- 23. No evidence of malfunction of the static system instruments was found.
- 24. There was no evidence of the existence of meteorological conditions severe enough to cause the altimeter to read in error.
- 25. The accident was survivable; however, the captain was not wearing his shoulder harness and died as a result of injuries.
- 26. The aircraft was destroyed by impact and there was no fire.
- 27. Of the four crewmembers on board one died as a result of injuries, one from asphyxiation and two from drowning.

(b) Probable Cause

The National Transportation Safety Board determines that the probable cause of this accident was an unarrested rate of descent due to inattention of the crew to instrument altitude references while the pilot was attempting to establish outside visual contact in meteorological conditions which precluded such contact during that segment of a precision radar approach inbound from the Decision Height.

3. RECOMMENDATIONS

During the latter part of 1968 and the early part of 1969, a rash of serious aircraft accidents occurred during the instrument approach phase of flight. As a result of those accidents, the National Transportation Safety Board, by letter dated January 17, 1969, made a number of

recommendations to the Administrator of the Federal Aviation Administration. Among others, it recommended that the Administrator emphasize the importance of altitude awareness during instrument approaches through strict attention to instrument indications, crew coordination, and altitude callout procedures. Due to the nature of this accident and attendant similarities, the Safety Board recommends that:

- (1) The Federal Aviation Administration reemphasize to air carrier flight-supervisory and pilot personnel the pertinent altitude awareness recommendations set forth in the above-mentioned letter. (See Appendix H.)
- (2) The Federal Aviation Administration issue an Advisory Circular incorporating excerpts of this report, including the findings, stressing to all instrument and airline transport rated pilots the need for continuous surveillance of flight instruments when operating in instrument meteorological conditions.
- (3) The Federal Aviation Administration determine that the Operations Manuals of all air carriers, commercial operators, and air taxi operators are explicit, particularly with regard to altitude callouts when the copilot is flying the airplane during an instrument approach.
- (4) Flying Tiger Line, Inc., amend its flight operations procedures to set forth specifically the responsibilities and duties, particularly with regard to altitude callouts, of both captain and first officer when the latter is flying the aircraft on an instrument approach.

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1. Surreival despects.

2. monothing followed by IFR approach ref. precision:

3. Effect of winds whear on approach (1015 K)

4. G. C. A. assists of accident

5. Effect of max & using beneight vs. wind shear vs.