

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: June 24, 1977

Forwarded to:

Honorable Langhorne M. Bond
Administrator
Federal Aviation Administration
Washington, D. C. 20591

SAFETY RECOMMENDATION(S)

A-77-45 through 47

On November 26, 1976, N4208F, a Piper PA-28-181, crashed about 33 miles northeast of Farmington, New Mexico. Before the crash, the pilot had contacted the Farmington Flight Service Station (FMN FSS) and stated that he was lost. The FSS advised the pilot to squawk code 7700 (emergency) on his transponder; it then contacted the Denver Air Route Traffic Control Center (ARTCC) and confirmed the position of N4208F by reference to the ARTCC radar. The FSS was attempting to give N4208F a DF steer to the Farmington Airport when radio contact was lost. Denver ARTCC lost the target about 2 minutes later.

The radar controller at Denver ARTCC attempted to determine the aircraft's last position on his scope by moving the electronic cursor on the scope to the last position that he recalled and entering the latitude and longitude of that position. The coordinates he determined were immediately transmitted to the National Rescue Coordination Center (NRCC) at Scott Air Force Base, Illinois. Search and rescue personnel did not find the aircraft until the afternoon of December 3, 6 days after the accident. Both occupants had died on impact; the aircraft's emergency locator transmitter also was destroyed on impact.

Denver ARTCC has a NAS Stage-A computer which stores radar target information (DART). The information included a D-log plot of Code 7700 from N4208F; according to personnel at the NRCC, the last known position obtained from this plot was transmitted to NRCC more than 24 hours after the accident. This position was about 6 miles from the position given originally. For some reason, field personnel did not receive the updated coordinates until 2 days after the accident. According to rescue personnel, if the efforts expended during the first 2 days of search had been expended near the area of the updated coordinates, the aircraft would have been located sooner.

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Although the survival of the occupants is not in question in this case, in other instances, a rapid and effective search and rescue effort may mean the difference between survival and death. To insure the best possible search and rescue efforts, the most accurate information on an aircraft's last known location should be transmitted to search and rescue personnel as soon as it is available.

Air Traffic Controller's Handbook 7110.65, Chapter 8, contains instructions for handling an emergency such as the loss of N4208F. Instructions are included for notifying the National Rescue Control Center at Scott Air Force Base and for "... making all possible facilities available for use of searching agencies." The Safety Board believes that more definitive instructions should be given controllers such as including the need to obtain the computer information regarding lost aircraft when that information is available and readily accessible so that it may be transmitted without delay to the NRCC, and subsequently to search and rescue personnel. In addition, the NRCC should be made aware of the availability of such information along with its potential accuracy and limitations.

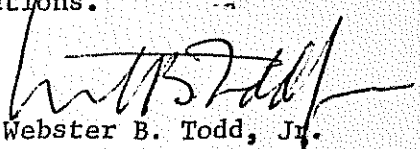
Therefore, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Alert all ATC personnel of the circumstances of this accident and emphasize to them the importance of transmitting to search and rescue personnel all available information on the last known location of a missing aircraft. (Class II - Priority Followup)
(A-77-45)

Revise the Air Traffic Controller's Handbook, Chapter 8, to include specific instructions to relay to the National Rescue Coordination Center at Scott Air Force Base, Illinois, information on the last known location of a missing aircraft obtained from the computer-stored radar information. (Class II - Priority Followup)
(A-77-46)

Inform the National Rescue Coordination Center of the NAS radar system computer capabilities and advise them to include in their procedures provisions for updating more rapidly information on last known positions of missing aircraft. (Class II - Priority Followup)
(A-77-47)

TODD, Chairman, BAILEY, Vice Chairman, McADAMS, HOGUE, and HALEY, Members, concurred in the above recommendations.


By: Webster B. Todd, Jr.
Chairman