



### Service Bulletin

**Title:** SB 407-060120; Bell 407 Air Conditioning System Aft Firewall Retrofit

**Date:** June 1, 2020

**Applicability:** Bell Helicopter Textron, Inc (Bell) Model 407 helicopters equipped with the Air Comm Corporation 407EC-203-2 air conditioning system with the Bell Technical Bulletin 407-19-130 applied

**Reference:** FAA / STC # SR00222DE, Bell 407 Air Conditioning System.

**Compliance:** To be performed in concurrence with Bell Technical Bulletin 407-19-130

**Required Equipment:**

1x S-3013EC-101 Stiffener	1x S-3013EC-102 Stiffener
3x MS21059L3 Nuplates	22x CR3523-4-2 Rivets
6x CCR264CS-3-03 Rivets	1x S-3046EC-2 Safety Strap Assembly
1x AN4H6A Bolt	1x MS27183-52 Washer
1x AN4H11A Bolt	1x AN6-12A Bolt
3x NAS1149F0663P Washers	4x NAS1149CN632R Washers
1x MS20615-3MP4 Rivet	1x MS21042L6 Nut
7x MS24694-S52 Screws	MIL-S-38249 Sealant (Pro Seal 890 or equivalent)
1x S-3016EC-2 Belt Guard	

**A. Discussion:**

Bell has incorporated an aft firewall upgrade in Bell Technical Bulletin 407-19-130. In order to make existing Air Conditioning Systems compatible with the Bell aft firewall upgrade, this Service Bulletin is intended to retrofit aircraft with the 407EC-203-2 Air Conditioning Systems. After completion of this service bulletin, the general arrangement of the Air Comm Air Conditioning System will meet the 407EC-203-3 configuration.

**B. Warranty:**

None

**C. Approval:**

The technical aspects of this Service Bulletin are based on FAA approved data.

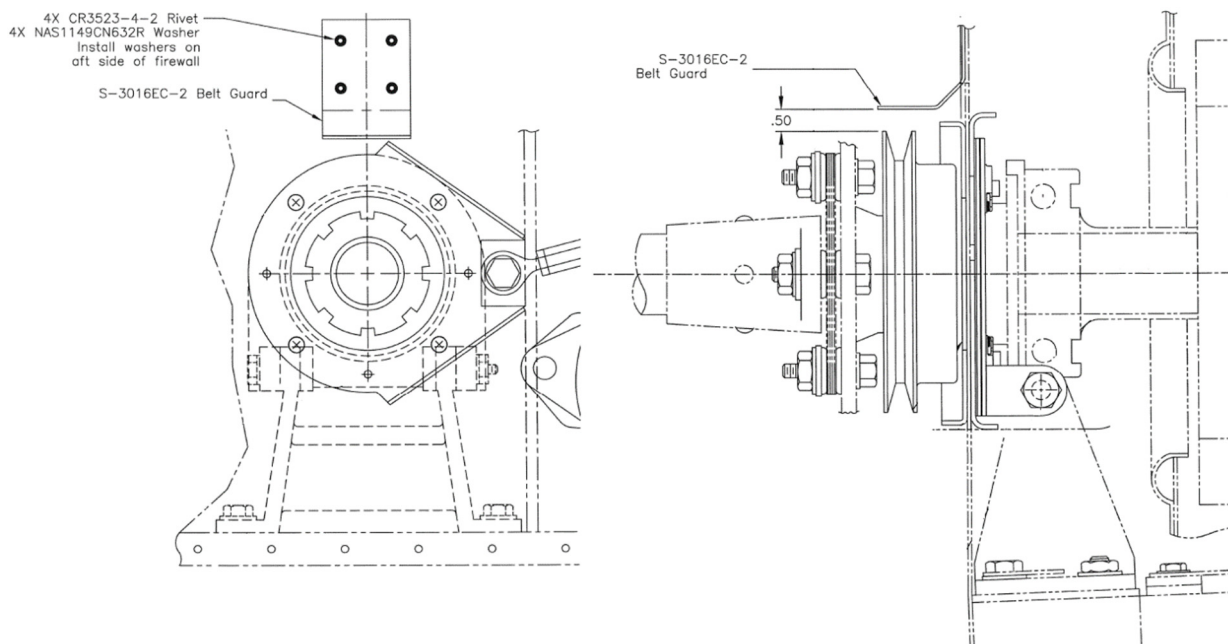
**D. Weight & Balance:**

This Service Bulletin does not significantly impact the installation weight.

Revision	Issue Date	Inserted By	Approved by	Description of Changes
NC	06/01/2020	CRP	MFK	Initial Release
A	07/24/2020	CRP	<i>MFK</i>	Corrected AN4H6A P/N and quantity in Required Equipment

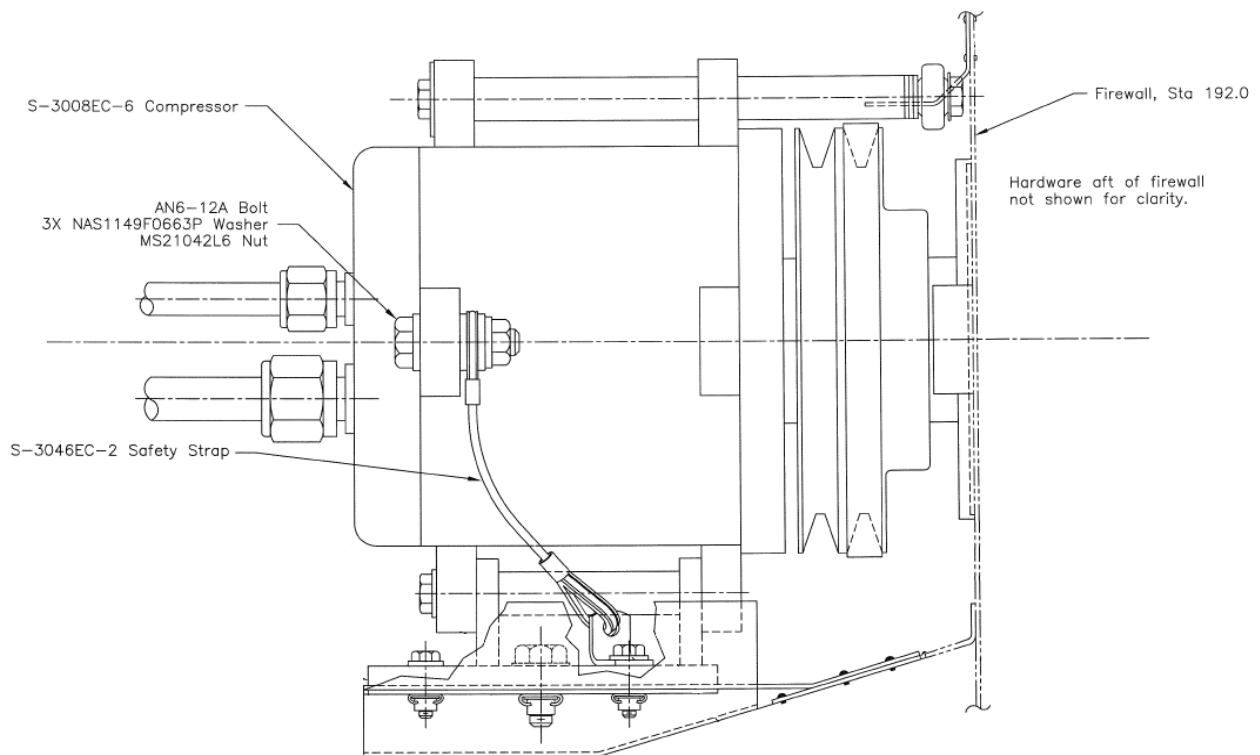
## E. Procedure:

1. Install the S-3013EC-101 and S-3013EC-102 Stiffeners to the firewall using 18x CR3523-4-2 rivets as shown in Figure 3.
2. **NOTE:** The oil cooler blower shaft may be optionally removed to facilitate installation of the S-3013EC-101 and S-3013EC-102 Stiffeners. If removed, reinstall oil cooler blower shaft after completion of this Service Bulletin and align per 407-MM DMC-407-A-65-10-00-01A-720A-A using Tool Kit T103388.
3. Install the S-3016EC-2 Belt Guard to the firewall using 4x CR3523-4-2 rivets and 4x NAS1149CN632R washers as shown in Figure 1.



**Figure 1: Belt Guard Installation**

4. Match drill rivet and bolt holes for 7x MS21059L3 nutplates thru firewall and stiffeners, using the existing S-3010EC-8 collar as a template. See Figure 3 for match drill locations.
5. Install 3x MS21059L3 nutplates to the stiffeners and firewall using 2x CCR264CS-3-03 rivets as shown in Figure 3. Install all fasteners with wet coating of MIL-S-38249 Sealant.
6. Re-install the existing S-3010EC-8 Forward Belt Tension Collar and S-3010EC-7 Aft Collar Assembly with 7x MS24694-S52 screws. Install all fasteners with wet coating of MIL-S-38249 Sealant. See Figure 3 for further installation instructions.
7. Install the S-3046EC-2 Safety Strap using an AN6-12A bolt, 3x NAS1149F0663P washers, and MS21042L6 nut, and the existing AN3-6A bolt and NAS1149F0363P washer as shown in Figure 2.



**Figure 2: Safety Strap Installation (view looking inboard from LH side)**

8. For all other items not expressly noted, reinstall per Air Comm drawing 407EC-300-4.
9. Sign off aircraft logbook that S/B 407-060120 has been performed, and the top-level Air Comm Corporation Air Conditioning System General Arrangement is 407EC-203-3.

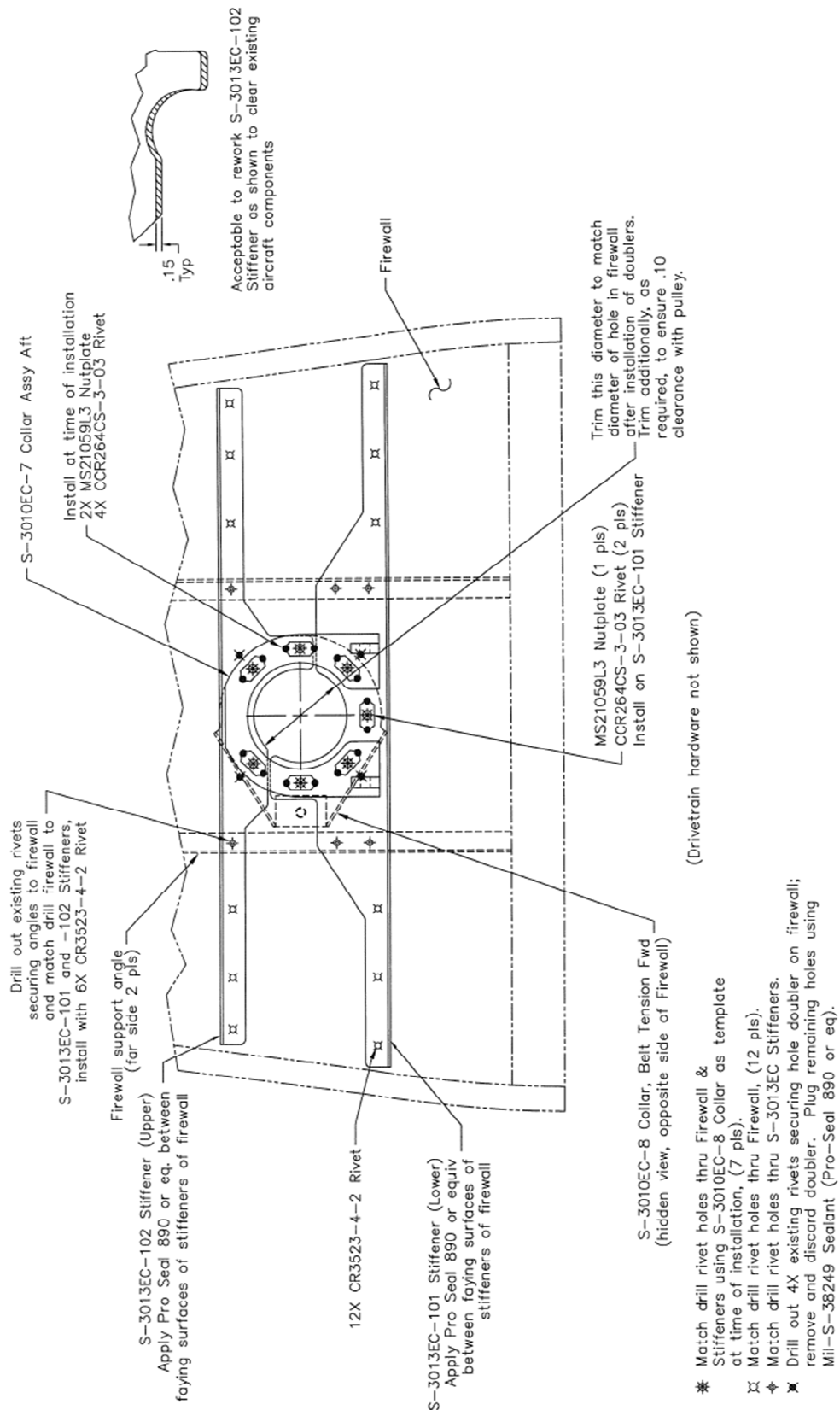


Figure 3: Stiffener Installation (view looking forward at aft firewall)