MODEL AFFECTED:	SportCruiser / PiperSport operating outside EASA rules
SUBJECT:	Rudder stops replacement
AIRCRAFT AFFECTED:	All SportCruiser / PiperSport aircraft operating outside EASA rules
COMPLIANCE:	According to the owner's decision

DESCRIPTION:

This Service Bulletin contains instructions for replacement of rudder stops. These stops are used to define and set the maximum deflection of rudder. This deflection is set to 30°±2° on both sides.

AUTHORISATION TO PERFORM:

Repairman (LS-M) or Mechanic (A&P)

REASON:

Reinforced rudder stops (P/N: SF0262L and SF0262P) have been developed by the aircraft manufacturer with the objective to further increase operational reliability of the aircraft, mainly in highly demanding operational conditions.

MANPOWER:

4 hours

SPECIAL TOOLS:

Common tools for aircraft maintenance.

WEIGHT AND BALANCE:

N/A

ELECTRICAL LOAD DATA:

N/A

PUBLICATIONS AFFECTED:

N/A

MATERIAL AND COSTS:

All costs to be covered by the aircraft owner / operator.

MATERIAL:

ITEM No.	NOMENCLATURE	DESCRIPTION	QUANTITY
001	3171T032	rivet Avex 5	4 pcs
002	3171T030	rivet Avex 4	10 pcs
003	ST0050N-510-001	mounting device	1 pc
004	3111x611	bolt M6x35	1 pc
005	3121x602	nut M6	2 pcs
006	SF0262L	left stop	1 pc
007	SF0262P	right stop	1 pc
008	4410V002[1]	Emfimastic PU50 or	1 pc
009	N/A[1, 2]	3M Marine Adhesive Sealant 5200	1 pc

[1] one of these, [2] order in local store

ACCOMPLISHMENT INSTRUCTIONS:

NOTE: During the implementation of this SB follow AC43-13 and AMM.

1) Remove horizontal stabilizer (SC_MM-1-0-00, Chap 5.3), disconnect trim wires and elevator rod.
2) Remove rudder (SC-MM-1-0-00, Chap 5.3), disconnect control cables.
3) Drill out the rivets both sides (SC-MM-1-0-00, Chapter 15.2). All drilled rivets are marked on the picture (Fig. 1). Rivets marked as Avex 4 with drill bit D3,2mm and Avex 5 with drill bit D4,1mm.

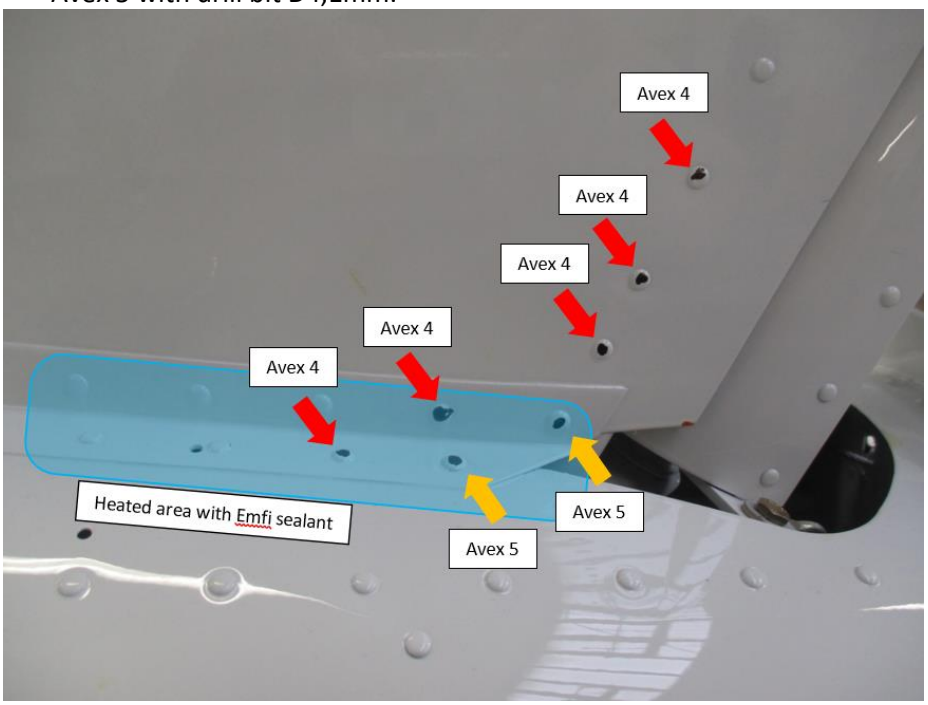

Fig. 1: Rivets marked to be drilled out

4) Gently heat up the fairing with a hot-air gun in blue area.
5) Remove the stops.
6) Remove any residual Emfi sealant using a snap blade knife.
7) Install the mounting device (Fig. 2) for alignment of the new stops SF0262LP.

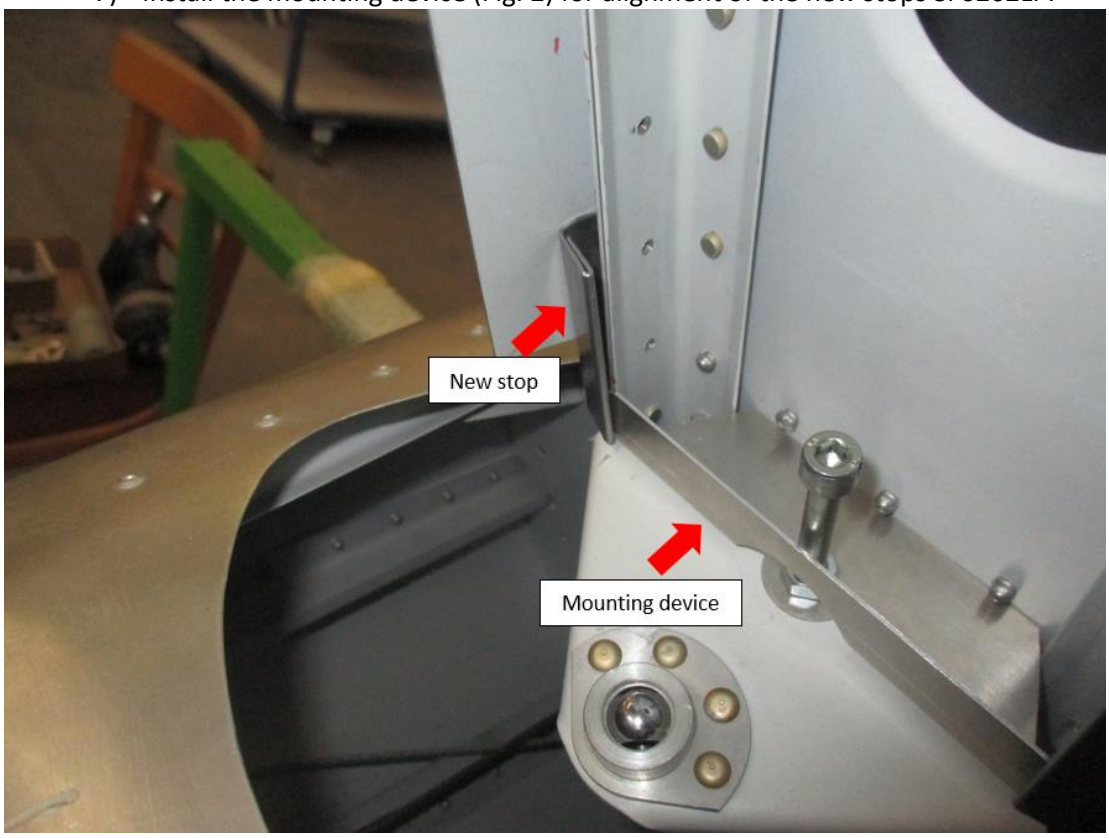

Fig. 2: Mounting device

8) Install the left and the right stop, keep stops in contact with the mounting device.
9) Drill the holes, D3,2mm for Avex 4 and D4,1mm for Avex 5, see Fig. 1.
10) Remove the stops and deburr the holes.
11) Apply Emfi/3M sealant where was the original sealant.
12) Install the stops back in place, fix the stops with clecos.
13) Gradually rivet (SC-MM-1-0-00, Chap 15.3) the rivets Avex 4-10 pcs. and Avex 5-4 pcs. See Fig. 1.
14) Remove the mounting device.
15) Clean the airframe from rest of rivets.
16) Install back the rudder (SC-MM-1-0-00, Chap 5.3), connect control cables.
17) Install back the horizontal stabilizer (SC-MM-1-0-00, Chap 5.3) and connect trim cables.
18) Check deflection of the rudder, system function and tension of the control cables (SC-MM-1-0-00, Chap 6.4).
19) Fill the holes in the rivet heads with Emfi/3M sealant, allow to cure and grind it.
20) Repair the paint (SC-MM-1-0-00, Chapter 15.6).
21) Restore the aircraft to airworthy condition.
22) Update aircraft records to reflect compliance with this Service Bulletin.

APPROVAL:

This Service Bulletin has been approved by:

TITLE:	Head of Design Organisation	Airworthiness Manager
NAME:	David Bilík	Jan Pejchar
HAND WRITTEN SIGNATURE: