## NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: May 8, 1980

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Honorable Langhorne M. Bond Administrator Federal Aviation Administration Washington, D.C. 20591	SAFETY RECOMMENDATION(S)
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Because of the burgeoning increase in air taxi and commuter carrier operations, the matter of pilot age and physical condition in Part 135 operations has become increasingly important from the standpoint of aviation safety and the protection of the traveling public.

The Safety Board's investigation of three air taxi/commuter accidents disclosed significant medical problems involving pilots more than 60 years of age.

Studies to assess the effects of aging on human performance have generally been inconclusive. However, the progressive degeneration of certain important physiological functions in humans is important to aviation safety when it may cause sudden incapacitation, such as cardiovascular disease, metabolic disease, and central nervous system disorders. These conditions relate to the ability of a pilot to resist fatigue, to adapt to rapidly changing environmental conditions, and to perform under stress.

On the basis of these physiological factors and other considerations, the Federal Aviation Administration, in 1959, promulgated a regulation restricting the use of the services of pilots in air carrier operations to those under age 60 (14 CFR 121.383). Because the air taxi industry at that time was not a significant factor in transportation and was minimally regulated, it was not included in this regulation. Today, the air taxi/commuter industry has attained a scale of operations which rivals that of air carriers.

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Because of the nature of air taxi/commuter-type operations -- the shorter flight segments, the numerous approaches, landings-and takeoffs, and the relatively low altitudes which subject these flights to more weather-related problems -- the duty day of the pilot in Part 135 operations may be more arduous than that worked by most pilots in Part 121 operations. Even if the flight time and duty time limitations for Part 135 operations are made the same as for Part 121 operations, the equipment and instrumentation of the aircraft often will be less sophisticated. Moreover, pilots may fly certain aircraft in Part 135 operations without a copilot. Consequently, the Safety Board believes that since the rationale used to establish the age limitation in 14 CFR 121 has, in the FAA's opinion, established an acceptable level of safety for commercial operations, this requirement should be equally and immediately applied to Part 135 operations on an interim basis.

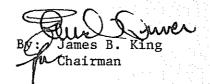
Recently, Congress mandated the National Institutes of Health, in consultation with the Department of Transportation, to further study the aging process with respect to a pilot's ability to safely perform his duties, to determine the efficacy of medical certification of pilots, and to determine the medical need for an age limitation for pilots. The results of this study may well require the FAA to reevaluate the present age limitation rule in 14 CFR 121.383. The Safety Board is of the opinion, however, that the operational environment and operating rules for Part 135 operators are sufficiently different from Part 121 operations to warrant a separate study or expansion of the current study to include the effects of fatigue and stress on pilots engaged in air taxi and commuter operations with a view toward establishing the need for a different age limitation in 14 CFR 135.

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

> Determine through a study of the operating environment and rules for Part 135 operators whether the working conditions of Part 135 pilots are sufficiently different to warrant an age limitation different from that established for Part 121 pilots. (Class II - Priority Action) (A-80-36)

Amend 14 CFR 135.95 to include as an interim measure, pending completion of an appropriate study, an upper age limit for airmen under this Part which provides a level of safety equivalent to air carrier operations. (Class II - Priority Action) (A-80-37)

KING, Chairman, DRIVER, Vice Chairman, McADAMS, GOLDMAN, AND BURSLEY, Members, concurred in this recommendation.



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