

4. RECOMMENDATIONS

As a result of the investigation of this accident, the National Transportation Safety Board makes the following recommendations:

--to the Federal Aviation Administration:

Require Hamilton Standard to review and evaluate the adequacy of its tools, training, and procedures for performing propeller blend repairs, and ensure that those blend repairs are being performed properly. (A-96-142)

Review the need to require inspection (“buy back”) after the completion of work that is performed by uncertificated mechanics at Part 145 repair stations to ensure the satisfactory completion of the assigned tasks. (A-96-143)

Revise Advisory Circular 20-66 to include the vibratory testing of composite propeller blades that have been previously operated for a substantial number of service hours, and composite blades that have been altered to the limits set forth in FAA-approved repair manuals to determine the expected effects of age on propeller vibration and provide guidelines for rpm margin between a propeller blade’s natural frequencies and the excitation frequencies associated with propeller operation. (A-96-144)

Require that Hamilton Standard consider long-term, atmospheric-induced corrosion effects and amend the Component Maintenance Manual (CMM) inspection procedure to reflect an appropriate interval that will detect any corrosion within the taper bore. (A-96-145)

Require Hamilton Standard to review and, if necessary, revise its policies and procedures regarding 1) internal communication and documentation of engineering decisions, and 2) involvement of the Designated Engineering Representative (DER) and FAA, and to ensure that there is proper communication, both internally and with the FAA, regarding all significant engineering decisions. (A-96-146)

Include an article in the Air Traffic Bulletin and provide a mandatory formal briefing to all air traffic controllers regarding the necessity and importance of notifying crash, fire and rescue personnel upon a pilot's request for emergency assistance. Ensure that air route traffic control center (ARTCC) controllers are aware that such a request may require them to notify local emergency personnel. (A-96-147)

Amend Advisory Circular 120-51B (Crew Resource Management Training) to include guidance regarding the communication of time management information among flight and cabin crewmembers during an emergency. (A-96-148)

Evaluate the necessary functions of the aircraft crash ax, and provide a technical standard order or other specification for a device that serves the functional requirements of such tools carried aboard aircraft. (A-96-149)