



AIRWORTHINESS DIRECTIVE

TYPES AFFECTED: Pilatus B4 gliders all models all serial numbers

SUBJECT: Corrections to airspeed limitations.

BACKGROUND: When the Pilatus B4 glider was Australian Type Accepted in 1973 the manufacturer supplied Position Error data based on flight testing dated 1972. During 1973 further flight testing was completed but the results of those tests were not apparently passed on to the Australian Dept of Aviation. The original Certificate of Airworthiness issued by the D of A called up airspeed limitations appropriate to the position error data they received dated 1972 resulting in significant differences between the Pilatus B4 flight manual airspeed limits, the cockpit placards and the C of A limits.

Those differences were highlighted in 1980 when G.F.A. acting on advise from the D of A circularised all Pilatus B4 owners advising them of the Australian certified speed limitations suggesting that the Flight Manuals and the cockpit (I.A.S) placards should be changed (increased) to match the C of A values.

Following a flutter incident involving a Pilatus B4 early 1988, G.F.A. requested the manufacturer to verify the certified Position Error for the type to ensure that we were operating the B4 inside the correct flight limitations. (I.A.S.)

The manufacturer supplied the G.F.A with data dated 1973 which confirmed both that the D.of A. C.of A. values and the values circularised to owners in 1980 WERE ALL INCORRECT ALLOWING THE B4 TO BE FLOWN OVER ITS DESIGN LIMITS IF THE PILOT FLEW IN ACCORDANCE WITH THE AUSTRALIAN RECOMMENDED PLACARDS.

ACTION REQUIRED: (1) COCKPIT AIRSPEED PLACARD CORRECTIONS

Before the next flight the cockpit placards are to be checked against the airspeed limitations shown on Appendix A. If the placards are different they must be changed to

Issued by:

A.P. Bann

Chief Technical Officer,
Airworthiness

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For and on behalf of:

GLIDING FEDERATION OF AUSTRALIA

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match Appendix A before further operation.

(2) FLIGHT MANUAL CORRECTION

All copies of the Pilatus B4 Flight Manual must be corrected to the same values as the cockpit placards. (corrected pages are available from the G.F.A. Secretariate)

(3) AIRSPEED INDICATOR

If the Airspeed Indicator is colour coded the coding must be checked against the speed limits in Appendix A and changed as necessary.

IMPLEMENTATION:

The owner or any G.F.A. inspector can carry out the actions required which must be recorded by log book entry. Where an A.S.I. is removed for correction of colour coding its re-installation must be checked by a G.F.A. inspector authorised "C of A" (any type) and recorded by log book entry.

COMPLIANCE:

The requirements of this Airworthiness Directive are mandatory. This Directive is issued pursuant to the Air Navigation Regulations under the delegated authority of the Secretary of the Department of Transport and Communications (S45/87)

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## APPENDIX A

### NOTE !

There are three models of the Pilatus B4 glider. Please make sure you know which model you are checking for correct airspeed placarding. The following speed limits are to be used for cockpit placarding and flight manual revision.

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PLACARDED AIRSPEED LIMITS (knots I.A.S.)

	B4- PC11	PC11A	PC11AF
Max. smooth or rough air Vne	130	130	130
Max. air brake operating speed	130	130	130
Max. manouvering speed Va	78	88	88
Max. speed for flick manouvres	nil	nil	81
Max. aero tow speed Vt	78	88	88
Max. winch launch speed Vw	70	70	70

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### JUSTIFICATION

The speed limitations above are based on:

- (1) Calibrated Airspeeds stated on Swiss Type Certificate No s 43-02 (31/1/1975)
- (2) Pilatus Position Error Data provided March 1988 (reproduced overleaf)

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POSITION ERROR DATA PROVIDED BY PILATUS MARCH 1988

