

68-11

DEPARTMENT OF TRANSPORTATION
NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20591

September 29, 1967

IN REPLY OC-1-AS-96
REFER TO:

Honorable William F. McKee
Administrator
Federal Aviation Administration
Department of Transportation
Washington, D. C. 20590

Dear General McKee:

This is in reference to an aircraft accident involving Aero Commander 560-E, N3831C, en route from Grand Prairie, Texas, to Dallas, Texas, September 27, 1967. As you know the aircraft crashed on approach to Love Field following inflight failure of the left wing as a result of a fatigue fracture of the lower left wing spar cap at Wing Station No. 31.

Our investigation of this subject accident is continuing and no final conclusions have been reached at this time as to the reasons for the catastrophic fatigue failure of N3831C's left wing main spar. It is known at this time that this aircraft was involved in an incident in 1959 which required substantial repair work on the left wing and fuselage nose section but it is not clear as to the extent of the wing structural inspection that was conducted at that time.

However, we have learned that the subject aircraft is one of the relatively high time Aero Commanders (T.T. 6780 hours) and that it has sustained an estimated 23,000 engine starts and 25,000 gear cycles in its taxi/shuttle type operation with LTV. From this it would appear that the wing failure might be directly associated with the operational use of the aircraft alone and that the 1959 incident was probably not a significant factor in causing the failure. This is further corroborated by the fact that the failed spar area was inspected at LTV in November of 1965, about 1700 flight hours before the accident. For this reason, we believe that you should give immediate consideration to the need for a one-time inspection of all high time/short haul Aero Commanders, with further fleet inspections predicated on these results.

Honorable William F. McKee (2)

The fatigued spar section is presently undergoing metallurgical testing in our laboratory and we will keep you informed of significant developments in this area.

Sincerely yours,

Joseph J. O'Connell, Jr.
Chairman
