

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: February 5, 1980

Forwarded to:

Honorable Langhorne M. Bond
Administrator
Federal Aviation Administration
Washington, D.C. 20591

SAFETY RECOMMENDATION(S)

A-80-11

On September 29, 1979, a Cessna Model 120, N72504, crashed near Vicksburg, Mississippi, after the right wing separated in flight. Both persons aboard, an instructor pilot and his student, were killed.

Investigation disclosed that the wing separated when the forward wing strut, upper rod-end spherical fitting failed. Metallurgical examination disclosed that the fitting was severely pitted and corroded. The fitting apparently had become pitted and corroded over a long period of time and, at the location of failure, corrosion was found to have penetrated almost the entire thickness of the fitting.

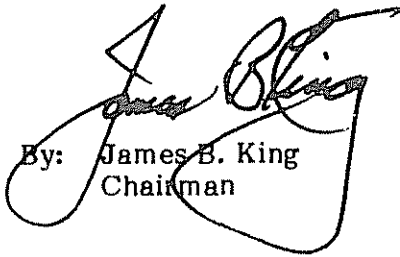
The airplane involved was manufactured in 1946, and was last inspected in February 1979. Although the external location of the spherical fitting makes it physically and visually accessible, evidence of corrosive deterioration, cracking, or elongation apparently was not detected during the inspection. Paint, which covered the lower portion of the fitting in the area of the failure, may have partially obscured the corrosion.

Wing strut fittings similar to the one which failed are also installed on many Cessna Model 140 airplanes. As of December 31, 1978, a total of 3,486 Cessna Model 120/140 aircraft were registered with the Federal Aviation Administration, the newest of which are approaching 30 years in service.

Therefore, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Issue an Airworthiness Directive applicable to the Cessna Model 120 and 140 airplanes, requiring an immediate inspection of wing strut upper rod-end spherical fittings for corrosion, cracking, or elongation. If any of these conditions are detected, the fittings should be replaced before further flight. (Class I — Urgent Action) (A-80-11)

KING, Chairman, DRIVER, Vice Chairman, McADAMS, GOLDMAN, and BURSLEY, Members, concurred in this recommendation.



By: James B. King
Chairman