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

Fairchild (Swearingen) SA226 and SA227 Series Aeroplanes

## AD/SWSA226/53 Amdt 1

## **Control Cables**

9/87

Applicability: All models.

Requirement:

Inspect all elevator, rudder, aileron and aileron to rudder interconnect primary control cables for general condition and broken wires, (a wire is to be considered broken if worn more than 50% of wire diameter), along their entire length, including cables routed inside the control column. Where cables contact any pulley or fairlead, the cable is to be slightly untwisted and inspected internally for wear, broken wires and general condition for a distance of 600 mm either side of the control neutral position contact point.

Rejection criteria is as follows:

- a. More than 3 broken wires within any 300 mm section, or
- b. Cables where the total number of broken wires exceeds 3 times the length of the cable measured in metres, or
- c. More than 6 wires worn less than 50% of wire diameter in any 25 mm length of cable.

Where discrepant cables are found, inspect any associated fairleads or pulleys for damage and replace any unserviceable items.

## Compliance:

- a. Prior to attaining 10 000 hours time in service and thereafter every 400 hours time in service.
- b. Where the current time in service exceeds 10 000 hours on 9 April 1987; within 100 hours time in service after 9 April 1987 or at the next inspection for Maintenance Release issue after 9 April 1987 whichever is later.
- Note 1. Where an operator can substantiate individual cable lives in hours time in service, this may be substituted for aircraft hours time in service.
- Note 2. Cable replacement with new items at 10 000 hour intervals terminates this inspection requirement. However, this Directive does not remove the requirement to perform routine inspections in accordance with Fairchild Maintenance Manual Section 27-00-00 prior to achieving 10 000 hours time in service.

*Note 3. FAA AD 87-02-02 refers.* 

Background:

Overseas experience has shown that the control cables in these aircraft are subject to a high failure rate in high time aircraft. Amdt 1 removes any ambiguity at Note 2.