

STATEMENT OF THE HONORABLE QUENTIN S. C. TAYLOR, DEPUTY  
ADMINISTRATOR OF THE FEDERAL AVIATION ADMINISTRATION, BEFORE  
THE HOUSE SUBCOMMITTEE ON AVIATION, COMMITTEE ON PUBLIC WORKS  
AND TRANSPORTATION, CONCERNING THE AGE 60 RULE. JULY 18, 1979.

Mr. Chairman and Members of the Committee:

I am pleased to appear before you today to discuss what is commonly referred to as the "Age 60 Rule". I welcome the opportunity to set out for you our rationale behind the rule.

Before proceeding with a discussion of the rule and the bases for the rule, I want to take note of the fact that there are a number of pending bills which would have the effect of amending the rule by statute. We are opposed to the enactment of these bills. As I will describe in a moment, we are simply unable to develop a feasible test protocol which would adequately protect the flying public from the risks of declining functional capabilities and increased cardiovascular and other problems associated with advancing age. If we believed more frequent medical examinations or changes in our examinations, as contemplated generally by the pending bills, would provide an accurate assessment of an individual, notwithstanding chronological age, there would not be a basis for the rule and we would take appropriate regulatory action to change it.

I would like to turn now to a discussion of the rule and the bases for the rule. Briefly, the Age 60 Rule (contained in §121.383 of the Federal Aviation Regulations) provides that an individual who has reached his 60th birthday may not serve as a pilot of an aircraft engaged in air carrier operations under Part 121 of the Federal Aviation Regulations. The rule does not prohibit pilots from serving in other capacities with the airlines, though, such as flight instructors, check airmen, or flight engineers.

The rule was adopted on December 1, 1959, and made effective on March 15, 1960. It is an aviation safety rule promulgated in accordance with the Federal Aviation Administration's statutory mandate to promote safety, and in recognition of the statutory duty of air carriers to provide the highest level of safety.

Not unexpectedly, our promulgation of the rule resulted in substantial opposition by airline pilots, culminating in a 1960 suit by the Air Line Pilots Association in which the rule was upheld by the Second Circuit Court of Appeals, and denied certiorari by the Supreme Court. Since that time there have been additional suits by pilots challenging the rule and our refusal to grant individual exemptions from it. In each instance the agency has been upheld. Perhaps equally important

as the concern expressed by the airline pilots, however, was the support of the rule by the airlines and medical organizations.

Though we do not favor rules which have a discriminatory impact, in the nearly 20 years the Age 60 Rule has been in effect we have not been able to find an alternative which will offer equivalent protection to the American traveling public. In fact, support for such a rule on an international level has been recently demonstrated by the International Civil Aviation Organization, an aviation safety body comprised of 144 member states, which in 1978 adopted an age 60 rule for pilots in command as the international standard for commercial aviation.

The safety reasons for the rule were, and remain, several fold: first, there is a deterioration of many functions with age; second, aging is accompanied by an increased frequency of sudden or insidious incapacitation or death from cardiovascular and other diseases; and, third, there is no way to predict, with reliable accuracy, the presence or onset of cardiovascular problems in an individual aging pilot or to detect and measure all of the possible declining psychophysiological functions.

This rule reflects extensive study by the FAA of the aging process and of the safety hazards which could result from using airline pilots age 60 or over. The studies that were reviewed by the FAA, before it was adopted, clearly indicated that there is a progressive deterioration of certain physiological and psychological functions with age, that significant medical defects attributable to this deterioration occur at an increasing rate with advancing age, and that sudden incapacity due to such medical defects becomes significantly more frequent in any group after reaching age 60. In this regard, the Administrator found in 1959 that the possibility of sudden incapacity, "due primarily to heart attacks and strokes, cannot be predicted accurately as to any specific individual on the basis of presently available scientific tests and criteria."

Other factors, even less susceptible to precise measurement as to their effect, but which required consideration in connection with safety in flight, were found to result simply from aging alone and were, with some variation, applicable to all individuals. These related to the loss of ability to perform highly skilled tasks rapidly; to resist fatigue; to maintain physical stamina; to perform effectively in a complex and stressful environment; and to rapidly apply experience, judgment, and reasoning in new, changing, and emergency situations.

Research indicated that some of these human capabilities were retained for relatively long periods of time and in certain cases even improved with age. They seemed to be operative at least from maturity until some ill-defined state of deterioration was reached. In general, however, decline in capabilities was found to begin in early middle life and to continue at a fairly steady rate thereafter. It was recognized that, at some point which may vary from individual to individual, human functions will have deteriorated to a significant degree; a degree that would compromise the safety of airline passengers.

Weighing the available information, the FAA determined that it was not feasible to attempt to individualize assessments of pilots' medical qualifications without regard to chronological age. Accordingly, we found that "establishment of a maximum age of 60 for pilots utilized by air carriers is necessary for safety in air commerce and is in the public interest."

Intervening years have not eliminated the bases that led to the Administrator's decision in 1959. In 1976, despite a perceptible decline in cardiac mortality statistics, the death rate for major cardiovascular diseases was still more than ten

times greater for persons age 55 to 64 than for those aged 35 to 44. By age 65, the number of deaths from these diseases approach the total from all other causes combined. Non-fatal, but potentially incapacitating, cardiac or cerebrovascular events also occur at a comparably increased rate with age. Unfortunately, both fatal and incapacitating episodes frequently are the first evidence of disease, even in persons undergoing regular medical examinations using today's advanced technology. We are still unable to adequately and timely identify those older individuals who represent a hazard to aviation safety.

The validity of our rule has been reassessed on a number of occasions in the context of advancing medical science. For example, in response to petitions from the Air Line Pilots Association (ALPA) and a group of former airline pilots, the FAA held informal public hearings in October 1971 to receive the views of interested persons on proposals to rescind the rule. After analysis of the public comment received, the petition to rescind the rule was denied in March 1972, noting that the testimony and exhibits offered at the hearing in support of revoking the rule were subject to contention. There was strong support for the Age 60 Rule from the Aerospace

Medical Association. Although the FAA considered medical views which were advanced regarding the physical fitness and freedom from disease of pilots as individuals and as a class, we concluded that substantial evidence to the contrary supported retention of the rule.

While the petitions were pending before the FAA, ALPA filed suit in district court to compel the agency to hold a public evidentiary hearing on the current validity of the rule. Both the district court and the court of appeals rejected the suit. Later, in 1976, several pilots filed suit to enjoin the FAA from enforcing the Age 60 Rule and to have the rule declared unconstitutional. Their claims were also denied.

Recently, in 1978, several retired and retiring airline pilots filed suit in different U.S. Circuit Courts of Appeal, challenging the agency's policy of not granting exemptions from the Age 60 Rule. Their arguments included the assertion that present medical knowledge was adequate to allow exemptions from the rule on an individual basis. On December 19, 1978, the U.S. Court of Appeals for the Seventh Circuit, on February 14, 1979, the U.S. Court of Appeals for the Second Circuit, and on March 21, 1979, the U.S. Court of Appeals for the Tenth Circuit, decided in favor of the FAA. In short, the Age 60 Rule has received careful judicial scrutiny and has been

consistently found to be an appropriate response to a still-existing problem.

I might also note that the validity of the rule has been reviewed by successive FAA Administrators who have consistently supported its retention in the interests of aviation safety.

Most recently, during confirmation hearings before the Senate in 1977, Administrator Bond agreed to personally review the Age 60 Rule. That review was completed in September 1977, at which time the Administrator concluded:

"I would favor replacing the age 60 rule with a system based on a psychophysiological age index if I could be satisfied that a proven scientific basis exists and a feasible mechanism could be devised which could replace this rule while providing an equivalent level of safety. From my review of this matter, I am convinced that this capability has not yet been reached.

"The age 60 rule is based on the fact that medical examinations of an individual pilot cannot sufficiently predict his future health and functional capacity.

"This is particularly true by the time one reaches age 60 when most persons suffer from measurable advancing cardiovascular disease and declining psychophysiological performance."

The Administrator also noted that the FAA had been studying the possibility of developing a "physiological age rating" and would continue to do so. In that respect, he stated the following:

"Shortly after the age 60 rule for air carrier pilots was adopted, the FAA initiated studies intended to lead to the development of a 'physiological age rating' which would permit determinations as to which individual pilots might be safe to serve beyond a chronological age cutoff. After five years and \$2.5 million of effort, these studies were critically reviewed with the assistance of a group of expert consultants. As a result of this review and a subsequent review of a related effort funded by the Department of Health, Education and Welfare, the prospect of developing such a rating was seriously questioned. The FAA studies were abandoned in 1966. Since then, the FAA has monitored on-going and completed studies relating to the effect of age on skilled performance and has assisted

by funding one continuing study--the 'Thousand Aviator' study of the U.S. Navy. Information currently available is insufficient to support the development of a psychophysiological age index or a means of predicting the time of occurrence of incapacitating diseases which occur at increasing frequency with advancing age.

"The FAA will continue to encourage pertinent studies, monitor the medical state of the art on the effects of aging, and take whatever actions are clearly supported by the results of scientific investigation."

I want to emphasize today that the FAA is aware of the advances made in medical science during the last twenty years. Indeed, through our professional staff and consultants we have maintained a continuous watch to identify and adopt new concepts which prove to be practical and useful in the medical certification of airmen. However, we are presently unpersuaded by the arguments of individuals seeking elimination of the rule or the granting of individual exemptions from it. They suggest, for example, that cardiovascular risk assessment combined with electrocardiographic (EKG) stress testing and a record of medical examinations extending over a period of time provide sufficient information on which to grant exemptions.

Further, they have argued that the age-related deterioration of the more subtle and unmeasurable psychophysiological factors could be determined through assessing a pilot's performance during regular flight checks. Let me briefly describe, in part, why we have not accepted these arguments.

First, it is important to note that, while sudden incapacitation from heart attack or stroke is substantially more frequent in older age groups and is of major concern to us, it is by no means the only important factor to consider. A pilot may be incapacitated, sometimes subtly and insidiously, even without signs that could be recognized by another crewmember. Degenerative diseases of the nervous system, for example, could cause this. Cardiovascular risk assessment tells us little or nothing about the individual's susceptibility to these conditions. Moreover, flight checks are not an adequate measure for assessment of the important psychophysiological functions. While check airmen are able to ascertain pilot competence in its most obvious sense, they cannot assess subtle changes in psychophysiological functioning. Beyond that, check rides cannot measure pilot performance under all potential routine and emergency situations that could demand faultless functioning. Undetected deterioration of these functions in an otherwise experienced and proficient pilot could have catastrophic consequences.

Most arguments advanced today against the Age 60 Rule seem to focus on cardiovascular risk assessment and the use of electrocardiographic stress testing. A statistical estimate of cardiovascular risk can be obtained by determining an individual's blood pressure, blood lipid levels, glucose tolerance, smoking and exercise habits, age, and level of obesity. The family history is also considered significant. While the assessment results in placing an individual in a statistical group with "greater or lesser" risk of suffering future heart disease, it doesn't necessarily provide an accurate gauge of what will, in fact, happen to that individual.

Exercise stress testing has been frequently proposed as "the answer" to our requirements for a physiological assessment which could permit pilots beyond age 60 to safely transport airline passengers. But, as already noted, it assesses only the cardiovascular system, most particularly the coronary arteries. We believe that this procedure is a valuable tool, and use it extensively in the airman medical certification process. However, despite extensive on-going research into ways of increasing the test's usefulness, there is ample evidence in the medical literature that significant heart diseases can and do go undetected, and conversely that normal

hearts may be falsely labeled as diseased. As there are conflicting views concerning exercise stress testing, we intend to closely follow the significant research efforts in this area.

As we have said before, when practical evaluation procedures allow us to identify those individual pilots who will not be an unacceptable risk to aviation safety beyond age 60, the Age 60 Rule will be amended. Unfortunately, we cannot today accurately identify with an acceptable degree of reliability those unusual persons.

Mr. Chairman, that completes my prepared statement. My associates and I would be pleased to respond to questions you or members of the Committee may have.

