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

ISSUED: June 5, 1979

Forwarded to:

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

SAFETY RECOMMENDATION(S) A-79-40

During the last 5 years, the National Transportation Safety Board issued seven safety recommendations (A-74-62 through 64 and A-77-5 through -8) to the Federal Aviation Administration (FAA) regarding procedures involving the medical certification of airmen. These recommendations were the result of Board review of FAA medical records of airmen involved in aircraft accidents and the discovery of irregularities in those records. The Board has been concerned with the frequency of these irregularities, because not only were they errors in the medical examination as performed by the Aviation Medical Examiner (AME) but also they were not detected by the reviewing authority, the Civil Aeromedical Institute.

The most recent safety recommendations regarding procedures in the FAA medical certification of airmen were issued by the Board on February 17, 1977. Recommendation A-77-5 recommended that the FAA develop procedures that would enhance the quality control functions at the Civil Aeromedical Institute with respect to the medical certification of airmen. FAA's response, dated May 11, 1977, noted that the anticipated conversion to a new computer would substantially improve the Civil Aeromedical Institute's capabilities for detecting physical deficiencies in airmen and deficiencies in the performance of AME's. The Board learned that the new computer went into operation on January 1, 1978. A later response, dated June 13, 1978, stated that the computer capability had enhanced the efficiency of the process and had provided a greater level of confidence in the ability of the system to identify medically unfit airmen. This response also noted that the system could provide to FAA Regional Flight Surgeons computer-generated tabulations of the administrative and professional performance of AME's resulting in "AME Profiles" to be used as aids in AME training and control programs.

Honorable Langhorne M. Bond - 2 -

During recent Safety Board investigations of both general aviation and air carrier accidents, our review of the Airmen Medical Records revealed that discrepancies, demonstrating nonadherence to 14 CFR 67 and lack of quality control by AME's and by the Civil Aeromedical Institute, continue to persist despite the revised computerized procedures.

For example, the pilot involved in the Antilles Air Boats, Inc., accident near St. Thomas, Virgin Islands, on September 2, 1978, had been issued a first-class medical certificate on May 9, 1978. The examination indicated that the pilot's distant vision was 20/40 in each eye, correctable to 20/20 with lenses. His near vision was recorded as 20/20 uncorrected. However, the limitation on the certificate stated that the holder must wear correcting lenses for near vision.

A review of this pilot's four previous medical examinations performed at 6-month intervals by the same AME indicated that the AME issued the certificates without limitations pertaining to the distant vision discrepancy despite the fact that the pilot's distant vision had deteriorated from 20/20 in one eye and 20/30 in the other eye to 20/40 in both eyes. The pilot's near vision during the first three examinations had deteriorated to 20/70 but was recorded as 20/20 uncorrected during the last two medical examinations. During the period under review, the limitation on four of the five certificates stated that the pilot must wear correcting lenses for near vision; such a limitation is not described in the Guide for Aviation Medical Examiners.

During the Safety Board's investigation of the Allegheny Airlines BAC 1-11 accident at Rochester, New York, on July 9, 1978, our review of the FAA medical records revealed a discrepancy that resulted in the necessity for postaccident medical evaluations on the surviving pilot to satisfactorily complete the investigation. On the February 1978 physical examination record for this pilot's first-class medical certificate, the distant visual acuity was recorded as 20/200 in each eye correctable to 20/20 with lenses. The AME issued the medical certificate with the appropriate limitations noted despite the fact that vision worse than 20/100 in each eye is disqualifying for both first- and second-class certification without a Statement of Demonstrated Ability. This discrepancy was apparently overlooked by the reviewing authority at the Civil Aeromedical Institute since no action was taken.

The primary concern of the Safety Board in this case was not in the error as noted above, but in the fact that FAA medical records

indicated that the pilot's distant visual acuity apparently had deteriorated from 20/20 to 20/200 in each eye over a period of approximately 1 year in which he received three physical examinations. This rapid change in distant visual acuity is medically significant, and the Civil Aeromedical Institute should have required complete ophthalmologic evaluation for certification. A postaccident evaluation of the pilot's eyes requested by the Safety Board revealed that the distant visual acuity was 20/20 in each eye and that there was no evidence of organic disease.

Because of the Safety Board's concern regarding the continuing irregularities associated with airman medical certification, and because the Civil Aeromedical Institute's review of the medical certification process has not detected such irregularities, the National Transportation Safety Board recommends that the Federal Aviation Administration:

> Develop improved procedures to enhance the quality control function of the Civil Aeromedical Institute with respect to its capabilities for detecting physical disabilities in airmen and performance deficiencies of Aviation Medical Examiners. (Class II - Priority Action) (A-79-40)

KING, Chairman, DRIVER, Vice Chairman, McADAMS and HOGUE, Members, concurred in the above recommendation.