## COMMONWEALTH OF AUSTRALIA CIVIL AVIATION SAFETY AUTHORITY SCHEDULE OF AIRWORTHINESS DIRECTIVES

Fairchild (Swearingen) SA226 and SA227 Series Aeroplanes

## **AD/SWSA226/57 Amdt 1**

## **Battery Bus Relay**

10/90

Applicability:

All model SA226-T S/N T201 through T275 and T277 through T291; SA226-T(B) S/No T(B) 276, and T(B) 292 throught T(B) 417; SA226-AT S/No AT 001 thorught AT 074; SA226-TC S/No TC 201 through TC 419; SA227-TT S/No TT 421 through TT 541; SA227-AT S/No AT 423 through AT 695; SA227-AC S/No AC 406, AC 415, AC 416, AC 420 through AC 705, and AC 707 through AC 733.

Requirement:

Modify the battery bus relay electrical system as follows:

- 1. Remove the access cover from the 'J-box', EP 11;
- 2. Remove the diode from terminals X1 and X2 of the battery bus relay K40;
- 3. Reinstall access cover; and
- 4. Using the battery switches, varify that battery voltage is present on the LH essential, RH essential and non essential busses.

Note: Fairchild SB's SA226-24-032, SA227-24-013 and FAA AD 90-03-19 R1 also refer.

Compliance:

Prior to exceeding 100 hours time in service from 17 May 1990.

Background:

Fairchild and the FAA have determined that a short circuited battery relay diode will cause de-energization of the battery relay and prevent any subsequent re-energization of the battery relay. This in combination with the loss or interruption of electrical power could result in an un-recoverable loss of electrical power to the aircraft. Tests by Fairchild indicate that removal of the battery relay diode as required by this AD did not impose any high voltage spike problems on the DC system.

Amendment 1 to this AD is issued to correct the applicable S/No range only. - No additional work is required.