

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

ISSUED: September 17, 1973

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD
at its office in Washington, D. C.
on the 29th day of August 1973

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

SAFETY RECOMMENDATIONS A-73-71 & -72

On December 12, 1972, a Zantop Airways Lear Jet was involved in an accident at Ypsilanti, Michigan.

After the aircraft was landed on an ice- and slush-covered runway, poor braking conditions were encountered, and the pilot initiated a go-around at the midway point of the runway. After the throttles were advanced to full power, the engines did not respond, quite possibly because of water or slush ingestion, and both engines subsequently flamed out. The airplane slid across the runway threshold and continued approximately 300 feet before coming to rest. Although the airplane sustained substantial damage, the two crewmembers, who were the only occupants of the airplane, were not injured.

The engine ignition system was not energized during the approach and landing, nor was there a procedural requirement to do so. It is interesting to note, however, that precautions to minimize engine flame-out due to water or slush ingestion are explicitly outlined in the flight handbook for takeoff. This precaution requires the engine ignition system to be energized if water or slush is anticipated. Such precautions should also be delineated in the flight handbook for the landing phase of flight.

The National Transportation Safety Board believes that the operators of all Lear Jet Models (i.e., 23, 23B, 24, 24D, 25, 25B, and 25C) should be informed of suitable precautions to minimize the possibility of a power loss precipitated by water or slush ingestion into the engines. There is also a need to assure consistency of such procedures in executive jet aircraft flight manuals.

Honorable Alexander P. Butterfield (2)

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

1. Require that Lear Jet flight manuals (all models) be modified to include a precautionary item in the landing procedures to minimize the possibility of power loss or flameout when encounters with water or slush are anticipated.
2. Review the procedures in all corporate and executive jet aircraft to assure the presence of adequate precautionary notes concerning the "before takeoff," "cruise," and "landing" procedures as related to water and slush encounters.

Our Bureau of Aviation Safety staff is available for consultation if desired.

McADAMS, THAYER, BURGESS, and HALEY, Members, concurred in the above recommendations. REED, Chairman, was absent, not voting.

Isabel A. Burgess. acting.

By: John H. Reed
Chairman

THESE RECOMMENDATIONS WILL BE RELEASED TO THE PUBLIC ON THE ISSUE DATE SHOWN ABOVE. NO PUBLIC DISSEMINATION OF THE CONTENTS SHOULD BE MADE PRIOR TO THAT DATE.