Log 1506

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: July 22, 1982
SAFETY RECOMMENDATION(S)

Forwarded to:

Aircraft Owners and Pilots Association 7315 Wisconsin Avenue Washington, D.C. 20014

National Association of Flight Instructors Box 2024 Ohio State University Airport Columbus, Ohio 43220

Commuter Airline Association of America Suite 700 1101 Connecticut Avenue, N.W. Washington, D.C. 20036

Helicopter Association International 1110 Vermont Avenue, N.W., Suite 430 Washington, D.C. 20036

National Business Aircraft Association Inc. One Farragut Square S. Washington, D.C. 20006

About 0847 e.d.t. on September 23, 1981, a Ronson Aviation Bell 206B helicopter and a Seminole Air Charter Piper PA-34 airplane collided in flight over the Meadowlands Sports Complex in East Rutherford, New Jersey, about 2 nmi south of the Teterboro, New Jersey, Airport. There were scattered clouds at about 6,000 feet and the visibility was 30 miles at the time. The airplane had departed Syracuse, New York, on an instrument flight rules flight plan to Teterboro, and was on a left base leg to runway 1 following an instrument landing system (ILS) approach to runway 6. The helicopter was operating under visual flight rules inbound to Teterboro from Woodbridge, New Jersey, for a landing on the ramp area adjacent to the south end of runway 1. The two aircraft collided at about 650 feet. The helicopter fell into a parking lot, and both persons aboard were killed. The airplane, with about 8 feet of its left wing and its right engine missing, made a gear-up landing in a marsh about seven-tenths of a mile east of the collision point. The pilot was seriously injured and the passenger received minor injuries. 1/

^{1/} For more detailed information read Aircraft Accident Report--"Ronson Aviation Bell 206B, N27670, and Seminole Air Charter Piper PA-34-200T, N8110R, Midair Collision, East Rutherford, New Jersey, September 23, 1981" (NTSB-AAR-82-6).

The communication transcripts show that at 0843:45, the Teterboro local controller received a telephone call, concerning an administrative problem, which lasted until 0845:44. During those 2 minutes there were eight separate transmissions by five different aircraft, including the initial contacts by both the helicopter and the airplane involved in the accident. Neither of these two aircraft stated their position in the initial contact.

The helicopter first contacted the Teterboro tower at 0844:57 and was told to "stand by." The next contact was at 0846:27 when the helicopter reported "coming up on the sports complex" The tower controller answered this with a request for a report ". . . about a mile south, I don't have you in sight." The airplane first called the Teterboro tower at 0845:22. After the controller terminated the telephone conversation at 0845:44, the frequency became congested for about 90 seconds with transmissions and acknowledgments that were missed during the telephone conversation. At 0845:56 the controller acknowledged the airplane, requested the pilot report at the outer marker, and advised that the approach would be a left base leg to land on runway 1. A radar data plot made during the investigation showed that at that time the airplane was at the outer marker. The copilot later stated that he did not report over the outer marker because of congestion on the radio frequency. The next transmission to the tower was at 0847:08 when the pilot reported "inside the marker, left base for 1." The tower replied, "in sight, continue, traffic departing." There were no more communications from either aircraft before they collided at 0847:34.

In the absence of a report at or near the outer marker, the controller no doubt believed that the airplane was farther out on the ILS than was actually the case. Thus, when the helicopter reported "coming up on the sports complex," which is about 3 miles south of the tower and 2 miles south of the runway 1 threshold, the controller believed that the helicopter was nearer the airport than the airplane and would cross the base leg for runway 1 well ahead of the airplane. When the pilot of another aircraft reported his position as "8 miles out" southwest of the airport, the controller advised that he remain "well clear" of the ILS course because of traffic inbound on the ILS. Although at that time the accident airplane had already passed the outer marker, the fact that the controller issued this advisory showed that he believed that the airplane had not yet reached the marker.

When the helicopter reported "coming up on the sports complex," it was about 1.6 miles south of the stadium, or about 3.6 miles south of the approach end of runway 1 and nearly 5 miles from the control tower at an altitude of about 700 feet. The phrase "coming up on. . ." is sufficiently vague that it can be interpreted to mean anything from 1/4 mile to 3 miles, and while it meant one thing to the helicopter pilot, it meant something much different to the controller. He stated that he considers the phrase "coming up on" to mean about 1/4 mile away from a point when used by helicopter pilots. The Safety Board believes that when reports of this nature are received, it is incumbent on controllers to report a more specific position. The Board also believes that the Federal Aviation Administration should emphasize to all pilots the importance and necessity of accurate position reporting. Because of the controller's interpretation of "coming up on," it is likely that he perceived the helicopter to be nearly a mile nearer the airport than was actually the case. Although the controller never observed the helicopter, and so advised its crew, he believed the airplane was still outside the outer marker, and he interpreted the helicopter's reported position to be nearly over the stadium. He then concluded that there was no conflict and no need to issue a traffic advisory to either aircraft.

Therefore, the National Transportation Safety Board recommends that the Aircraft Owners and Pilots Association, the National Association of Flight Instructors, the Commuter Airline Association of America, the Helicopter Association International, and the National Business Aircraft Association, Inc.:

Through appropriate educational programs and communications, emphasize to pilots the importance of accurate position reporting in communications with air traffic control facilities. (Class II, Priority Action) (A-82-61)

BURNETT, Chairman, GOLDMAN, Vice Chairman, McADAMS and BURSLEY, Members, concurred in this recommendation.

By: Jim Burnett Chairman