COMMONWEALTH OF AUSTRALIA CIVIL AVIATION SAFETY AUTHORITY SCHEDULE OF AIRWORTHINESS DIRECTIVES

North American Aviation T-28 Series Aeroplanes

AD/T-28/1 Horizontal Tailplane 4/96

Applicability:

All T-28 series aircraft which do not have tailplane reinforcement TO 1T-28-569 incorporated.

Note: Reinforced tailplanes will have 'D-10' marked on the tailplane data plate.

Requirement:

- Remove the elevator and outboard ends of the horizontal tailplane. Visually
 inspect the aft face of the forward spar and all ribs between the forward and rear
 spar for signs of cracks. A flexible borescope may be used to assist access.
 Inspect both inboard and outboard faces of each rib. Refit or repair all access
 openings in the tailplane before returning the aircraft to service.
- 2. Remove fairings, as required, to gain access to the forward horizontal tailplane to fuselage attachment fitting. Visually inspect the attachment fitting for cracks or working rivets. Refit fairings before returning the aircraft to service.

Compliance:

1. Inspect in accordance with Requirements 1 and 2 before 5 hours time in service after 28 March 1996, or before 20 June 1996, whichever occurs first. Re-inspect at intervals not to exceed 50 hours time in service or 1 year, whichever occurs first.

Background:

The Warbirds Maintenance Review Board has received a report of a T-28 aircraft with cracks in the tailplane ribs and forward tailplane attachment fitting. The Board has recommended issue of a Directive to inspect unmodified tailplanes on Australian registered T-28 aircraft for similar cracks.

The T-28 aircraft has a history of horizontal tailplane failures. Investigation of the failures by the manufacturer has shown that the design standard in use at the time may not meet applied service loads. The manufacturer has recommended that all tailplanes are strengthened to meet a later design standard. When details of the modification are received this Directive may be amended accordingly. It has been reported that the aircraft found with cracks had not been modified.