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AgustaWestland Products

SERVICE BULLETIN

RECOMMENDED

N° 139-616

DATE: June 19, 2024

REV. : /

TITLE

ATA 53 - LOWER LH TAIL LONGERON INSPECTION AND REPAIR

REVISION LOG

First Issue

1. PLANNING INFORMATION

A. EFFECTIVITY

Part I:

Tail boom assemblies P/N 3G5350A00132, P/N 3G5350A00133, P/N 3G5350A00134, P/N 3G5350A00135 and P/N 3G5350A00136 up to S/N PZL247C included, installed on AB139/AW139 helicopters or kept in stock, and equipped with structural provision of the Kit HF P/N 3G2310F00211.

Part II:

Tail boom assemblies P/N 3G5350A00132, P/N 3G5350A00133, P/N 3G5350A00134 and P/N 3G5350A00135:

- ✓ identified as affected and requiring Part II application based on inspection in Part I, and
- ✓ already improved by tail fitting reinforcement retromod P/N 3G5309P02711 (ref. also to SB 139-419) or tail reinforcement retromod P/N 3G5309P01812 (ref. also to SB 139-200).

Part III:

Tail boom assemblies P/N 3G5350A00132, P/N 3G5350A00133 and P/N 3G5350A00134:

- ✓ identified as affected and requiring Part III application based on inspection in Part I, and
- ✓ NOT already improved by tail fitting reinforcement retromod P/N 3G5309P02711 (ref. also to SB 139-419) or tail reinforcement retromod P/N 3G5309P01812 (ref. also to SB 139-200).

Part IV:

Tail boom assembly P/N 3G5350A00136 up to S/N PZL247C, identified as affected and requiring Part IV application based on inspection in Part I.

B. COMPLIANCE

Part I

- For tail boom assemblies installed on AB139/AW139 helicopters: within and not later than 6 months after the issue of this Service Bulletin.
- For tail boom assemblies kept in stock: before next installation.

Part II, Part III, Part IV

Within and not later than 600 flight hours or 1 year whichever occurs first after accomplishment of Part I.

C. CONCURRENT REQUIREMENTS

N.A.

D. REASON

This Service Bulletin is issued in order to provide the necessary instructions on how to inspect the lower left longeron for drill marks and, in case of findings, on how to apply a repair procedure.

LHD issued this SB for the following reason:

Helicopter Reliability/Maintainability	✓
Product Improvement	
Obsolescence	
Customization	
Product/Capability Enhancement	

E. DESCRIPTION

During 300 FH inspection, an operator found drill marks in two locations on the lower left tail boom longeron where the HF mount is fitted to the tail boom at STA 9200, WL 1670, BL 300 LH. For in service components, repair drawings have been developed to install reinforcements in the affected area.

Part I provides the necessary instructions on how to perform a one-off check for the presence of drill marks on the longeron.

Part II provides the necessary instructions on how to perform the installation of the tail lower LH longeron HF antenna repair P/N 3G5350R00911.

Part III provides the necessary instructions on how to perform the installation of the tail lower LH longeron HF repair P/N 3G5350R01011.

Part IV provides the necessary instructions on how to perform the installation of the tail lower LH longeron HF antenna repair P/N 3G5350R00811.

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 LHD 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

To comply with this Service Bulletin, the following MMH are deemed necessary.

Part I: approximately ten (10);

Part II: approximately thirty-five (35);

Part III: approximately thirty-five (35);

Part IV: approximately thirty-five (35).

MMH are based on hands-on time and can change with helicopter configuration, personnel and facilities available. MMH are not comprehensive of the overall hours necessary to get access to work areas and to remove all the equipment that interferes with the application of the prescribed instructions.

H. WEIGHT AND BALANCE

N.A.

I. REFERENCES

I.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
DM02	39-A-06-41-00-00A-010A-A	Access doors and panels - General data	All
DM03	39-A-23-14-04-00A-520A-K	HF antenna - Remove procedure	I
DM04	39-A-23-14-04-00A-720A-K	HF antenna - Install procedure	All

I.2 ACRONYMS & ABBREVIATIONS

AMDI Aircraft Material Data Information

AMP Aircraft Maintenance Publication

AR	As Required
DM	Data Module
DOA	Design Organization Approval
EASA	European Aviation Safety Agency
FW	Forward
IPD	Illustrated Part Data
ITEP	Illustrated tool and equipment publication
LH	Left Hand
LHD	Leonardo Helicopters Division
MMH	Maintenance Man Hours
N.A.	Not Applicable
P/N	Part Number
SB	Service Bulletin
S/N	Serial Number

I.3 ANNEX

N.A.

J. PUBLICATIONS AFFECTED

N.A.

K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.

2. MATERIAL INFORMATION

A. REQUIRED MATERIALS

A.1 PARTS

PART I

N.A.

PART II

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
1	**3G5350R00911**		**TAIL LOWER LH LONGERON HF ANTENNA REPAIR**	**REF**	**.**		**-**
2	3G5350R00951		Shim angle	1	..	(1)	-
3	3G5350R00953	3G5350R00952	Reinforcement angle	1	..	(2)(3)	-
4	NAS9301BNS-6-04	NAS9301B-6-04	Rivet	9	..	(4)	-
5	NAS9302BNS-5-02	NAS9302B-5-02	Rivet	2	.		-
6	MS90353S0503		Rivet	5	.		-
7	NAS9302BNS-6-04	NAS9302B-6-04	Rivet	4	.		-
8	3G5350A18954	3G5350A18954A	Lower left machined (down)	1	.	(5)	-
9	3G5350A19454	3G5350A19454A	Lower laminated shim (down)	1	.	(5)	-
10	3G5350A19754	3G5350A19754A	Lower longeron strip (down)	1	.	(5)	-
11	NAS9301BNS-6-03	NAS9301B-6-03	Rivet	12	.	(5)	-
12	NAS9301BNS-6-05	NAS9301B-6-05	Rivet	11	.	(5)	-
13	A297A06TW13		Rivet	4	.	(5)	-

PART III

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
14	**3G5350R01011**		**TAIL LOWER LH LONGERON HF REPAIR**	**REF**	**.**		**-**
15	3G5350R01051		Shim angle	1	..	(6)	-
16	3G5350R01052		Reinforcement angle	1	..	(7)	-
17	NAS9301BNS-6-04	NAS9301B-6-04	Rivet	16	..		-
18	NAS9302BNS-5-02	NAS9302B-5-02	Rivet	2	.		-
19	NAS9302B-6-04		Rivet	14	.		-

PART IV

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
20	**3G5350R00811**		**TAIL LOWER LH LONGERON HF ANTENNA REPAIR**	**REF**	**.**		**-**
21	3G5350R00851		Shim angle	1	..	(8)	-
22	3G5350R00852		Reinforcement angle	1	..	(9)	-
23	A297A06TW03		Rivet	12	..		-
24	A299A06TW04		Rivet	7	..		-
25	A299A06TW05		Rivet	6	..		-
26	AGS4720-508	NAS1721H5L2A	Rivet	2	.		-

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

A.2 CONSUMABLES

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

#	SPEC./LH CODE NUMBER	DESCRIPTION	Q.TY	NOTE	PART
27	AMS-QQ-A-250/4	Sheet AL-ALY 2024 T3 Thickness 1,02 mm	0,02 m^2	(1)	II
28	AMS-QQ-A-250/4	Sheet AL-ALY 2024 T3 Thickness 2 mm	0,1 m^2	(2)	II
29	AMS-QQ-A-250/4	Sheet AL-ALY 2024 T3 Thickness 1,02 mm	0,02 m^2	(6)	III
30	AMS-QQ-A-250/4	Sheet AL-ALY 2024 T3 Thickness 2 mm	0,1 m^2	(7)	III
31	AMS-QQ-A-250/4	Sheet AL-ALY 2024 T3 Thickness 0,4 mm	0,01 m^2	(8)	IV
32	AMS-QQ-A-250/4	Sheet AL-ALY 2024 T0 Thickness 2 mm	0,2 m^2	(9)	IV
33	MMM-A-132, Type II, Class 2 199-05-002 Type I, Class 2	Adhesive EA9309.3NA (C021)	AR	(10)	II, III, IV
34	Code No. 999999999000000773	Liquid shim EA9395	AR	(10)	II, III, IV

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

A.3 LOGISTIC MATRIX

N.A.

NOTES

(1) Shim angle P/N 3G5350R00951 can be obtained from raw material with following properties: sheet AL-ALY 2024 T3 Thickness 1.02 mm (ref. to Figure 6).

(2) Reinforcement angle P/N 3G5350R00953 can be obtained from raw material with following properties: Sheet AL-ALY 2024 T3 Thickness 2 mm (ref. to Figure 5).

(3) Reinforcement angle P/N 3G5350R00953 can be obtained from rework of reinforcement angle P/N 3G5350R00952.

(4) Qty 12 additional rivets P/N NAS9301BNS-6-04 or NAS9301B-6-04 are required if drill mark has been found at location 2 during the inspection in Part I.

(5) This item has to be provided only if the drill mark has been found at location 2 during the inspection in Part I.

(6) Shim angle P/N 3G5350R01051 can be obtained from raw material with following properties: sheet AL-ALY 2024 T3 Thickness 1.02 mm (ref. to Figure 15).

(7) Reinforcement angle P/N 3G5350R01052 can be obtained from raw material with following properties: Sheet AL-ALY 2024 T3 Thickness 2 mm (ref. to Figure 16).

(8) Shim angle P/N 3G5350R00851 can be obtained from raw material with following properties: sheet AL-ALY 2024 T3 Thickness 0,4 mm (ref. to Figure 11).

(9) Reinforcement angle P/N 3G5350R00852 can be obtained from raw material with following properties: sheet AL-ALY 2024 T0 Thickness 2 mm (ref. to Figure 10).

(10) Item to procured as local supply.

B. SPECIAL TOOLS

The following special tools, or equivalent, are necessary to accomplish this Service Bulletin:

#	P/N	DESCRIPTION	Q.TY	NOTE	PART
35	Commercial	Boroscope	1		I

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

C. INDUSTRY SUPPORT INFORMATION

Owners/Operators who comply with the instructions of this Service Bulletin no later than the applicable date in the “Compliance” section will be eligible to receive necessary replacements on free of charge basis.

Consumables, Special Tools, and materials required by AMP DM recalled in this SB are not included in the aforementioned policy.

NOTE: Customers who fail to comply with the instructions in this Service Bulletin before the compliance date are not eligible for the aforementioned special policy.

Please Issue relevant MMIR form to your Warranty Administration Dpt. only if damage is found following the inspection prescribed in Part I and so if Part II, Part III or Part IV application is required.

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

c) 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.

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

e) Exposed thread surface and nut must be protected using a layer of tectyl according to MIL-C-16173 grade I.

f) All lengths are in mm.

PART I

NOTE

Skip steps 1 and 2 if the tail boom assembly is kept in stock.

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.

NOTE

As alternative to HF antenna removal it is allowed to gain access through the access panel 310BL (Ref. AMP DM 39-A-06-41-00-00A-010A-A).

2. In accordance with AMP DM 39-A-23-14-04-00A-520A-K, if necessary, remove HF antenna from the helicopter.

NOTE

Refer to Figures 12 and 13 for tail boom assemblies P/N 3G5350A00132/-133/-134.
Refer to Figures 1 and 2 for tail boom assembly P/N 3G5350A00135.
Refer to Figures 7 and 8 for tail boom assembly P/N 3G5350A00136.

3. With reference to Figures 1 and 2 Detail A or Figures 7 and 8 Detail A or Figures 12 and 13 Detail A, perform a visual inspection to find drill marks on the internal side of the longeron in correspondence of the indicated rivets (location 1 and 2) as described in the following procedure:
   3.1 With reference to Figure 2 Detail A or Figure 8 Detail A or Figure 13 Detail A, insert the boroscope inside the tail boom assy longeron passing through the hole on the FW cover LH or passing through the access panel 310BL.
   3.2 Accurately examine the internal areas of the lower left longeron in correspondence of the indicated rivets at locations 1 and 2 for presence of drill marks. In case of findings, accomplishment of Part II or Part III or Part IV is required within the compliance time indicated; otherwise, no other action is needed after Part I accomplishment.
4. Record the compliance with Part I of this Service Bulletin on the component log card.

NOTE

Skip steps 5 thru 7 if the tail boom assembly is kept in stock.

5. In accordance with AMP DM 39-A-06-41-00-00A-010A-A, if necessary re-install all external panels, internal panels and internal liners previously removed as required.
6. In accordance with AMP DM 39-A-23-14-04-00A-720A-K, if necessary, re-install HF antenna on the helicopter.
7. Return the helicopter to flight configuration and record for compliance with Part I of this Service Bulletin on the helicopter logbook.
8. Gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.
   As an alternative, send the attached compliance form to the following mail box:
   engineering.support.lhd@leonardo.com
   and (for North, Central and South America) also to:
   AWPC.Engineering.Support@leonardocompany.us

PART II

NOTE

Perform the following step 1 only if shim angle P/N 3G5350R00951 has not been provided.

1. With reference to Figure 6, rework one plate AL-ALY 2024 (Thickness 1.02 mm) as indicated to obtain shim angle and mark it as P/N 3G5350R00951.

NOTE

Perform the following step 2 only if reinforcement angle P/N 3G5350R00952 has been provided.

2. With reference to Figure 5, rework the reinforcement angle P/N 3G5350R00952 as indicated and mark it as P/N 3G5350R00953.

NOTE

Perform the following step 3 only if reinforcement angle P/N 3G5350R00952 or P/N 3G5350R00953 has not been provided.

3. With reference to Figure 5, rework one plate AL-ALY 2024 (Thickness 2.00 mm) as indicated to obtain reinforcement angle and mark it as P/N 3G5350R00953.

NOTE

Skip the following step 4 if the tail boom assembly is kept in stock.

4. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figure 1, remove all external panels, internal panels and internal liners as required to gain access to the area affected by the installation.

NOTE

The tail boom can be lifted with a sling (support equipment HA-09-00 or HA-16-02). Equivalent solutions (different sling, saddles at STA10630 and STA11370) can be used.

NOTE

Perform the following step 5 ONLY if the drill mark has been found at location 2 (Ref. Figure 2 Detail A).

5. With reference to Figure 2 Section B-B, remove lower left machined P/N 3G5350A18954, shim down P/N 3G5350A19454 and strip down P/N 3G5350A19754 from the longeron P/N 3G5350A12851. Retain for later reuse.

NOTE

Repeat the following steps 6 thru 9 for each location where drill marks have been found: location 1 **AND/OR** location 2.

6. With reference to Figure 2 Detail A, drill out the indicated rivet.
7. With reference to Figure 2, in correspondence of previously removed rivet drill a hole Ø 3.25 normal to external profile on the longeron P/N 3G5350A12851 as indicated.
8. With reference to Figure 3 View C, from the internal side of the tail boom assy, widen the previously performed slotted hole up to Ø 10.0 only on the longeron.
9. With reference to Figure 2 Detail A, install rivet P/N NAS9302BNS-5-02 on the doubler P/N 3G5350A20351.

NOTE

Perform the following step 10 ONLY if drill mark has been found at location 2 (Ref. Figure 2 Detail A).

NOTE

If necessary, it is allowed to use oversized hardware.

10. With reference to Figure 4, re-install lower left machined P/N 3G5350A18954, shim down P/N 3G5350A19454 and strip down P/N 3G5350A19754 by means of n°12 rivets P/N NAS9301BNS-6-04, n°12 rivets P/N NAS9301BNS-6-03 or P/N NAS9301B-6-03, n°4 rivets P/N A297A06TW13 and n°11 rivets P/N NAS9301BNS-6-05 or P/N NAS9301B-6-05 on the longeron P/N 3G5350A12851.
11. With reference to Figure 3 View E, drill out the indicated existing rivets.
12. With reference to Figure 3 View E, temporarily locate the shim angle P/N 3G5350R00951 and the reinforcement angle P/N 3G5350R00953 and proceed as follows:
    - 12.1 Countermark on the shim angle the positions of existing rivets previously removed at step 11 and the positions of existing holes of the reinforcement angle.
    - 12.2 Countermark on the reinforcement angle the positions of existing rivets previously removed at step 11.
    - 12.3 Countermark on the longeron the positions of existing holes of the reinforcement angle.
    - 12.4 Drill pilot holes Ø2.50 through the shim angle, the reinforcement angle and the longeron in the previously countermarked positions.

NOTE

During installation of shim angle P/N 3G5350R00951 and reinforcement angle P/N 3G5350R00953, it is allowed to use liquid shim EA9395 on the banding area to fill possible gap.

13. With reference to Figure 3 Section D-D, install shim angle P/N 3G5350R00951 by means of adhesive EA9309.3NA (C021) on the longeron P/N 3G5350A12851.

NOTE

If necessary, it is allowed to use oversized hardware.

14. With reference to Figure 3, install reinforcement angle P/N 3G5350R00953 by means of adhesive EA9309.3NA (C021), n°5 rivets P/N MS90353S0503, n°4 rivets P/N NAS9302BNS-6-04 or P/N NAS9302B-6-04 and n°9 rivets P/N NAS9301BNS-6-04.
15. Record the compliance with Part II of this Service Bulletin on the component log card.

NOTE

Skip steps 16 thru 18 if the tail boom assembly is kept in stock.

16. In accordance with AMP DM 39-A-06-41-00-00A-010A-A, re-install all external panels, internal panels and internal liners previously removed as required.
17. In accordance with AMP DM 39-A-23-14-04-00A-720A-K, if necessary, re-install HF antenna on the helicopter.
18. Return the helicopter to flight configuration and record for compliance with Part II of this Service Bulletin on the helicopter logbook.
19. Gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.
    As an alternative, send the attached compliance form to the following mail box:
    engineering.support.lhd@leonardo.com
    and (for North, Central and South America) also to:
    AWPC.Engineering.Support@leonardocompany.us

PART III

NOTE

Perform the following step 1 only if shim angle P/N 3G5350R01051 has not been provided.

1. With reference to Figure 15, rework one plate AL-ALY 2024 (Thickness 1.02 mm) as indicated to obtain shim angle and mark it as P/N 3G5350R01051.

NOTE

Perform the following step 2 only if reinforcement angle P/N 3G5350R01052 has not been provided.

2. With reference to Figure 16, rework one plate AL-ALY 2024 (Thickness 2.00 mm) as indicated to obtain reinforcement angle and mark it as P/N 3G5350R01052.

NOTE

Skip the following step 3 if the tail boom assembly is kept in stock.

3. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figure 12, remove all external panels, internal panels and internal liners as required to gain access to the area affected by the installation.

NOTE

The tail boom can be lifted with a sling (support equipment HA-09-00 or HA-16-02). Equivalent solutions (different sling, saddles at STA10630 and STA11370) can be used.

NOTE

Repeat the following steps 4 thru 7 for each location where drill marks have been found: location 1 **AND/OR** location 2.

4. With reference to Figure 13 Detail A, drill out the indicated rivet.
5. With reference to Figure 13, in correspondence of previously removed rivet drill a hole Ø 3.25 normal to external profile on the longeron P/N 3G5350A12851 as indicated.
6. With reference to Figure 14 View C, from the internal side of the tail boom assy, widen the previously performed slotted hole up to Ø 10.0 only on the longeron.
7. With reference to Figure 13 Detail A, install rivet P/N NAS9302BNS-5-02 on the doubler P/N 3G5350A20351.
8. With reference to Figure 14 View E, drill out the indicated existing rivets.

9. With reference to Figure 14 View E, temporarily locate the shim angle P/N 3G5350R01051 and the reinforcement angle P/N 3G5350R01052 and proceed as follows:
   9.1 Countermark on the shim angle the positions of existing rivets previously removed at step 8 and the positions of existing holes of the reinforcement angle.
   9.2 Countermark on the reinforcement angle the positions of existing rivets previously removed at step 8.
   9.3 Countermark on the longeron the positions of existing holes of the reinforcement angle.
   9.4 Drill pilot holes Ø2.50 through the shim angle, the reinforcement angle and the longeron in the previously countermarked positions.

NOTE

During installation of shim angle P/N 3G5350R01051 and reinforcement angle P/N 3G5350R01052, it is allowed to use liquid shim EA9395 on the banding area to fill possible gap.

10. With reference to Figure 14 Section D-D, install shim angle P/N 3G5350R01051 by means of adhesive EA9309.3NA (C021) on the longeron P/N 3G5350A12851.

NOTE

If necessary, it is allowed to use oversized hardware.

11. With reference to Figure 14, install reinforcement angle P/N 3G5350R01052 by means of adhesive EA9309.3NA (C021), n°14 rivets P/N NAS9302B-6-04 and n°16 rivets P/N NAS9301BNS-6-04.
12. Record the compliance with Part III of this Service Bulletin on the component log card.

NOTE

Skip steps 13 thru 15 if the tail boom assembly is kept in stock.

13. In accordance with AMP DM 39-A-06-41-00-00A-010A-A, re-install all external panels, internal panels and internal liners previously removed as required.
14. In accordance with AMP DM 39-A-23-14-04-00A-720A-K, if necessary, re-install HF antenna on the helicopter.
15. Return the helicopter to flight configuration and record for compliance with Part III of this Service Bulletin on the helicopter logbook.

16. Gain access to My Communications section on Leonardo WebPortal and compile the "Service Bulletin Application Communication".

    As an alternative, send the attached compliance form to the following mailbox:

    engineering.support.lhd@leonardo.com

    and (for North, Central and South America) also to:

    AWPC.Engineering.Support@leonardocompany.us

PART IV

NOTE

Perform the following step 1 only if shim angle P/N 3G5350R00851 has not been provided.

1. With reference to Figure 11, rework one plate AL-ALY 2024 (Thickness 0.40 mm) as indicated to obtain shim angle and mark it as P/N 3G5350R00851.

NOTE

Perform the following step 2 only if reinforcement angle P/N 3G5350R00852 has not been provided.

2. With reference to Figure 10, rework one plate AL-ALY 2024 (Thickness 2.00 mm) as indicated to obtain reinforcement angle and mark it as P/N 3G5350R00852.

NOTE

Skip the following step 3 if the tail boom assembly is kept in stock.

3. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figure 7, remove all external panels, internal panels and internal liners as required to gain access to the area affected by the installation.

NOTE

The tail boom can be lifted with a sling (support equipment HA-09-00 or HA-16-02). Equivalent solutions (different sling, saddles at STA10630 and STA11370) can be used.

NOTE

Repeat the following steps 4 thru 8 for each locations where drill marks have been found: location 1 **AND/OR** location 2.

4. With reference to Figure 8 Detail A, drill out the indicated rivets.
5. With reference to Figure 8, in correspondence of previously removed rivet drill a hole Ø 3.25 normal to external profile on the longeron P/N 3G5350A22551 as indicated.
6. With reference to Figure 9 View C, from the internal side of the tail boom assy, widen the previously performed slotted hole up to Ø 10.0 only on the longeron.
7. With reference to Figure 8 Detail A, install rivet P/N AGS4720-508 on the doubler P/N 3G5350A20351.
8. With reference to Figure 9 View E, drill out the indicated existing rivets.

9. With reference to Figure 3 View E, temporarily locate the shim angle P/N 3G5350R00851 and the reinforcement angle P/N 3G5350R00852 and proceed as follows:
   9.1 Countermark on the shim angle the positions of existing rivets previously removed at step 8 and the positions of existing holes of the reinforcement angle.
   9.2 Countermark on the reinforcement angle the positions of existing rivets previously removed at step 8.
   9.3 Countermark on the longeron the positions of existing holes of the reinforcement angle.
   9.4 Drill pilot holes Ø2.50 through the shim angle, the reinforcement angle and the longeron in the previously countermarked positions.

NOTE

During installation of shim angle P/N 3G5350R00851 and reinforcement angle P/N 3G5350R00852, if the clearance to be shimmed is between 0.2 mm and 0.7 mm it is allowed to use liquid shim EA9395 on the banding area to fill possible gap.

10. With reference to Figure 9 Section D-D, install shim angle P/N 3G5350R00851 by means of adhesive EA9309.3NA (C021) on the longeron P/N 3G5350A22551.

NOTE

If necessary, it is allowed to use oversized hardware.

11. With reference to Figure 9, install reinforcement angle P/N 3G5350R00852 by means of adhesive EA9309.3NA (C021), n°12 rivets P/N A297A06TW03, n°7 rivets P/N A299A06TW04 and n°6 rivets P/N A299A06TW05.
12. Record the compliance with Part IV of this Service Bulletin on the component log card.

NOTE

Skip steps 13 thru 15 if the tail boom assembly is kept in stock.

13. In accordance with AMP DM 39-A-06-41-00-00A-010A-A, re-install all external panels, internal panels and internal liners previously removed as required.
14. In accordance with AMP DM 39-A-23-14-04-00A-720A-K, re-install HF antenna on the helicopter.
15. Return the helicopter to flight configuration and record for compliance with Part IV of this Service Bulletin on the helicopter logbook.

16. Gain access to My Communications section on Leonardo WebPortal and compile the "Service Bulletin Application Communication".

    As an alternative, send the attached compliance form to the following mailbox:

    engineering.support.lhd@leonardo.com

    and (for North, Central and South America) also to:

    AWPC.Engineering.Support@leonardocompany.us

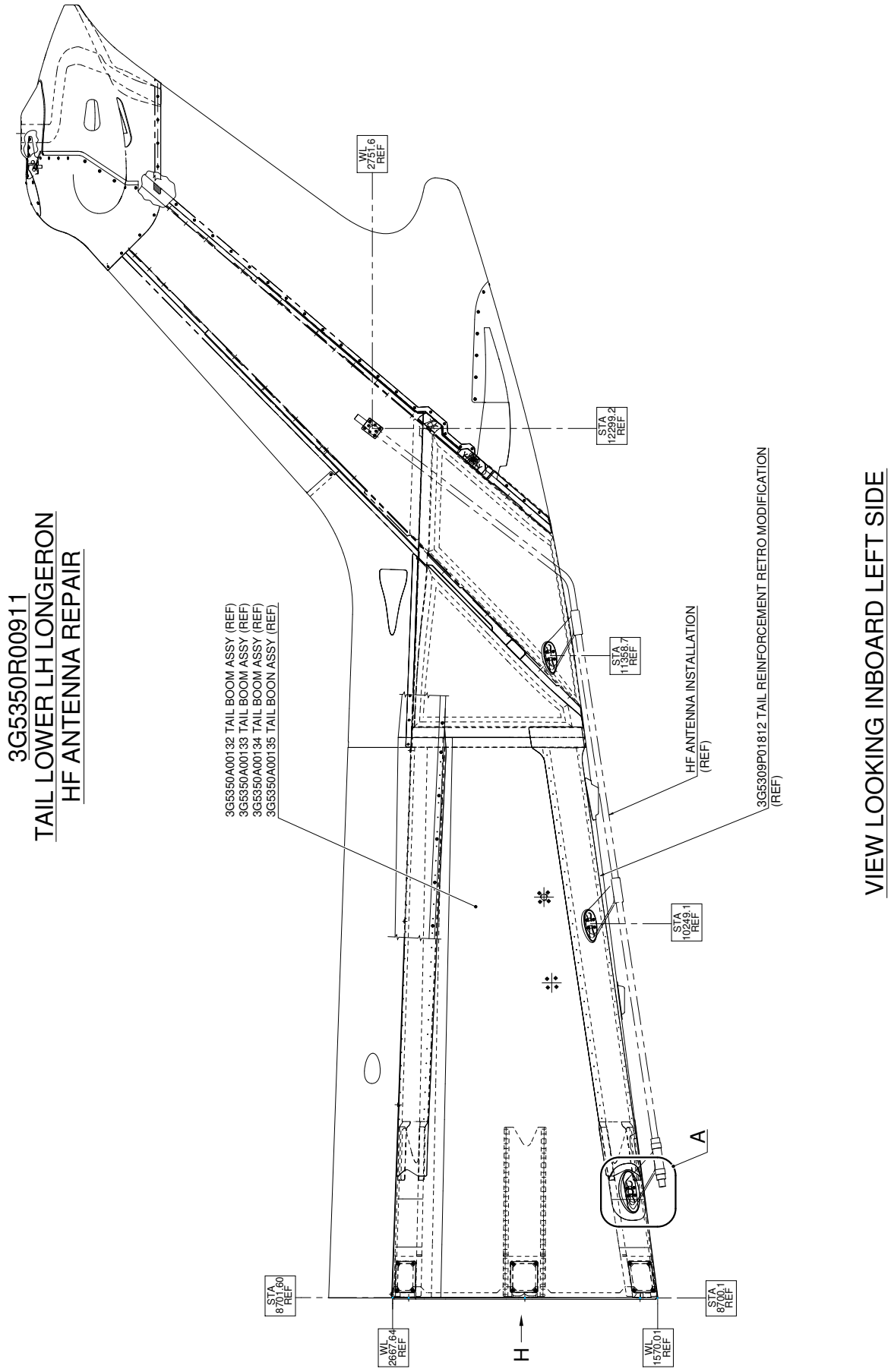
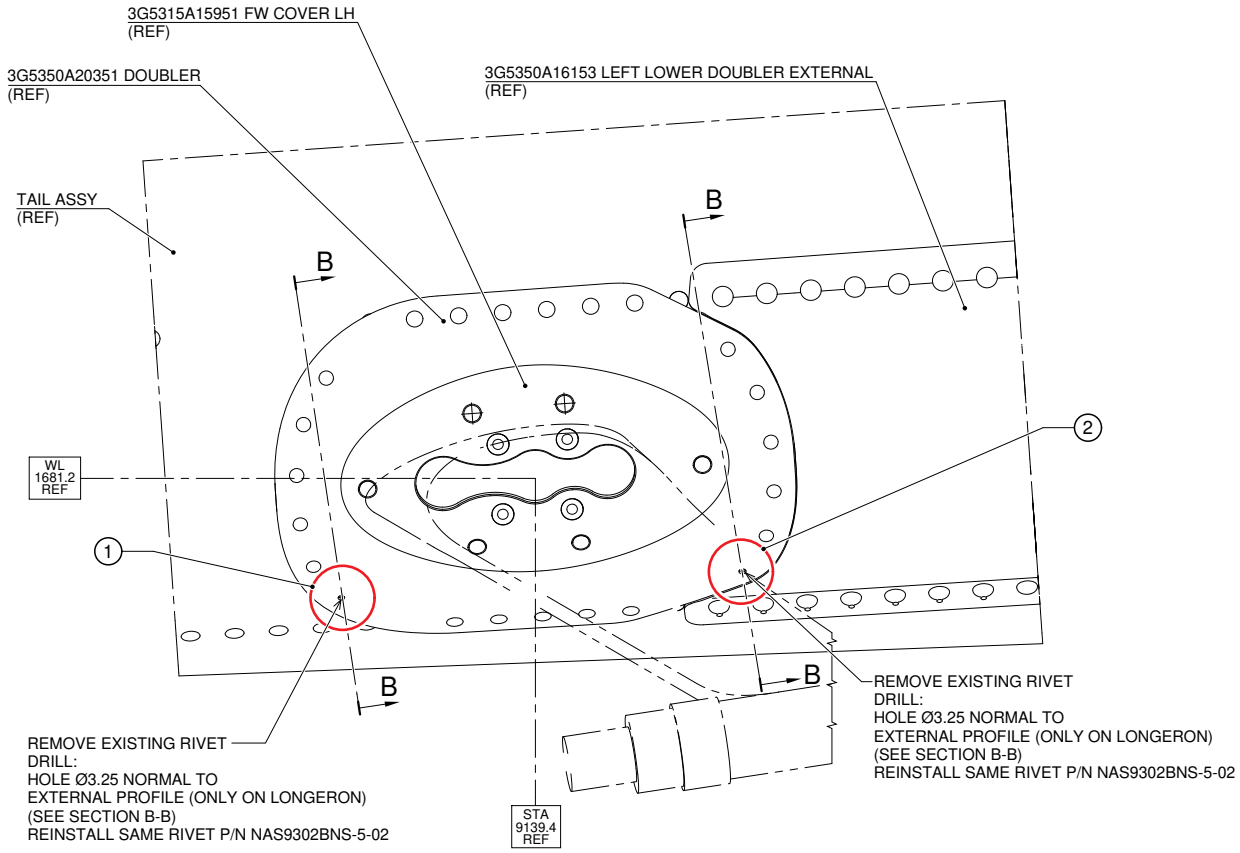
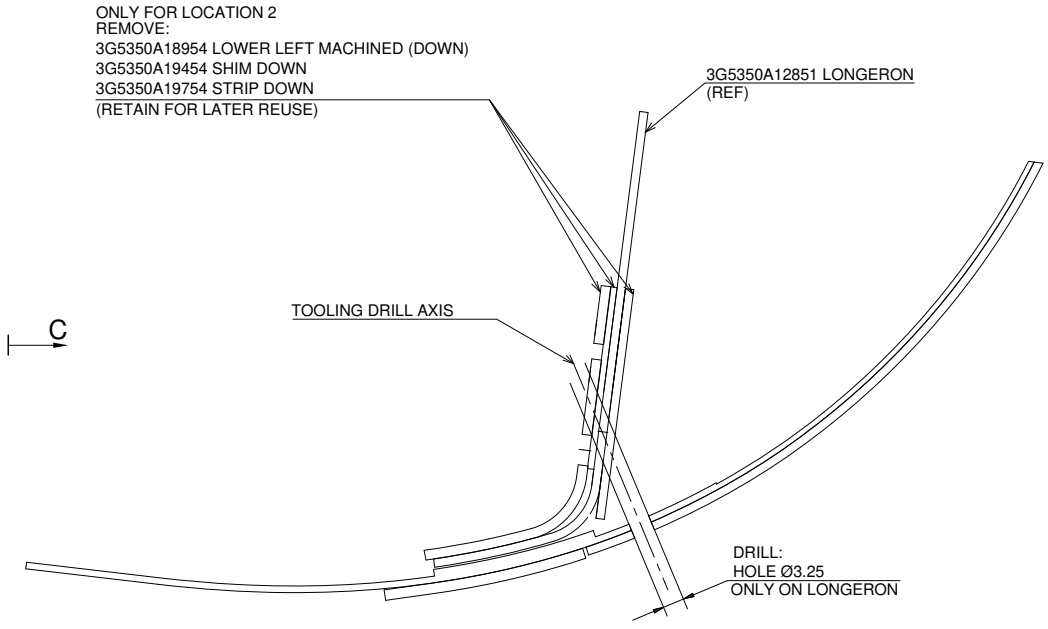

3G5350R00911
TAIL LOWER LH LONGERON
HF ANTENNA REPAIR
VIEW LOOKING INBOARD LEFT SIDE
WL 2751.6 REF
STA 12299.2 REF
STA 11358.7 REF
STA 10249.1 REF
STA 8701.80 REF
STA 8700.1 REF
WL 2667.64 REF
WL 1570.01 REF
3G5350A00132 TAIL BOOM ASSY (REF)
3G5350A00133 TAIL BOOM ASSY (REF)
3G5350A00134 TAIL BOOM ASSY (REF)
3G5350A00135 TAIL BOON ASSY (REF)
HF ANTENNA INSTALLATION (REF)
3G5309P01812 TAIL REINFORCEMENT RETRO MODIFICATION (REF)
A
H

Figure 1



DETAIL A

STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE



SECTION CUT B-B

Figure 2

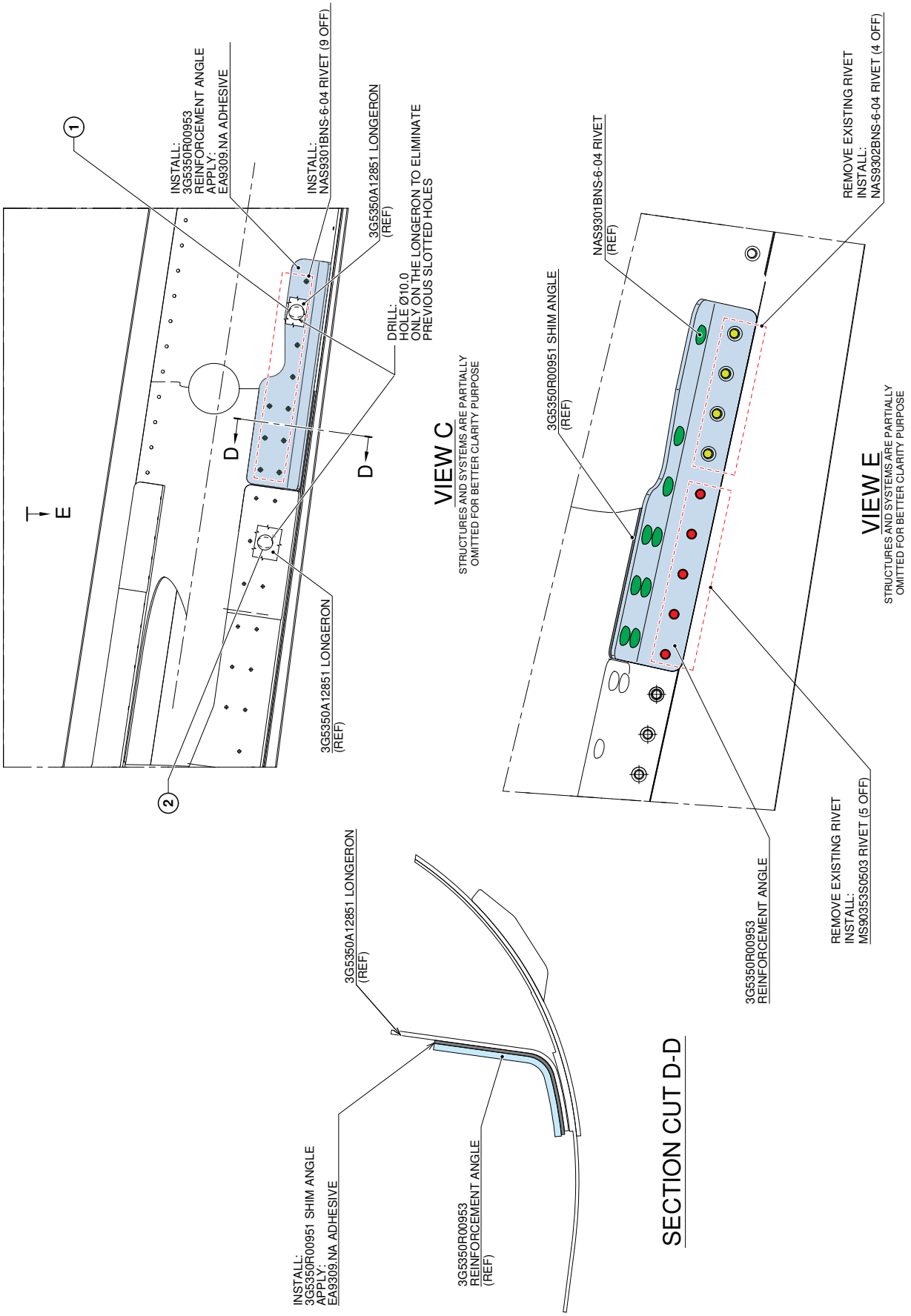

INSTALL:
3G5350R00953
REINFORCEMENT ANGLE
APPLY:
EA9309.NA ADHESIVE
INSTALL:
NAS9301BNS-6-04 RIVET (9 OFF)
3G5350A12851 LONGERON
(REF)
DRILL:
HOLE Ø10.0
ONLY ON THE LONGERON TO ELIMINATE
PREVIOUS SLOTTED HOLES
3G5350A12851 LONGERON
(REF)
VIEW C
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE
3G5350R00951 SHIM ANGLE
(REF)
NAS9301BNS-6-04 RIVET
(REF)
REMOVE EXISTING RIVET
INSTALL:
NAS9302BNS-6-04 RIVET (4 OFF)
VIEW E
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE
3G5350R00953
REINFORCEMENT ANGLE
REMOVE EXISTING RIVET
INSTALL:
MS90353S0503 RIVET (5 OFF)
3G5350A12851 LONGERON
(REF)
INSTALL:
3G5350R00951 SHIM ANGLE
APPLY:
EA9309.NA ADHESIVE
3G5350R00953
REINFORCEMENT ANGLE
(REF)
SECTION CUT D-D

Figure 3

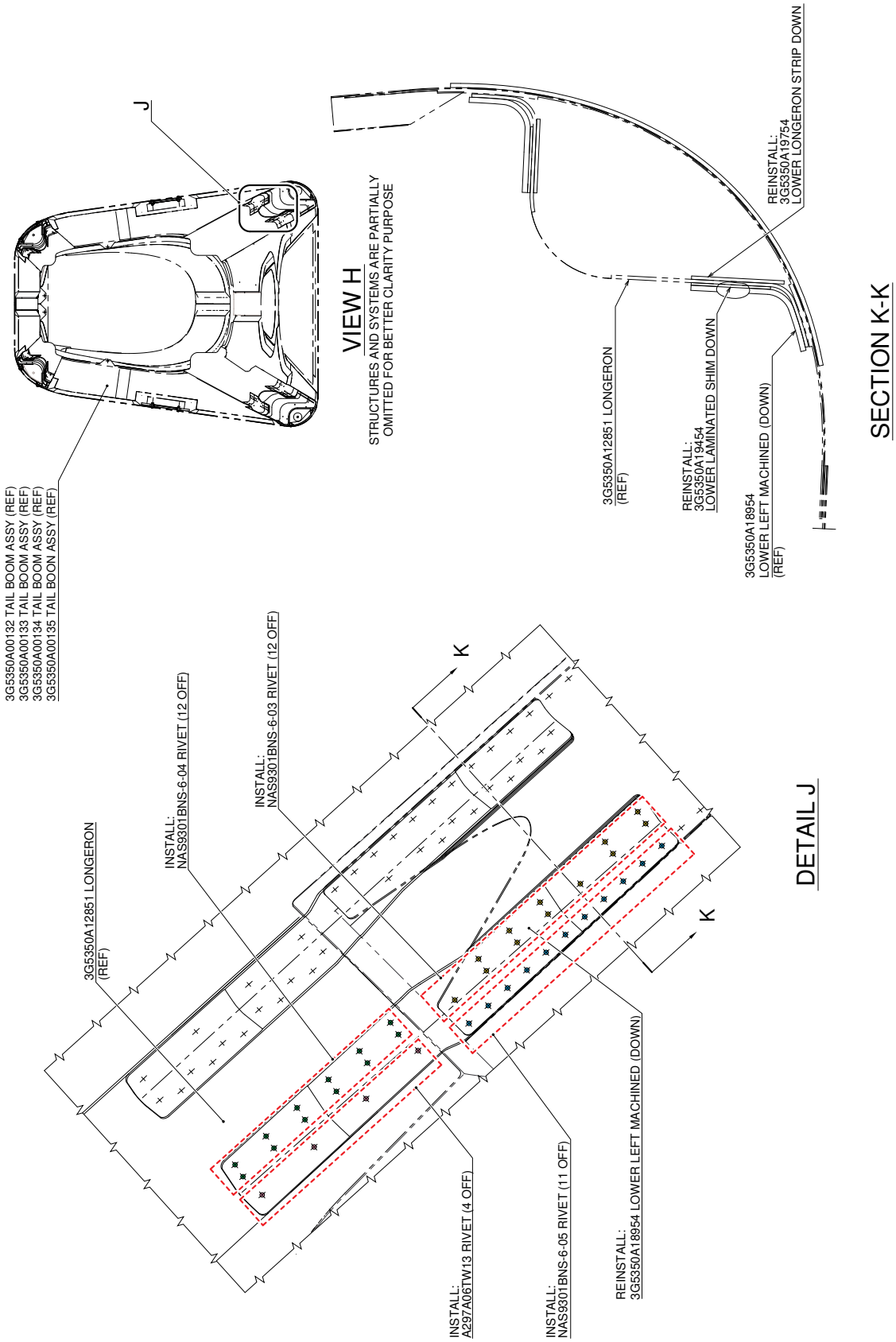
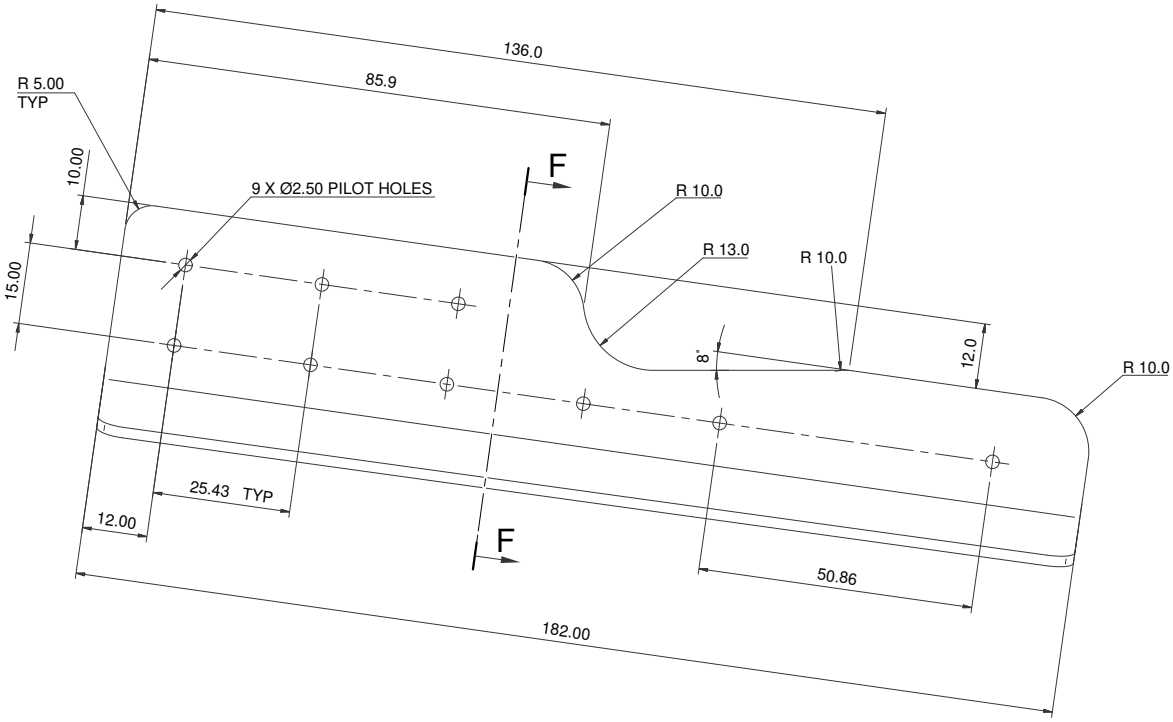
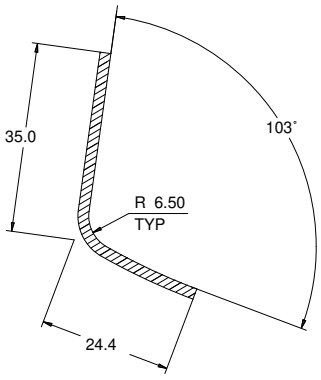

J
VIEW H
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
3G5350A00132 TAIL BOOM ASSY (REF)
3G5350A00133 TAIL BOOM ASSY (REF)
3G5350A00134 TAIL BOOM ASSY (REF)
3G5350A00135 TAIL BOON ASSY (REF)
REINSTALL:
3G5350A19754
LOWER LONGERON STRIP DOWN
3G5350A12851 LONGERON
(REF)
REINSTALL:
3G5350A19454
LOWER LAMINATED SHIM DOWN
3G5350A18954
LOWER LEFT MACHINED (DOWN)
(REF)
SECTION K-K
K
K
3G5350A12851 LONGERON
(REF)
INSTALL:
NAS9301BNS-6-04 RIVET (12 OFF)
INSTALL:
NAS9301BNS-6-03 RIVET (12 OFF)
INSTALL:
A297A06TW13 RIVET (4 OFF)
INSTALL:
NAS9301BNS-6-05 RIVET (11 OFF)
REINSTALL:
3G5350A18954 LOWER LEFT MACHINED (DOWN)
DETAIL J

Figure 4

3G5350R00953
REINFORCEMENT ANGLE
MATERIAL AL-ALY 2024 T3
AMS-QQ-A-250/4, TH 2.00, N+XPFW/1



FRONT VIEW



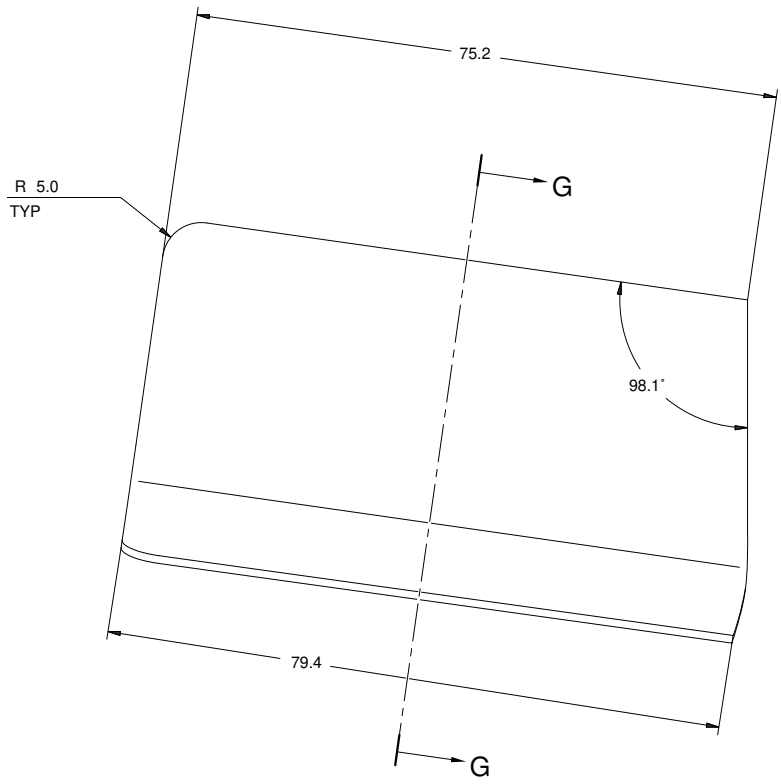
SECTION CUT F-F

FINISH CODES:
N = Chromic acid anodising not sealed
XPFW = Waterborne chromate free primer

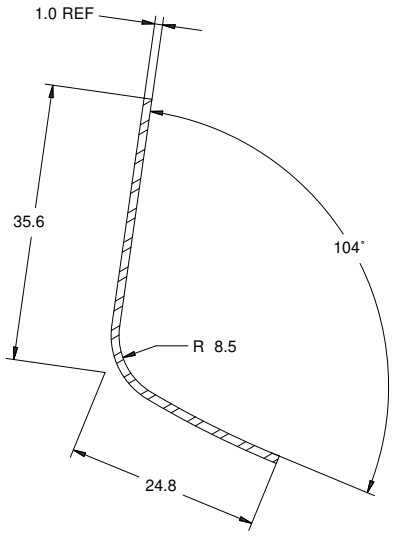
Figure 5

3G5350R00951 SHIM ANGLE

MATERIAL AL-ALY 2024 T3
AMS-QQ-A-250/4, TH 1.02, N+XPFW/1



FRONT VIEW



SECTION CUT G-G

FINISH CODES:
N = Chromic acid anodising not sealed
XPFW = Waterborne chromate free primer

Figure 6

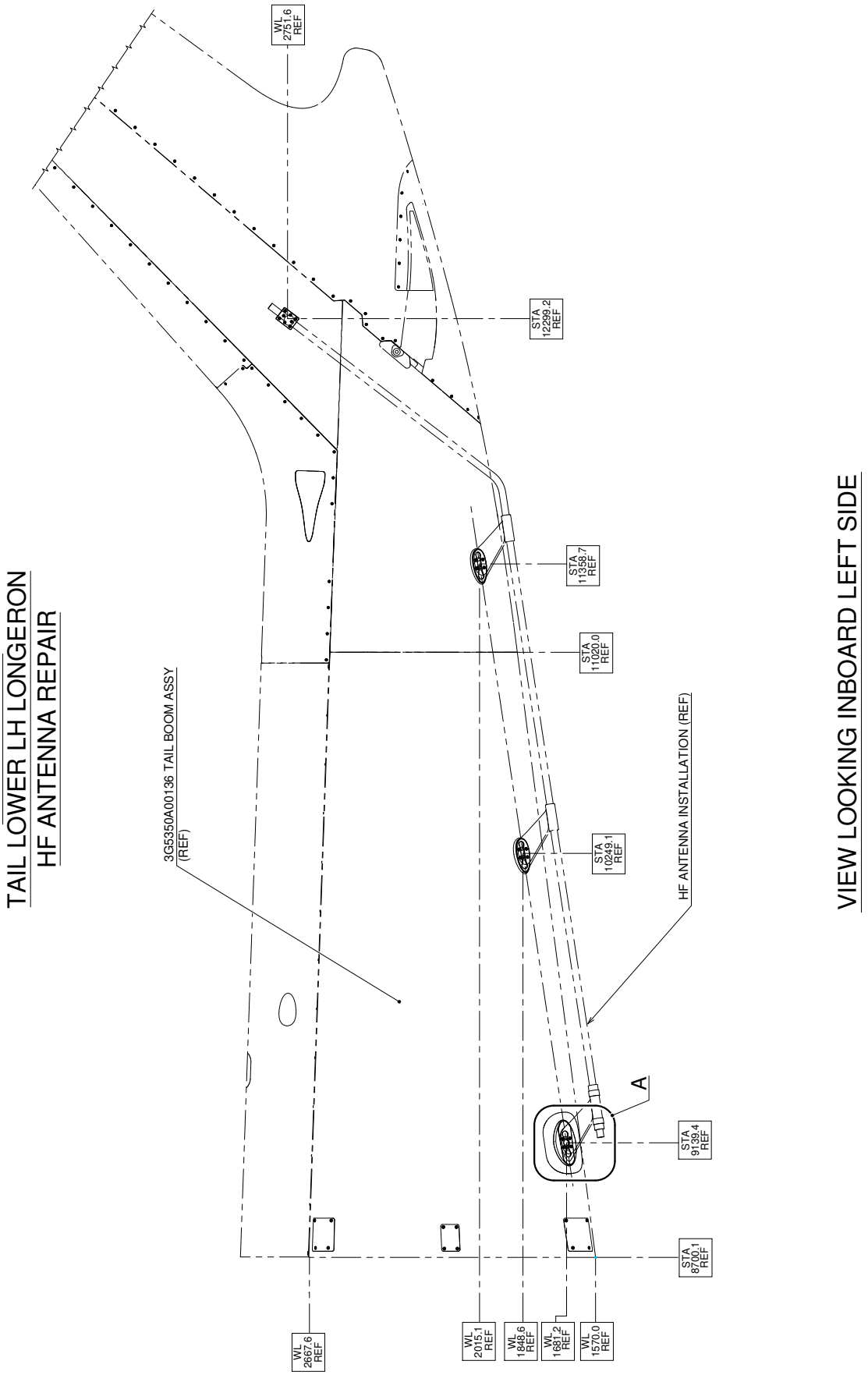
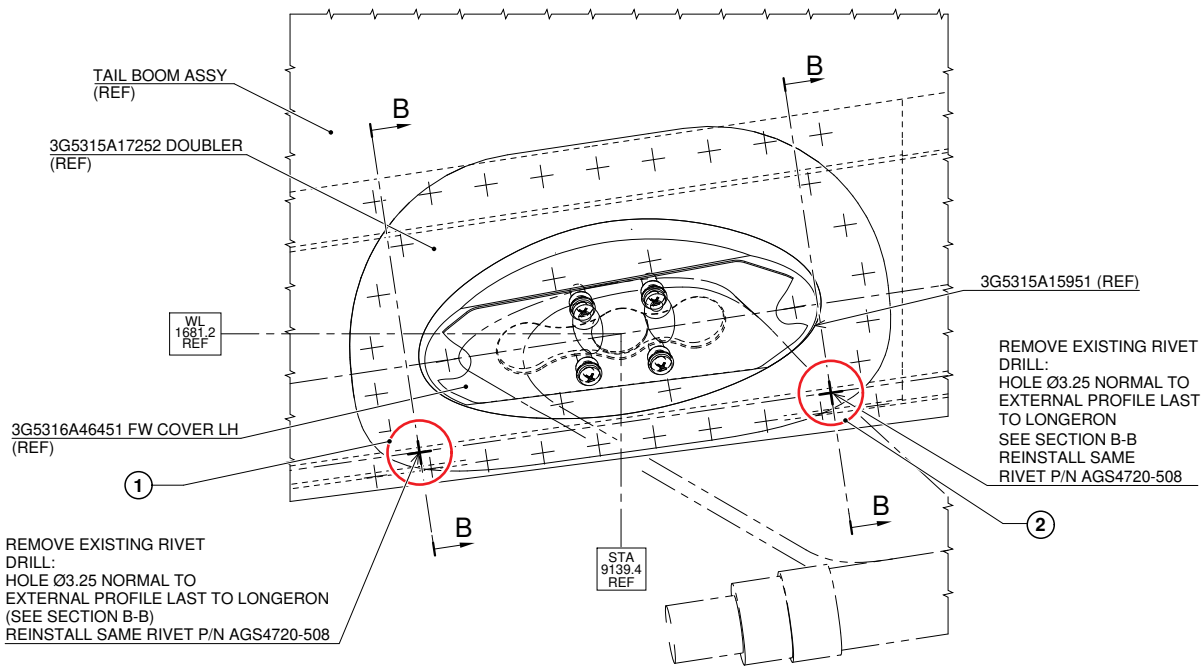
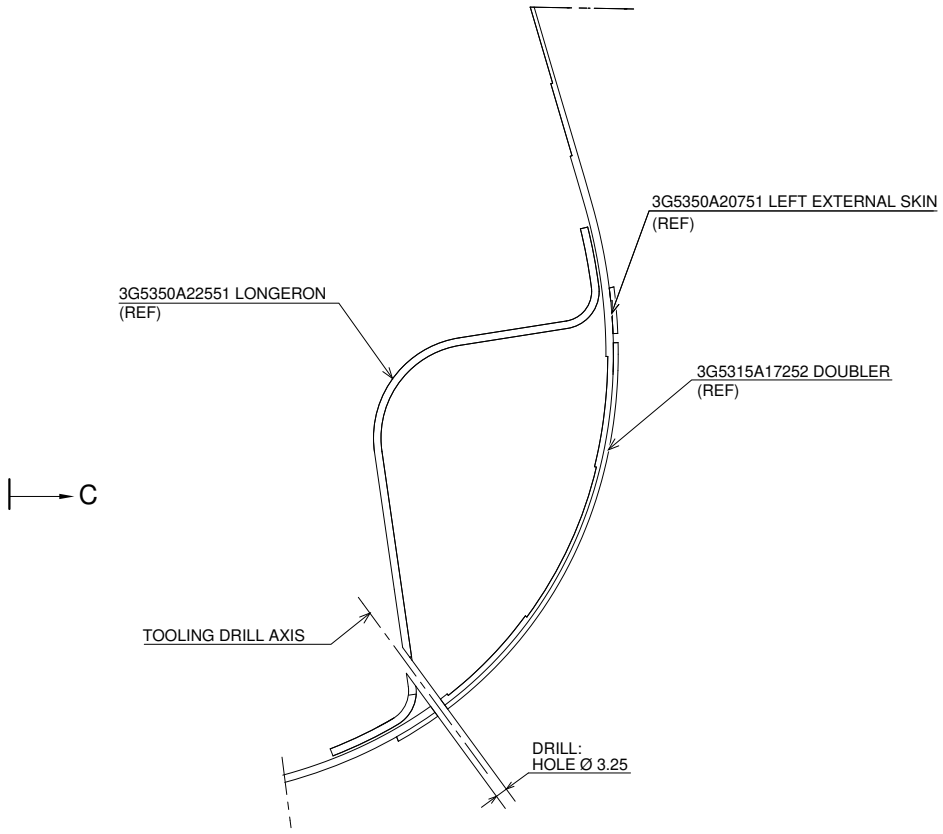

3G5350R00811
TAIL LOWER LH LONGERON
HF ANTENNA REPAIR
VIEW LOOKING INBOARD LEFT SIDE
3G5350A00136 TAIL BOOM ASSY
(REF)
HF ANTENNA INSTALLATION (REF)
A
WL 2751.6 REF
STA 12299.2 REF
STA 11358.7 REF
STA 11020.0 REF
STA 10249.1 REF
STA 9139.4 REF
STA 8700.1 REF
WL 2667.6 REF
WL 2015.1 REF
WL 1848.6 REF
WL 1661.2 REF
WL 1570.0 REF

Figure 7



DETAIL A

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE



SECTION CUT B-B

Figure 8

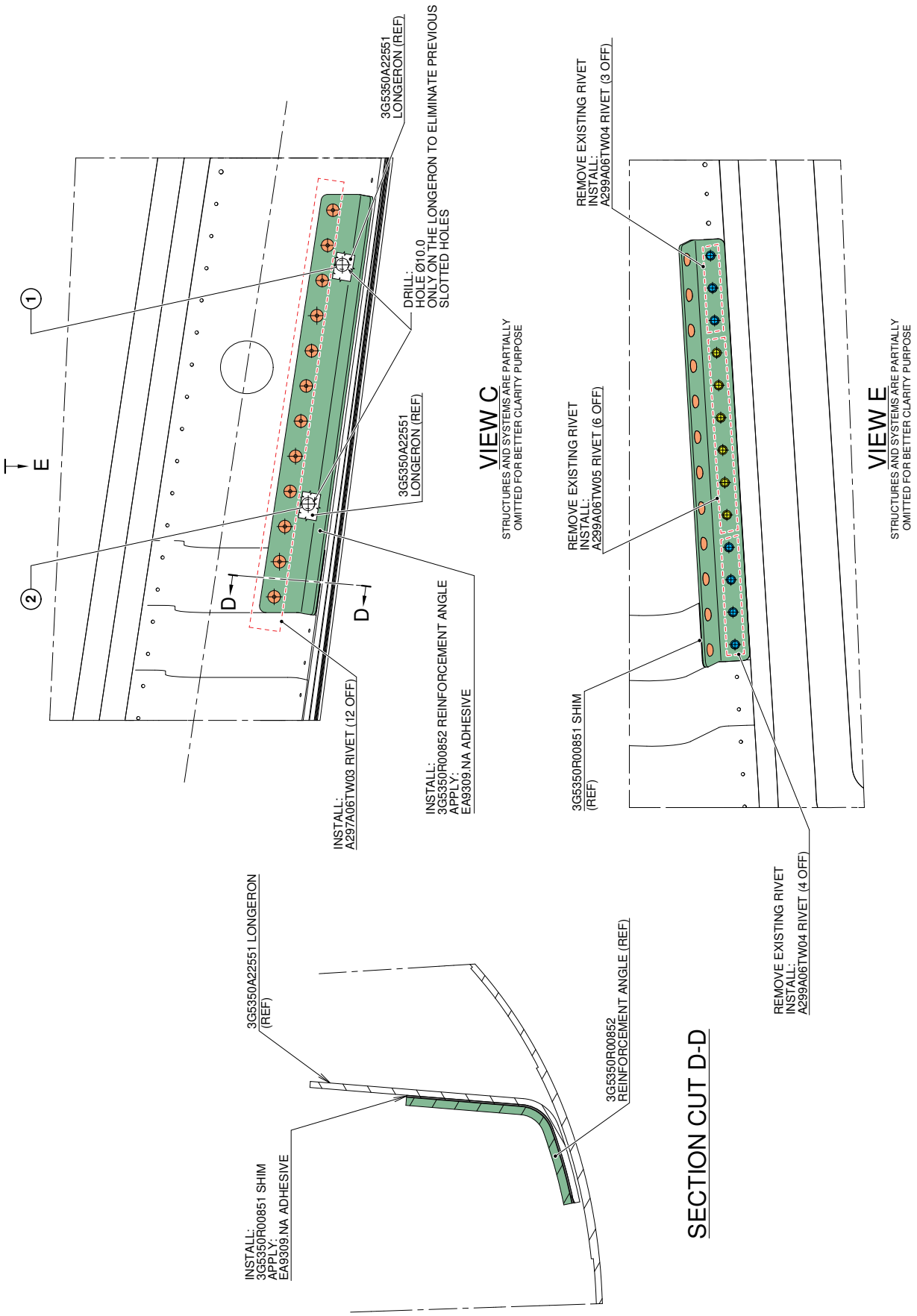
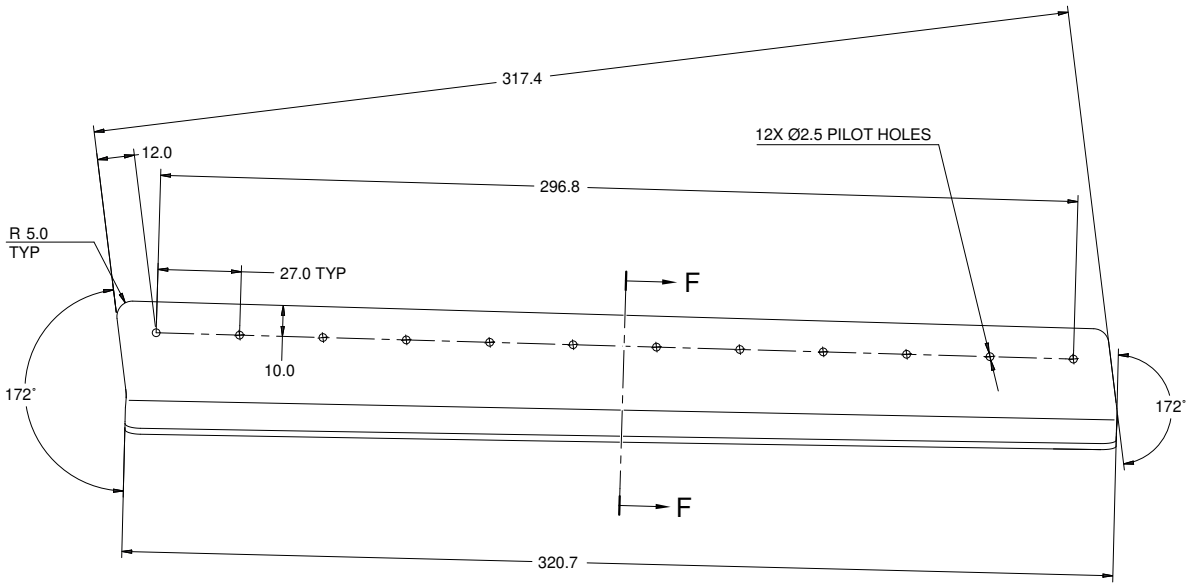

3G5350A22551
LONGERON (REF)
DRILL:
HOLE Ø10.0
ONLY ON THE LONGERON TO ELIMINATE PREVIOUS
SLOTTED HOLES
VIEW C
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE
3G5350A22551
LONGERON (REF)
INSTALL:
3G5350R00852 REINFORCEMENT ANGLE
APPLY:
EA9309.NA ADHESIVE
INSTALL:
A297A06TW03 RIVET (12 OFF)
REMOVE EXISTING RIVET
INSTALL:
A299A06TW04 RIVET (3 OFF)
REMOVE EXISTING RIVET
INSTALL:
A299A06TW05 RIVET (6 OFF)
3G5350R00851 SHIM
(REF)
VIEW E
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE
REMOVE EXISTING RIVET
INSTALL:
A299A06TW04 RIVET (4 OFF)
3G5350A22551 LONGERON
(REF)
3G5350R00852
REINFORCEMENT ANGLE (REF)
INSTALL:
3G5350R00851 SHIM
APPLY:
EA9309.NA ADHESIVE
SECTION CUT D-D

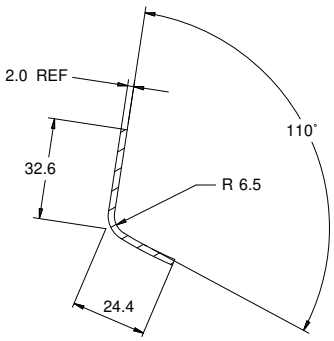
Figure 9

3G5350R00852
REINFORCEMENT ANGLE

MATERIAL AL-ALY 2024 T0
AMS-QQ-A-250/4, TH 2.00, N+XPFW/1
(FINAL HEAT TREATING T42)



FRONT VIEW



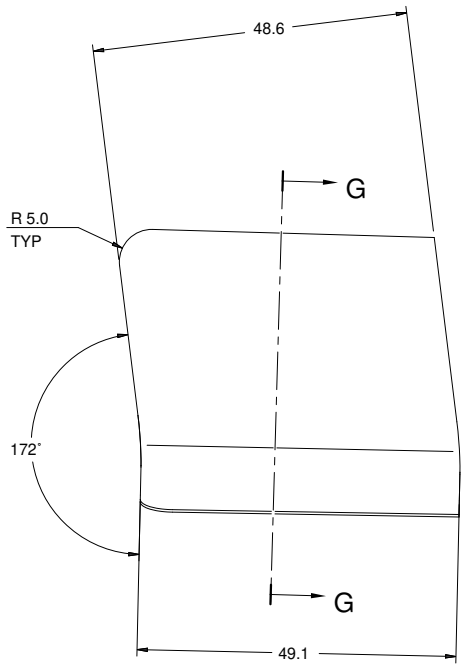
FINISH CODES:
N = Chromic acid anodising not sealed
XPFW = Waterborne chromate free primer

SECTION CUT F-F

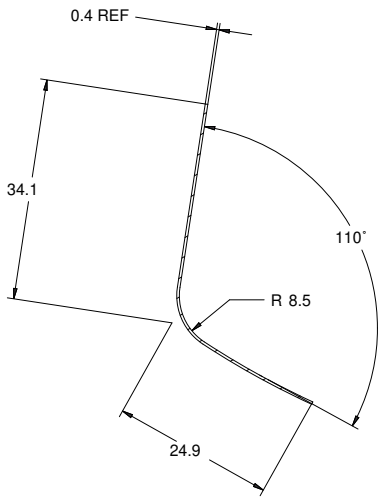
Figure 10

3G5350R00851 SHIM ANGLE

MATERIAL AL-ALY 2024 T3
AMS-QQ-A-250/4, TH 0.40, N+XPFW/1



FRONT VIEW



SECTION CUT G-G

FINISH CODES:
N = Chromic acid anodising not sealed
XPFW = Waterborne chromate free primer

Figure 11

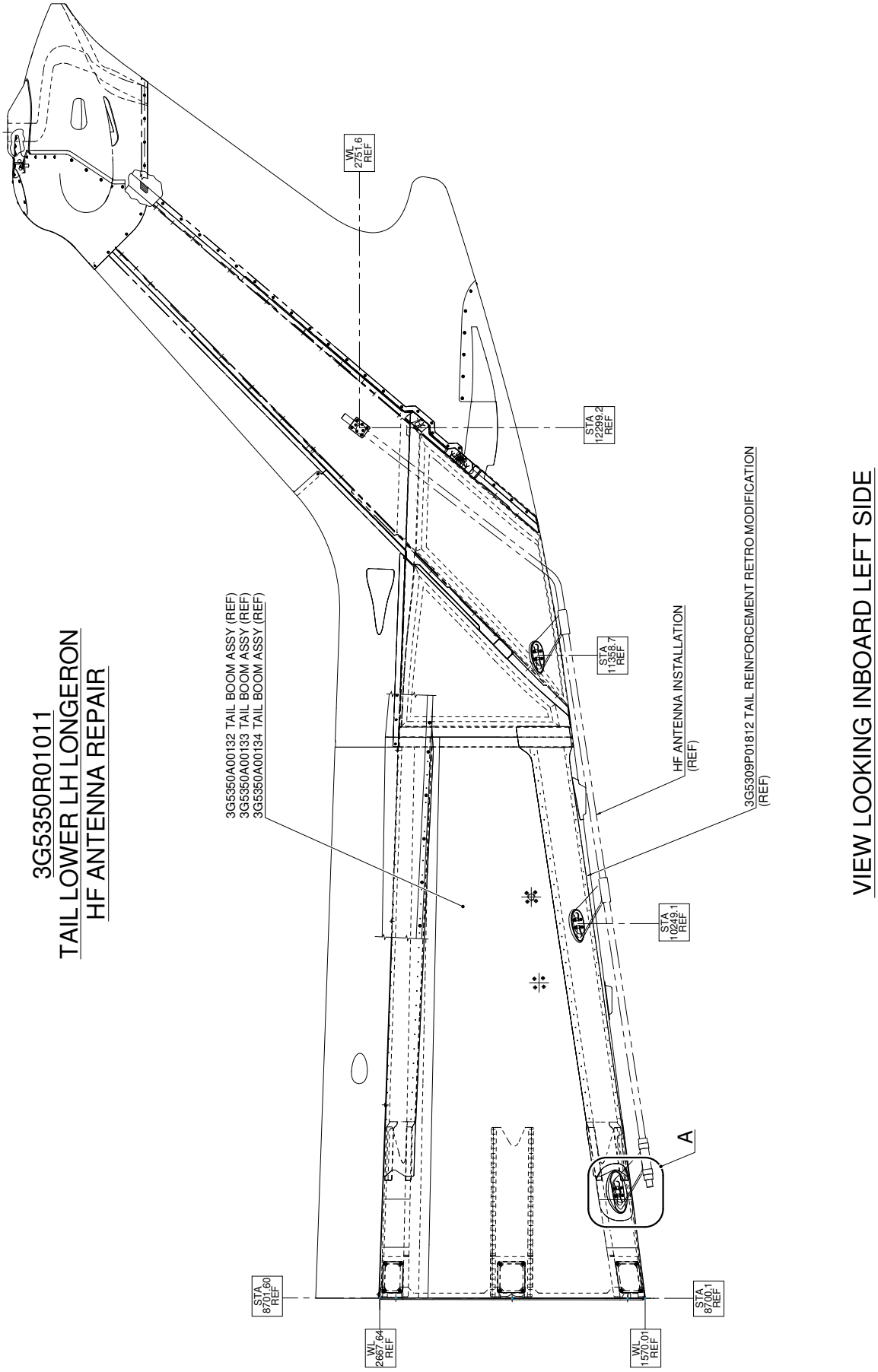
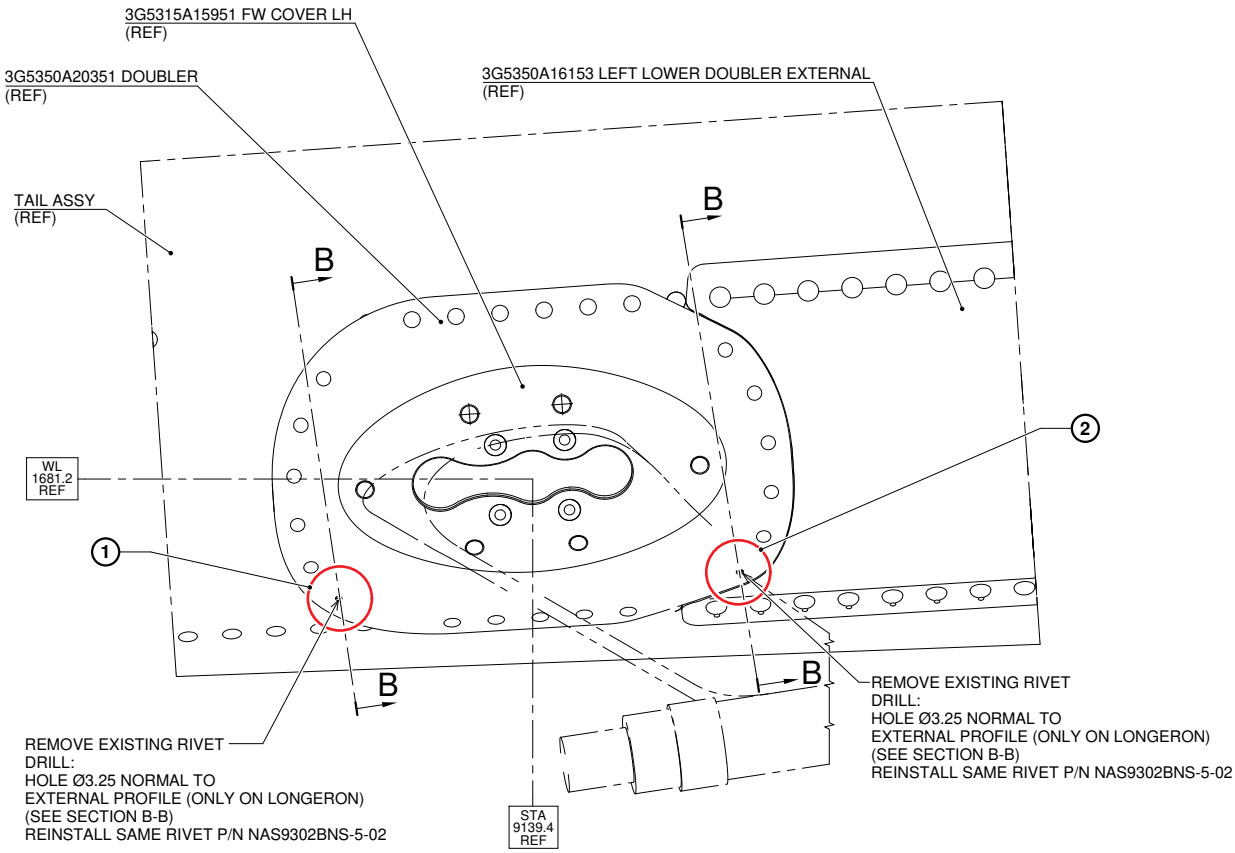
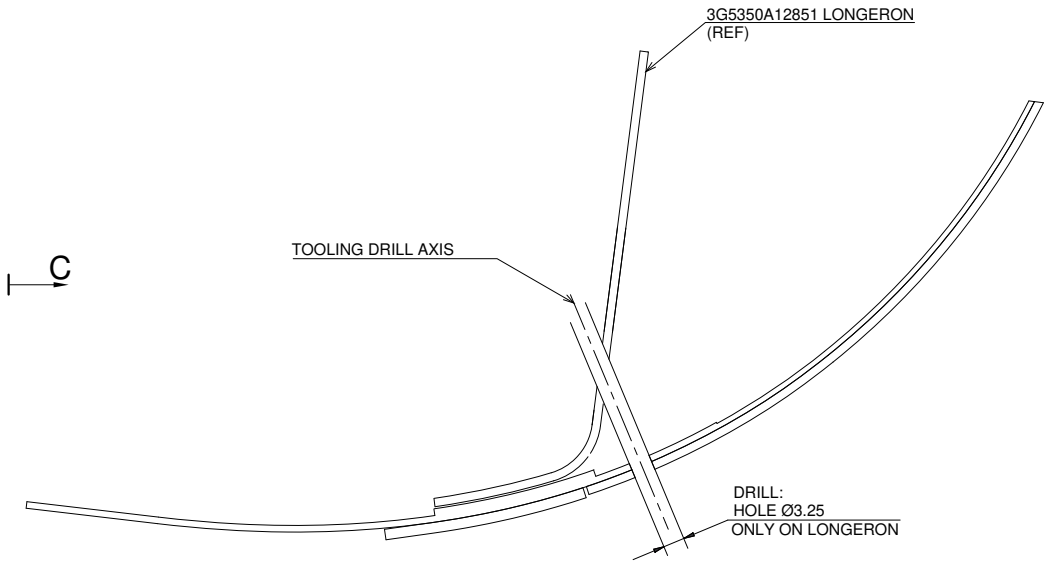

3G5350R01011
TAIL LOWER LH LONGERON
HF ANTENNA REPAIR
VIEW LOOKING INBOARD LEFT SIDE
WL 2751.6 REF
STA 12299.2 REF
STA 11368.7 REF
STA 10249.1 REF
STA 8701.60 REF
STA 8700.1 REF
WL 2667.64 REF
WL 1570.01 REF
3G5350A00132 TAIL BOOM ASSY (REF)
3G5350A00133 TAIL BOOM ASSY (REF)
3G5350A00134 TAIL BOOM ASSY (REF)
HF ANTENNA INSTALLATION (REF)
3G5309P01812 TAIL REINFORCEMENT RETRO MODIFICATION (REF)
A

Figure 12



DETAIL A

STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE



SECTION CUT B-B

Figure 13

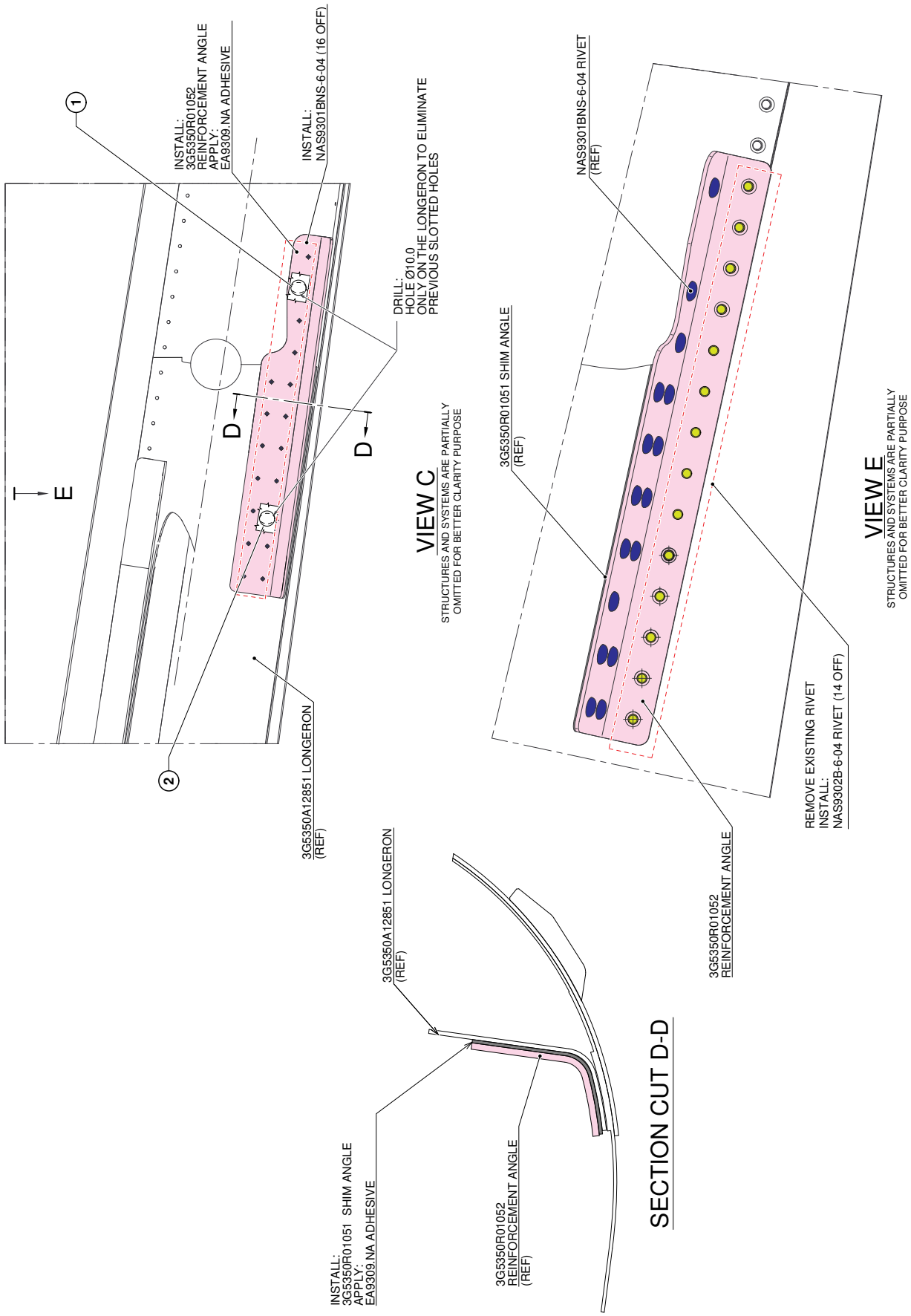
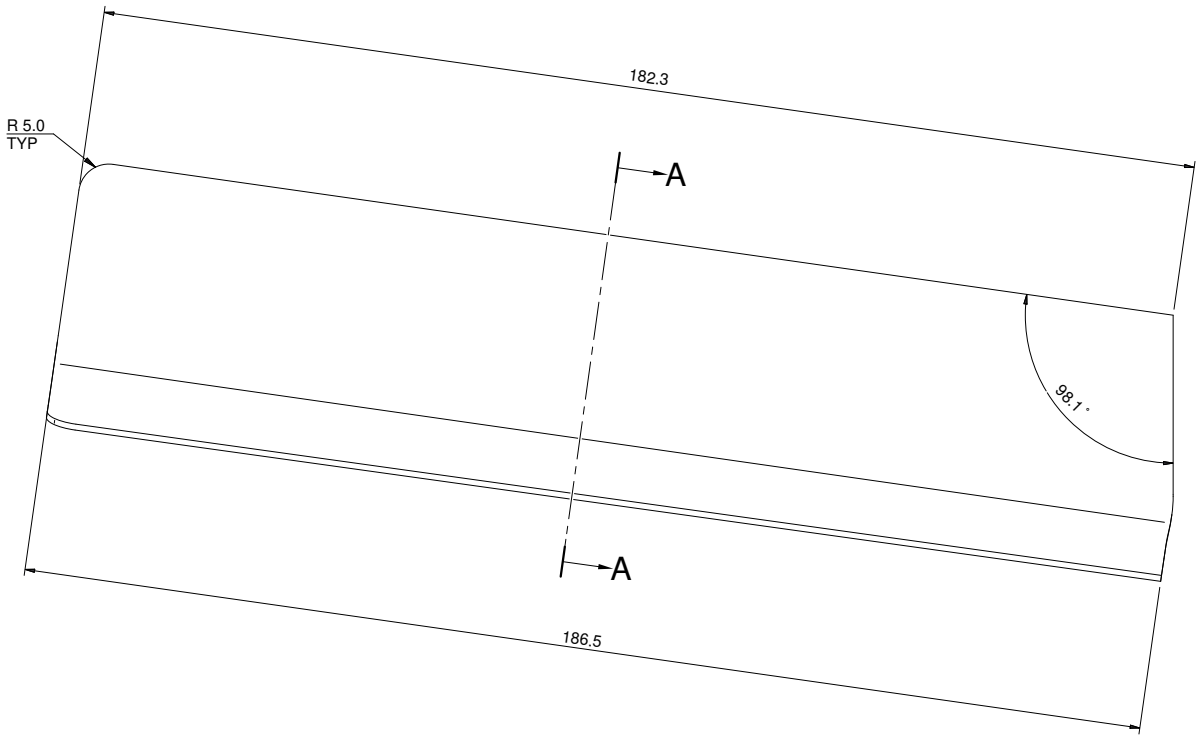
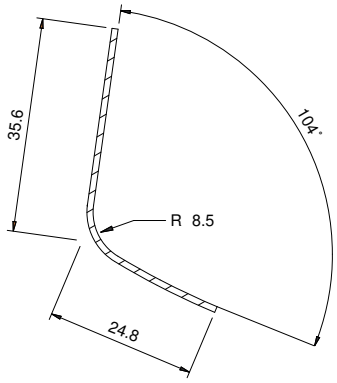

INSTALL:
3G5350R01052
REINFORCEMENT ANGLE
APPLY:
EA9309.NA ADHESIVE
INSTALL:
NAS9301BNS-6-04 (16 OFF)
DRILL:
HOLE Ø10.0
ONLY ON THE LONGERON TO ELIMINATE
PREVIOUS SLOTTED HOLES
VIEW C
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE
3G5350A12851 LONGERON
(REF)
NAS9301BNS-6-04 RIVET
(REF)
3G5350R01051 SHIM ANGLE
(REF)
VIEW E
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE
REMOVE EXISTING RIVET
INSTALL:
NAS9302B-6-04 RIVET (14 OFF)
3G5350R01052
REINFORCEMENT ANGLE
3G5350A12851 LONGERON
(REF)
INSTALL:
3G5350R01051 SHIM ANGLE
APPLY:
EA9309.NA ADHESIVE
3G5350R01052
REINFORCEMENT ANGLE
(REF)
SECTION CUT D-D

Figure 14

3G5350R01051
SHIM ANGLE
MATERIAL AL-ALY 2024 T3
AMS-QQ-A-250/4, TH 1.02, N+XPFW/1



FRONT VIEW



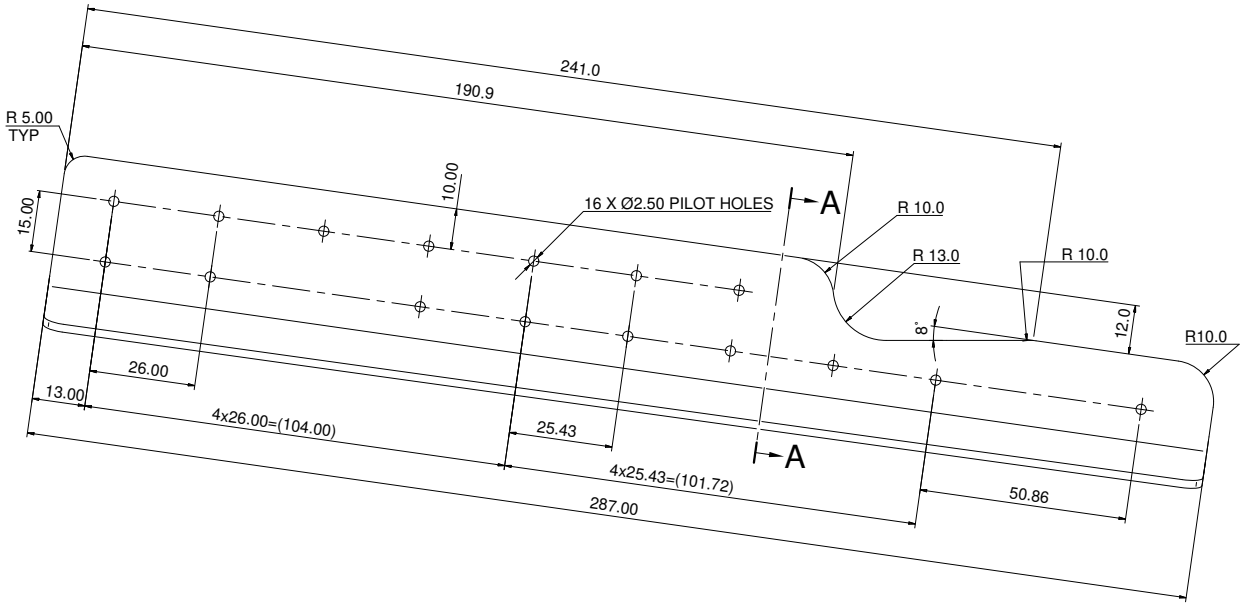
FINISH CODES:
N = Chromic acid anodising not sealed
XPFW = Waterborne chromate free primer

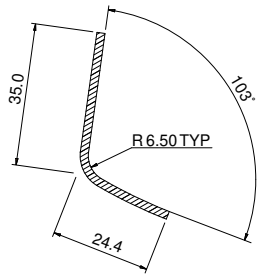
SECTION A-A

Figure 15

3G5350R01052
REINFORCEMENT ANGLE

MATERIAL AL-ALY 2024 T3
AMS-QQ-A-250/4, TH 2.00, N+XPFW/1





SECTION A-A

FINISH CODES:

N = Chromic acid anodising not sealed

XPFW = Waterborne chromate free primer

Figure 16

LEONARDO
HELICOPTERS

AgustaWestland Products

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.