



National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: February 9, 2004

In reply refer to: A-04-01 and -02

Honorable Marion C. Blakey
Administrator
Federal Aviation Administration
Washington, D.C. 20591

On January 24, 2003, a Beech 95 (Travelair), N2733Y, lost control shortly after takeoff from Cable Airport, Upland, California, after a 2 1/2-foot section of a blade separated from a Hartzell model HC-92ZK-2 propeller installed on the No. 2 (right) engine of the airplane. Witnesses reported observing the airplane's right engine suspended below the right wing,¹ and the airplane entering a steep right bank, rolling inverted, and descending until impacting a private residence in Rancho Cucamonga, California. The house was severely damaged, the airplane was destroyed, and the pilot, its sole occupant, was killed. The flight was being conducted under 14 *Code of Federal Regulations* (CFR) Part 91 and was the first flight following overhauls of both propellers.²

The Safety Board's investigation into this accident found all four propeller blades from the accident airplane in a condition that suggests they were improperly overhauled. The evidence indicated corrosion pits, a lack of necessary corrosion-protective coatings on all blades, and the failure to detect a large surface crack in a designated critical area on the separated blade from the accident airplane.³ T&W Propellers, LLC, Chino, California, which operated as a limited propeller repair station, had previously overhauled all four blades. In addition, the investigation discovered two additional propeller blades from another airplane that had been similarly improperly overhauled by T&W. Although overhaul is not mandatory, the manufacturer recommends that these propellers be overhauled every 2,000 hours or 5 years, whichever occurs first.

As a result of the investigation into the January 24, 2003, accident, the Safety Board recommended that the FAA require the immediate inspection of certain propellers overhauled by

¹ This position is consistent with the engine having separated from its mountings.

² A description of this accident, LAX03FA074, can be found on the National Transportation Safety Board's Web site at <<http://www.ntsb.gov>>.

³ A detailed description of the indications of improper overhaul can be found in the Safety Board's recommendation letter to the Federal Aviation Administration dated April 29, 2003.

T&W Propellers.⁴ The FAA responded with an airworthiness directive (AD)⁵ requiring certain inspections and also issued an unapproved parts notice (UPN)⁶ recommending inspection of all propellers maintained, altered, or approved for return to service by T&W not covered by the AD. As a result of the AD and UPN inspections, the FAA has received reports of at least 7 other propellers in a condition that suggests they were improperly overhauled. The FAA issued a letter of investigation to T&W Propellers on February 7, 2003, questioning its overhaul procedures. T&W Propellers surrendered its Air Agency Certificate on February 14, 2003, and the enforcement investigation was never completed.

The Safety Board's investigation revealed that the owner, who also served as the chief inspector, of T&W Propellers had previously been the chief inspector at another repair station, Southern California Propeller Service, Inc. (SCPS) in Inglewood, California. The FAA revoked SCPS's repair station certificate on June 16, 1998, for performing improper maintenance and overhauls on aircraft propellers. Following the revocation, the FAA issued a special airworthiness information bulletin (SAIB) in March 2001 to all owners of propellers overhauled by SCPS recommending that these propellers be reinspected in accordance with the manufacturer's manuals. Propeller reinspection results reported to the FAA as a result of this SAIB indicated that 17 propellers (forty percent of the reinspection results reported to the FAA) were improperly overhauled by SCPS.

The Safety Board is concerned that the FAA has no mechanism for preventing individuals who have been associated with a previously revoked repair station, such as the owner of T&W, from continuing to operate through a new repair station. The FAA has addressed this issue in the context of air carriers and other commercial operators. Specifically, 14 CFR 119.39(b) allows the FAA to deny an application for a Part 121 or 135 air carrier or operating certificate if the applicant has previously held a certificate that was revoked or if a person who exercised control over (or held a key management position in) a previously revoked operator will be exercising control over (or holding a key management position in) the new operator. Additionally, the rule allows the FAA to deny certification to an applicant who is substantially owned by (or who intends to fill a key management position with) an individual who had a similar interest in a certificate holder whose certificate was (or is being) revoked when that individual materially contributed to the circumstances causing revocation.⁷

⁴ Safety Recommendation A-03-13.

⁵ AD 2003-13-17, issued on June 26, 2003.

⁶ UPN 2003-00142, issued on March 31, 2003.

⁷ 14 CFR section 119.39 (b) states, in part, that that an application for a certificate may be denied if the FAA Administrator finds that:

(2) The applicant previously held an Air Carrier Certificate or Operating Certificate which was revoked;

(3) The applicant intends to or fills a key management position listed in 119.65(a) or 119.69(a), as applicable, with an individual who exercised control over or who held the same or a similar position with a certificate holder whose certificate was revoked or is in the process of being revoked, and that individual materially contributed to the circumstances causing revocation or causing the revocation process;

(4) Any individual who will have control over or have a substantial ownership interest in the applicant had the same or a similar control or interest in a certificate holder whose certificate was revoked, or is in the process of

Currently, there is no similar regulation applicable to Part 145 repair stations. The same safety concerns that are addressed by the FAA's limitation on air carriers and other commercial operators should also apply to repair stations. For example, the FAA recognized when it first promulgated this rule that, "the FAA revokes an operating certificate only for a very serious infraction of the regulations. If a person contributes materially to that infraction, this fact should be considered as a factor in evaluating the new application."⁸ The FAA also noted in the notice of proposed rulemaking that preceded this rule that, "operating experience has shown that the compliance disposition of an operator and persons serving in key positions is a reliable indication of future performance."⁹ These observations should apply equally to Part 145 certificate holders. Therefore, the Safety Board believes that the FAA should issue a regulation, similar to 14 CFR 119.39, that applies to applicants for a Part 145 repair station certificate, so the FAA can prevent individuals who have been associated with a previously revoked repair station from continuing to operate through a new repair station.

According to the FAA, the investigation into the improper overhauls performed by T&W Propellers was never completed because the owner voluntarily surrendered T&W's repair station certificate. It is therefore likely that even if a rule similar to 14 CFR 119.39 applied to repair stations, individuals such as the former owner of T&W Propellers who have voluntarily surrendered a certificate or otherwise avoided a revocation could move to a different area under the jurisdiction of a different FAA Flight Standards District Office and open a new repair station without the relevant FAA certification personnel necessarily being aware of the circumstances of the previous investigation. The Safety Board is concerned that the process by which the FAA tracks key personnel and issues air carrier, operating, and repair station certificates may not be robust enough to identify individuals who have voluntarily surrendered a certificate to avoid investigation or revocation. Therefore, the Safety Board believes that if an air carrier, operating, or repair station certificate is surrendered prior to completion of an enforcement investigation that is based on charges that could be grounds for revocation, the FAA should nonetheless complete the investigation to the extent necessary to document all available facts relating to the fitness of the involved individuals; these facts should be made available to all FAA personnel responsible for granting a future air carrier, operating, and repair station certificate when considering the fitness of the applicant.

Therefore, the National Transportation Safety Board makes the following recommendations to the Federal Aviation Administration:

Issue a regulation, similar to 14 *Code of Federal Regulations* 119.39, that applies to applicants for a Part 145 repair station certificate, so the FAA can prevent individuals who have been associated with a previously revoked repair station from continuing to operate through a new repair station. (A-04-01)

being revoked, and that individual materially contributed to the circumstances causing revocation or causing the revocation process

⁸ "Regulatory Review Program; Air Taxi Operators and Commercial Operators." 43 *Federal Register* 46762 (October 10, 1978).

⁹ "Regulatory Review Program; Air Taxi Operators and Commercial Operators." 42 *Federal Register* 43495 (August 29, 1977).

If an air carrier, operating, or repair station certificate is surrendered prior to completion of an enforcement investigation that is based on charges that could be grounds for revocation, the FAA should nonetheless complete the investigation to the extent necessary to document all available facts relating to the fitness of the involved individuals; these facts should be made available to all FAA personnel responsible for granting a future air carrier, operating, or repair station certificate when considering the fitness of the applicant. (A-04-02)

Chairman CONNERS, Vice Chairman ROSENKER, and Members CARMODY, GOGLIA, and HEALING concurred with these recommendations.

By: Ellen Engleman Connors
Chairman