



## AEROSTAR SERVICE BULLETIN 130

02/20/92

**Subject:** Replacement of aluminum support tubes on Classic Limited Stretch (CWS) gondola (P/N 51620) or Classic Limited (CW) gondola (P/N 13860) or Classic Custom (CWV) gondola (P/N 15325).

**Applicability:** Aerostar S-66A (P/N 17653) or S-71A (P/N 52071) balloon systems mated to Classic Limited Stretch (CWS), Classic Limited (CW) or Classic Custom (CWV) gondolas with four point suspension and aluminum support tubes (P/N 52555-01).

**Problem:** An S66-A balloon mated to a Classic Limited Stretch basket recently experienced a stress fracture on the aluminum superstructure support tube at the lowest hole on the load block.

**Corrective Action:** The aluminum support tubes (uprights) of the applicable gondolas must be replaced with stainless steel support tubes (P/N 52555-02). The procedure outlined herein is not recognized as preventive maintenance and therefore may not be performed by persons other than those recognized by the FAA to perform aircraft repairs or alterations. Hot air balloon repair stations or repairman certificate holders are qualified to perform this procedure.

S-66A and S-71A balloons which are mated to Classic Limited Stretch, Classic Limited or Classic Custom gondolas outfitted with 4-Pt aluminum superstructures must be removed from service until such time that the support tubes can be disassembled and inspected for cracks or refitted with stainless steel support tubes. This inspection is necessary only if additional flight is desired prior to replacement of the aluminum support tubes. If, upon inspection, the support tubes are found to be free of cracks, the system may be returned to service for a maximum of five hours provided that those hours accrue before the next annual or 100 hour inspection. Support tube replacement is mandatory by the next annual or 100 hr. inspection.

Discussion: It is imperative that aluminum support tubes which are replaced with stainless steel support tubes be permanently removed from service.

Support Tube  
Inspection  
Procedure

- 1) Remove and disassemble superstructure into primary components: support tube assemblies, side frames.
- 2) Remove bolts from load blocks (3 each), and slide load blocks down, exposing holes in support tube.
- 3) Carefully examine both support tubes, especially in the areas adjacent to these holes for cracks.
- 4) If no cracks are present on any of the support tubes, re-install load blocks and bolts. Endorse aircraft log book (see p. 4).
- 5) If crack is present, further flight is prohibited until support tubes are replaced.

Support Tube  
Replacement  
Procedure:

Note: See Figure 1, Page 5

- 1) Install aluminum support tubes in basket. It is imperative that the support tubes be installed in the basket to ensure a proper match and alignment of the aluminum interface pins during reassembly.
- 2) Insert quick release pins, fastening lower frames to support tubes.
- 3) Leaving quick release pins which connect basket and superstructure support tubes installed, remove bolts at bottom of support tubes. Remove support tubes from aluminum interface pins, leaving interface pins installed in lower frames.
- 4) Remove bolts which attach load blocks to aluminum support tubes (3 each load block) and remove load blocks.

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- 5) Remove burner support block from aluminum support tube.
- 6) Install burner support block on stainless steel replacement support tube. Refer to P. 4-40a of ACAI manual.
- 7) Install load blocks on stainless steel support tube.
- 8) Place new support tubes on aluminum interface pins still installed in lower frames. Be sure to push support tubes down as far as possible. Install aluminum side frames, completing superstructure assembly.
- 9) Reinstall bolts connecting stainless steel support tube and aluminum interface pin.

If bolts can not be easily and readily inserted through stainless support tube and aluminum interface pin, aluminum pins must be replaced as well. (This may be the case with older 2-Pt. suspension baskets which were converted to 4-Pt.) Refer to PG. 4-37 of ACAI.

Measure 35 inches from the bottom of each leg of both remaining aluminum support tubes and cut the tube with a hacksaw or tubing cutter at those four locations. Using a stamp, etching tool or permanent marker, transfer the corner numbers from the support tube bottom to a point on the curved part of the tube, making the corner number identifiable at the factory. Discard straight sections of tubing and return bent sections only to Dee Rose, Customer Service, 1813 "E" Ave., Sioux Falls, SD 57104.

Endorse the aircraft log book showing compliance with this service bulletin. (See p. 4)

Log Book Endorsements

Endorsement For Support Tube Inspection

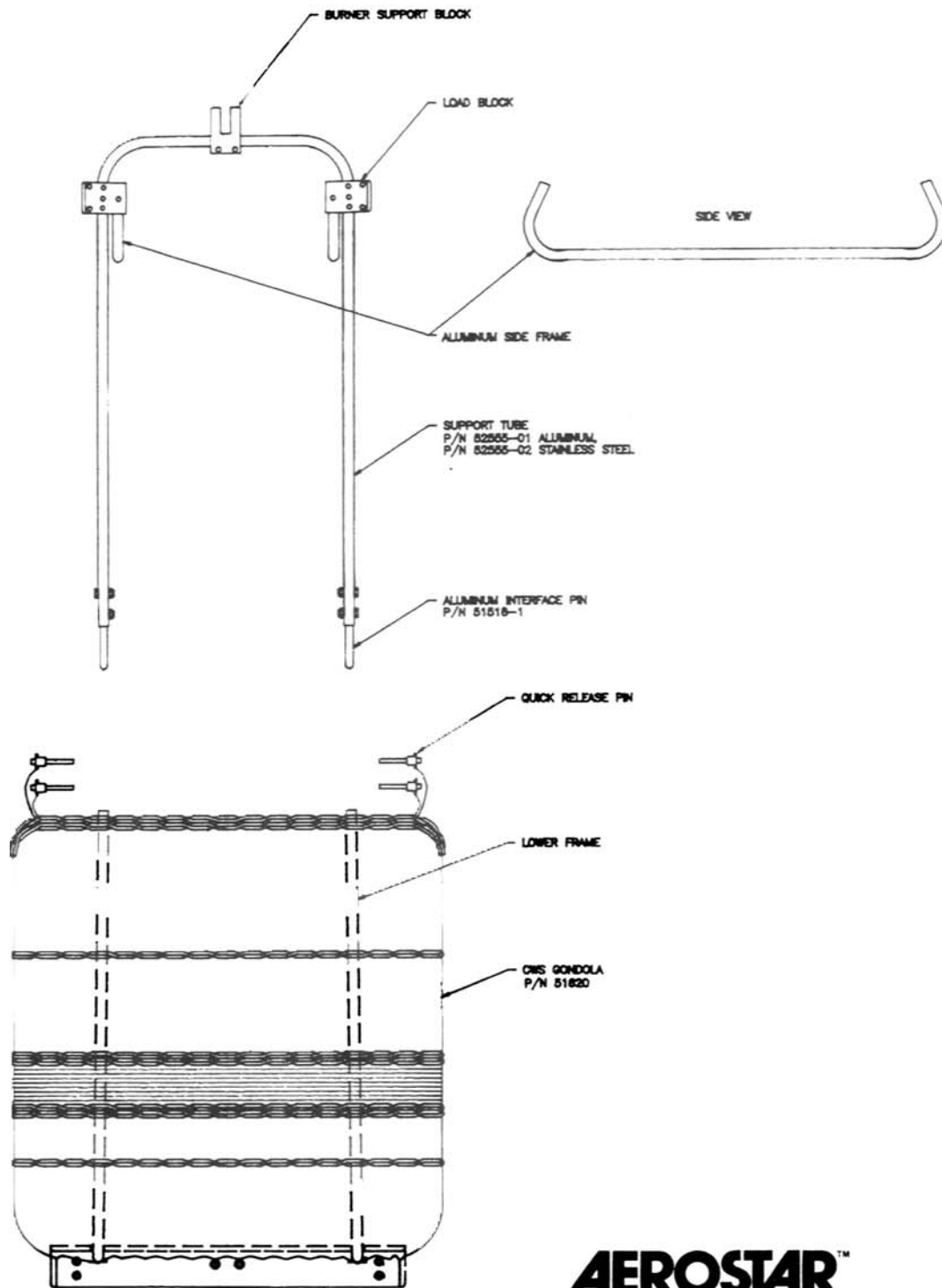
have inspected CWS, CWV or CW Gondola S/N \_\_\_\_\_ in accordance with Aerostar Service Bulletin 130 and found no visible signs of cracking. This aircraft is returned to service for a maximum of five hours or until the annual/100 hr. inspection, whichever comes first.

Endorsement For Support Tube Replacement

I have replaced CWS, CWV or CW gondola S/N \_\_\_\_\_ support tubes with parts as provided by Aerostar International, Inc. and have complied with all procedures set forth in Aerostar Service Bulletin 130 and authorize it's return to service.

Owner Endorsement

I have complied with required procedures as set forth in Aerostar Service Bulletin 130.



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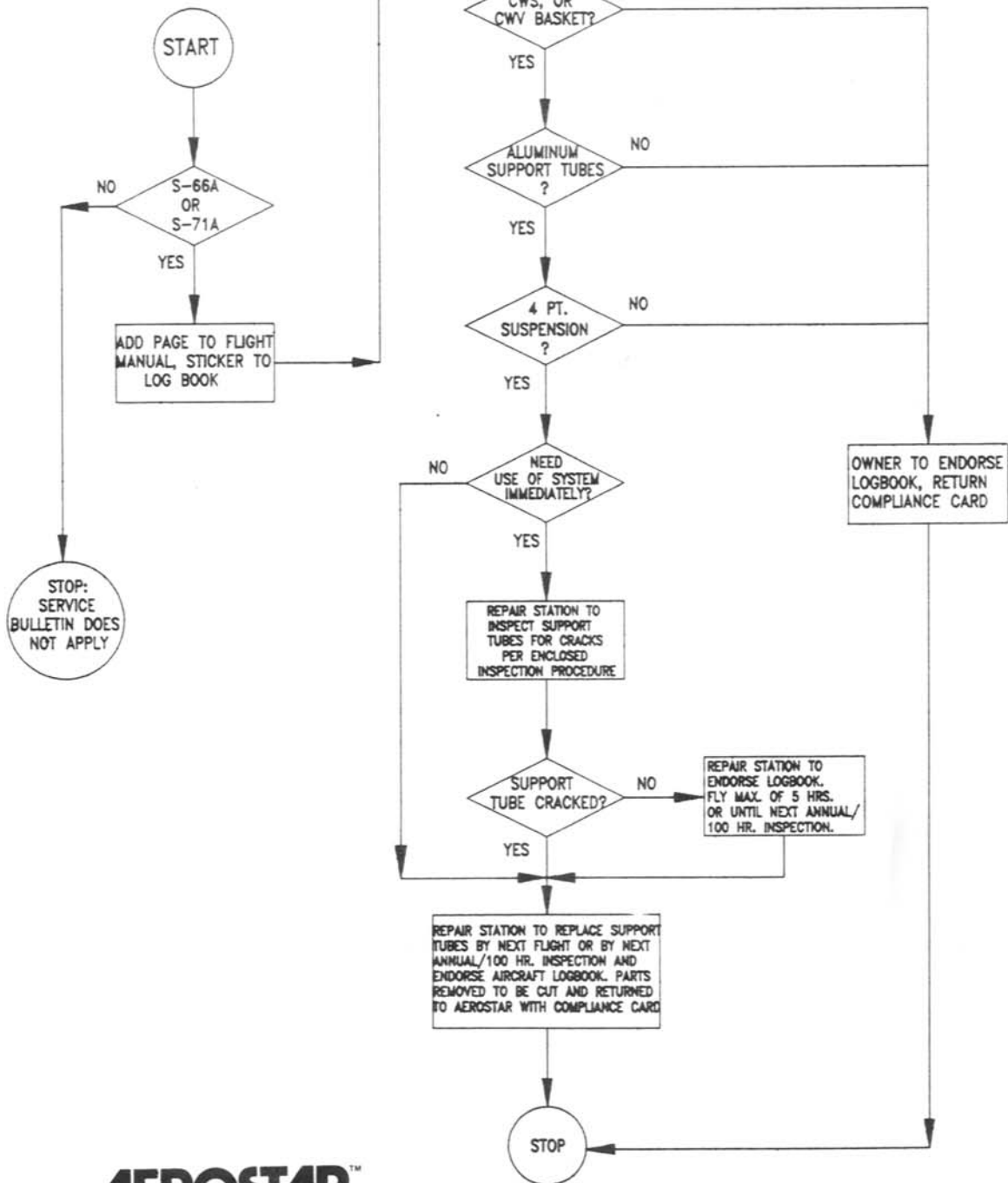
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# AEROSTAR INTERNATIONAL SERVICE BULLETIN 130 PROCESS FLOWCHART

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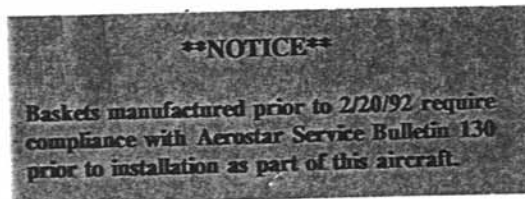
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**AMENDMENT #1  
AEROSTAR SERVICE BULLETIN 130**

2/27/92

THIS AMENDMENT IS TO ADD ITEM 13 TO PAGE 3 OF 6 OF SERVICE BULLETIN 130 DATED 2/20/92.

- 13) The applicable Flight Manual pages i-f(a) and 1-3f for Model S66A or i-p and 1-3p for Model S71A must be made a permanent part of the Flight Manual. In addition, the attached label must be attached to the front information page of the aircraft logbook.



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