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NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: September 25, 1980

Forwarded to:

Honorable Langhorne M. Bond Administrator Federal Aviation Administration Washington, D.C. 20591

SAFETY RECOMMENDATION(S) A-80-101 through -104

The National Transportation Safety Board has studied the air taxi accidents which occurred in Alaska from 1974 through 1978. Accident data from the Safety Board's automated aviation accident data system for that period were analyzed by means of frequency distributions. Safety Board staff also visited Alaska to see the conditions under which the air taxi community operates, to discuss the community's attitudes and needs, and to examine the community's interaction with Federal and State agencies. While in Alaska, the Safety Board staff met with officials of the Federal Aviation Administration (FAA), the National Weather Service (NWS), the Alaska Department of Transportation and Public Facilities (DOT/PF), the Alaska Air Carriers Association, and 17 air taxi operators. 1/

The State of Alaska is heavily dependent on its air taxi industry to transport food, medicine, mail, and many other necessities of life to rural villages. Alaska, however, has an air taxi safety problem. During the 5-year period 1974-1978, there were 311 air taxi accidents in Alaska, of which 266 were nonfatal and 45 were fatal, compared with 753 air taxi accidents in the rest of the United States, of which 562 were nonfatal and 191 were fatal. More importantly, the nonfatal air taxi accident rate (per 100,000 flying hours) in Alaska is almost five times higher than the nonfatal air taxi accident rate in the rest of the United States, and the fatal air taxi accident rate in Alaska is more than double the fatal air taxi accident rate in the rest of the United States.

The Safety; Board study concluded that there are three major factors responsible for the high air taxi accident rate in Alaska: (1) the "bush syndrome," (2) inadequate airfield facilities and inadequate communications of airfield conditions, and (3) inadequate weather observations, inadequate communications of the weather information, and insufficient navigation aids. The "bush syndrome" is an attitude on the part of air taxi operators, pilots, and passengers in Alaska that ranges from a casual acceptance of risks to a willingness to take unwarranted risks. Most of the active airports in Alaska are State owned and maintained, and many of their runways are inadequately maintained. Whiteouts, very rapid weather changes, and a scarcity of navigation aids cause pilots to make many off-airport takeoffs and landings in floatequipped and ski-equipped aircraft. The collection and dissemination of weather information and current runway condition information is hampered by a shortage of trained personnel and an inadequate communications system in rural Alaska.

^{1/} For more detailed information read "Special Study--Air Taxi Safety in Alaska" (NTSB-AAS-80-3).

The relationship between the State's air taxi operators and the FAA appears to be strained. Further, because of a lack of permanent FAA inspectors at the rural aviation transportation hubs, there is insufficient opportunity for the FAA to provide guidance to the air taxi operators.

The State of Alaska has recently appropriated, through Chapter 50, SLA 1980, substantial funds for the improvement of the State aviation system, including upgrading of runways and the installation of navigation aids, and weather reporting and communications equipment. A comprehensive State aviation system plan, adequate to implement the intent of Chapter 50, SLA 1980, does not appear to exist. Further, centralized control over, and authority for, developing such a plan does not appear to exist within the current State DOT/PF structure. Cooperation among the State, the FAA, the NWS, and the air taxi operators must be increased if the State is to develop and implement the plan.

Based on the results of this study, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Evaluate, in cooperation with the State of Alaska and the National Weather Service, the feasibility of equipping its flight service stations and the NWS-certified weather observers in rural villages with high-frequency transceivers that have the appropriate frequencies to facilitate the ground-to-ground communication of weather and runway conditions. (Class II, Priority Action) (A-80-101)

Locate and maintain permanently a Principal Operations Inspector and a Principal Maintenance Inspector at Nome, Bethel, Ketchikan, and at as many other regional aviation hubs as possible. (Class II, Priority Action) (A-80-102)

Continue to develop, in cooperation with the National Weather Service, the concept of "meteor burst" technology for transmission of weather observations from rural villages to regional aviation hubs in Alaska. (Class II, Priority Action) (A-80-103)

Continue to develop and improve, in cooperation with the National Weather Service, the technology of the television weather observation system in Alaska. (Class II, Priority Action) (A-80-104)

James B. King Chairman

KING, Chairman, GOLDMAN and BURSLEY, Members, concurred in these recommendations. DRIVER, Vice Chairman, and McADAMS, Member, did not participate.