A Textron Company

**INFORMATION LETTER** **407-22-128**

3 January 2023

**TO:** **All owners and operators of Model 407 helicopters**

**SUBJECT:** **Air Comm Corporation Air Conditioner (STC #SR00222DE) Potential Fouling with Bell Automatic Flight Control System (407-706-061 or 407-706-067)**

The purpose of this Information Letter (IL) is to achieve complete distribution of the attached supplier bulletin to all owners/operators currently registered on the Bell technical publications distribution list.

Bell was made aware of an incident where smoke was noted in the helicopter cabin. It was then noted that the Main Selector Panel (MSP) of the Bell Automatic Flight Control System (AFCS) had become non-operational and the circuit breaker of the AFCS system had “popped”.

Following troubleshooting it was discovered that a clamping arrangement of the Air Comm Corporation (ACC) air conditioner system had fouled on a transistor that is part of the MSP and AFCS system installation of the helicopter.

To prevent future occurrences, ACC has released Service Bulletin 407-221012 for the fielded helicopters that may be equipped with the 407-706-061 or 407-706-067 AFCS kits installed in conjunction with the ACC STC #SR00222DE. ACC has also incorporated changes to the kit installation procedures in Revision U of the 407EC-502 plumbing installation drawing for kits that may be installed aftermarket.

For helicopters with the ACC STC #SR00222DE and the Bell AFCS provisions, or complete kit(s) installed, it is recommended to review the installation and comply with the ACC SB 407-221012.

To obtain the most recent Air Comm Corporation technical documents, go to the ACC website at: https://www.aircommcorp.com

For any questions regarding this letter, please contact:

Bell Product Support Engineering
Tel: 1-450-437-2862 / 1-800-363-8023 / productsupport@bellflight.com


Approved for public release.

ACC Air Comm Corporation

# Service Bulletin

**Title:** SB 407-221012; Bell 407 Air Conditioner fouling with Bell AFCS

**Date:** October 12, 2022

**Applicability:** Bell model 407 Equipped with the Air Comm Corporation 407EC-203-2 or -3 air conditioner systems

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

**Compliance:** One time inspection within 20 flight hours unless forward evaporators refrigerant plumbing clamping orientation is already corrected

## A. Discussion:

This service bulletin resolves potential fouling conditions with the Bell Automatic Flight Control Systems (AFCS) kits 407-706-061 (2-axis) and the 407-706-067 (3-axis).

On the 407GX (serial numbers 54300 through 54566) and the 407GXP (serial numbers 54568 through 54752) have the AFCS as optional kits for installation and could potentially have this condition once installed and the air conditioning kit clamping installation not modified.

On the 407GXi (serial numbers 54304, 54567, 54805 through 54999, and 56300 through 56999) all aircraft were delivered with the AFCS provisions so are potentially also having the fouling condition, whether the full AFCS kit is installed or not.

## B. Warranty:

None

## C. Approval:

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

## D. Weight & Balance:

The weight change due to the installation of these parts would be negligible and no adjustment to the weight and balance of the aircraft is necessary.

| Revision | Issue Date | Inserted by | Approved by | Description of Changes |
|---|---|---|---|---|
| NC | 12-Oct-2022 | ROL | T. Widlund | Initial Release |

## E. Procedure:

1. Locate the two clamping arrangements connecting the #6 & #8 refrigerant tube assemblies protruding from the inboard side of each evaporator, routed aft as shown below in Figure 1.

2. If both clamping arrangements are not oriented as shown in Figure 1 below, remove clamping arrangements from the refrigerant tubes and reattach loose as shown.

3. If both clamping arrangements are oriented as shown in Figure 1 below, loosen the two hardware clamping arrangements.

4. If required, move both clamping arrangements aft along the tubes up to the back of the tube fitting, approximately as shown.

5. Torque hardware per standard company practices.

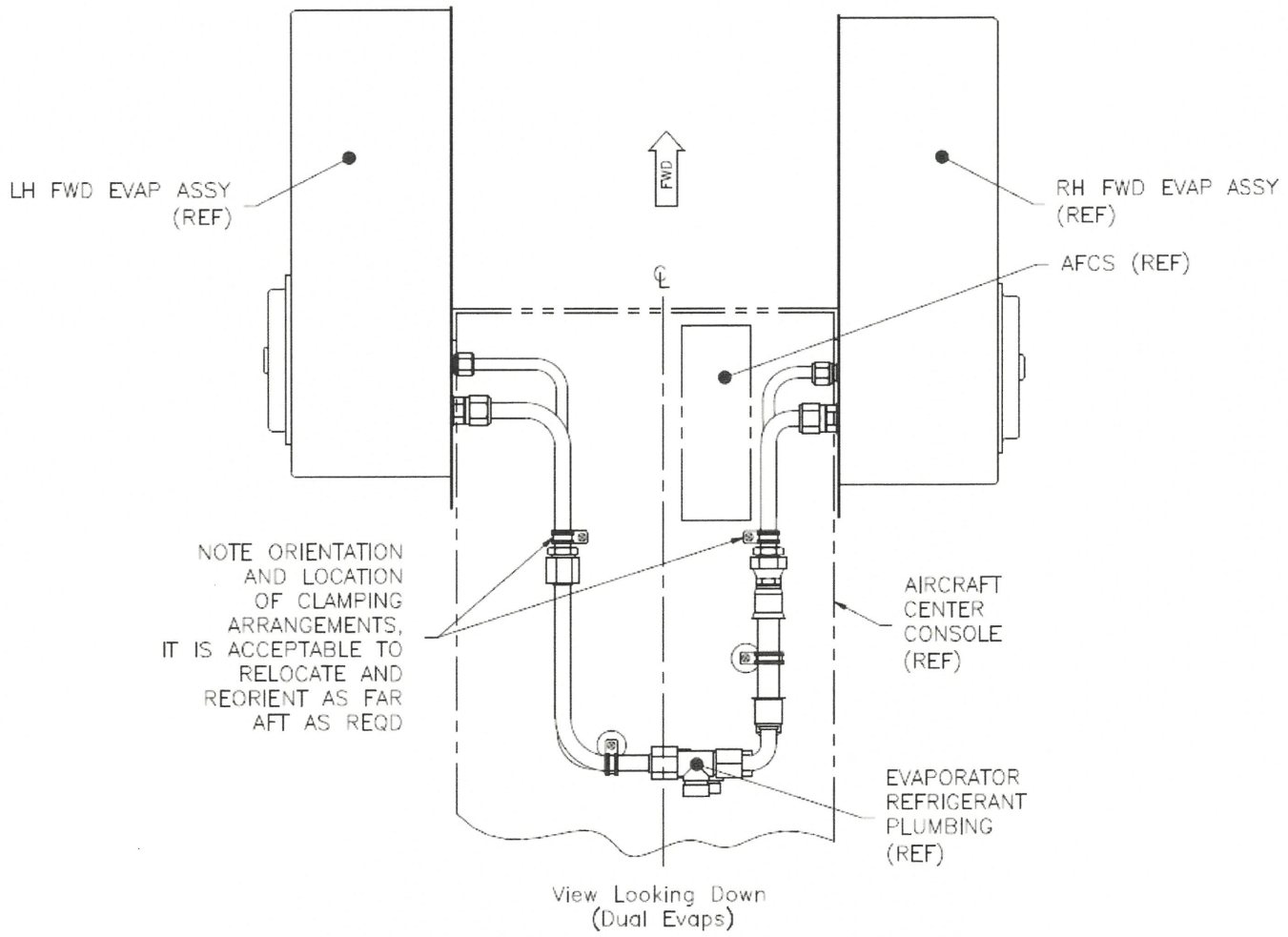


Figure 1 – Forward Evap plumbing clamp detail and orientation