NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: January 5, 1982

Forwarded to:
Honorable J. Lynn Helms
Administrator
Federal Aviation Administration
Washington, D.C. 20591

SAFETY RECOMMENDATION(S)

A-81-162

About 1230 e.d.t. on July 2, 1981, a Beech aircraft model 65-A80-8800, N100UV, operated by Universal Airways, Inc., under 14 CFR 91, crashed about 7 miles east-southeast of Madisonville, Texas. Witnesses heard a small explosion and saw the aircraft descend from a dark cloud; the wings and the empennage were not attached during the observed portion of the aircraft's descent. The pilot and both passengers were killed. The aircraft was destroyed. 1/

The investigation indicates that the in-flight breakup was probably caused by excessive airloads generated by a nose up control input by the pilot at high speed. Based on weather observations made by the National Weather Service, reports from pilots in the Madisonville area, and observations of witnesses to the accident, the in-flight breakup may have occurred in light-to-moderate turbulence in instrument meteorological conditions.

A review of the pilot's records indicated that he had limited experience in the operation of multiengine aircraft in instrument meteorological conditions and had not received instrument training in a multiengine aircraft. Because the pilot had acquired an instrument rating in a single-engine aircraft, he had not been required to demonstrate to a flight instructor or flight examiner his ability to satisfactorily cope with in-flight emergencies, such as unusual attitudes, gyro instrument failure, or engine failure, in a multiengine aircraft under simulated or actual instrument meteorological conditions.

1/ For more detailed information, read Aircraft Accident Report - "Universal Airways, Inc., 65-A80/Excalibur Conversion, N100UV, Near Madisonville, Texas, July 2, 1981" (NTSB-AAR-81-17).

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While there is a commonality between single-engine and multiengine instrument flying techniques and procedures, multiengine aircraft require a greater degree of piloting skill because of the additional powerplants, more complex systems, and larger sizes and weights. The Safety Board believes that the differences in the flight characteristics and emergency procedures between single-engine and multiengine rating aircraft are such that flight instructors/examiners should require multiengine applicants who received their instrument rating in a single-engine aircraft to satisfactorily demonstrate their ability to handle abnormal in-flight situations in a multiengine aircraft under actual or simulated instrument meteorological conditions.

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

> Require all holders of an instrument rating and a multiengine rating to demonstrate their ability to operate a multiengine aircraft under normal and emergency conditions by reference to flight instruments only as a prerequisite to exercising the privileges of an instrument rating in multiengine aircraft. (Class II, Priority Action) (A-81-162)

KING, Chairman, DRIVER, Vice Chairman, and McADAMS and BURSLEY, Members, concurred in this recommendation. GOLDMAN, Member, did not participate.

By: James B. King
Chairman