

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: December 10, 1981

Forwarded to:

Honorable J. Lynn Helms
Administrator
Federal Aviation Administration
Washington, D.C. 20591

SAFETY RECOMMENDATION(S)
A-81-154 through -156

On August 18, 1981, the National Transportation Safety Board began a special investigation of the air traffic control (ATC) system of the United States. The Safety Board conducted in-depth studies of 45 ATC facilities to observe the operation of the ATC system under the reduced controller workforce levels. About 220 controllers and supervisors were interviewed in the ATC facilities. Additionally, the Safety Board analyzed the Federal Aviation Administration (FAA) program for the training of replacement controllers, for the management of the current controller workforce, and for programs to detect and control stress and fatigue in the controller population. 1/

The interviews with controllers and supervisors and a review of National Aeronautics and Space Administration (NASA) Aviation Safety Reporting System (ASRS) data indicated that some working controllers were either unaware of the ASRS system or did not appreciate the system's potential to identify safety deficiencies. This was reflected in the comments of the controllers and the review of the data. The Safety Board believes that the ASRS program is an important means to identify safety deficiencies in the National Airspace System. The ASRS program should be a safety tool at each ATC facility, and new controllers coming into the FAA should have a full understanding and appreciation of the ASRS program.

The investigation of the FAA's program to train replacements for the controller workforce indicated that the training potential of the Mike Monroney Aeronautical Center is not being used properly with respect to the assignment of new controllers. The center has the ability to identify trainees who have the potential to work at high-density ATC facilities. This determination, which is based on academic evaluations and the performance of the trainee in the radar training facility, can reduce failure rates by insuring that trainees are assigned to the facilities where they are most likely to succeed. However, the current practice is to assign a student to a facility before the person is evaluated at the training center. As a result, the center's potential to provide accurate trainee evaluation and have an influence on initial assignments is not used. Training personnel at the center cited examples of

1/ For more detailed information, read Special Investigation Report—"Air Traffic Control System" (NTSB-SIR-81-7).

developmental controllers who have shown potential for radar control duty in Terminal Radar Approach Control facilities with high-density traffic being assigned to VFR (visual flight rules) towers. When the subject was discussed with training center personnel, they stated that it was an administrative procedure beyond their control. They stated that a student's grade and instructor evaluations are forwarded to the region for its use. In fact, they stated that one region requested that this practice be discontinued. The Safety Board believes that more emphasis should be placed on the capability of the center to evaluate and recommend placement of trainees. An assignment procedure based on center evaluations should reduce the facility failure rate and make controllers operational in a short time.

The investigation indicated that the over-the-shoulder training evaluation which the FAA uses to monitor the proficiency and training needs of controllers is ineffective. The Safety Board agrees that a formal controller evaluation process is necessary. However, the program must be effective and must provide a means to measure the proficiency and standardization of the controller workforce. Since most controllers and supervisors agreed that the current over-the-shoulder evaluation was not effective, the FAA should develop a new, standardized program which would measure the proficiency and standardization of both the controllers and the supervisors and staff who maintain certification on sectors and operating positions.

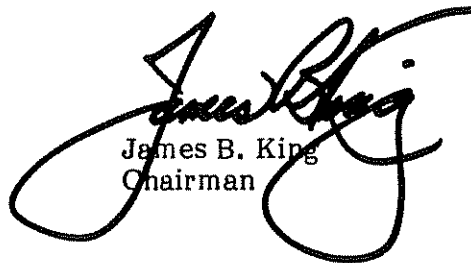
Therefore, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Establish a program to periodically reemphasize use of the National Aeronautics and Space Administration's Aviation Safety Reporting System (ASRS) by controllers to report hazardous conditions. (Class III, Longer-Term Action) (A-81-154)

Adopt procedures and directives to use the student evaluations prepared by training personnel at the FAA controller training center as a placement tool for new controllers. (Class III, Longer-Term Action) (A-81-155)

Establish a periodic formal evaluation process to monitor the standardization of ATC practices and proficiency of controllers utilizing a facility's staff specialists as well as first-line supervisors. (Class II, Priority Action) (A-81-156)

KING, Chairman, DRIVER, Vice Chairman, and McADAMS, GOLDMAN, AND BURSLEY, Members, concurred in these recommendations.



James B. King
Chairman