

PILATUS AIRCRAFT LTD, STANS, SWITZERLAND

SERVICE BULLETIN

Ref No: 218 ATA Chapter: 27

Service Bulletin No: 27-015 Modification No: EC-19-0142

FLIGHT CONTROLS - ROLL CONTROL INTRODUCTION OF A FIXED AILERON TAB INSTALLATION

1. Planning Information

A. Effectivity

MSN 103 thru 313.

For these items held as spare or in stock:

LH	RH
Effective for MSN 103 thru 108, 153-154	Effective for MSN 103 thru 108, 153-154
(Pre SB 34-012)	(Pre SB 34-012)
Aileron assy, LH P/N 557.60.21.125	Aileron assy, RH P/N 557.60.21.126
Aileron Flettner Tab Instln., LH	Aileron Flettner Tab Instln., RH
P/N 557.60.21.133	P/N 557.60.21.134
Tab assy, LH P/N 557.60.21.127 (part of Instln)	Tab assy, RH P/N 557.60.21.128 (part of Instln)
Effective for MSN 103 thru 108, 153-154	Effective for MSN 103 thru 108, 153-154
(Post SB 34-012)	(Post SB 34-012)
Aileron assy, LH P/N 557.60.21.205	Aileron assy, RH P/N 557.60.21.206
Aileron Flettner Tab Instln., LH	Aileron Flettner Tab Instln., RH
P/N 557.60.21.133	P/N 557.60.21.134
Tab assy, LH P/N 557.60.21.127 (part of Instln)	Tab assy, RH P/N 557.60.21.128 (part of Instln)
Effective for MSN 109 thru 152	Effective for MSN 109 thru 152
Aileron assy, LH P/N 557.60.21.125	Aileron assy, RH P/N 557.60.21.126
Aileron Flettner Tab Instln., LH	Aileron Flettner Tab Instln., RH
P/N 557.60.21.133	P/N 557.60.21.134
Tab assy, LH P/N 557.60.21.127 (part of Instln)	Tab assy, RH P/N 557.60.21.128 (part of Instln)
Effective for MSN 155 thru 233	Effective for MSN 155 thru 233
Aileron assy, LH P/N 557.60.21.179	Aileron assy, RH P/N 557.60.21.180
Aileron Flettner Tab Instln., LH	Aileron Flettner Tab Instln., RH
P/N 557.60.21.133	P/N 557.60.21.134
Tab assy, LH P/N 557.60.21.127 (part of Instln)	Tab assy, RH P/N 557.60.21.128 (part of Instln)
Effective for MSN 234 thru 313	Effective for MSN 234 thru 313
Balanced Aileron, LH	Balanced Aileron, RH
P/N 557.60.21.191	P/N 557.60.21.192
Aileron assy, LH P/N 557.60.21.179	Aileron assy, RH P/N 557.60.21.180
(part of Balanced Aileron)	(part of)
Tab assy, LH P/N 557.60.21.127	Tab assy, RH P/N 557.60.21.128
(part of Balanced Aileron)	(part of Balanced Aileron)
Alleron Fletther Tab Instin., LH	Alleron Flettner Tab Instin., RH
P/N 557.60.21.197	P/N 557.60.21.198



B. Concurrent Requirements

None.

C. Reason

(1) Problem

During flutter analysis of under wing stores configurations, it was found that the failure case with disconnected aileron Flettner tabs shows a dynamic instability within the flight envelope for all aircraft configurations.

(2) Solution

The aileron Flettner tabs are clamped mechanically to the LH and RH ailerons to make sure that they do not become disconnected in flight. As a result, the Flettner tab functionality is lost.

D. Description

This Service Bulletin gives the instructions and data necessary to clamp the Flettner tabs to the ailerons and remove the input rods on the left and right sides.

Revision No. 1 is issued to align the effective Service Bulletin compliance date to that of the airworthiness directive FOCA AD HB-2020-005 compliance date 12th Mar 2021. Procedure warnings amended. Para 3.A.3.(e). amended.

No further work is required on aircraft that had this Service Bulletin accomplished in accordance with the initial revision.

E. Compliance

Mandatory.

Accomplishment required not later than the 12th March 2021.

F. Approval

I

The technical content of this Service Bulletin is approved under the authority of Letter of DOA Acceptance ref. FOCA. 21J.002.

PILATUS advises Operators/Owners to check with their designated Airworthiness Authorities for any changes, local regulations or sanctions that may affect the embodiment of this Service Bulletin.

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H. Manpower

	Man-Hours	Man-Hours Spares (Per Unit)
Preparation	3.00	-
Modification - on aircraft	5.00	-
Modification - spares	-	3.00
Close up	2.00	-
TOTAL MAN-HOURS	10.00	3.00

NOTE: Man-hours figures do not include the time required to cure adhesives, sealants or for primer and paint to dry.

I. Weight and Balance

(1) Weight Change

-0.242 kg (-0.534 lb).

(2) Moment Change

-1.269 kg m (-9.179 lb ft).

J. Electrical Load Data

Not changed.

K. Software

Not changed.

L. References

Aircraft Maintenance Manual (AMM): 00-50-00-00A-013A-A, 27-00-00-00A-012A-A, 27-00-00-00A-525A-A, 27-10-03-00A-344A-A, 27-10-04-00A-520A-A, 27-10-04-00A-720A-A, 95-00-00-00A-012A-A.

Structural Repair Manual (SRM): 51-20-03-00A-257A-A, 51-60-00-00A-276A.

M. Publications Affected

Aircraft Maintenance Manual (AMM): 27-00-00-00A-040A-A, 27-10-00-00A-041A-A, 27-10-00-00A-042A-A, 27-10-04-00A-520A-A, 27-10-04-00A-720A-A.

Illustrated Parts Data (IPD):

21-D-57-60-00-01D-941A-A, 21-D-57-60-00-02D-941A-A, 21-D-57-60-00-03D-941A-A, 21-D-57-60-00-04D-941A-A, 21-E-57-60-00-01E-941A-A, 21-E-57-60-00-02E-941A-A, 21-E-57-60-00-04E-941A-A, 21-G-57-60-00-01G-941A-A, 21-G-57-60-00-02G-941A-A, 21-G-57-60-00-03G-941A-A, 21-G-57-60-00-04G-941A-A.



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N. Interchangeability of Parts

One way interchangeable. Pre-Service Bulletin parts must not be installed on post-Service Bulletin 27-015 aircraft or spares.



2. Material Information

A. Material - Price and Availability

Modification Kit No. 500.50.21.222 is necessary to do this Service Bulletin.

Operators who require further information on this subject should contact their Customer Liaison Manager at:

Pilatus Aircraft Limited, 6371 Stans, Switzerland.

Operators are requested to advise Pilatus Aircraft Ltd. of the Manufacturer's Serial Number (MSN), the flying hours and landings of aircraft that are allocated for this Service Bulletin using the Service Bulletin Evaluation Form.

When you order the modification kit (P/N 500.50.21.222) from Pilatus Aircraft Ltd, you will also get a parts list. Use the numbers in column 1 (Pos. No.) to identify the parts in the kit (Ref. Para. 2.B.(1), Column 1).

B. Material Necessary for Each Aircraft

(1) Material to be Procured

Modification Kit No. 500.50.21.222.

The table below lists the parts in the Modification Kit (Ref. Para. 2.A.) and the disposition of the replaced parts:

Pos. No.	Description	Old Part No.	Qty	Disp. Code	Fig. No.	ltem. No.
10	CLAMPING DEVICE, ASSY, LH	-	1	N	2	31
20	CLAMPING DEVICE, ASSY, RH	-	1	N	2	32
30	SHIM PLATE		2	N	2	33
40	BUSH, DISTANCE	-	2	N	2	25
45	BALLAST WEIGHT	-	2	N	2	37
50	BOLT, HEX	-	4	N	2	35
60	BOLT, HEX	-	6	N	2	21
70	BOLT, HEX	-	2	N	2	27
80	WASHER	-	20	N	2	19 22 24 26 34

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Pos. No.	Description	Old Part No.	Qty	Disp. Code	Fig. No.	ltem. No.
90	NUT	-	8	N	2	20 23
100	RIVET, BLIND	-	8	N	2	38
110	COTTER PIN	See Note	4	N	-	-
120	COTTER PIN	See Note	4	N	-	-
130	LABEL, SB INCORPORATED	-	2	Ν	2	39
140	PROT. FILM, LABEL, SB INCORP	-	2	N	-	-
Disposition Codes: N - New. D - Discard. R - Return to Pilatus.						

NOTE: These items are used during the installation procedure of the ailerons, refer to AMM 27-10-04-00A-720A-A.

(2) Operator Supplied Materials (Ref. AMM, 00-50-00-00A-013A-A):

MATERIAL NO.	DESCRIPTION	QTY	REMARKS
P01-010	SOLVENT	A/R	Or equivalent
P02-001	LOCKWIRE	A/R	Or equivalent
P02-031	ABSORBENT PAPER	A/R	Or equivalent
P04-039	CORROSION PREVENTIVE	A/R	Or equivalent
P04-041	GREASE	A/R	Or equivalent
P07-007	PRIMER	A/R	Or equivalent
P07-021	ALODINE 1132	A/R	Or equivalent
P07-031	TOPCOAT	A/R	Or equivalent
P08-094	SEALANT	A/R	PSU, MC-780 - Interfay, C-1/3
P09-012	ALUMINUM TAPE	A/R	Or equivalent
P10-013	ARDROX AV 40	A/R	Corrosion preventative
P10-016	CPC	A/R	Ardrox / Dinitrol AV 25, Aerosol



C. Material Necessary for Each Spare

Modification Kit No. 500.50.21.222.

The table below lists the parts in the Modification Kit (Ref. Para. 2.A.) and the disposition of the replaced parts:

Pos. No.	Description	Old Part No.	Qty	Disp. Code	Fig. No.	ltem. No.
10	CLAMPING DEVICE, ASSY, LH	-	1	N	2	31
20	CLAMPING DEVICE, ASSY, RH	-	1	N	2	32
30	SHIM PLATE		2	N	2	33
40	BUSH,DISTANCE	-	2	N	2	25
45	BALLAST WEIGHT	-	2	N	2	37
50	BOLT, HEX	-	4	N	2	35
60	BOLT, HEX	See Note	6	N	2	21
70	BOLT, HEX	-	2	N	2	27
80	WASHER	- See Note - Item 22 See Note - Item 24 - -	20	N	2	19 22 24 26 34
90	NUT	- See Note - Item 23	8	N	2	20 23
100	RIVET, BLIND	-	8	N	2	38
110	COTTER PIN	See Note	4	N	-	-
120	COTTER PIN	See Note	4	N	-	-
130	LABEL, SB INCORPORATED	-	2	N	2	39
140	PROT. FILM, LABEL, SB INCORP	-	2	N	-	-
Disposition Codes: N - New. D - Discard. R - Return to Pilatus.						

NOTE: These items are not applicable to the modification to the spares.



D. Re-identified Parts

The part number for the aileron will be updated and shown on the new SB incorporated label, included in the kit.

E. Tools and Equipment

PART NO.	DESCRIPTION	QTY	REMARKS/APPLICATION
990.00.02.004	MECHANICAL TOOL KIT	1	-
-	SCRAPER	1	Non metallic
-	PENCIL		Or equivalent
-	FEELER GAUGE		Or equivalent
-	STRAIGHT EDGE		Or equivalent



- 3. Accomplishment Instructions Aircraft
 - WARNING: READ AND OBEY THE SAFETY PRECAUTIONS AT THE START OF CHAPTER 95, CREW ESCAPE AND SAFETY, BEFORE YOU GO IN OR NEAR TO THE COCKPIT. IF THE EJECTION SEAT AND THE CANOPY FRACTURING SYSTEM (CFS) OPERATE ACCIDENTALLY OR INCORRECTLY THEY CAN CAUSE DEATH OR INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.
 - WARNING: BE CAREFUL WHEN YOU OPERATE THE FLIGHT CONTROL SURFACES. MAKE SURE THAT PERSONNEL AND EQUIPMENT ARE AWAY FROM THE AREA AROUND THE FLIGHT CONTROL SURFACES. A SUDDEN MOVEMENT OF THE FLIGHT CONTROL SURFACES CAN CAUSE AN INJURY TO PERSONNEL AND CAN CAUSE DAMAGE TO THE EQUIPMENT.
 - WARNING: BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. OBEY THE MANUFACTURERS' HEALTH AND SAFETY INSTRUCTIONS AND ALL THE APPLICABLE LOCAL INSTRUCTIONS. CONSUMABLE MATERIALS CAN BE DANGEROUS AND CAN CAUSE DEATH OR INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.
 - **NOTE:** For the safety precautions for the ejection seat and the CFS, refer to AMM 95-00-00-00A-012A-A.
 - **NOTE:** The mechanical tool kit (P/N 990.00.02.004) is necessary to do this procedure.
 - **NOTE:** This procedure is applicable to the left and the right ailerons.

A. Preparation

- (1) Do the safety procedures for the Flight Control System (FCS), before you do work on the flight controls (Ref. AMM, 27-00-00-00A-012A-A).
- (2) Put a warning sign 'DO NOT OPERATE THE FLIGHT CONTROLS', in the front cockpit and the rear cockpit.
- (3) Do the procedure to measure the aileron tab deflection (Ref. Fig. 1).

NOTE: This measurement procedure is applicable to the left and the right ailerons.

- (a) Install the aileron trim control rigging-pin (Ref. AMM, 27-10-03-00A-344A-A).
- (b) Use a straight edge (A ruler held on its edge or equivalent) and hold it in position on the upper surface of the aileron (2) or tab (1) as follows:
 - If the tab (1) is deflected above the aileron (2), hold straight edge (4) on the tab (1)
 - If the tab (1) is deflected below the aileron (2), hold straight edge (4) on the aileron (2).
- (c) Use a pencil (or equivalent) to make a mark on the relevant surface where you hold the straight edge (4).
- (d) Use a feeler gauge (or equivalent) and measure the gap between the underside of the straight edge (4) and the relevant surface (the aileron (2) or the tab (1)).





- (e) Make record of the left and right measurements as follows:
 - Assign a positive value (+) when the measurement of the tab is above the aileron
 - Assign a negative value (-) when the measurement of the tab is below the aileron.
 - **NOTE:** You will use these measurements to set the aileron tabs to the correct system trim position when you fix the tabs to the ailerons.
- (f) Remove the aileron trim control rigging-pin (Ref. AMM, 27-10-03-00A-344A-A).
- (4) Remove the left and right aileron assemblies (Ref. AMM, 27-10-04-00A-520A-A).
- (5) Examine the aileron tab main-rib on the LH and RH ailerons. If any structural damage is found, please contact Pilatus for guidance.

B. Modification (Ref. Fig. 2)

- (1) Do the modification to remove the trim tab input mechanism.
 - (a) Remove the trim tab pushrod (5) and the trim tab bracket (12).
 - <u>1</u> Remove and discard the cotter pin (6).
 - 2 Remove and discard the nut (7), the washers (8) and (13) and the bolt (14).
 - <u>3</u> Remove and discard the pushrod (5) from the trim tab bracket (12).
 - <u>4</u> Remove and discard the three nuts (10) and washers (11).
 - 5 Remove and discard the three bolts (16), three washers (15) and the trim tab bracket (12) from the rear spar.
 - **NOTE:** The servo bellcrank (2) and the related attachment equipment is removed when the aileron assembly (1) is removed from the aircraft.
 - <u>6</u> Discard the following pushrod (5) attachment items, these items were removed during the aileron assembly (1) removal:
 - The nut (3)
 - The washers (4) and (17)
 - The bolt (18).
 - (b) Close the attachment holes at the base area of the removed trim tab bracket (12) on the rear spar.
 - 1 If necessary, use a non-metallic scraper to remove any residual sealant from the base area of the removed trim tab bracket (12) on the rear spar.
 - <u>2</u> Use absorbent paper (Material No. P02-031) made moist with solvent (Material No. P01-010) to clean the base area of the removed trim tab bracket (12) on the rear spar.



- <u>3</u> Apply the applicable topcoat (Material No. P07-031) as necessary to the base area of the removed trim tab bracket (12) on the rear spar, refer to SRM, 51-20-03-00A-257A-A.
- <u>4</u> Let the topcoat dry.
- 5 Apply a layer of corrosion preventive (Material No. P04-039) on assembly of the new bolts (21) (Pos. No. 60) and washers (22) (Pos. No. 80).
- <u>6</u> Put the three bolts (21) (Pos. No. 60) and washers (22) (Pos. No. 80) in position aft of the rear spar.
- Apply a layer of grease (Material No. P04-041) to the threads of the three bolts (21) (Pos. No. 60) and install the new washers (24) (Pos. No. 80) and the new nuts (23) (Pos. No. 90).
- (c) Install a bolt in the redundant hole of the servo bellcrank (2).
 - <u>1</u> Install these items in the redundant hole of the servo bellcrank (2):
 - The new bolt (27) (Pos. No. 70)
 - The new washer (26) (Pos. No. 80)
 - The new distance bush (25) (Pos. No. 40).
 - Apply a layer of grease (Material No. P04-041) to the threads of the bolt (27) (Pos. No. 70) and install the new washer (19) (Pos. No. 80) and the new nut (20) (Pos. No. 90).
- (2) Do the modification to clamp the trim tab to the aileron.
 - **NOTE:** When necessary, move the aileron trim tab assembly (30) and hold in the deflected position to get access to the work areas.
 - (a) Remove the tab balance weight (29).
 - <u>1</u> Use a 3,2 mm diameter drill and carefully remove the two rivets (28) from the balance weight (29).
 - 2 Remove and discard the balance weight (29) from the aileron trim tab assembly (30).
 - <u>3</u> If necessary, use a non-metallic scraper to remove any residual sealant from the work area.
 - <u>4</u> Use absorbent paper (Material No. P02-031) made moist with solvent (Material No. P01-010) to clean the work area.
 - (b) Increase the diameter of the holes in the aileron trim tab assembly (30) for the attachment of the new ballast weight (37) (Pos. No. 45).
 - <u>1</u> Use a 4,80 mm (+0.12/0 mm) diameter drill and increase the diameter of the old rivet holes in the aileron trim tab assembly (30) to make the new bolts holes.
 - <u>2</u> Apply a chamfer to the new bolts holes of between 0,20 mm and 0,40 mm.



- <u>3</u> Apply a layer of alodine 1132 (Material No. P07-021) to the bolt holes in the aileron trim tab assembly (30).
- Apply a layer of the primer (Material No. P07-007) to the bolt holes in the aileron trim tab assembly (30).
- (c) Install the new clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH)) on the aileron assembly (1).
 - <u>1</u> Put the clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH)) on the aileron assembly (1), hold it in position and make sure of the following:
 - With the trim tab assembly (30) in the neutral position, the bolts holes for the ballast weight align with the corresponding attachment holes in the clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH)).
 - The three spigots points of the clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH)) are in contact with the structure of the aileron assembly (1)
 - **CAUTION:** DO NOT APPLY TOO MUCH FORCE WHEN YOU PUT THE CLAMPING DEVICE IN POSITION. THE STRUCTURE IN THIS POSITION CAN EASILY BE DAMAGED IF TOO MUCH FORCE IS APPLIED.
 - **NOTE:** If the spigots points are not in full contact with the structure, make sure that there is an equal distance between the structure and each spigot point.
 - **NOTE:** If, with the spigot points in full contact with the structure, the attachment holes for the clamping device are too far forward to align with the bolts holes for the ballast weight:
 - Remove material from the spigot points until the attachment holes align.
 - **NOTE:** If, to align the attachment holes for the clamping device with the bolts holes for the ballast weight, you have to move it forward so the spigot points are not in full contact with the structure:
 - Apply aluminum tape (Material No. 09-012), as required, between the spigots and the structure as a spacer to give you the correct position.
 - <u>2</u> Use a 2,4 mm (0.10 in.) diameter drill and make the rivet holes, through the pre-drilled holes of the new clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH)) into the aileron assembly (1).
 - <u>3</u> Remove the clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH)) from the aileron assembly (1).
 - <u>4</u> Put the clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH)) into position on the aileron assembly (1) and hold it in position with clamps and/or gripper pins (or equivalent).

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- 5 Use a 3,3 mm (0.13 in.) diameter drill and increase the diameter of the rivet holes in these items:
 - The clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH))
 - The aileron assembly (1).
- <u>6</u> Remove the clamps and/or gripper pins (or equivalent).
- <u>7</u> Deburr the rivet holes as necessary in these items:
 - The clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH))
 - The aileron assembly (1).
- <u>8</u> Apply a layer of alodine 1132 (Material No. P07-021) to the rivet holes in these items:
 - The clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH))
 - The aileron assembly (1).
- <u>9</u> Apply a layer of sealant (Material No. P08-094) on the mating surfaces between these items:
 - The clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH))
 - The aileron assembly (1).
- 10 Put the clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH)) into position on the aileron assembly (1) and hold it in position with clamps and/or gripper pins (or equivalent).
- <u>11</u> Apply a layer of sealant (Material No. P08-094) on each rivet before you install it.
- <u>12</u> Install four new rivets (38) (Pos. No. 100) to attach the clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH)) in position.
- 13 Use absorbent paper (Material No. P02-031) and solvent (Material No. P01-010) to remove unwanted sealant.
- (d) Do the adjustment to the new shim plate (33) (Pos. No. 30).
 - <u>1</u> Move and hold the aileron trim tab assembly (30) in the neutral position.
 - Put the shim plate (33) (Pos. No. 30) in position between the clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH)) and the aileron trim tab assembly (30).
 - <u>3</u> Make sure of the following:
 - There are no gaps between the clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH)) and the aileron trim tab assembly (30)
 - There is no compression between the shim plate (33) (Pos. No. 30) and the aileron trim tab assembly (30).



- <u>4</u> Adjust the shim plate (33) (Pos. No. 30) as necessary to remove any compression and make sure there are no gaps.
 - **NOTE:** Remove the 0.10 mm layers of the shim plate (33) (Pos. No. 30) in stages, as required, to do the adjustment.
- 5 Apply a layer of the primer (Material No. P07-007) to the bare surfaces of the shim plate (33) (Pos. No. 30).
- <u>6</u> Let the primer dry.
- (e) Clamp the aileron trim tab assembly (30) to the aileron assembly (1).
 - <u>1</u> Apply a layer of sealant (Material No. P08-094) on the mating surfaces between these items:
 - The new ballast weight (37) (Pos. No. 45)
 - The aileron trim tab assembly (30).
 - 2 Put the new ballast weight (37) (Pos. No. 45) on the aileron trim tab assembly (30) and hold in position.
 - <u>3</u> Move and hold the aileron trim tab assembly (30) and make sure the bolt holes in the aileron trim tab assembly (30) for ballast weight align with the corresponding attachment holes in these items:
 - The shim plate (33) (Pos. No. 30)
 - The clamping blocks in the clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH)).
 - Apply a layer of grease (Material No. P04-041) to the threads of the new bolts (35) (Pos. No. 50).
 - Loosely install the two bolts (35) (Pos. No. 50) and the new washers (34) (Pos. No. 80) so you can move the clamping blocks in the clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH)).
 - 6 Move and hold the aileron trim tab assembly (30) to the correct neutral position in relation to the aileron assembly (1) (Refer to the measurement procedure for aileron tab deflection, Para 3.A.(3).
 - <u>7</u> Tighten the two bolts (35) (Pos. No. 50) to hold the aileron trim tab assembly (30) in the correct neutral position.
 - <u>8</u> Use the lockwire (36) (Material No. P02-001) to safety the two bolts (35) (Pos. No. 50).
 - 9 Apply a layer of Ardrox AV 40 (Material No. P10-013) to the outside of the clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH)) to cover:
 - The heads of the two bolts (35) (Pos. No. 50)
 - The uncovered area of the bonding surface on the ballast weight (37) (Pos. No. 45).
 - <u>10</u> Let the Ardrox AV 40 dry.



- 11 If necessary, apply the applicable topcoat (Material No. P07-031) to the ballast weight (37) (Pos. No. 45) and work area, refer to SRM, 51-20-03-00A-257A-A.
- <u>12</u> Let the topcoat dry.
- <u>13</u> Apply a layer of CPC (Material No. P10-016) to the inside of the clamping device (31) (Pos. No. 10) (LH) (or (32) (Pos. No. 20) (RH)) to cover all the untreated surfaces.
- <u>14</u> Let the CPC dry.
- (3) Install the new SB incorporated label.
 - (a) Find the existing identification label.
 - (b) Make sure that the data given on the new SB incorporated label (39) (Pos. No. 130) is complete and correct and relates to the SB being incorporated.
 - (c) Use a permanent marker to add the date of incorporation of the SB in the DATE field of the new SB incorporated label (39) (Pos. No. 130).
 - (d) Use the absorbent paper (Material No. P02-031) made moist with the solvent (Material No. P01-010) and clean the installation area for the new SB incorporated label (39) (Pos. No. 130).
 - (e) Let the installation area dry.
 - **NOTE:** Install the new SB incorporated label (39) (Pos. No. 130) adjacent and inline with the existing identification label in a position that can be read easily.
 - (f) Remove the backing strip from the new SB incorporated label (39) (Pos. No. 130).
 - (g) Align the SB incorporated label (39) (Pos. No. 130) and apply it correctly into position. Make sure that:
 - There are no folds in the label
 - There are no air bubbles caught between the label and the surface.
 - (h) When the new SB incorporated label (39) (Pos. No. 130) is fully bonded in position, remove the backing strip from the protective film (Pos. No. 140).
 - (i) Align the protective film (Pos. No. 140) with the SB incorporated label (39) (Pos. No. 130) and apply it correctly into position. Make sure that:
 - There are no folds in the protective film and it completely covers the label
 - There are no air bubbles caught between the label and the protective film.
- (4) Do Steps 3.B.(1) thru (3) for the other aileron.

C. Close up

(1) Do the aileron balance procedure for the left and right ailerons (Ref. SRM, 51-60-00-00A-276A-A).



- (2) Install the left and right ailerons (Ref. AMM, 27-10-04-00A-720A-A).
- (3) Remove the warning panels.
- (4) Do the close up procedure for the FCS (Ref. AMM, 27-00-00-00A-525A-A).
- (5) Remove all equipment, materials and tools from the work area. Make sure that the work area is clean.

D. Documentation

- (1) Make an entry in the Aircraft Logbook of the aileron tab deflection measured values for the LH and RH side and that this Service Bulletin has been incorporated.
- (2) Use the Service Bulletin Evaluation Sheet and report the aileron tab deflection measured values for the LH and RH side and the serial number of the aircraft to PILATUS.



4. Accomplishment Instructions - Off Aircraft

A. Modification

- (1) Do the modification to the aileron assemblies held as spare or in stock, refer to Para. 3.B.(1)(c), Para. 3.B.(2), Para. 3.B.(3) and 3.C.(1).
 - **NOTE:** The adjustment to get the correct aileron trim-tab deflection can only be done onaircraft during the installation procedure of the spare aileron assembly.

B. Documentation

- (1) If applicable, make an entry on the aileron Log-Card that this Service Bulletin has been incorporated and that the part number has changed.
- (2) Use the Service Bulletin Evaluation Sheet and report your results to PILATUS.





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SERVICE BULLETIN



Modification to Introduce a Fixed Aileron Trim Tab Installation Figure 2 (Sheet 1 of 2)

Service Bulletin No: 27-015 Rev. No. 1 Date: Nov 20/20





Figure 2 (Sheet 2 of 2)





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SERVICE BULLETIN EVALUATION SHEET FOR SB No. 27-015						
Title	Flight Controls - Roll Control Introduction of a Fixed Aileron Tab Installation					
Customer						
Service Center						
	EM	BODIMENT	REPO	ORTING		
This SB has been embodied: On the entire fleet						
D 11 1 1				Only pa	rtially	
Provide embodim	ent details per a	ircraft (use a	dditio	onal copies	s of this table, if necessary)	
MSN	Flying H	lours	MSI	N	Flying Hours	
Additional embo	diment comme	ents/findings	; ;			
	E	DITORIAL C	OMN	IENTS		
(p	rocedure, kit q	uality, sugg	este	d improve	ements, etc.)	
Name	,	Sign	ature		Date	
Please complete and forward this form to:						
Pilatus Aircraft LTD,						
Customer Technical Support (MCC),						
P.O. BOX 992,						
	6371 St	ans, Switzerian	u 73			
	Fax. +4		o ilatue-	aircraft.com		

SERVICE BULLETIN EVALUATION SHEET





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