

This accident emphasizes the necessity for maintaining altitude awareness throughout an approach regardless of the presence of visual reference. The Board believes that this accident would not have occurred if the crew had adhered to optimum procedures and observed MDA penetration criteria in the conduct of the nonprecision approach.

Because of the rapid development of fog at Victoria, the surface visibility at arrival time was considerably less than had been anticipated by the pilot by means of the forecast provided to him during the preflight briefing. While the flight was en route, an amended forecast had been issued, but the pilot did not have advantage of that information.

If the preflight forecast had indicated that the visibility at Victoria was expected to drop to between one quarter and one-eighth mile in fog by arrival time, it is conceivable that the pilot might not have initiated the flight, or might have planned his flight to the alternate destination. Regardless of the forecast, however, the pilot was informed that the visibility had dropped to 1/4 mile in fog prior to the initiation of the approach. The Board believes that the pilot used poor judgment in attempting the approach under the weather conditions which prevailed.

PROBABLE CAUSE

The National Transportation Safety Board determines that the probable cause of this accident was the lack of altitude awareness on the part of the flightcrew while descending into known weather conditions which were conducive to a rapid deterioration in forward visibility. The Board believes that the action of the crew might have been influenced by a visual illusory effect produced by a shallow layer of dense fog, combined with the relative position of the sun.

RECOMMENDATIONS

The number of accidents that have occurred during recent years which have involved an attempted landing approach in weather condi-

tions wherein visibilities near or below specified landing minima is a matter of utmost concern to the Safety Board. The Board has previously made recommendations to the FAA. These recommendations have related to regulatory changes, improved pilot training aids, the promulgation of information regarding specifically defined hazards, and the development of vertical guidance and ground proximity warning hardware. This accident reemphasizes the need for improvement in these areas. The Board, therefore, urges the FAA to reconsider all these previous recommendations for immediate implementation.

As a result of this accident, the Safety Board recommends that:

The FAA ensure widespread dissemination of information to pilots in all segments of aviation regarding the potential hazards associated with weather conditions characterized by a partial obscuration of the sky caused by a shallow layer of dense fog.

The Board acknowledges the FAA's issuance of Advisory Circulars No. 91-25A, and No. 90-60 both of which provide information regarding the loss of visual cues during low visibility landings. The Board believes that a more detailed training-aid should be published which describes the visual illusory effects that can be produced by descent into shallow fog.

The Board notes and supports the FAA in its issuance of Air Carrier Operations Bulletin No. 71-9, which emphasizes the common faults noted in nonprecision approaches and proposes several recommendations to eliminate such faults. The Board believes that this type of information should be promulgated to the general aviation public.

The Board also notes and supports the FAA's Notice of Proposed Rule Making 72-17 entitled Landing Minimums which was issued July 20, 1972, and recommends expeditious action in incorporating these changes to the Federal Aviation Regulations which will restrict the Part 91 operator from initiating an approach when the reported visibility is less than the specified landing minima.