 <p style="text-align: center;"> <small>• MANUFACTURERS OF WIPLINE FLOATS & SKIS • SPECIALISTS IN AIRCRAFT MODIFICATION</small> </p> <p style="text-align: center;"> <small>1700 Henry Avenue - Fleming Field South St. Paul, MN 55075 651-451-1205</small> </p>			Rev A
			Date 3/31/07
Prepared by Ellen Parker	Aircraft Make / Model AT-802A	Float / Ski Model Wipline 10000 Floats	Page 1 5
FAA Reviewed <input checked="" type="checkbox"/>	Title Air Tractor Float Brackett Welding Repair, S/N 217 & Similar		
ALL INFORMATION IN THIS SERVICE DOCUMENT BASED ON FAA APPROVED DATA			

SERVICE LETTER: 92

EFFECTIVITY: AT-802A s/n 0217 and other AT-802As with similarly placed and caused welding cracks.

COMPLIANCE: Repair at next inspection or sooner.

BACKGROUND INFORMATION: One aircraft, shown in included picture, has reported a crack at the point where the weld for the aft float attach bracket overflows past the doubler plate and onto the longeron tube. Only one aircraft has a confirmed crack of this type but any others with a similar crack should be repaired as per this service letter.

METHOD OF COMPLIANCE: Carefully grind the existing weld down to the parent metal of the longeron at the point where the weld for the aft float attach bracket continues onto the longeron. Then the longeron needs welding and heat treatment repair for stress relief as per the included process specification instructions from Air Tractor to be done by an Air Tractor certified welder or equivalently certified structural welder.

SHOP HOURS REQUIRED: TBD

WARRANTY: N/A

COMPLIANCE: As per included drawing and instructions.

YES: _____ **NO:** _____

SIGNATURE: _____ **DATE:** _____

FLOAT SERIAL NUMBER: _____ **AND** _____

SNOW ENGINEERING CO. Wichita Falls, Texas	ENGINEERING		NUMBER
	REPORT	<input checked="" type="checkbox"/>	120
	ORDER	<input type="checkbox"/>	MODEL
TITLE PROCESS SPECIFICATION	BY	CHK'D	SERIAL
	Leland Snow		
	DATE	6-2-03	PAGE 1 OF 1

WELDING 4130N STEEL

1. Factory welding is accomplished with a hell-arc (Miller) welding machine. A foot control is used to control amperage within a given range, and Argon is used to shield the arc.
2. Welding rod used is 1/16 to 3/32 dia No. 1 H.T. This is black in color, the AWS spec is A5.2 and is classification RG60 or R60. Alternate welding rod is ER70S-2 (first option) or ER70S-6 (second option) or ER80S-D2 (third option). Any diameter welding rod may be used, as the thickness of the material being welded dictates the rod diameter. These numbers are generally present on the shipping container.
3. Welding rod is stored in a container that prevents build-up of moisture. Rust on the rod has to be sanded off before use.
4. Welds are to be smooth and uniform. Undercut is to be avoided as well as burn-through. Pin holes will require welding over, as there will be leaks when the structure is oiled internally. Sufficient filler should be added to provide the proper fillet.
5. Surfaces to be welded should be free of grease, oil, or other contaminants. A wire brush is sometimes required if there is rust or residue present.
6. Tubing clusters should have fits such that gaps between parts should not exceed 1/8" for tubes up to .083 wall thickness, and should not exceed 3/16" for tubes having .120 wall or greater. Larger gaps are permissible if the gaps are for no more than 25% of the perimeter of the tube, and the welder is confident that filling the gap can be done easily.
7. Welders are to be certified, and are to weld clusters for testing purposes every 12 months. See 4 & 5 of P.S. 121.
8. Welders are to be classified as Production welders or Trainees. Production welders are to weld primary structure or any other parts, as long as the material welded is the same type that was used in their certification test. Trainees may not weld primary structure, but can weld non-critical parts that are approved by Engineering. The Q.C. manager is to closely control the selection of parts welded by Trainees.

SNOW ENGINEERING CO. Wichita Falls, Texas		ENGINEERING REPORT <input checked="" type="checkbox"/> ORDER <input type="checkbox"/>		NUMBER 125	
TITLE PROCESS SPECIFICATION		BY CHKD Leland Snow		MODEL	
		DATE 11/28/93		SERIAL	
		PAGE 1		OF 1	

STRESS RELIEVING-TORCH

1. Parts too large for oven stress relieving may be stress relieved with a torch. This would include certain clusters in the fuselage frame that have high or repeated loads.
2. A heating tip is installed on the welding torch and a fairly large flame with a slight feather edge is established. The cluster is heated gradually by moving the torch over the entire surface as rapidly as possible so that the cluster heats up as a unit. When the weld areas and the surrounding metal is just starting to turn red, the correct temperature has been reached, and heating should be discontinued. Avoid overheating to cherry red, or heating in spots.
3. When the correct temperature has been reached, allow the cluster to cool gradually at room temperature.

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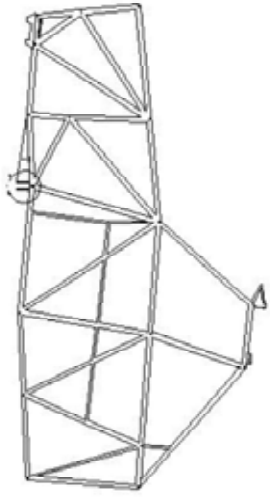


2

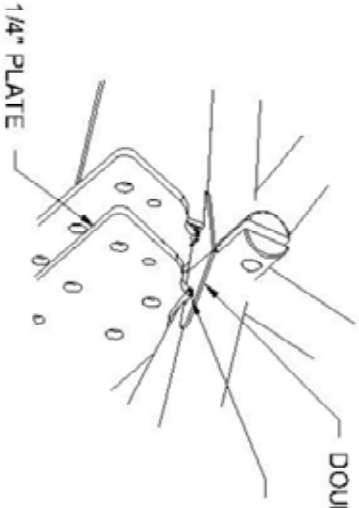


1

REVISION HISTORY				DESCRIPTION
REV	DATE	ECO	DR	INITIAL RELEASE
A	1/26/07	N/A	ESR	



GRIND 1/4" PLATE AS SHOWN



DOUBLER

1/4" PLATE

GRIND BACK 1/4" PLATE AND OLD WELD TO CENTERLINE OF LONGERON TUBE. REPAIR OR PATCH LONGERON TUBE. REWELD 1/4" PLATE TO LONGERON DOUBLER. WELD ON 1/4" PLATE TO LONGERON DOUBLER AS SHOWN. WELD AND STRESS RELIEVE PER SNOW ENGINEERING SPECIFICATION # 120 & 125.

MATL N/A

FINISH N/A

WIPPAIRE, INC.

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(651) 451-1205

TITLE
DWG. SERVICE LETTER 92 IMAGES

BREAK ALL EDGES .01 - .03 ALL DIMENSIONS ARE AFTER FINISH



THIRD ANGLE PROJECTION

TOLERANCES
.X = ± .05
.XX = ± .015
.XXX = ± .005
X = ± .5

SIZE A

SCALE N/A

PART NO.

1001889

REV

A

Sheet 1 of 1

2



1

A

B

A

B