DRB 2018-SA-92-085

Fire Bottle Support Angle Cracks

SIKORSKY AIRCRAFT DESIGN RECORD BOOK

Record NO:

Prepared by	Kenneth Welch	DRB No:	2018-SA-92-085
Title	Fire Bottle Support Angle Cracks		
Start Date:	10/9/2018	Detail Dwg	92210-03382
End Date:		Assy Dwg	92201-03140
No. Pages:		Related Documents: (1)	(3)
Model:	S-92A	(2)	(4)
Keyword: (1)	Cracks (2) Fire Bottle	Hours:	
(3)		Model Effectivity:	920279
Supersedes:		FEM Analysis:	
Analysis Type	Repair	Charge No:	
Reason for Analysis	Field Support	Superseded By:	

Description:

During a 1500 hour scheduled maintenance inspection TAS maintainers found a one-inch long radius crack on either end of the P/N 92210-03382-113 fire bottle support forward angle, and a one inch radius crack on the inboard end of the -121 aft angle.

Results:

Repair with the procedure documented in this DRB.

The repair procedure is specified in this DRB, and for FAA purposes, this repair is considered “minor”.

Assigned:	John Scheib	Approval :	John W Scheib
		Approve Date:	10/9/2018

PREPARED BY Kenneth Welch

Export Controlled Information
CHECKED BY John Scheib

DATE October 9, 2018

Fire Bottle Support Angle Cracks

Background:

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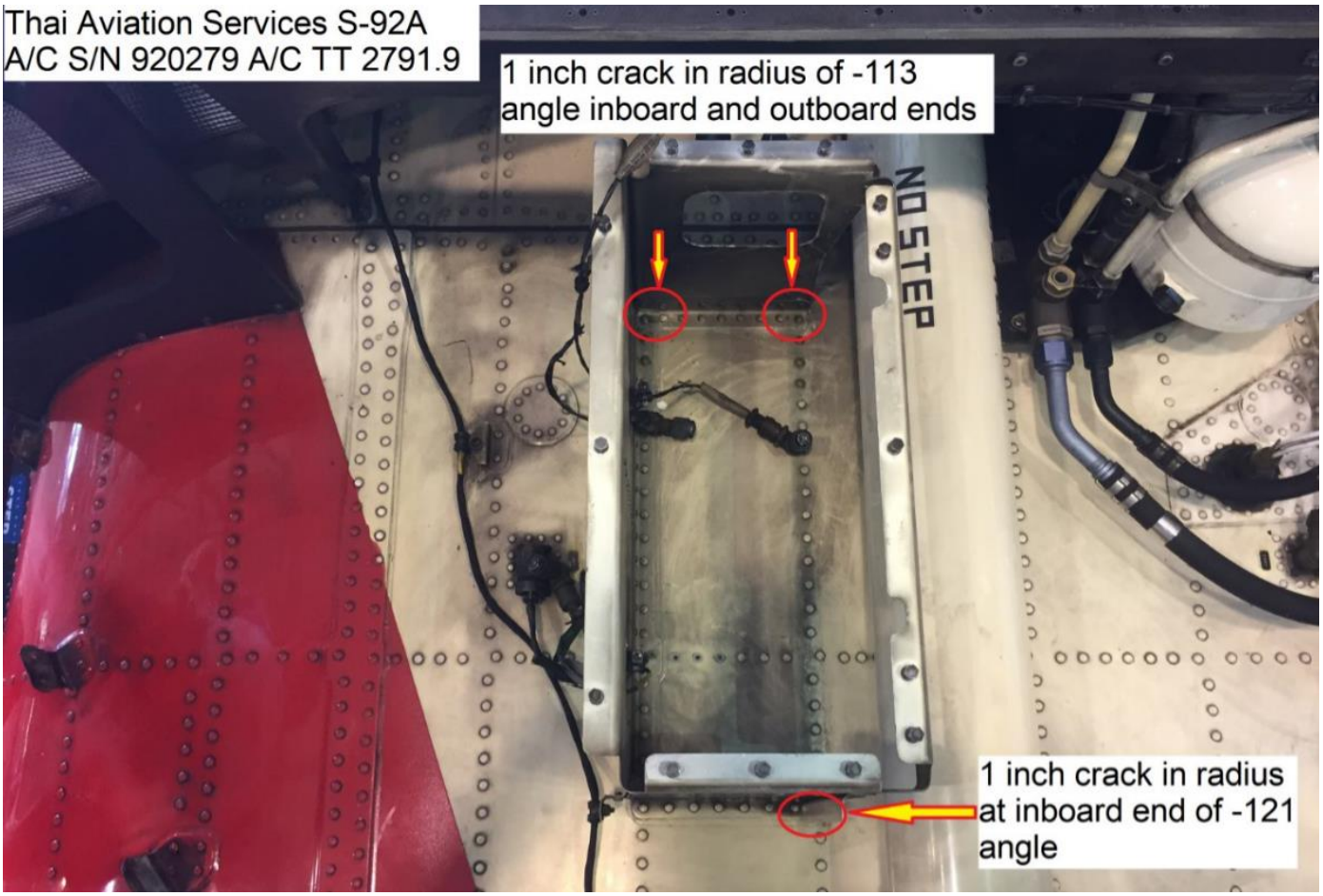

Figure 1 – Crack Locations

Fire Bottle Support Angle Cracks

Procedure:

1. Prepare the ship for ground maintenance.
2. Gain access to the cracked fire bottle attach angle.
3. Remove the fire bottle attach angles from the aircraft by drilling out the rivets. Vacuum the area to remove any loose particles.
4. Inspect area for any other cracks or anomalies. If any are found, report to Sikorsky Aircraft.
5. Fabricate a new attach angle from 0.040" thick , 301 ¼ hard stainless steel sheet, using the existing angle as a template. Break all sharp edges 0.005-0.015 in radius. The 90 degree bend radius is .12".
6. Measure and transfer the rivet hole locations from the existing angle to the new angle and drill the rivet holes. De-burr the rivet holes and the edges of the angle. Vacuum the area to remove any loose particles.
7. Degrease the new angle by wiping with a low-lint cleaning cloth (conforming to A-A-59323, Type II) using acetone (conforming to ASTM D329) or ethyl alcohol (conforming to A-A-51693). Wash with clean water to a water-break free condition.
8. Brush cadmium plate the new angle per MIL-STD-865.
9. Apply one coat of MIL-PRF-23377 or MIL-PRF-85582 epoxy primer to the new angle and allow to cure.
10. Prior to the final installation, lightly coat the mating surfaces of the doubler with one of the following sealants, in order of preference: MIL-S-81733 or AMS 3265, Class A-2.
11. Rivet the new angle into position with MS20470AD5-6D rivets. Blind rivets may be used if necessary (ensure proper fit and edge distance). Wet install the fasteners with one of the following sealants, in order of preference: MIL-S-81733 Type IV-12 or AMS 3265, Class A-2.
12. Apply another coat of MIL-PRF-23377 or MIL-PRF-85582 epoxy primer to the repair area and allow to cure.
13. After the sealant has cured, scrape off any excess with a non-metallic scraper.
14. Re-install the items removed in Step 3 per the Maintenance Manual.

Fire Bottle Support Angle Cracks

C0106722 - Work Stop 12HR - Fire Bottle Support Angle Crack

Case Number:	C0106722
Case Title:	Fire Bottle Support Angle Crack-Request
Severity:	Work Stop
Customer:	Thai Aviation Services Limited
FSR:	David McConnell
Aircraft Model:	S-92A
Aircraft S/N:	920279
Sub-System:	20 - Airframe/Structures
Part Number:	
Part Description:	
Part S/N:	
Date Submitted:	10/9/2018 12:08 AM

Problem Description:

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