

Adopted 9/24/90

Log 2257



National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: September 24, 1990
In reply refer to: A-90-119 and 120

Honorable James B. Busey
Administrator
Federal Aviation Administration
Washington, D.C. 20591

On September 8, 1989, a Convair Model 580, operated by Partnair, crashed off the coast of Denmark. All 50 passengers and 3 crewmembers aboard were fatally injured. The accident is being investigated under the authority of the Aircraft Accident Investigation Board/Norway (AAIB/N). The National Transportation Safety Board is providing technical assistance in the investigation.

The accident flight originated in Oslo, Norway, with a destination of Hamburg, Germany. While cruising at 22,000 ft msl the airplane was lost from air traffic control radar coverage over the North Sea. A rescue/recovery operation was initiated. During the ensuing months, most of the wreckage was recovered and transported to indoor facilities near Oslo. A reconstruction of the airplane wreckage and examination of the engines and propellers has been completed.

Although the investigation is continuing, preliminary indications are that the airplane experienced an inflight breakup while in cruise flight. During inspection of the reconstructed wreckage, the accident investigation team noted that one of the four right-hand elevator hinge pins was missing. Damage surrounding the location of the missing pin indicated that the pin was missing prior to the accident or was lost in flight. General Dynamics-Convair Division is currently examining the effect of a missing pin or pins on airplane stability and control.

The airplane had been operated 37,000 flight hours and had undergone a "C" check 55 operating hours before the accident. Field service reports received by Convair indicate that other operators performing inspections during routine maintenance have found evidence of bearing rotation, binding, and wear on the elevator hinge pins. If these conditions continue undetected, the loss of an elevator hinge pin may occur that could possibly cause an inflight separation of the elevator and loss of control of the airplane.

General Dynamics-Convair Division has developed separate alert service bulletins for the 340/440/580/640 and similarly designed elevators on the 240/600 model airplanes that require a one-time inspection of the elevator hinge pins, bushings, nuts, bearing plates, and bearings and the replacement of any worn or damaged parts. These inspections are recommended to be performed within the next 50 hours of aircraft operation.


The Safety Board is aware that compliance with manufacturer service bulletins is not mandatory. However, since participating in the investigation of the Partnair accident, the Safety Board is convinced that the Convair service bulletins on the elevator hinge pin installation are of major significance and that compliance with such bulletins should be mandatory.

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

Issue an Airworthiness Directive applicable to Convair model 340/440/580/640 airplanes that requires close visual inspections of the elevator hinge pins in compliance with Convair Alert Service Bulletin 640(340D) No. 55-A5. (Class II, Priority Action)(A-90-119).

Issue an Airworthiness Directive applicable to the Convair models 240/600 aircraft that requires close visual inspections of the elevator hinge pins in compliance with Convair Alert Service Bulletin 600(240D) No. 55-A4. (Class II, Priority Action)(A-90-120).

KOLSTAD, Chairman, COUGHLIN, Vice Chairman, and LAUBER, BURNETT, and HART, Members concurred in these recommendations.


By: James L. Kolstad
Chairman