

DESCRIPTION AND MAINTENANCE INSTRUCTIONS
AIRCRAFT CONTROL CABLE
TENSIONING-GENERAL

1 Where aircraft cable tensions are suspected of inaccuracy and affecting their intended role, the aircraft is to be brought into the hangar and allowed to remain in the constant-temperature area for as long as possible, before commencing cable tensioning, to ensure that the temperatures of the aircraft structure are stabilized.

2 To achieve best results, the aircraft should be placed in the hangar or in the shade, never in the direct sunlight. The aircraft should be shielded from draughts or hot-air blasts from heaters.

3 Temperature readings should be taken from the interior of the wheel wells as the temperature changes more rapidly at this point than that of the internal airframe structure.

4 The following are suggested points to check to obtain the best results:-

(a) Errors inherent in the measuring instrument; calibration is generally accurate within five percent. Avoid shocks or jarring of the instrument.

(b) Errors in the method of taking read-

ings; take several readings at the same location and avoid snapping of instrument from the cable.

(c) Errors in temperature readings; two categories cover this phase, namely, human errors which can be corrected by rechecking readings, and errors due to unequal heating or cooling of the aircraft.

(d) Errors in positioning of the tensiometer; ensure that the cable is held firmly against the back of the tensiometer, when placed on the cable. Do not position the tensiometer within six inches of any type of cable connections as these increase the stiffness of cable resulting in high readings.

(e) Errors in the control positioning; neutralize the controls.

(f) Errors in the use of risers; ensure risers are retained for the particular instrument at all times.

5 This Engineering Order shall be used in conjunction with the applicable aircraft -2 EO. Engineering Order 65D-20AA-2 may be referenced for further information on cable tensiometers.

ISSUED ON AUTHORITY OF THE CHIEF OF THE AIR STAFF

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