NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

FOR RELEASE: 6:30 A.M., E.S.T., APRIL 23, 1976

(202) 426-8787 ISSUED: April 23, 1976

Forwarded to:

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

SAFETY RECOMMENDATION(S) A-76-56 and 57

About 0126 e.d.t., on May 10, 1975, NAVIK Air, Inc., Flight 11, a scheduled air taxi courier service, crashed 3.3 nmi short of the runway while making a night ILS approach to runway 5R at the Cleveland-Hopkins International Airport, Cleveland, Ohio. 1 The pilot, the only crewmember, was killed during impact. The pilot's 14-year-old son, the only passenger, was seriously injured.

When the aircraft was 15 miles from the outer marker, the Cleveland approach controller cleared the flight for the ILS approach and to contact the tower when passing the outer marker. The pilot's acknowledgement of this clearance was his last radio transmission.

The accident went unnoticed by ATC personnel because the procedures in use did not define the local controller's responsibilities to monitor the radar display in a manner that would insure a positive transfer of control by radar observation. In addition, the aircraft's emergency locator transmitter failed because of crash damage. As a result, ATC personnel could not meet their responsibility to provide the search and rescue services that should have been afforded the occupants of NAVIK 11. Although this shortcoming did not contribute to the cause of the accident or to the loss of life, the Safety Board is concerned that an IFR aircraft under radar control can disappear from a radarscope, crash in the approach sector of a major air terminal, and remain undetected.

At the time of the accident, it was the local controller's responsibility to monitor his BRITE radar display to assure that NAVIK 11 was identified as an arrival aircraft. The controller knew that any arriving flight would be required to call the tower no less than 4 miles from the runway threshold. Although he had assumed the added duties of the ground controller, the workload in the tower cab was light and should not have interfered with adequate monitoring of the BRITE display.

^{1/} For more detailed information on this accident, read "Aircraft Accident Report: NAVIK Air, Inc., Piper PA 23-250, N644N, Cleveland-Hopkins International Airport, Cleveland, Ohio (AAR 76-10)."

Before NAVIK 11's data block disappeared from the BRITE scope, it should have been displayed for 2 to 3 minutes—the time period NAVIK 11 should have been within range of the BRITE display. It must be concluded that the local controller was not monitoring the BRITE display effectively and that, instead, he relied on the pilot's call near the outer marker to alert him to his control responsibilities.

The Safety Board believes that under these light workload conditions the "Quick Look" procedure for arriving aircraft should have been terminated; instead, nonautomated procedures which require verbal coordination for transfer of aircraft from approach to local controller should have been used. The local controller would then have known that NAVIK 11 was inbound and failure of the pilot to communicate, or failure of a controller to see a radar target on the approach path to the runway, would have prompted immediate action to locate the aircraft.

When NAVIK 11 was cleared for the approach, Cleveland Tower was operating under the provisions of Paragraph 1262c(2) of Handbook 7110.8D. Also applicable was a facility directive which set forth communications transfer points.

ARTS facilities have considered the provisions of Paragraph 1262c (1) and (2) most appropriate to their operations and facility directives had been written along these lines. Unfortunately, these facility directives did not define clearly the responsibilities of the local controller, and they did not give him the prerogative of using procedures other than 1262c(2). Therefore, an amendment of Handbook 7110.8D or the facility directive, was needed to clarify the local controller's responsibilities.

On May 14, 1975, FAA issued General Notice N7110.403, which charges the local controller with the responsibility "to monitor the BRITE sufficiently to accept data transfer on arrivals via the Modify or Quick Look functions within the confines of the facility directive or take action to require some other mode of data transfer..."

The notice gives the local controller the prerogative to use any handoff procedure he deems operationally advantageous under given conditions. Furthermore, it defines his responsibility when the "Modify or Quick Look" functions are being utilized. He must monitor his BRITE display sufficiently to accomplish his duties under these procedures.

The Safety Board believes that the action taken by the FAA to define the local controller's responsiblities in using automated handoff procedures as intended will serve to prevent the undetected disappearance of an IFR aircraft under conditions similar to those during NAVIK 11's approach. However, the Safety Board also believes that the Notice would have been more effective had it been explained to all controller personnel that the procedural changes are intended to prevent the undetected disappearance of aircraft under ATC control.

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

- 1. Inform all Tower/Approach Control personnel of the facts and circumstances surrounding the NAVIK 11 accident, placing special emphasis on the local controller's responsibilities when utilizing the "Quick Look" function to acquire data transfer on arriving aircraft. (Class II, Priority Followup)
- 2. Assure that all Tower/Approach Control personnel understand the circumstances of the undetected disappearance of this aircraft and encourage them to make use of the options available to effect transfer of control, including verbal communications, at any time conditions are encountered that do not justify reliance on the "Quick Look" procedure. (Class II, Priority Followup)

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

By: Webster B. Todd, Jr.

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Chairman

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