

TRAINING COMMAND

TECHNICAL INSTRUCTIONS

EXPEDITOR AIRCRAFT

TAIL OLEO STRUT

TCTI D4/1

1 Mar 57

1 As a result of examination of several Expeditor a/c some were found to have the tail oleo strut jammed in the fully extended position. In some cases the leg was readily freed through physical manipulation of the tail of the aircraft, however, others remained jammed even after a reasonable amount of taxiing. It was also noted that some oleo struts, though operative when examined in the static position, had a tendency to jam or bind during taxiing or towing operations whenever the load on the strut was reduced intermittently.

2 In investigating a cause for these occurrences it was noted primarily, that legs were generally over inflated. One leg found in the jammed position, was dismantled to examine for distortion, freedom of operation, and cleanliness. Although no distortion was found, severe scoring of the piston by foreign matter was noted. It is not felt, however, that this scoring was the cause for jamming although it may have been a contributing factor. This leg had also been filled by the overhaul facility with the incorrect type of fluid.

3 To eliminate or reduce these occurrences of malfunction, which could result in damage to the aircraft structure, the following is to be brought into effect:

- (a) oleo struts are to be inflated to an extension of three inches, EO 05-45B-2 refers, under normal temperature conditions, and without payload.
- (b) new or reconditioned legs are to be drained, flushed out whenever a strut is fitted to the aircraft.

4 After towing or taxiing, a check is to be carried out to ensure that the tail wheel is trailing correctly. During the Primary Inspection, the correct position of the tail wheel is to be assured before the oleo extension is checked.

5 The checking of the tail oleo is to be included in the unit pre-flight check by technicians.

6 A copy of this leaflet is to be inserted in front of EO 05-45B-2 in the appropriate EO binder.