

11 Feb 08

All Flight Deck Crews

**HANDLING ENGINE STARTING FAULTS WITH RPM LIMITED TO 80%
WHILE CROSSFEED AIR VALVES OPEN**

1. **Engine air start valve fails to open.** Follow advice in the Flying Manual Chapter 7 Table 1 until the point where the use of higher RPM is required then:
 - a. **Engine 3:** If No 3 engine air start valve fails to open, start No 4 engine and follow the procedure in "i" below.
 - i. **Select the Start Selector Switch to WINDMILL and when the valve MIs indicate SHUT, pull CB 91 on Z3 P1 to "fail" the crossfeed air valves in the closed position – MIs now indicate crosshatched; reselect air assist ensuring the crossfeed air valves' indication remain crosshatched and attempt to open the stuck air start valve by selecting a higher RPM on the adjacent engine. Following a successful engine start, select the Start Selector Switch to WINDMILL and reset CB 91 and continue the start procedure as normal.**
 - b. **Engine 4:** If No 4 engine air start valve fails to open repeat the procedure in "i" above.
 - c. **Engine 2:** If No 2 engine air start valve fails to open, start No 1 engine and repeat the procedure in "i" above.
 - d. **Engine 1:** If No 1 engine air start valve fails to open repeat the procedure in "i" above.
2. **Air in the fuel during engine start:** Follow the procedure in the Flying Manual Chapter 11 para 21 by selecting both No 4A tank booster pumps on the affected side to ON. Then, when ready to clear the air in the fuel, **select the Start Selector Switch to WINDMILL and when the valve MIs indicate SHUT, continue with the standard procedure.**
3. **Conditioning system fails to initiate:** Leave the check of the conditioning system until all engines have been started and the Start Selector is set to WINDMILL and both MIs indicate SHUT.
4. If there are any queries regarding these or any other starting malfunctions feel free to contact the STANEVAL Engineers.
5. These procedures will be incorporated in the relevant publications in due course.

NOTE: Although not the norm, CB 91 on Z3P1 will have to be used as a switch for this procedure. It is important to ensure that the correct indication of crossfeed air valve position is achieved following resetting of the CB. Furthermore, the crossfeed air valve indications must be carefully monitored during all operations.

Original Signed

XXXXXX S.40
Sqn Ldr
STANEVAL Eng 1
Ext XXXX S.40