Customer Services

Advisory Wire

REFERENCE NO:	AW700-32-0513, Rev 01	INFORMATION TYPE:	Maintenance Operational
ATA:	32-43	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:	Wheel Speed Transducer – Brake System Nuisance Fault Messages		

1. REFERENCES:

   1.1. Service Bulletin 700-32-034 Modification – Brake Control System- Introduction of the Wheel Speed Transducer Part No. 140-209-4 (GW415-1050-9)

   1.2. Service Bulletin 700-1A11-32-021 Modification – Brake Control System- Introduction of the Wheel Speed Transducer Part No. 140-209-4 (GW415-1050-9)

   1.3. Service Bulletin 700-32-6009 Modification – Brake Control System- Introduction of the Wheel Speed Transducer Part No. 140-209-4 (GW415-1050-9)

   1.4. Service Bulletin 700-32-5009 Modification – Brake Control System- Introduction of the Wheel Speed Transducer Part No. 140-209-4 (GW415-1050-9)

2. INTRODUCTION:

This Advisory Wire informs Operators of a possible Brake Control System nuisance messages on aircraft equipped with Wheel Speed Transducers (WST) Part No. GW415-1050-7.

The revision 1 of this Advisory Wire is to modify the aircraft effectivity list in order to accommodate the Global Express, XRS, Global 5000 and closing Advisory Wire AW700-32-0344

3. DESCRIPTION:

The originally designed WST part No. GW415-1050-7 was causing a momentary (approximately one second) brake releasing condition without releasing the brake pedals when taxiing at a speed around 10 knots.

This situation was attributed to a WST voltage output issue occurring at low speeds. To mitigate this issue, the WST coil winding was increased to raise the voltage output at low speeds.

The increase in the coil winding resulted in a higher coil resistance. This resistance is amplified when added to the brake temperature coefficient factor. This change can affect the Brake Control Unit (BCU) monitoring circuit of the WST. As a result, the BCU may post a WST CAIMS/OMS related message associated with one or a combination of the following EICAS messages should the brakes temperature indication reaches temperature around 13 units:

- BRAKE FAULT
- L OUTBD BRAKE FAIL
- L INBD BRAKE FAIL
- R INBD BRAKE FAIL
- R OUTBD BRAKE FAIL
- NORMAL BRAKE FAIL

The messages will remain posted until the brakes cool down.

Bombardier has issued Service Bulletins (SB) (ref 1.1 to 1.4) providing the operators the opportunity to upgrade the WST with the latest Part No. GW415-1050-9 which eliminates the possibility of the nuisance messages and the ratcheting noise reported by some operators. The WST Part No. GW415-1050-9 was introduced in production from A/C 9623.

4. ACTION:

The crew and maintenance personnel should familiarize themselves with the conditions described in this Advisory Wire. In order to reduce unnecessary BCU or WST(s) replacement, if the messages listed in this Advisory Wire are posted:

- CAIMS/OMS faults should be monitored for WST related faults.
- Troubleshooting should start only when the brakes have cooled down.
- If the message(s) are no longer displayed when the brakes have cooled down, the messages should be considered as nuisance.

Should you have any questions or require more information, please contact your Field Service Representative (FSR) or the Customer Response Center (CRC).