

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

ISSUED: May 15, 1973

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD
at its office in Washington, D. C.
on the 26th day of April 1973

FORWARDED TO:)
Honorable Alexander P. Butterfield)
Administrator)
Federal Aviation Administration)
Washington, D. C. 20591)

SAFETY RECOMMENDATIONS A-73-19 & 20

The National Transportation Safety Board is currently investigating two fatal accidents involving Bell Model 206B Helicopters. The first accident involved Petroleum Helicopters, Inc., Bell Model 206B, N14831, which crashed into the Gulf of Mexico on February 20, 1973, and killed the pilot and a four-man oil-drilling team. The second accident occurred 3 days later when Air Logistics, Inc., Bell Model 206B, N35AL, crashed near Morgan City, Louisiana, and killed the pilot.

Examination of the failed pylon support links, P/N 206-031-508, from both helicopters revealed fatigue fractures that originated within the bearing bore of the link forging. The fatigue propagated from the bearing bore downward through the forging in the first accident and upward from the bearing bore through the top of the forging in the second accident.

The pylon support link, S/N BCJZ-0041, which was removed from N14831 had a total service time of 460 hours, and the pylon support link, S/N A100246, which was removed from N35AL had a total service time of 545 hours. The mandatory retirement life on this link is 4,800 hours for the Model 206B and for the 206A when it utilizes the 250-C20 engine. The link has an unlimited life when used in the Model 206A with the 250-C18 engine.

The Safety Board is aware of Airworthiness Directive Amendment 39-1622 which you recently issued that requires visual and Zyglo inspections for cracks in the links. However, since the fatigue failures propagated from cracks inside the bearing bore where a crack could not be detected by the

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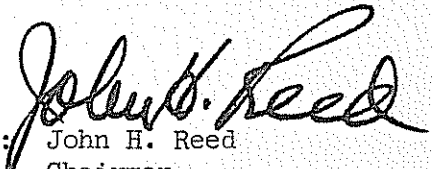
required inspections, the Board recommends that the Federal Aviation Administration:

1. Require an early X-ray inspection on all Bell Model 206A and 206B pylon support links for evidence of cracks.
2. Require a repetitive X-ray inspection of the links until such time as the new link, P/N 206-031-589 is installed.

Personnel from our Bureau of Aviation Safety have been in contact with your Flight Standards representatives and will be available if any further information or assistance is desired.

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; McAdams, Thayer, Burgess, and Haley, Members, concurred in the above recommendations.


By: John H. Reed
Chairman