

National Transportation Safety Board

Washington, DC 20594

Safety Recommendation Report

Provide Inspectors with Automatic Notification of Flight Instructors with Substandard Student Pass Rates

Accident Number: WPR19MA177

Operator: Oahu Parachute Center
Aircraft: Beech King Air 65-A90
Location: Mokuleia Hawaii

Location: Mokuleia, Hawaii **Date:** June 21, 2019

The National Transportation Safety Board (NTSB) is providing the following information to urge the Federal Aviation Administration (FAA) to take action on the safety recommendations in this report. We identified these issues during our ongoing investigation of a fatal accident involving a Beech King Air 65-A90 airplane that impacted terrain after takeoff from Dillingham Airfield, Mokuleia, Hawaii (HDH). The NTSB is issuing three safety recommendations to the FAA.

Background and Analysis

On June 21, 2019, about 1822 Hawaii-Aleutian standard time, a Beech King Air 65-A90 airplane, N256TA, impacted terrain after takeoff from HDH. The pilot and 10 passengers were fatally injured, and the airplane was destroyed by impact forces and a postcrash fire. The airplane was owned by N80896 LLC and was operated by Oahu Parachute Center LLC under the provisions of Title 14 *Code of Federal Regulations (CFR)* Part 91 as a local parachute jump flight.¹

The accident pilot received flight instruction at Riter Aviation in Torrance, California, a company owned by the pilot's flight instructor. The flight instructor also operated a Beech King Air C90GTx airplane as the pilot-in-command for another company that had paid Riter Aviation for pilot services. During his initial flight training, the accident pilot logged about 53 hours in the King Air C90GTx airplane, but this time was logged during flights that included extended cross-country commercial Part 91 operations conducted with passengers in the cabin. In addition, the flight time was primarily logged as dual instruction while the accident pilot was still a student pilot.² Thus, the flight instructor had provided training that the accident pilot could not have been expected to fully comprehend as a student pilot, and the flights were most likely conducted by the flight instructor with the accident pilot sitting in the copilot seat.

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¹ This accident is still under investigation. Information about this accident can be found in the public docket for this investigation by accessing the <u>Investigation Dockets</u> link at the <u>NTSB website</u>.

² According to the FAA, 14 *CFR* Part 61 regulations allow a student pilot to log flight training and aeronautical experience toward a commercial pilot certificate; however, the pilot must be trained and evaluated at the commercial pilot level. The accident pilot had accumulated only 4.6 hours as a student pilot when he began logging (and the instructor began endorsing) commercial pilot training and experience.

The intent of flight instruction is to ensure that the student pilot (or the pilot receiving instruction if the pilot possesses a private pilot certificate) has developed the necessary skills addressed in 14 *CFR* Part 61 regulations. According to the FAA's *Aviation Instructor's Handbook* (FAA-H-8083-9B, dated 2020), a student's "failure to perform often results from an instructor's inability to transfer the required information." Even though the Riter Aviation flight instructor endorsed the accident pilot for a private pilot certificate with an airplane single-engine land rating, an instrument airplane rating, and a commercial pilot certificate with an airplane multiengine land rating, the accident pilot did not pass the checkrides for each on the first attempt. Also, according to FAA records, for the 2-year period ending April 10, 2020, only 59% of those students that the Riter Aviation flight instructor endorsed passed their certificate or rating practical examination on the first attempt.

As indicated in 14 *CFR* 61.197, one option for renewal of a flight instructor certificate for a 2-year period is for the applicant to provide a record showing that at least 80% of five or more students passed a practical test for a certificate or rating on the first attempt during the preceding 2 years. The regulation provides other means for flight instructors to have their certificate renewed for a 2-year period, such as completing an approved refresher ground or flight training course. FAA records showed that the accident pilot's flight instructor attended and successfully completed a ground training refresher course on March 6, 2019, and that his flight instructor certificate was renewed on March 19, 2019.

The FAA stated that it tracks flight instructor student pass rates in its Program Tracking and Reporting Subsystem (PTRS) using information from airman certificate and/or rating applications (FAA Form 8710-1) that examiners enter into PTRS.⁶ A flight instructor's pass rate is determined by dividing the number of passed PTRS activities by the total number of activities (including those that were failed) during "the last 2 full years (plus the current partial month)." The system generates an "advisory" flag for flight instructors whose pass rate falls below 80%.

The PTRS "Air Personnel Single Designee Flag View" information for the accident pilot's flight instructor showed that, as of April 10, 2020, the instructor had received an advisory flag for his student pass rate of 59%, which covered 29 PTRS activities during the preceding 2-year period. (The displayed information did not show when this advisory flag was initially generated or when the flight instructor's pass rate had initially dropped below 80%.) The PTRS information also indicated that no surveillance activities of the flight instructor had been performed during that period, even with his substandard pass rate.

³ The accident pilot passed each checkride on a second attempt.

⁴ The accident pilot's failures occurred before the 2-year period covered by the FAA records.

⁵ Data that the FAA provided indicated that the national pass rate for all flight instructors was 79.8% for both 2017 and 2018 and 80.4% for 2019. Thus, the average national pass rate for that 3-year period was 80%.

⁶ According to the FAA, PTRS "is a comprehensive information management and analysis system...that provides the means for the collection, storage, retrieval, and analysis of data resulting from the many different job functions performed by Aviation Safety Inspectors...in the field, the regions, and headquarters." FAA Form 8710-1 is completed by the pilot and signed by the pilot's flight instructor before any FAA certificate or rating evaluation. After the evaluation, the examiner signs the form and notes whether the evaluation was successful or unsuccessful. The FAA issues a notice of disapproval to those pilots who do not pass a certificate or rating evaluation.

FAA inspector guidance for surveillance of flight instructors is found in Order 8900.1, Flight Standards Information Management System, volume 6, chapter 1, section 5, "Surveillance of a Certificated Flight Instructor." The guidance stated that surveillance of flight instructors should occur on a random basis during the 2 years before certificate renewal. The guidance also stated that surveillance of a flight instructor would allow an inspector to determine whether the instructor "continues to perform to the same standards of the original certification." This surveillance could be performed by a discussion, an observation of performance, an evaluation of observed performance, or any combination of these methods.

Because a flight instructor's student pass rate during a 2-year period can change depending on when the PTRS is queried, random surveillance might not identify a weak flight instructor, especially if that surveillance is only conducted when the flight instructor's certificate is scheduled for renewal. No mechanism within PTRS notifies FAA inspectors automatically when a flight instructor (within their geographic area of responsibility) has a substandard pass rate, which the FAA established as below 80%. Also, inspectors might not check to see if a flight instructor's pass rate has been flagged unless an accident or incident involving the flight instructor or one of the instructor's students (regardless of the student's certificate level) has occurred or "a justifiable public complaint" has been directed toward the flight instructor.

The flight instructor surveillance guidance in FAA Order 8900.1 indicated that, if any of these circumstances existed, the inspector should take "appropriate action" and document those actions in PTRS. In an e-mail dated September 22, 2020, the FAA described "appropriate action" as flight instructor surveillance, in addition to routine surveillance, if there was a question about whether a flight instructor was performing to standards and according to regulations. However, the FAA conducted no surveillance of the accident pilot's flight instructor as a result of the Mokuleia accident.

According to the FAA's Aviation Instructor's Handbook, the goal of a flight instructor is "to teach each learner in such a way that he or she will become a competent pilot." The accident pilot's three checkride failures on the first attempt, along with the flight instructor's substandard pass rate for other students that he trained (59%), showed that the flight instructor did not achieve that goal. The NTSB is concerned that the substandard pass rate of the accident pilot's flight instructor did not trigger any FAA surveillance and that other flight instructors with similar (or lower) pass rates might not receive any FAA surveillance.

Because a substandard student pass rate might be an indication of a flight instructor who does not effectively teach the necessary skills associated with pilot certificates and ratings, additional FAA oversight of such instructors is necessary to help improve their performance and identify those instructors who are not able to improve. The NTSB concludes that, if FAA inspectors were automatically notified of flight instructors with substandard student pass rates, the inspectors could perform, in a timely manner, the necessary surveillance to assess the instructors' performance. Therefore, the NTSB recommends that the FAA develop a system to automatically notify its inspectors of those flight instructors (within each inspector's geographic area of responsibility) whose student pass rate in PTRS has become substandard so that the inspectors can

⁷ In addition to the reference in 14 *CFR* 61.197 regarding an 80% overall student pass rate, the FAA established the 80% student pass rate as one of the certification criteria for Part 141 training centers (see 14 *CFR* 141.5).

perform additional surveillance according to the guidance in Order 8900.1. The NTSB also recommends that the FAA, until the system proposed in Safety Recommendation A-20-40 is implemented, direct its inspectors to (1) review PTRS on an ongoing basis to identify those flight instructors (within each inspector's geographic area of responsibility) with a substandard student pass rate and (2) provide additional surveillance of those instructors according to the guidance in Order 8900.1.

In addition to an accident or incident involving the flight instructor or one of the instructor's students and a justifiable public complaint directed toward the flight instructor, a substandard student pass rate warrants additional surveillance of a flight instructor. As a result, the NTSB recommends that the FAA revise Order 8900.1 to include flight instructors with a substandard student pass rate as one of the criteria necessitating additional surveillance of a flight instructor.

Recommendations

To the Federal Aviation Administration

Develop a system to automatically notify your inspectors of those flight instructors (within each inspector's geographic area of responsibility) whose student pass rate in the Program Tracking and Reporting Subsystem has become substandard so that the inspectors can perform additional surveillance according to the guidance in Order 8900.1, Flight Standards Information Management System, volume 6, chapter 1, section 5, "Surveillance of a Certificated Flight Instructor." (A-20-40)

Until the system proposed in Safety Recommendation A-20-40 is implemented, direct your inspectors to (1) review the Program Tracking and Reporting Subsystem on an ongoing basis to identify those flight instructors (within each inspector's geographic area of responsibility) with a substandard student pass rate and (2) provide additional surveillance of those instructors according to the guidance in Order 8900.1, Flight Standards Information Management System, volume 6, chapter 1, section 5, "Surveillance of a Certificated Flight Instructor." (A-20-41)

Revise Order 8900.1, Flight Standards Information Management System, volume 6, chapter 1, section 5, "Surveillance of a Certificated Flight Instructor," to include flight instructors with a substandard student pass rate as one of the criteria necessitating additional surveillance of a flight instructor. (A-20-42)

BY THE NATIONAL TRANSPORTATION SAFETY BOARD

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