ADVISORY WIRE

You. First.

REFERENCE NO:	AW700-72-0551 Rev 1	INFORMATION TYPE:	Maintenance
ATA:	72-56	EFFECTIVITY:	Global Express / XRS (9002 - 9312, 9314 - 9380, 9384 - 9429) Global 5000 (9127 to 9383, 9389 to 9400, 9404 to 9431 and 9998) Global 5000 feat. Vision Flight Deck (9386, 9401, 9445 - 9997) Global 6000 (9313, 9381, 9432 -9997)
SUBJECT:	Engine – Low Pressure Turbine Fuel Shut-Off Pawl Carrier Pivot Pin – Replacement		

1. REFERENCE:

1.1. EASA Airworthiness Directive (AD) No 2016-0034, ATA 72 – Engine – Low Pressure Turbine Fuel Shut-Off Pawl Carrier Pivot Pin – Replacement. Issued February 24, 2016.

1.2. Rolls-Royce Deutschland Alert Non-Modification Service Bulletin (NMSB) SB-BR700-72-A101523 Rev 3, issued December 10, 2015.

1.3. FAA Airworthiness Directive (AD) 2016-13-12, issued July 1, 2016.

2. INTRODUCTION:

This Advisory Wire will inform Operators of the ref. 1.1 Airworthiness Directive (AD) that has a time compliance of within 6 month from the AD effective date of March 09, 2016.

The revision 1 of this Advisory wire is to advise about the recently released ref 1.3 Airworthiness Directive (AD) that has a time compliance of within 6 month from the AD effective date of August 05, 2016.

3. DESCRIPTION:

During engine overhaul, Rolls Royce has discovered the possibility that corrosion of the pawl carrier pin of the fuel shut-off mechanism can cause the mechanism to be seized. The emergency low-pressure turbine (LPT) fuel shutoff system is designed to shut off fuel flow to the fuel manifolds in the event of a LPT shaft failure in order to prevent possible overspeed of the LP turbines. Subsequently Rolls Royce has issued an Alert Non-Modification Service Bulletin (NMSB) ref 1.2 that introduces fuel shut-off pawl carrier pivot pins made from a material with improved corrosion protection.

To address this potential unsafe condition, EASA has released the ref. 1.1 Airworthiness Directive mandating replacement of the affected LPT fuel shut-off pawl carrier pivot pin. In addition, the FAA has also released the ref 1.3 Airworthiness Directive with the same mandate.

4. ACTION:

Operators are recommended to review the ref. 1.1 and ref 1.3 ADs and to comply with the instructions given, unless already accomplished. Should you have any questions or require more information, please contact your FSR or the CRC.

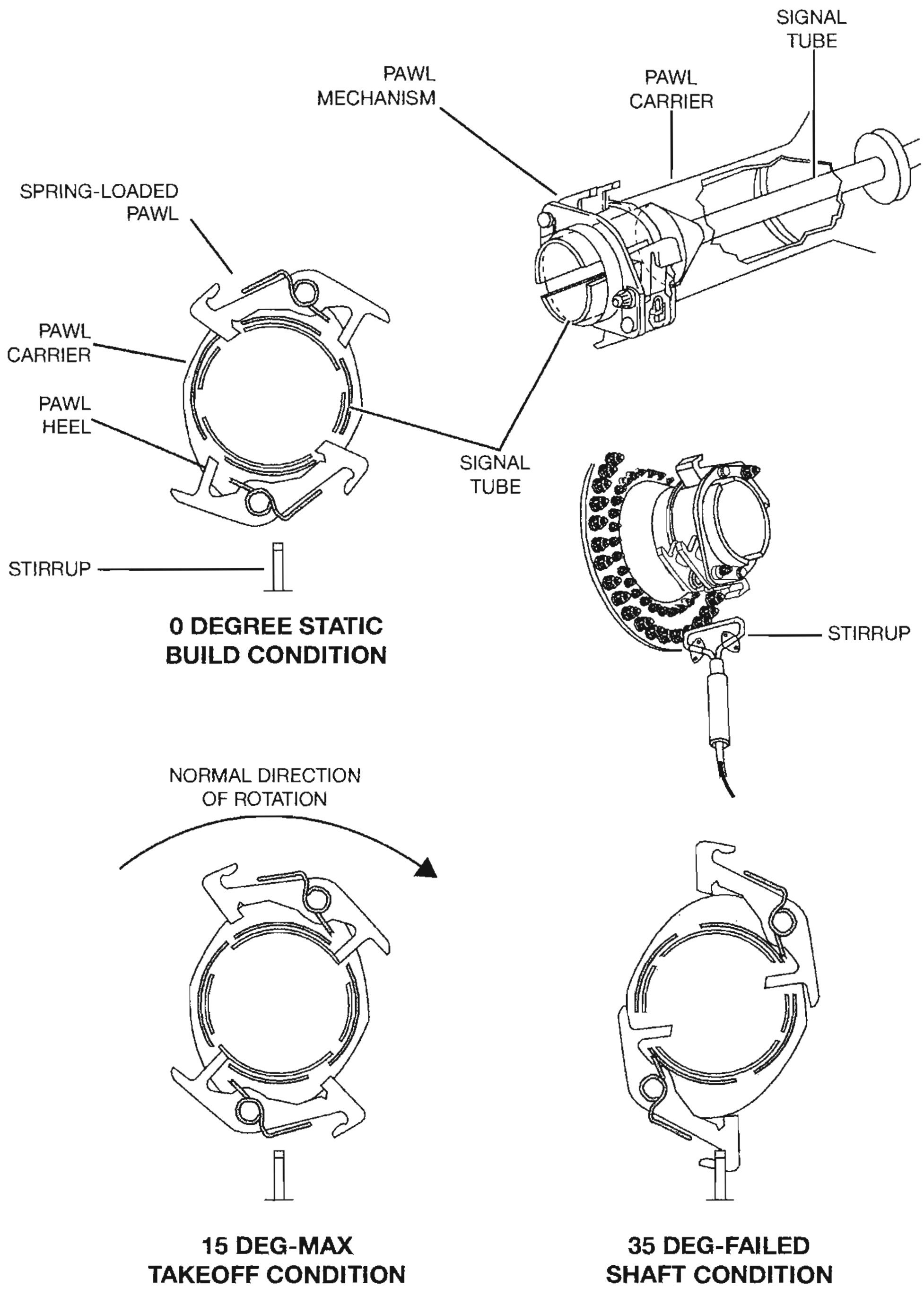

Figure 72-11. LP Shaft Breakage Mechanism

Operation

The LP shaft breakage sensing mechanism (Figure 72-11) mechanically monitors the twist of the LP shaft between the fan and the LP turbine assemblies. The arrangement of the pawl carrier, signal tube, pawls and stirrup is shown opposite. When the engine is in a static condition, the pawls are spring-loaded down. During normal engine operation, the pawls are thrown out by centrifugal force until the heels of the pawls seat onto the reference tube.

Impending failure of the LP fan or turbine shaft would result in an angular displacement between the LP turbine and the signal tube (fan) increasing from a normal maximum take-off condition (of approximately 15°) to an impending failed shaft condition of 35°. This would align the pawl heels with slots in the signal tube and allow the pawls to move outwards and engage with the stirrup.

The pawls will pull on the cable and move the emergency fuel shutoff valve to the closed position. The operating cable will then break. The emergency fuel shutoff valve, however, is latched in the closed position by a leaf spring.

NOTES