ADVISORY WIRE

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First.

REFERENCE NO:	AW300-32-0273	INFORMATION TYPE:	Maintenance Operational
ATA:	32-50	EFFECTIVITY:	Challenger 300 (20003 – 20500) Challenger 350 (20501 – 20999)
SUBJECT:	Nosewheel Steering System Rigging		

1. REFERENCES:

1.1. AMM 32-51-00-820-801 - Rigging of the Nosewheel-Steering Control System
1.2. AMM 32-51-05-820-802 - Calibration of the Steering Control Handwheel
1.3. AMM 32-51-17-820-802 - Rigging of the Rudder Pedal Transducer
1.4. AMM 32-51-29-820-802 - Rigging of the Rotary Variable Transducer

2. INTRODUCTION:

The purpose of this Advisory Wire is to raise awareness concerning an increasing number of reported aircraft pulling to one side during taxi following the replacement of a Nosewheel Steering System (NWSS) component. The problem is believed to be with the rigging procedure not being properly carried out.

3. DESCRIPTION:

During rigging, the SCU stores the electrical offset values for each transducer/potentiometer in the system's memory.

· Nosewheel feedback RVT
· Handwheel
· Rudder pedal potentiometer

These offset values are the 0 degree datum, or straight ahead reference.

The SCU does not permit the separate recording of individual LRU position; therefore, even if only 1 LRU is replaced, all transducers/potentiometers must be re-set to their physical 0 degree position. Failure to do this will result with the procedure either failing or cause the aircraft to pull to one side.

4. ACTION:

When rigging the NWSS it is important to ensure that:

· the rig pin is inserted in the forward rudder quadrant,
· the nosewheel steering indicator is aligned with the 0 degree position on the nosewheel position placard,
· the handwheel is centered at 0 degree

If the measured voltage of the rudder pedals potentiometer or nosewheel feedback RVT are out of tolerance while they are at their physical 0 degree position, the adjustment task reference 1.3 or 1.4 must be carried out. If the handwheel potentiometers are found out of tolerance, the handwheel assembly must be replaced.

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