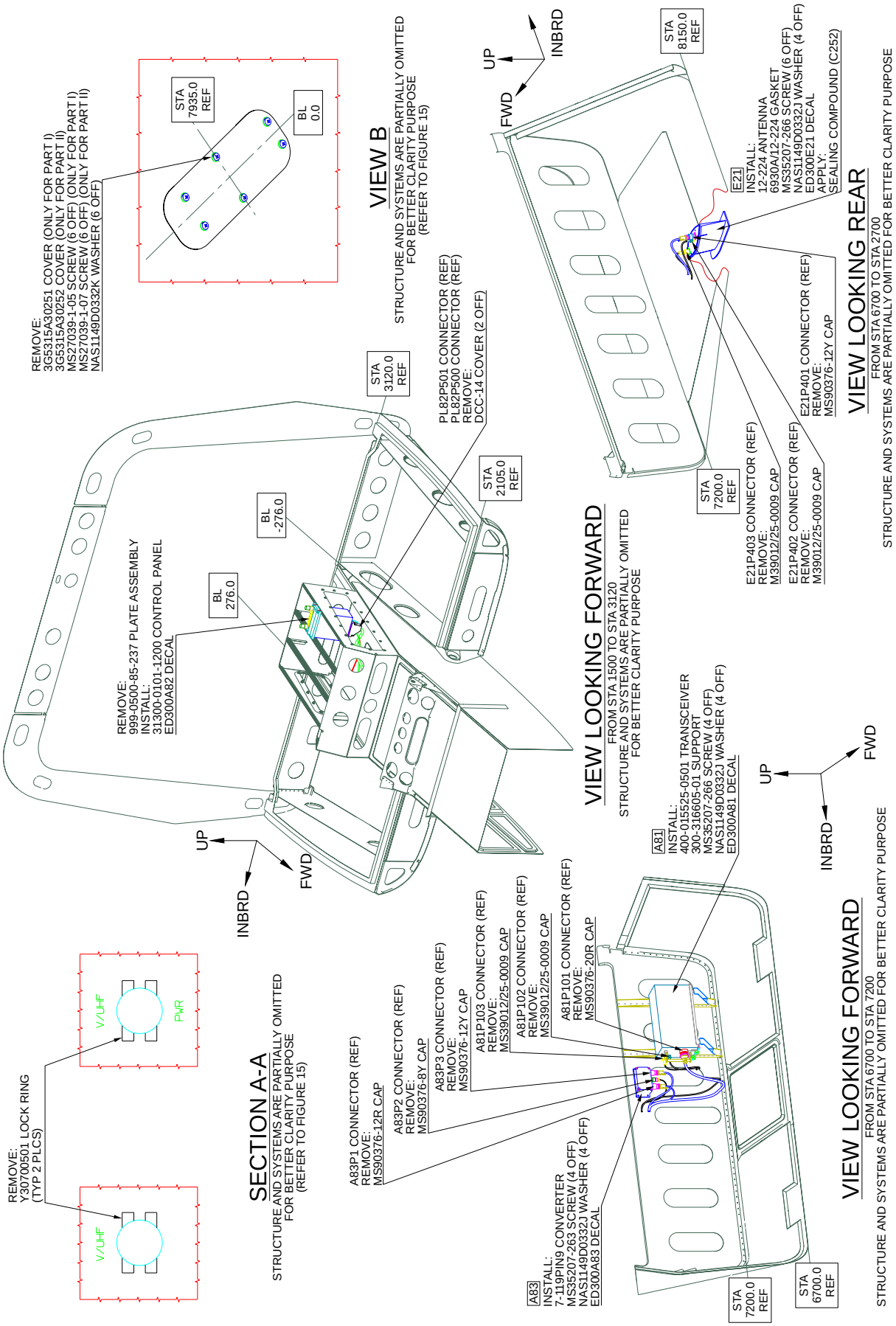


Figure 15



S.B. N°139-271
DATE: July 25, 2013
REVISION: A - July 9, 2021

LEONARDO
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Please send to the following address: **LEONARDO S.p.A.** **CUSTOMER SUPPORT & SERVICES - ITALY** **PRODUCT SUPPORT ENGINEERING & LICENSES DEPT.** Via Giovanni Agusta, 520 21017 Cascina Costa di Samarate (VA) - ITALY Tel.: +39 0331 225036 Fax: +39 0331 225988	**SERVICE BULLETIN COMPLIANCE FORM**	Date:
	Number:	
	Revision:	

Customer Name and Address:	Telephone:
	Fax:
	B.T. Compliance Date:

Helicopter Model	S/N	Total Number	Total Hours	T.S.O.

Remarks:

Information:

We request your cooperation in filling this form, in order to keep out statistical data relevant to aircraft configuration up-to-date. The form should be filled in all its parts and sent to the above address or you can communicate the application also via Technical Bulletin Application Communication Section placed in Leonardo AW Customer Portal - MyCommunications Area. We thank you beforehand for the information given.