



SERVICE BULLETIN NO. 86

ISSUE 2

TITLE: TOP RIGGING CABLE SWAGING.

CLASSIFICATION Cyclone Airports consider this bulletin compulsory.

COMPLIANCE Before further flight.

APPLICABILITY All Pegasus Q2 and Q wings between serial numbers 7607 and 7874 (Jan 2000-Nov 2001).

INTRODUCTION:

The reflex bridle separated from the top rigging on two Pegasus Q2 wings recently. This is potentially hazardous because of 1) possible propeller contact and 2) loss of pitch stability under negative loading. This is not the first time the reflex bridle has separated, service bulletin SB86 issue 1 refers.

The probable cause of this problem has now been found. During production of this part, the sleeve is expanded slightly so that it passes over the plastic coating. It is slid along the cable to the region where the 3mm cable is bared and is joined with the 3mm reflex bridle cable. Because the sleeve is expanded, it is then swaged in two stages, first in the 4mm jaws and then the 3mm jaws.

On both the separated cables returned to the Factory, it was evident that the sleeves had only been swaged to the 4mm size, giving an under-strength joint. All other sleeves are swaged in a single operation to final size so the possibility of missing the second stage does not appear. The swaging tools are checked before each batch of cables are produced.

Procedures have been changed to require a 100% gauge check on this sleeve to the 3mm size. In addition, the sleeve is now swaged at 3 locations instead of 2.

ACTION

- 1) Remove the kingpost top cap.
- 2) Measure, with calibrated vernier calipers or a Nicopress gauge, the swaged dimension across the compressed portions of the sleeve. The typical correct size for the 3mm jaws is 8.5mm, maximum size 8.9mm (Nicopress oval M gauge).

If the swaged dimension is over 8.8mm, then the sleeve has been swaged with the 4mm jaws only. The typical size for the 4mm jaws is 9.05mm, maximum size 10.0mm (Nicopress oval P gauge).

If the swage dimension exceeds 8.8mm or will not fit the Nicopress oval M gauge, then a replacement cable assembly will be provided free of charge.

Any cables with over size swages **MUST** be either clearly labelled and returned to the Factory, or be made unusable.

When this inspection has been satisfactorily carried out to the satisfaction of your inspector, "SB 86 issue 2 (swages) completed" must be signed off in the technical log.

Approved:

Date:

Page 1 of 1.

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