

PILATUS

service bulletin

PILATUS AIRCRAFT WORKS LTD. STANS SWITZERLAND

Approved by the Swiss Federal Air Office

May 1967

Service Bulletin No. 62B
(Supersedes No. 62A)

Subject: Flettner tabs V-14463
Models affected: PILATUS PORTER PC-6/ all models
Time of compliance: None

Dear customer,

The manual control forces required for Porter aircraft are often regarded as rather high by the pilots. Therefore, we have designed Flettner tabs for the elevators and ailerons to reduce the stick force. These devices can be subsequently installed on any Porter.

The Flettner tabs result in easier controllability of the Porter without any change in trimmability, stall or other flight characteristics.

Because the existing elevator gust lock can no longer be used with these tabs, it must be replaced by a new gust lock, item No. 6367.29. A support plate must be riveted to both elevator end ribs for this purpose.

The Flettner tabs and the new elevator gust lock and also the aileron reinforcement (which becomes necessary due to increased balance weight) are shown on drawing

V - 14463 Sheets 1 and 2

Balancing instructions are given on sheets No. J-4526 / J-4527.
Accordingly the C.G. locations are as follows:

- for the elevator: 1.06 in. (existing .59 in.)	} aft of hinge axes.
- for the aileron .55 in. (existing .433 in.)	

To correct the C.G. proceed as follows:

1. Aileron: With the reinforcement of the aileron according to drawing No. V-14463 Sheet 2, the position of the balance weight is moved forward (approx. .63 in.)
Nevertheless, the balance weight must be increased by adding of lead. The required quantity has to be calculated according to diagram No. J-4527.

2. Elevator: Unrivet the end ribs. Install the required additional balance weight (approx. .8 lbs. each side, calculated in accordance with J-4526) in form of a steel plate diam. 3.15 in. (cadmium plated or painted) on the inner rib on each side. Reinstall the end ribs using Cherry rivets (1/8" oversize).

With this system installed (balance weight included), the aircraft weight will be increased by approx. 5.5 lbs. - 1560 in. lbs.

The fixed tabs on the elevator and the aileron will be replaced by these Flettner tabs and have to be removed.

The Flettner tabs on the aileron are basically adjusted to 0° in neutral position. This value may be trimmed in accordance with flight requirements. The necessary trim correction should be divided in such a way that the left and right tabs are corrected 50 % in opposite direction.

The reinforcement of the outer ailerons, provided with balancing weights, calls for new part numbers, because the inner ailerons, which have been interchangeable so far, need not be reinforced. For numbers of the 4 possible aileron versions, see attached table.

After the aileron in question has been reinforced, it must be marked with the new part number by crossing out P/N 6106.10 on the existing plate and gluing on the new plate P/N 6106.34/I or P/N 6106.34/II supplied by us next to it.

The inner ailerons on aircraft, including inner ailerons you may possibly have in stock, must be marked with the plates "CAUTION - NO BALANCE WEIGHT", and the slots of the blind screws must be filled with resin.

In future, Pilatus will only produce ailerons P/N 6106.34 according to version 4. The ailerons P/N 6106.34 can also be used for Porters without Flettner tabs in place of the aileron P/N 6106.10 as indicated in the enclosed table, but never vice-versa.

Of course, you may also have the inner aileron reinforced for the sake of uniformity, which you should however specially mention in the order.

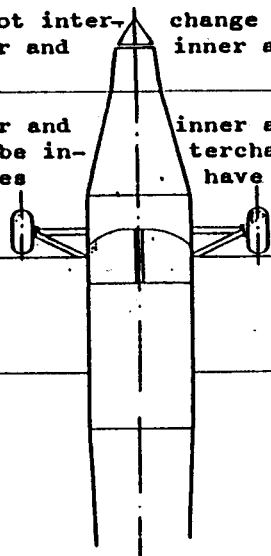
The parts can be ordered from us under the above number. Prices and delivery are indicated on request.

If installed, please note the modification in the technical documents as follows:

"Flettner tabs installed, according to Pilatus Service Bulletin No. 62B, drawing No. V-14463. Ailerons reinforced. Mass balance in accordance with J-4526 / J-45/27.

Identification of ailerons for PC-6, all models

Approved variant	Design	left hand wing		Drawing No.	right hand wing		
		outside	inside		inside	outside	
1	without Flettner tabs	Ailerons not reinforced, without hinges for Flettner tabs (existing version)	6106.10	6106.10	Model 6106.34 may be used instead of 6106.10 but not reverse.	6106.10	6106.10
2		As variant 1 but hinges for Flettner tabs fitted (without reinforcement)	6106.10 Rub. I	6106.10 Rub. II		6106.10 Rub. I	6106.10 Rub. II
3	with Flettner tabs	Outer ailerons reinforced; hinges for Flettner tabs fitted	6106.34 Rub. I	6106.10 Rub. II	Do not interchange outer and inner ailerons	6106.10 Rub. I	6106.34 Rub. II
4		Outer and inner ailerons reinforced and provided with hinges for Flettner tabs	6106.34 Rub. I	6106.34 Rub. II		Outer and inner ailerons may be interchanged if hinges have been changed	6106.34 Rub. I



Note: "Rub. I" and "Rub. II" refer to position of hinges for Flettner tabs.