

UNITED STATES OF AMERICA  
NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.

ISSUED: June 26, 1973

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD  
at its office in Washington, D. C.  
on the 6th day of June 1973

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FORWARDED TO: )  
Honorable Alexander P. Butterfield )  
Administrator )  
Federal Aviation Administration )  
Washington, D. C. 20591 )  
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SAFETY RECOMMENDATIONS A-73-44 & 45

A Cessna model 210G, N6801R, crashed near Solvang, California, on March 31, 1973, while executing a VOR approach to the Santa Ynez, California, Airport. Although the National Transportation Safety Board's investigation has not proceeded to the point where the probable cause can be established, we have identified turbulence and downdrafts as causal areas.

The Gaviota VOR (GVO) is the facility upon which this approach is based. The station is located on a steep ridge at an elevation of 2,620 feet m.s.l. The ridge is oriented in an east-west direction. The final approach course of 354° magnetic is virtually perpendicular to the ridge, and the minimum altitude at the station is 3,300 feet m.s.l., or 680 feet above ground level.

The topography of the approach is such that any northerly or southerly winds of 30 knots or more would create strong lee side downdrafts and turbulence. Statements of pilots who are familiar with the area and the approach have confirmed that these conditions are fairly common and are generally associated with cloud cover in the area of the station. Further substantiation of these conditions is found in the postaccident Flight Inspection Report of the Los Angeles, California, Flight Inspection District Office and a recommendation from the Chief, WE-GADO-17, dated December 10, 1969, requesting that the minimum altitude over GVO be raised.

The Safety Board believes that the topography and the approach procedures have created an accident potential. We believe, therefore, that the current approach should be abandoned and that a new approach to the Santa Ynez Airport based on another facility, e.g., Santa Barbara, California, VORTAC, should be developed.

A new approach would represent the optimum solution to the problem. In the event that abandonment of the approach is not feasible, we urge, alternatively, that the minimum altitude at the VOR be raised to afford a minimum terrain clearance of 1,000 feet. The Board believes that the terrain in the vicinity of the GVO VOR meets the definition of "precipitous terrain" as set forth in the TERPS Manual, and, therefore, this action would be justified pursuant to the contents of Paragraph 323(a) of that manual.

We also believe that if the current approach remains in effect, the approach plates should be annotated to warn airmen that turbulence and downdrafts can be experienced in the vicinity of the GVO VOR. This should be done even though the minimum altitude at GVO is raised.

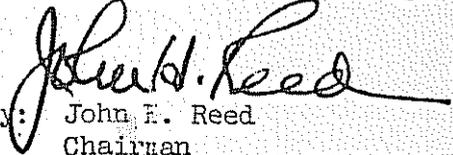
Therefore, the Safety Board recommends that the Federal Aviation Administration:

1. Preferably, replace the presently approved GVO VOR approach at the Santa Ynez Airport with a new approach using another facility or, alternatively, raise the minimum station crossing altitude of the GVO VOR approach to provide at least 1,000 feet terrain clearance at the station.
2. Require annotation of the Santa Ynez Airport approach plates to warn airmen of the likelihood of turbulence and downdrafts in the vicinity of the GVO VOR.

Members of Bureau of Aviation Safety will be available for consultation in this matter if desired.

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.

Reed, Chairman, McAdams, Thayer, and Haley, Members, concurred in the above recommendations. Burgess, Member, was absent, not voting.

  
By: John F. Reed  
Chairman