

UNITED STATES OF AMERICA
NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: October 8, 1971

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD
at its office in Washington, D. C.
on the 16th day of September 1971

FORWARDED TO:)
Honorable John H. Shaffer)
Administrator)
Federal Aviation Administration)
Washington, D. C. 20591)

SAFETY RECOMMENDATION A-71- 40 & 41

On August 20, 1971, an Allegheny Airlines Convair Model 580, N5844, was involved in an accident at Pittsburgh, Pennsylvania, after portions of the right main landing gear had separated during an aborted landing at Parkersburg, West Virginia.

Examination of the right main landing gear assembly on August 21, 1971, revealed that the lower wheel assembly separated from the upper cylinder as a result of a shear failure of the single upper bearing lock pin, P/N 528067. This failure allowed the upper piston bearing P/N 528066 to back off from its threaded attachment to the piston and axle assembly, P/N 528039, thereby permitting the piston to slide freely in the outer oleo housing. A subsequent failure of the torque links then permitted the whole lower unit to separate from the aircraft.

Two additional main landing gear assemblies, which were due to be overhauled for the operational 15,000-hour time requirement interval, were disassembled for inspection of the lock pins. It was found that the upper bearings of both had worn locking pins. One had two pins, and the other had three pins.

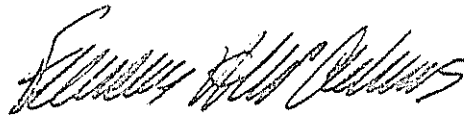
Subsequent investigation revealed that Convair made a revision to the basic configuration from one-lock pin to the three-lock pin, but compliance has not been mandatory.

Based upon the fact that this landing gear assembly failed prior to its reaching the present 15,000-hour overhaul requirement, after approximately 10,811 hours of operation, and because the three-lock pin configuration also exhibited considerable wear, the Safety Board recommends:

1. That a prompt inspection, and subsequent modification from the one- or two-lock pin configuration to the three-lock pin configuration, be required on all Convair Models 240, 340, 440, 580, and 600 main landing gear assemblies that have accumulated over 7,500 hours of operation.
2. That consideration be given to reducing the present 15,000-hour overhaul time interval until sufficient data have been compiled to warrant a further extension.

These recommendations will be released to the public on the issue date shown above. No public dissemination of the contents of this document should be made prior to that date.

Reed, Chairman; Laurel, McAdams, Thayer, and Burgess, Members, concurred in the above recommendations.



By: Francis H. McAdams
Acting Chairman

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SAFETY BOARD
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