

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: April 21, 1976

Forwarded to:

Honorable John L. McLucas
Administrator
Federal Aviation Administration
Washington, D. C. 20591

SAFETY RECOMMENDATION(S)

A-76-17 through 19

On January 12, 1975, N100KC, a Cessna 411A, crashed near Wise, Virginia, while operating on an instrument flight rules (IFR) flight plan from Savannah, Georgia, en route to Pontiac, Michigan. Aboard the aircraft were the pilot, his wife and five children. All received fatal injuries in the crash which occurred when the aircraft collided with mountainous terrain during night instrument meteorological conditions (IMC) in an area where freezing rain generally prevailed.

The National Transportation Safety Board's investigation of this accident revealed that the pilot of N100KC, after a series of radio communications with ATC about icing, an engine problem, the aircraft's climb performance, and severe vibrations encountered, advised the controller, "100KC has got extreme vibration again and you had better lead me to an airport." After a short discussion concerning two airports about 15 miles ahead of the aircraft the pilot stated "...lead me somewhere. Can I get in there without an approach or what?" The controller interpreted the pilot's response as a request to proceed to the nearest airport with an instrument approach and replied as follows: "... for your information ... the closest airport with an instrument approach is in your ... make it 5 o'clock position and about 21 miles." The pilot responded, "OK what State is that in and give me the name of the airport."

A series of communications followed in which pertinent information on the airport (Lonesome Pine), as requested by the pilot, was provided including radar vectors to the Lonesome Pine VOR and a clearance for an approach to that airport.

While on a vector to the Lonesome Pine VOR the pilot requested the Lonesome Pine weather. The controller advised, "the nearest station that I can get weather for you is the Tri-City Airport. It's about 30 miles due south of Lonesome Pine Airport. Their weather is measured one six thousand broken correction one thousand six hundred broken, four thousand overcast, seven miles, and light rain." The pilot of N100KC acknowledged this transmission as follows: "Hundred K C is going down sir."

This flight subsequently executed a VOR approach procedure followed by a missed approach procedure because visual contact with the airport could not be established. The pilot requested a clearance to another airport and the flight was cleared to the Tri-City Airport to fly a heading of 180°, to climb and maintain 6,000 feet, the minimum safe en route altitude. Several minutes later the pilot advised the controller that the aircraft could not climb above 3,300 feet. Because of communications problems controller personnel were unable to effect a planned course of action to vector the aircraft clear of terrain exceeding 3,000 feet. The flight crashed while on a vector heading of 240° at an elevation of 3,290 feet.

The Safety Board is concerned that the pilot of N100KC did not declare an emergency when he requested the controller to lead him to an airport. Investigation shows that controller personnel recognized the need for assistance and considered the flight as an emergency, although the controller did not notify the pilot that he was receiving priority service, nor did he ask the pilot if he wished to declare an emergency.

Had the pilot declared an emergency, voluntarily or in response to the controller's question, we believe that more specific information regarding the pilot's problems would have been requested by the controller. In this case, the controller knew the pilot needed assistance but the controller could not assess the urgency of the pilot's problem. The lack of specific information acted to limit the amount of information the controller offered to the pilot. If the controller had gathered more detailed information regarding the pilot's problems, he could have offered more specific options to the pilot. The availability of specific options could have aided the pilot in his decisionmaking processes while under stress. The Safety Board believes that pilots should be trained to immediately advise the air traffic controller whenever they encounter adverse conditions which threaten the safety of the flight. This notification should include a specific declaration of an emergency. When controllers receive information which causes them to believe the flight is in an emergency condition, they should immediately request the pilot to provide them with the information needed to give the flight priority service and inform the pilot they are planning to declare an emergency.

The Safety Board believes that many pilots are reluctant to declare an emergency because they believe that this action will involve them in drawn out correspondence with the Administrator regarding the circumstances which led to the declaration of the emergency. There also appears to be a fear of being involved in an enforcement action as well.

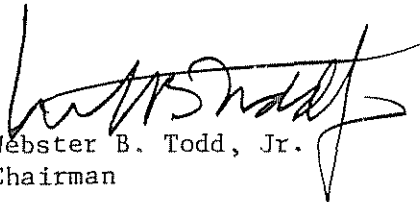
The Board believes that pilots who declare an emergency in today's ATC system may be subjected to some minor inconvenience. However, there may be many who do not understand the existing regulations concerning emergency authority of the pilot.

The Board concludes that any deterrent that would inhibit ground or flight-crews from the declaration of an emergency should be removed in the interest of safety of flight.

In view of the above, the National Transportation Safety Board recommends that the Federal Aviation Administration:

1. Review its regulations and procedures to determine whether any deterrents exist to either ground or flight personnel which would inhibit them from the earliest possible recognition and subsequent declaration of emergency, and if so:
 - (a) change controller training and the Controller's Handbook, and
 - (b) change its regulations governing pilot training and certification procedures. (Class II, Priority Followup)
2. Modify its ATC handbook to require the controller to seek further information from any pilot who is unable to execute an ATC clearance during adverse conditions. (Class II, Priority Followup)
3. Review its regulations surrounding the formal declaration of an emergency to remove any doubt which may exist between the pilot and the controller as to:
 - (a) the existence and extent of the emergency,
 - (b) the ability of the pilot and airborne equipment to deal with it, and
 - (c) the realistic options which are available to the pilot. (Class III, Longer Term Followup)

TODD, Chairman, McADAMS, THAYER, BURGESS, and HAI, FY, Members, concurred in the above recommendations.

By: 
Chairman