



AUSTRALIAN PARACHUTE FEDERATION

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APF SERVICE BULLETIN N^o. APF 100427 Issued 27 APRIL 2010

SUBJECT: RIPCORDER PIN TEST

STATUS: MANDATORY. This is a one-time TEST. One of two tests (either test 1 or test 2) must be performed and marked as per test procedure.

IDENTIFICATION: Reserve ripcorders without markings to indicate manufacturer or previous test marking in rigs manufactured before July 2003

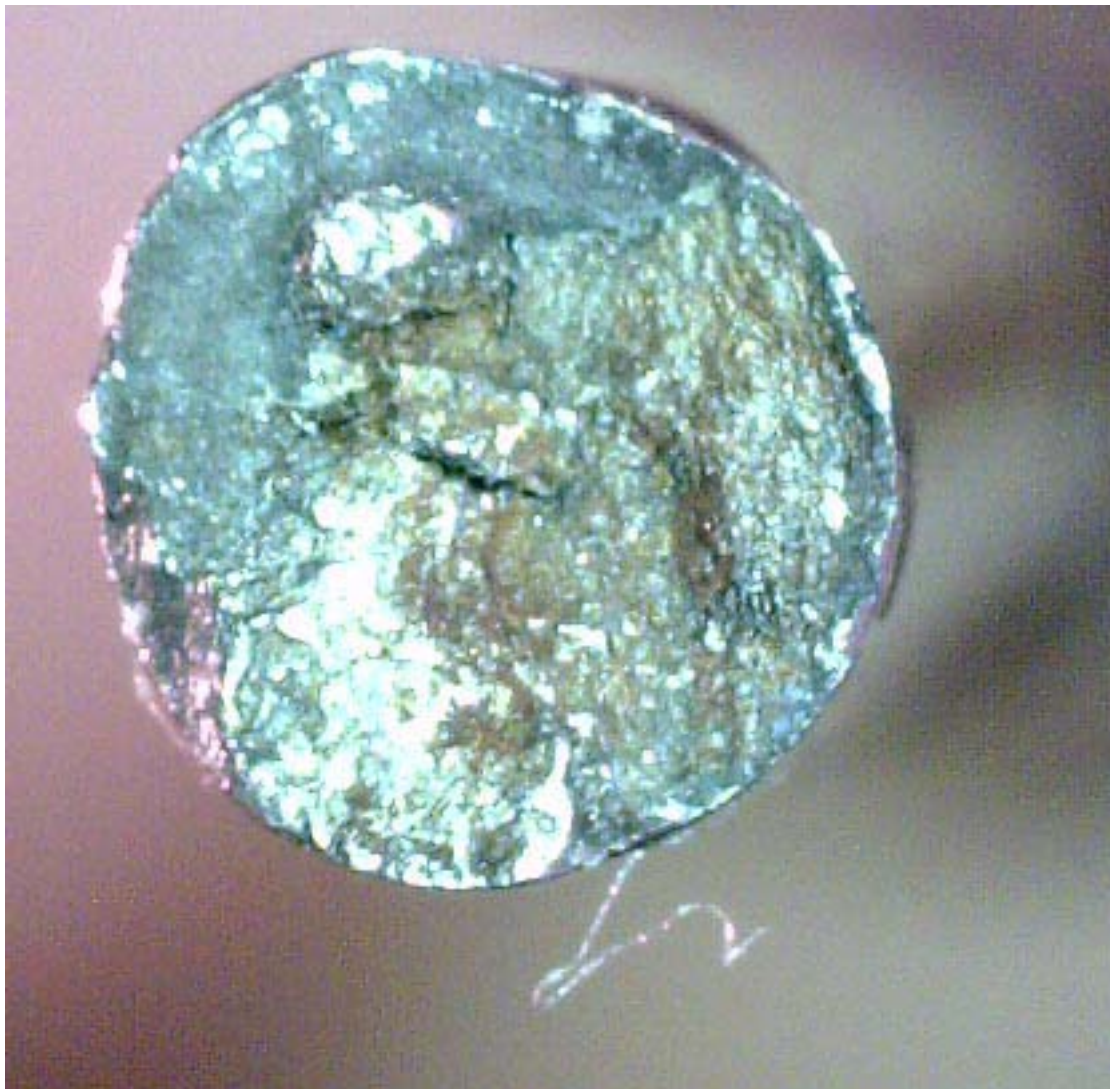
BACKGROUND: A reserve being closed after repack had the terminal pin of the ripcorder break as it was inserted into the closing loop. The rigger had closely inspected the pin prior to attempting to insert it and it was straight without any visible defect. The pin fractured 0.40" (10mm) from the shoulder at the place where the CYPRES closing loop would sit. The rig, a PA Talon was manufactured in 07/ 96 and the ripcorder was unmarked and presumed to be original as no other data was available on the log card to indicate otherwise. The ripcorder is outside the date period as noted in [Capewell SB No. CW03-01](#) and there are no indications that it may have been previously tested.



Pic 1. Broken pin shown over "0" grommet



Pic 2. Broken body end of pin magnified.



Pic. 3. Face of fracture, body side of pin. Brown discoloration on face may be corrosion or an impurity in the stainless steel. (The ripcord has been returned to the manufacturer for further analysis).

The location of the break is such that if it had been tested according to [Capewell SB CW03-01](#) test 2 it may have passed the test as the fulcrum point in this test is 0.188 from the shoulder and is above the break. Test 1, an in the field in situ test on a packed rig would be an appropriate test as the load would be applied at a point consistent with the seating of the closing loop.

Capewell has changed from type 303 stainless steel to type 302 stainless steel in Jan. 07 and since Aug 2004 have laser etched pins supplied to manufacturers that manufacture their own ripcords. This allows them to be identified as to the year of manufacture using alphabet letters to denote the year e.g. 2004 –A, 05-B, 06-C etc. to the current year 2010-G.

Since July 2003 it is probable that all gear manufacturers would use 100% test procedures for all ripcords they supply, but as this and a similar incident reported on a main ripcord indicate, there is still the risk that there may be other flawed ripcords in use that were not tested as they fell outside the then issued service bulletin.

The purpose of this bulletin is to ensure that unmarked and untraceable ripcords have their pins tested for integrity and so marked as to remain in safe use.

APF ADVISORY: That all reserve ripcords in rigs manufactured before July 2003 that do not have manufacturer's data or test indications on them be subjected to [Capewell Service Bulletin CW03-01](#) **Field Test 1** and marked as indicated in the SB.

As test 2 may not be an adequate test due to the fulcrum point being too close to the shoulder an alternate test as described in Poynter's "the Parachute Manual" Vol. 2, Chapter 6.15. Inspection and Testing, where the pin tip is inserted ½" (12.5mm) into the test block and a load of 8lb is applied at right angles in four equispaced directions. This will test a greater length of the pin blade. The ripcord handle should then be permanently marked "APF-T2". The log card should also be annotated with the date and APF SB No.100427- T2.

MARKING: The ripcord handle can be stamped with small 3mm metal alphabet / number set to indicate which test was used to comply with this SB.

DO NOT stamp the handle at the weld joint as it may be hardened from the welding process. (Small metal stamp sets are easily obtained from engineering tool suppliers).

Alternative temporary marking using an adhesive paper strip can be attached to the handle.

COMPLIANCE: This SB to be carried out by an APF Packer 'A' or Rigger (or foreign equivalent), before the next jump.

Test 1 to be carried out using a calibrated scale of minimum 20lb (9kg) capacity and is within its 12 month recalibration cycle.

Test 2 can be carried out using a weight that was measured using a calibrated scale.

AUTHORITY: APF Director Rigging

DISTRIBUTION: Through APF Service Bulletin system

APF Website.

APF Packers, Riggers.

International bodies, PIA, IPC Technical committee.