# SERVICE BULLETIN

DATE:	JUN 22, 1992	SERVICE BULLETIN #	1513 Rev. A	<b># OF PAGES:</b> 3
<b>SUBJECT:</b>	SKYHOOK RESERVE PILOTCHUTE			
STATUS:	MANDATORY			

**IDENTIFICATION:** Skyhook Reserve Pilotchute P/N 2233-() manufactured by Rigging Innovations Inc between May 16, 1989 and July 29, 1991. Serial numbers include 2405-5551.

**BACKGROUND:** In April 1991, a Skyhook reserve pilotchute was identified as having below specification spring tension. Subsequent investigations have identified additional Skyhook pilotchutes with below specification springs.

**SERVICE BULLETIN:** The Skyhook reserve pilotchutes must have their spring tension tested for acceptable limits according to Rigging Innovations testing procedure TP-19F001, **Field Pilotchute Spring Test. Refer to Attachment A.** Those pilotchutes passing the test may be marked as specified in the test procedure and returned to service. Those failing the test must be returned to the manufacturer or their designated representative for repair or replacement.

**COMPLIANCE DATE:** AT THE NEXT RESERVE REPACK.

#### **AUTHORITY:**

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#### **DISTRIBUTION:**

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### **COMMENT:**

Attachment A follows.

# SB-1513-A - ATTACHMENT A

## FIELD PILOTCHUTE SPRING TEST - TP-19F001

#### **BACKGROUND:**

The purpose of this device and procedure is to provide the rigger in the field with a simple, quick, and accurate method of determining the compression tension of a spring type pilotchute assembly.

This device and procedure was developed to test Skyhook reserve pilotchutes for compliance with Rigging Innovations Inc Service Bulletin 1513- Revision-A.

#### **AUTHORIZED REPAIRMAN:**

FAA Senior or Master Parachute Rigger or foreign equivalent.

### **EQUIPMENT REQUIRED:**

- 1 ea Spring tester assembly. P/N 19F001
- 1 ea CALIBRATED spring scale with 50# (22 Kg) capacity.

**COMMENT:** There has been much discussion within the industry as to the point at which you measure the compression tension of pilotchute springs. The only standard available is the Mil-Spec for MA-1 springs. That drawing references measurement at 1 inch compression. Accordingly, Step 11 of the following procedure tells you how to determine that 1 inch configuration.

Also, it is imperative that the scale used is a *calibrated* scale. Failure to do so will result in false measurements and non-compliance with this Test Procedure.

#### **PROCEDURE:**

- 1. A mounting platform for the testing jig needs to be located. Two table tops of the same height placed approximately 4" (10 cm) apart will suffice.
- 2. Take the base plate and mount it securely to the top of the table surfaces with the rubberized surface facing up. A permanent fixture could be set up if space allows.
- 3. Assemble the top plate with the guide pin and circlip.
- 4. Remove any bridles or free bags from the pilotchute.
- 5. Place the pilotchute upside down on the base plate.
- 6. Thread the guide pin of the top plate through the bottom grommet or opening in the pilotchute. Compress the pilotchute while pulling the canopy fabric out of the spring coils and keeping the spring centered on the plates.
- 7. Thread the guide pin through the hole in the bottom plate so it protrudes out the bottom and compress the spring until the topmost hole in the pin is exposed. Lock the guide pin with the locking pin provided to hold the assembly in place.
- 8. Center the pilotchute within the plates and make sure that as much canopy fabric as possible is outside the spring.
- 9. Set the spring scale to zero and attach it to the bottom hole of the guide pin.
- 10. Remove the guide pin while holding tension on the spring scale to keep the pilotchute collapsed.
- 11. Pull the spring scale down until the pilotchute is at maximum compression. Release tension slightly on the pilotchute and then reapply to determine exactly where the "zero" point is at. From this point it is possible to measure down the shaft of the pin to determine the 1" (25mm) point is even with the bottom of the plate.
- 12. The tension of the pilotchute spring may now be read directly from the spring scale.
- 13. MINIMUM spring tension allowable for passing is 18# (8.2kg).
- 14. Skyhook pilotchutes that pass the test must be marked on the cap in indelible ink with "SB-1513A" along with the date of the test. They may then be returned to service. In addition, log entry must be made on the packing data card or log book as to the passing of the test.
- 15. Pilotchutes that fail the test are to be withdrawn from service and replaced or modified according to *RI Product Modification Procedure PMP-1213*. THEY ARE NOT TO BE DESTROYED.

  Upon completion of the test, the rigger must notify Rigging Innovations Inc of the results. The following

information is to be provided:

- Serial number of the Skyhook pilotchute.
   Results of the test, Pass/Fail and the tension of the spring.
- 3. Date of the test.
- Name and qualification of the person performing the test.
   END OF ATTACHMENT