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Before the
FEDERAL AVIATION ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
WASHINGTON, D.C. 20591

In the Matter of the Petition of)
)
Jerry L. Adams, Frank L. Ahern, Andrew A.)
Arthur, David L. Baker, Garry L. Baker, Charles A.)
Bangert III, Robert F. Beagle, Randall L. Bertrand,)
Walter N. Brand, III, Dennis A. Brawford, Donald)
E. Brown, Dallas E. Butler, Willson R. Campbell,)
Guy F. Casey, Eugene R. Cotteen, Arthur A.)
Danley, Jeannie C. deLamos, Alan J. De Sa,)
Robert E. Etwell, Peter R. Fleischhacker,)
Woodson M. Fountain, John J. Fucik, Melvin B.)
Fuller, Lowell A. Gilbert, John W. Gilliam,)
Kenneth C. Har, Woodrow M. Hassinger, Baruch)
Haviv, John R. Houser, John K. Hubert, Charlie)
E. Huff, David H. Jenkins, Robert D. Johnston,)
Edward E. Kirkpatrick, Walter L. Klaus, David E.)
Laird, Richard H. Laumeier, Joseph D. Lea,)
David A. Lippard, Kenneth A. MacGillivray, Joe)
R. McCabe, J. Peter McElroy, Edward E. Moon,)
Philip B. Nash, David P. Nazarian, J. William)
Nelson, Michael L. Oksner, Philip J. Orban,)
Harold Rhodes, Lewis L. Rich, Werner A. Roder,)
Rodney O. Russell, Paul E. Schueler, Richard)
Selph, Laurence E. Senn, William M. Siegel,)
David A. Skilling, Lee Brandon Smithe, Gary E.)
Stamper, Robert D. Stewart, Phil Stotts, William)
Ternes, John R. Ulbinsky, Doyle R. Vaughan,)
Michael L. Waldron, Arthur B. Ward, I. Jay)
Welch, Donald W. Wetmore, and Bert M. Yetman)
)
For exemption from § 121.383(c) of the Federal)
Aviation Regulations)

JAA-00-8016-4

PETITIONERS' EXHIBITS 68-229

VOLUME III

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April 2000

U.S. House of Representatives
Select Committee on Aging
Washington, DC 20515

Telephone (202) 226-3375

July 25, 1985

Mr. Donald Engen
Administrator
Federal Aviation Administration
800 Independence Avenue SW
Washington, DC 20591

Dear Mr. Engen:

As you are aware, the House Select Committee on Aging has been concerned with determining whether the Federal Aviation Administration (FAA) Age 60 Rule represents a mechanism to assure "public safety" or whether the rule represents a form of age discrimination in employment. In contemplation of a hearing by the Committee on issues involving the mandatory retirement of older workers, with a specific examination of the Age 60 Rule, Committee staff members have prepared a number of questions pertinent to the Committee's inquiry into this area based upon your April 26, 1985, letter to me and the medical and scientific basis for the Rule.

I strongly believe that the safety of the traveling public is the primary concern of the federal government. However, it is important to attempt to determine whether present medical technology and testing programs can adequately assure the safety of the traveling public in a manner which does not result in an arbitrary and unsubstantiated imposition of age discrimination against older workers. I am concerned about, and the Committee will explore, whether appropriate mechanisms for medical testing and flight simulation are presently available and can be instituted to assure adequate public safety from all commercial airline pilots regardless of age. Moreover, it should be noted that the FAA presently maintains a testing regime for commercial airline pilots below age 60 who have sustained various disqualifying conditions including cardiac failure, alcoholism and other medical conditions and who may be subsequently recertified upon improvements in their condition.

The following questions and answers thereto will assist the Committee in determining whether some modification or elimination of the Age 60 Rule is appropriate in light of present medical and flight simulation testing programs. While I am aware that the nature of these questions may involve technical, and in some cases, extensive responses, I would like to obtain an expeditious response to this inquiry.

JOHN PAUL HAMMERSCHMIDT, ARKANSAS
RALPH AIGU, ALABAMA
ANTHONY J. DIAMOND, CALIFORNIA
GEORGE J. DUNN, MAINE
JAMES M. LITTON, VERMONT
THOMAS J. TAYLOR, IOWA
GEORGE C. V. JARLEY, NEW YORK
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JOHN MCCANN, ARIZONA
GEORGE W. GEPAS, PENNSYLVANIA
MARK D. SILLANDER, MICHIGAN
CHRISTOPHER H. SMITH, NEW JERSEY
SHERWOOD L. ROSENBERG, NEW YORK
JIM SEXTON, NEW JERSEY
HELEN DELICH BENTLEY, MARYLAND
JIM LIGHTFOOT, IOWA
HARRY W. FAYELL, ILLINOIS
JAN MYERS, KANSAS
BEN BLAZ, GUAM
PATRICK L. SWINDALL, GEORGIA
PAUL B. HENRY, MICHIGAN
JIM KOLBE, ARIZONA
BILL SCHUETTE, MICHIGAN

PAUL SCHLEGEL
MINORITY STAFF DIRECTOR

JORGE J. LANPRINOS
STAFF DIRECTOR



You indicate in your April 26, 1985 response that among other things, "...that there are many 'medical conditions, the onset of which we cannot predict to a sufficient degree to provide an appropriate assurance of safety'." You further indicate that, "Therefore, what is significant is not that there may be some means of predicting or diagnosing some of these conditions, but that for many of these potentially threatening conditions there are substantial limitations associated with accuracy or predictability of the methods available to make such predictions or diagnoses." After citing several examples of medical conditions whose prediction or detection of occurrence are limited by the current state of medical science, you state that, "The frequency of these disorders increases with age." The conditions you listed include: Neoplastic diseases of various body organs; Ischemic cerebrovascular disease; Cerebrovascular conditions that lead to cerebral hemorrhage and subarachnoid hemorrhage; Parkinson's disease; Dementia; Endocrine disorders, to include disorders of the thyroid and pancreas; Cardiovascular disease, including diseases of the coronary arteries and peripheral vascular system.

1. What are the "substantial limitations" associated with the accuracy of the medical testing methods available to make predictions and diagnoses of the listed conditions?
2. What are the "substantial limitations" associated with the practicability of the medical testing methods available to make predictions and diagnoses of the listed conditions?
3. What degree of diagnostic accuracy or predictability is the FAA seeking for the methods available to make predictions and diagnoses of the listed conditions? With respect to other conditions not listed in your letter, for which the FAA testing program is seeking information, what level or degree of diagnostic accuracy or predictability is required by the FAA for such tests. For example, with respect to testing for alcoholism and other drug abuse among pilots, what level of accuracy or predictability is required in your testing program? Please cite examples.
4. Based upon your records, how many cases of each of the above listed conditions have been reported in commercial airline pilots in the past twenty years?
5. Which of the above listed conditions is disqualifying for a pilot's medical certificate? In other words, which require the mandatory revocation of a pilot's medical certificate?

6. If any of these conditions is disqualifying, for which one(s) could a pilot be recertified (granted an exemption or special issuance certificate)? Please provide data concerning the number of pilots who have been disqualified because of any of the listed conditions and whether such pilots have subsequently been recertified. Please provide for each pilot the age at which he was disqualified for the listed condition and the age at which he was recertified.
7. Are commercial airline pilots routinely tested for these listed conditions and if they are, what tests are used to detect or predict the occurrence of these conditions? If pilots are not tested for these conditions, please provide an explanation of why they are not so tested.
8. If they are tested, do the "substantial limitations associated with the accuracy and practicability of the methods used to make predictions and diagnoses of these conditions" apply to those pilots' tests?
9. Based upon your records, generally at what age do these conditions develop in airline pilots? Please provide relevant data on the frequency and age distribution of pilots so affected by these conditions.
10. Based upon your records and other medical knowledge with respect to these conditions, what is the frequency with which these conditions increase with age?

As noted previously, you made reference in your letter to, "medical conditions, the onset of which we cannot predict to a substantial degree to provide an appropriate assurance of safety":

11. What do you mean by a "substantial degree" and "an appropriate assurance of safety"?
12. What degree of predictability of the onset of these medical conditions are you seeking or require with respect to the listed conditions and with respect to other conditions which you test for?
13. What degree of predictability do you have for detecting the onset of these conditions in pilots under age 60?
14. What is meant by your use of the term an "appropriate assurance of safety" and do the regulations, medical instructions or other requirements of the FAA quantify what level of assurance of safety is required with respect to the listed conditions or any other conditions for which there are specific tests administered by direction of the FAA?

15. If there has been some quantification or definition of an "appropriate assurance of safety", on what medical, scientific or other basis was this level of assurance established? In instances of recertification of pilots with disqualifying conditions, how is an "appropriate assurance of safety" determined by the FAA? Has the FAA conducted any medical, scientific or other testing to determine the validity of their standard for the assurance of safety with respect to any disqualifying condition? Please provide copies of any relevant tests upon which the FAA has relied in determining both the recertification for disqualifying conditions and for the testing of validity with respect to such conditions.
16. With respect to the following conditions: myocardial infarction, bypass artery surgery, alcoholism, drug dependence, psychoses, diabetes, angina pectoris, and loss of consciousness without explanation, how many commercial airline pilots have been disqualified and later recertified for one or more of these listed conditions?
17. With respect to those conditions listed in question 19, how many pilots have had their recertification revoked for each such condition? What is the failure or relapse rate among commercial airline pilots with respect to each such condition?
18. What level or degree of "accuracy and practicability" do you require for the methods used to recertify airline pilots who have suffered one or more of these disqualifying conditions?
19. What is the statistical incidence among all commercial airline pilots tested by the FAA of these conditions by category of condition and in the aggregate of all these conditions?

In your letter you note that, "there are a variety of other conditions which typically increase in severity or are aggravated by age, and which, because of their often subtle nature, do not necessarily lend themselves to detection". You further indicate that, "Even if such changes are detected, there is no validated way to relate such information to the specific level of capabilities needed to safely pilot a commercial aircraft". You list examples of these conditions including: Decreased dynamic visual acuity, and acuity under low illumination; diminished visual accommodation and field; a slowing in the ability to process and respond to information; altered speed, capacity or accuracy associated with various aspects of attention, psychomotor performance, memory, and problem-solving ability. With respect to the conditions listed above:

20. Do these conditions occur in pilots under age 60? If so, how often?
21. How are each of these conditions aggravated by age?
22. Are pilots under age 60 tested for these conditions? If not, why not, and if they are, how are they tested?
23. If there is no validated way to relate information gathered from tests for these conditions to a specific level of capabilities needed to safely pilot a commercial aircraft, how is such information gathered from tests given to pilots under age 60 and applied to a specific level of capabilities needed for those persons to safely pilot a commercial aircraft?
24. To what extent do the following functions decrease with age:
 - a. Dynamic visual acuity
 - b. Acuity under low illumination
 - c. Visual accommodation and field?
25. Is it possible to compensate for a decrease in any of these conditions by using corrective lenses or other corrective devices to assure an acceptable level of performance under FAA requirements?
26. What are the visual requirements for airline pilots?
27. Do any commercial airlines employ pilots whose vision is less than those requirements?
28. Are any of the conditions listed in question 30 disqualifying?
29. Have any pilots who have been disqualified for such conditions ever been recertified and put back to full operational status?
30. Are commercial airline pilots tested for the ability to process and respond to information? If so, how are they tested?
31. Are there parameters of acceptable reaction times based upon age that are applied to commercial airline pilots, and if so what are those acceptable parameters?
32. Does the FAA presently test commercial airline pilots to determine whether there are losses or alterations in "capacity", "speed", "psychomotor performance", "memory", and "problem-solving ability"? Does the FAA establish any objective or subjective standards upon which certification of a pilot may be withdrawn based upon testing of those areas noted above?

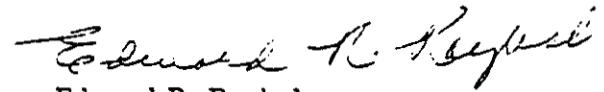
33. With respect to those areas noted in question 30, has the FAA determined, based upon its own tests or other validated medical tests and studies, that increasing age results in a decline in performance in these areas? If so, what were these tests and what were their essential results?
34. To your knowledge and based upon FAA review, has any commercial airline crash been the result of a pilot's failure to adequately perform in the above areas? If so, what was the age of the pilot and the nature of the failure to adequately perform that resulted in a crash?

You indicate in your letter that, "there are varying degrees to which we can predict or diagnose the existence of the kinds of conditions and disorders I have enumerated above. Some of these conditions, of course, are more serious than others from a safety perspective. Moreover, there are different degrees to which different individuals may be afflicted by such disorders. Although conditions such as I have mentioned may be found at any age, the frequency of such disorders does increase with age."

35. With respect to those conditions noted in your letter, does the FAA presently require the administration of any test to determine performance in those areas? If so, what are those tests and what are acceptable performance levels in each of the tested areas?
36. On what basis has the FAA identified the increased frequency of these conditions based upon increasing age? Please cite appropriate studies or other findings.
37. Based upon the FAA's review of its medical tests, what is the frequency of such conditions in the population of commercial airline pilots and at what relative or approximate ages has the FAA found these conditions sufficiently severe to require the decertification of a commercial airline pilot? Please provide data on the age and frequency of such decertifications for each category of condition.
38. In your letter of April 26, you indicate that "...our continued review of scientific literature persuades us that the age 60 rule should not be changed at this time". With respect to this statement, please provide a listing of the "scientific literature" upon which you base your conclusion. If an individual age 60 or older can meet the specific medical, cognitive, physical and other criteria necessary for certification as a commercial airline pilot, why should that individual be precluded from obtaining a pilot's certification for commercial airline piloting?

Thank you for your assistance in responding to these questions for the Committee. While I recognize the extensive nature and scope of the questions posed, because of the need of the Committee to adequately prepare for an anticipated hearing on this subject matter, I would like to obtain an expeditious response to these questions. If you should have any questions regarding this request, please contact Roger Thomas of my staff at 226-3375.

Sincerely,

A handwritten signature in cursive script, reading "Edward R. Roybal".

Edward R. Roybal
Chairman



U.S. Department
of Transportation

Federal Aviation
Administration

Office of the Administrator

800 Independence Ave., S.W.
Washington, D.C. 20591

AUG 26 1985

The Honorable Edward R. Roybal
Chairman, Select Committee on Aging
House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

This is in further reply to your letters of July 25 and 30 to me and of July 25 to Dr. Audie Davis, Manager of the Aeromedical Certification Branch, Civil Aeromedical Institute (CAMI). My answers to the numbered questions in your July 25 letter to me are contained in an enclosure numbered to correspond to yours.

In your letter of July 25 to the Manager, CAMI, you asked for information regarding activities related to your committee's inquiry. You indicated a wide range of interest. In order that you might review CAMI's major projects, I have enclosed a copy of the Index to Federal Aviation Administration (FAA) Office of Aviation Medicine Reports 1961 through 1982 and the most recent supplement. I have also enclosed copies of selected Aviation Medicine Reports that may be of interest to you. Any of the other reports will be provided on request. Currently, CAMI is not engaged specifically in aging research.

You also asked about the information gathered by our designated Aviation Medical Examiners (AME). An airman's medical history and physical findings are recorded by the AME and forwarded to the Aeromedical Certification Branch at CAMI. This documents the airman's certification status and specific medical parameters. In the aggregate, it provides a useful data base for airman population studies and, individually, may be used in aircraft accident investigations to explore the possibility of medical failure as a cause. Further, such population information may be useful in the development of new or revised medical standards.

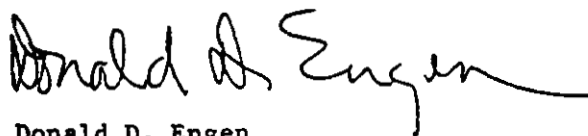
Our data always provide background for the operation of the Medical Certification System. Regulatory changes have, however, been infrequent. Revisions of policy occur regularly with the advancement of technology and our certification data base may reflect the results.

The evaluation techniques used for determining eligibility for medical certification reflect usual medical practice, the recommendations of expert medical specialty groups, and our own experience. Your references to "functional examination methods," "functional standards," and "standards of performance" are unclear in the context of the information collected by AME's. Airman performance evaluations, of course, are accomplished in accordance with applicable nonmedical regulations.

In your letter of July 30, you asked for any documents from our records pertaining to the age 60 rule, aging, pilot health, and exemptions from the age 60 rule. These files are voluminous and exist in several agency elements. In view of this, a member of your staff may wish to review the desired files. Copies of individual documents will be provided on request. Arrangements for access to the records may be made by contacting Dr. Jon L. Jordan of my staff at 426-3537.

I trust that this information is responsive to your request.

Sincerely,

A handwritten signature in dark ink, appearing to read "Donald D. Engen", with a long, sweeping horizontal line extending to the right.

Donald D. Engen
Administrator

4 Enclosures
Transmitted Correspondence

Response to Questions contained in Chairman Roybal's July 25, 1985, letter to Administrator Engen

1. Medical evaluative procedures rarely, if ever, attain 100 percent sensitivity or specificity. Usually, much lower values are achieved. For some conditions, there are no "tests."
2. Some evaluation procedures would require tests or batteries of tests that may have limited availability and/or high cost. In addition, some tests may adversely affect an individual's health and may be life threatening.
3. The FAA accepts the results of procedures used by recognized medical experts and evaluates the individual airman's eligibility for certification in the light of all objective information available and of the subjective opinion of the physicians involved or consulted. This includes consideration of the strengths and weaknesses of all techniques used. Diagnoses of alcoholism or drug abuse are complex and based in great part on the individual's history and on all medical findings. No one test is diagnostic.
4. The FAA has not compiled data on the listed conditions which have been reported in commercial airline pilots in the past 20 years. Provided for your information, however, is a January 1983 FAA report entitled Characteristics of Medically Disqualified Airline Pilots. (FAA-AM-83-5)
5. None of the listed conditions requires "mandatory revocation" of a pilot's medical certificate.

All conditions that are specifically disqualifying for airman medical certification are listed in Part 67 of the Federal Aviation Regulations (FAR). A copy is provided.

6. An airman may be recertified after any medical condition has stabilized and he or she has been found to present an acceptable risk in terms of aviation safety. The FAA has not compiled comprehensive or age specific data on pilots who have been disqualified because of the listed conditions and subsequently recertified. However, a copy of the FAA's 1983 Aeromedical Certification Statistical Handbook which contains some data regarding medical certification actions in respect to certain medical pathologies (see, e.g. Tables III.E. and III.G. of the Handbook) is provided. Also provided is a copy of related data made available to the Committee in response to an October 18, 1983, request.
7. Airmen exercising airline transport pilot certificates must possess valid first-class airman medical certificates. The medical standards are listed in Part 67 of the FAR. The scope of the examination is discussed further in the Guide For Aviation Medical Examiners, a copy of which is provided. Tests or examinations not routinely administered may be required if medical history or findings indicate they are appropriate. Only those tests likely to be of value and which are not invasive or unduly expensive are routinely obtained.

8. Yes.
9. The FAA does not have data on the age at which the listed conditions develop in airline pilots.
10. See answer to Question 9.
11. The terms used were "sufficient degree" and "appropriate assurance of safety." The words were used in the Administrator's letters of April 26 and February 25, to point out that there are substantial limitations associated with the accuracy or practicability of the methods available to make diagnoses or predictions, and that these limitations are unacceptable in the context of aging and the highest degree of airline safety.
12. The FAA seeks to determine in the light of everything known about the individual that the likelihood of incapacitation, of any type or degree, is sufficiently low to permit acceptance in airline operations. This philosophy would be the same for any component of the man-machine flight system. It applies to any or all conditions, known or unknown, that potentially could produce incapacitation of the airman.
13. Our diagnostic and evaluation techniques and capabilities are the same, regardless of age. Unfortunately, the possibility of underlying disease increases with age.
14. See the answer to Question 12. Such risks have not been quantified objectively.
15. An appropriate assurance of safety, in the context of medical certification, is determined through review by medical experts of all pertinent information and the formulation of prognosis through the application of experience and judgment. The validity of our procedures is demonstrated by the very low known incidence of in-flight medical incapacitation among airmen. We know of no other "testing to determine the validity" of our approach to safety that could be accomplished.

The FAA may use any known and professionally accepted medical technique to evaluate an airman for medical certification. In any given case, those used would reflect the diagnosis, the history and findings, our experience, and usual medical practice. Medical evaluative techniques are described in various textbooks and journals.

16. The FAA has not compiled, nor does it possess the necessary data elements to compile, data on all commercial airline pilots who have been disqualified and later recertified for one or more of the listed conditions. Provided, however, is a copy of related data made available to the Committee in response to an October 18, 1983, request.

17. See answer to Question 16.

We are unable to determine true "failure or relapse rates" because airmen leave the system without advising the agency of the reasons.

18. The FAA uses those techniques available, recognized as useful by the medical community, and recommended by appropriate medical specialists for the evaluation of airmen with the various conditions. We require that these procedures be conducted and interpreted according to accepted medical standards. The final certification decision is based on all available information regarding the airman, the recommendations of experts, and on collective agency experience and judgment.
19. The FAA has not compiled data on the statistical incidence among all commercial airline pilots tested by the FAA of the listed conditions. See, however, information provided in response to Questions 4., 6., and 16.

Statistical incidence among all commercial airline pilots cannot be determined since airmen leave the system without advising the agency of the reasons.

20. As noted in the Administrator's letter of April 26, those conditions were noted to be found at any age but to increase in frequency with age. In the paragraph preceding this question, the April 26 letter is quoted regarding the often subtle nature of the conditions, their increase in severity or aggravation by age, and the difficulty in their detection. Accordingly, we do not know how often the conditions occur in pilots under age 60.
21. Increases in frequency and severity are associated with aging.
22. No pilots are routinely tested for these conditions other than through standard required medical examinations. If such examinations or the medical history provide evidence of dysfunction, more extensive evaluation is required. Again, changes may be subtle and difficult to detect.

Additional evaluations may include psychiatric evaluation, psychological testing, and more extensive ophthalmological examination.

23. See answer to Question 18.
24. The measurements listed, in research projects, show increasing decrements with age of the subjects. Note the material in our Report No. FAA-AM-77-6, Psychophysiological Effects Of Aging: Developing A Functional Age Index For Pilots: I. A Survey of the Pertinent Literature, and its bibliography for details. A copy is provided.

25. The visual requirements for airman medical certification are contained in Part 67 of the FAR. They provide for the use of corrective lenses for static distant visual acuity and near visual acuity (loss of accommodation). We know of no correction for field losses, dynamic acuity, or specifically for loss of low-light acuity.
26. The visual requirements for airline pilots are contained in Part 67 of the FAR (copy provided).
27. An individual must possess a valid medical certificate of the appropriate class to exercise the privileges of an airman certificate. Therefore, a company may not utilize as a pilot one who does not possess a valid medical certificate. A certificate may be issued, however, under the provisions of section 67.19 ("waiver") of the FAR, to an individual who does not meet the standards.
28. Question 30 does not contain a list of conditions.
29. See answer to Question 28.
30. In a general sense, airmen are tested for their ability to process and respond to information through their written application for medical certification and their completion of the medical examination and through their ability to pass required airman examinations and checks.
31. No.
32. The listed parameters are considered intact if the airman successfully passes the required airman examinations and checks. For certain conditions, further specific testing and evaluation may be possible and indicated if the individual manifests some evidence of decrement or, by behavior, raises suspicion. Medical certification will be withdrawn if it is determined, through any means, that the individual's performance has become a risk to safety because of a medical condition. Of course, airman privileges may be lost if the individual manifests poor performance for any reason.
33. The ability to process and respond to information declines with age. This finding is contained in the scientific literature. See FAA Report No. FAA-AM-77-6 for a report of a survey.
34. The cause of many aircraft accidents is attributed to pilot error. The agency believes that some of these accidents can be attributed to a failure in the pilots' processing of and response to information. A discussion of the psychological factors involved in pilot proficiency and in accident causation is contained in FAA Report No. FAA-AM-78-16, Psychophysiological Effects Of Aging - Developing A Functional Age Index For Pilots: II. Taxonomy Of Psychological Factors. A copy is provided. For information regarding specific aircraft accidents, the National Transportation Safety Board (NTSB) is responsible for accident investigation and is the repository for related information.

35. The FAA relies on its requirements for periodic medical certification and practical airmanship demonstrations to maintain airman health and performance. In respect to the medical conditions listed, this includes a review of medical history and a physical examination with certain ancillary tests according to the class of medical certificate sought. The reference to specific "performance tests" is unclear, but the examination would include measurements of the required visual parameters and of hearing, while less specific tests are as noted in the answers to Questions 30 and 32. The Guide For Aviation Medical Examiners and Part 67 of the FAR include discussions regarding the findings and their acceptability.
36. The increased frequency with age of the various medical conditions is noted throughout the medical literature. The National Center For Health Statistics regularly publishes age-specific mortality and morbidity data which confirm this observation.
37. See answers to Questions 4., 6., 16., and 19.
38. A "listing of the 'scientific literature'" is not practical. FAA consultants and staff regularly review various medical journals and communicate with other members of the medical community. FAA Reports No. FAA-AM-77-6, FAA-AM-78-16, and FAA-AM-78-27 include extensive bibliographies. These reports are provided.

Numerous formal studies and reviews of this issue have been made over the years, all with similar results and with recommendations for retention of the age 60 rule since no acceptable basis for change has been identified or developed. Most recently, the National Institute on Aging issued the report of its Panel on the Experienced Pilots Study which included an extensive literature review and bibliography. This study again confirmed the agency's view that there is no practical testing methodology for a variety of conditions which may affect aging pilots. The Panel concluded that age-related changes in health and performance influence adversely the ability of an increasing number of individuals to perform as pilots with the highest degree of safety and, consequently, could endanger the safety of the aviation system as a whole.

QUESTION #8
Airline Pilots
ALCOHOLISM

	First Exemption		2nd Exemption or Special Issuance		3rd Exemption or Special Issuance	
	Granted	Terminated	Granted	Terminated	Granted	Terminated
United Airlines	90	7	4	1		
American Airlines	33	9	4	2		
T. W. A.	59	9	5	-		
Delta Airlines	14	4	2	1		
Continental Airlines	10	1	1	1		
Pan American Airlines	47	8	3	-		
Eastern Airlines	34	8	6	2	1	1
Northwest Airlines	8	1	-			
Braniff Airlines	15	1	-			
Republic Airlines	28	5	4	2		
Western Airlines	14	4	1	-		
Ozark Airlines	5	2	-			
Flying Tiger Airlines	9	4	3	1	1	1
U. S. Air	15	3	2	-		
Piedmont Airlines	5	4	2	1		
Alaska Airlines	4	2	1	-		
Texas International	5	2	2	1	1	
Frontier Airlines	2	1	-			
Air Wisconsin	1	-				
Shawnee Airlines	1	-				
Pacific S.W. Airlines	1	-				
Big Sky Airlines	1	-				
Hawaiian Airlines	2	-				
Wein Air Alaska	1	1	-			
Airlift International	1	-				
Transamerica Airlines	2	-				
Britt Airlines	1	-				
Seaboard World	1	1	-			
Total	409	77	40	12	3	

[16 of the terminations were due to medical conditions other than a relapse in sobriety.]

QUESTION #13

SPECIAL ISSUANCE Airline Pilots

<u>Date of birth</u>	<u>Employer</u>	<u>Medical Condition</u>	<u>Class</u>	<u>Limitations</u>
12-3-29	United Airlines	Alcoholism	I	None
11-27-42	"	"	"	"
10-6-47	"	"	"	"
2-6-41	"	"	"	"
7-12-42	"	"	"	"
4-11-28	"	"	"	"
9-27-30	"	"	"	"
8-31-41	"	"	"	"
11-18-28	"	"	"	"
11-22-37	"	"	"	"
1-21-24	"	"	"	"
4-19-41	"	"	"	"
11-18-33	"	"	"	"
4-29-36	"	"	"	"
7-16-32	"	"	"	"
5-12-35	"	"	"	"
3-31-42	"	"	"	"
5-2-32	"	"	"	"
9-19-40	"	"	"	"
10-27-24	"	"	"	"
3-18-37	"	"	"	"
8-22-27	"	"	"	"
12-3-29	"	"	"	"
8-4-37	"	"	"	"
6-25-38	T.W.A.	"	"	"
5-9-40	"	"	"	"
8-21-33	"	"	"	"
4-12-29	"	"	"	"
8-4-39	"	"	"	"
12-25-35	"	"	"	"
11-21-41	"	"	"	"
7-7-34	"	"	"	"
12-12-41	"	"	"	"
11-23-37	Pan American	"	"	"
8-8-37	"	"	"	"
1-12-32	"	"	"	"
9-27-32	"	"	"	"
10-30-38	"	"	"	"

**SPECIAL ISSUANCE
Airline Pilots**

<u>Date of birth</u>	<u>Employer</u>	<u>Medical Condition</u>	<u>Class</u>	<u>Limitations</u>
8-8-41	Pan American	"	1	None
10-17-36	"	"	"	"
10-27-43	"	"	2	"
9-9-29	"	"	1	"
3-21-38	"	"	"	"
9-3-43	Continental Airlines	"	"	"
5-28-40	"	"	"	"
5-12-39	"	"	"	"
6-4-43	"	"	"	"
4-14-39	"	"	"	"
10-19-39	"	"	"	"
2-22-40	"	"	"	"
12-23-26	"	"	"	"
11-18-41	American Airlines	"	"	"
9-9-44	"	"	"	"
2-21-33	"	"	"	"
12-19-37	"	"	"	"
3-17-33	"	"	"	"
11-29-36	"	"	2	"
4-14-33	"	"	1	"
8-18-30	Eastern Airlines	"	"	"
3-28-30	"	"	"	"
10-20-34	"	"	"	"
7-1-38	"	"	"	"
1-8-30	Republic Airlines	"	"	"
3-12-31	"	"	"	"
1-20-39	"	"	"	"
7-23-47	"	"	"	"
11-23-41	"	"	"	"
2-15-44	"	"	"	"
3-21-36	Delta Airlines	"	"	"
3-14-36	"	"	"	"
2-27-38	"	"	"	"
12-21-31	"	"	"	"
11-10-42	"	"	"	"
3-23-36	"	"	"	"
12-12-37	"	"	"	"
3-2-37	"	"	"	"

**SPECIAL ISSUANCE
Airline Pilots**

Date of birth	Employer	Medical Condition	Class	Limitations
9-21-24	Delta Airlines	Alcoholism	1	None
1-22-36	"	"	"	"
10-20-39	"	"	"	"
6-8-36	U. S. Air	"	"	"
2-13-30	"	"	"	"
12-17-44	"	"	"	"
12-10-43	"	"	"	"
7-11-40	"	"	"	"
8-29-25	"	"	"	"
7-31-43	"	"	"	"
12-14-29	Western Airlines	"	"	"
9-10-35	"	"	"	"
9-23-39	"	"	"	"
7-24-42	"	"	"	"
8-28-35	Flying Tiger Airlines	"	"	"
5-23-36	"	"	"	"
5-8-35	"	"	"	"
9-7-41	Northwest Airlines	"	"	"
4-7-37	"	"	"	"
11-20-43	Cascade Airways	"	"	"
9-1-43	"	"	"	"
6-27-48	Pacific Southwest Airlines	"	"	"
11-4-38	Hawaiian Airlines	"	"	"
9-15-27	Air Florida	"	"	"
5-20-51	Metro Airlines	"	2	"
2-5-46	Transamerica Airlines	"	1	"
6-2-26	Astro-Wing Airlines	"	"	"
9-6-45	Air Wisconsin	"	"	"
1-21-47	Ozark Airlines	"	"	"
2-20-24	"	"	"	"

**SPECIAL ISSUANCE
Airline Pilots**

<u>Name</u>	<u>Date of birth</u>	<u>Employer</u>	<u>Medical Condition</u>	<u>Class</u>	<u>Limitations</u>
	5-12-32	Eastern Airlines	Nervous condition	1	None
	1-31-30	Britt Airways	Chronic Depression	1	None
	6-11-53	Northwest Airlines	Emotional problems	1	None
	9-19-35	Northwest Airlines	Criminal Sexual conduct	1	None
	10-30-31	Delta Airlines	Phobic condition	1	None
	4-9-48	American Airlines	Drug Abuse	2	None
	2-9-41	Republic Airlines	Personality Disorder	1	None
	12-25-28	Pan American	Seizure	1	None
	10-19-31	Republic Airlines	Subarachnoid hemorrhage	1	None
	10-20-34	Braniff Airlines	R. carotid occlusion with cerebral bypass	1	None
	7-13-24	Braniff Airlines	Transient ischemic attack	2	Flight engineer duties only.
	2-27-28	T.W.A.	Adenocarcinoma	2	Flight engineer duties only.

14402
1710
⑥

**SPECIAL ISSUANCE
Airline Pilots**

<u>Date of birth</u> 9-19-33	<u>Employer</u> Pan American	<u>Medical Condition</u> Myocardial infarction	<u>Class</u> 2	<u>Limitations</u> 2nd class limited to flight engineer duties only. 2nd class limited to flight engineer duties only. None
10-12-28	Pan American	Myocardial infarction	2	2nd class limited to flight engineer duties only.
2-4-34	Republic Airlines	Myocardial infarction	1	None
2-25-33	Republic Airlines	Myocardial infarction	2	None
9-4-25	United Airlines	Myocardial infarction	2	2nd class limited to flight engineer duties only.
2-19-32	United Airlines	Myocardial infarction	2	2nd class valid for flight engineer duties only.
6-6-36	Northwest Airlines	Myocardial infarction	1	None
11-29-38	T. W. A.	Myocardial infarction	2	2nd class valid for flight engineer duties only.
2-1-34	United Airlines	Myocardial infarction and angioplasty	2	Not valid for pilot-in-command.
3-5-36	World Airways	Myocardial infarction	2	2nd class valid for flight engineer duties only.
4-20-36	United Airlines	Coronary artery bypass graft surgery	2	Not valid for pilot-in-command.
9-18-39	Pan American	Coronary artery bypass graft surgery	1	None
6-7-31	Pan American	Coronary artery bypass graft surgery	2	2nd class valid for flight engineer duties only.
9-1-39	Pan American	Coronary artery bypass graft surgery	2	Not valid for pilot-in-command.

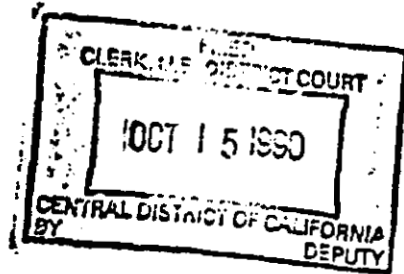
SPECIAL ISSUANCE
Airline Pilots

<u>Date of birth</u> 6-1-30	<u>Employer</u> Delta Airlines	<u>Medical Condition</u> Coronary artery bypass 1 graft surgery	<u>Class</u> bypass 1	<u>Limitations</u> None
2-12-30	Delta Airlines	Coronary artery bypass 1 graft surgery	bypass 1	None
5-7-34	Delta Airlines	Coronary artery bypass 1 graft surgery	bypass 1	None
5-23-41	Plying Tiger Airlines	Coronary artery bypass 1 graft surgery	bypass 1	None
12-7-28	Frontier Airlines	Coronary artery bypass 1 graft surgery	bypass 1	None
4-11-35	Delta Airlines	Coronary artery bypass 2 graft surgery	bypass 2	None
3-21-32	United Airlines	Coronary artery bypass 2 graft surgery	bypass 2	2nd class valid for flight engineer duties only. None
5-15-23	American Airlines	Coronary artery bypass 2 graft surgery	bypass 2	2nd class valid for flight engineer duti- only. 2nd class valid for flight engineer duti only. None
5-19-22	World Airways	Coronary heart disease 2 and LBBB	disease 2	None
3-16-36	Western Airlines	Coronary artery disease 2	disease 2	None
9-18-21	American Airlines	Porcine aortic valve replacement	valve 1	None
3-14-28	United Airlines	Coronary atherosclerosis 1 and abnormal ECGs	atherosclerosis 1	None
11-14-39	Britt Airlines			

(2)

ORIGINAL

1 Karen H. Baker
2 Assistant General Counsel
3 Equal Employment Opportunity Commission
4 1801 L Street, N.W.
5 Washington, D.C. 20507
6 (202) 663-4770



7 IN THE UNITED STATES DISTRICT COURT
8 FOR THE
9 CENTRAL DISTRICT OF CALIFORNIA

9 EQUAL EMPLOYMENT OPPORTUNITY)
10 COMMISSION,)

11 Plaintiff,)

12 v.)

13 LOCKHEED CORPORATION,)

14 Defendant.)

C.V. NO. 90-5253 TJH (Gx)

DECLARATION OF
FRANK H. AUSTIN, JR., M.D.

For hearing October 22, 1990
3:00 p.m.

15 1. I am Frank H. Austin, Jr. I am Crew Systems Manager for
16 the National Aeronautics and Space Administration (NASA) Space
17 Station Program. My address is 10701 Park Ridge Boulevard, Reston,
18 Virginia 22091. My office telephone is 703/487-7243.

19 2. I am a physician, and am licensed in Texas and
20 California. My specialty is Preventive Medicine and Aerospace
21 Medicine. I am a former naval aviator test pilot and flight
22 surgeon for the U.S. Navy, from which I retired in 1978.

23 3. I was the Federal Air Surgeon for the Federal Aviation
24 Administration from October 1, 1984 through February 2, 1987.

25 4. Attached to this declaration is a copy of a letter, with
26 two pages of attachments, that Stanley R. Mohler, M.D. sent to me
27 on November 19, 1984. On this letter are handwritten comments.

28 I wrote those comments on November 24, 1984.



1 5. Tthe first page of attachments to the letter is a piece
2 entitled "No Medical Basis for Age 60 Rule." The piece argues that
3 "with the new modern medical and flight technology [freedom from
4 impairing disease, ability to perform and motivation to fly] can
5 easily be determined in a given pilot." I wrote the handwritten
6 comments, that appear above and after the statement "There is no
7 medical basis for the age 60 rule, "True in 1984," and "True." The
8 same statement is repeated at the end of the piece, and my
9 handwritten comment, "True," follows it. At the end of the piece,
10 I wrote the following handwritten comments:

11 I believe this and Adm. Engen believes this. He wants to keep
12 the age 60 rule now. I will support the admiral in his
13 position. When it can be done - age 60 will be eliminated (I
14 think!) Its an ECONOMIC Issue! FA

15 6. I sent my handwritten comments to Dr. Mohler by returning
16 the original document to him. I understand that a copy of this
17 document was later submitted to the Federal Aviation Administration
18 in support of pilots' requests for medical exemptions from the "Age
19 60 Rule" that prevents pilots from flying airliners after they
20 reach that age.

21 I declare under penalty of perjury that the foregoing is true
22 and correct. Executed on October 10 1990.

23 
24 Frank H. Austin, M.D.

RIGHT
STATE



November 19, 1984

Frank H. Austin, Jr., M.D.
1409 Trap Road
Vienna, VA 22180

Dear Frank:

Enclosed are two items that consolidate some of my thinking on certain questions.

With best regards,

Stanley R. Mohler, M.D.
Professor and Vice Chairman
Department of Community Medicine
Director, Aerospace Medicine

SRM/mem

Inclosures

PETITIONER'S
EXHIBIT

69

11/24/84
Cm returned to Mr

11/24/84

Stan -
you are great - keep
it coming. Sorry the ERA was
got scratched. We'll do better.
We are working hard to realize
the certification process
keep in touch!

Stan

in Omaha
at office

✓ your comments about
American Airlines
VTRC Super Study (DRB)
were right on!!!!
His editorials are
almost as Acid
as yours! (used to be!)

NO MEDICAL BASIS FOR AGE 60 RULE

True in 1984

There is no medical basis for the age 60 rule. The age 60 rule is an operational rule, FAR 121.* Today there is no medical basis for the rule. The only factors determining a pilot's safety are:

1. Freedom from impairing disease;
2. Ability to perform; and
3. Motivation to fly

With the new modern medical and flight technology, these three can easily be determined in a given pilot, as is the case with the 500 alcoholic airline pilots, the coronary bypass and post-myocardial infarction pilots, and the pilots with other various conditions.

If the operations people want to continue to fight for the rule, let them make their own case, as there is no longer a medical basis for it. *True*

*I believe this + Adm. Engen believe this
He wants to keep the age 60 rule now.
I will support the Admiral in his position
When it can be done - age 60 will be eliminated
(I think!)*
It's an ECONOMIC Issue!

*FAR 121.383 (applies only to pilots, not flight engineers)

THE OFFICE OF AVIATION MEDICINE SHOULD REPORT DIRECTLY TO THE ADMINISTRATOR.

The Office of Aviation Medicine covers broad aspects of FAA responsibilities that include those of Air Traffic Control, Office of Personnel, Research and Development, and Employee Health. ^{These are outside the purview and expertise of the Associate Administrator for Aviation Standards.} ^{Not so.} The organizational demotion of the Federal Air Surgeon's office in 1979 produced an administrative layer that consistently hampers and impedes the efficient operation of the Office of Aviation Medicine. ^{Not so.} Part of the present program problems of adequate staffing and funds that face the Federal Air Surgeon may be traced directly to resource drains by the interposed Associate Administrator for Aviation Standards. ^{Not so.}

Recommendation: Office of Aviation Medicine should report directly to the Administrator.

Pete + you both advised me this would be the
first order of business. Not so! I'm
very comfortable with the support + staff
available to me in AFS. Let's put this to
SLEEP till we may need it LATER if +
when the AFS (not the present group) are
not supportive!
My first priority (after CIVILIZATION MESS)
is to get CAMI under FTS. It will be same!
70

Hartford Hospital

ATTN: BOARD OF DIRECTORS

June 27, 1986

Frank E. Austin, Jr., M.D.
The Federal Air Surgeon
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Dear Frank:

Please be advised that I am supporting the petition of AMAN et.al. in changing the "age 60" rule, which prevents commercial airline pilots from exercising their skill in command of commercial aircraft.

In the Summer of 1980, while I was still on active service as a naval reserve flight surgeon, I testified as an expert on aging and flying, as I was still studying the "1000 Aviator" population at Pensacola, Florida. Enclosed is a photocopy of a report which you already may have read.

In brief, selected individuals after age 60 who are physically qualified and aeronautically adaptable can continue to fly safely and effectively. I believe that the Federal Aviation Administration has the knowledge and capability to revise an existing, inflexible rule, and allow capable captains continuing their efforts in the cockpit.

Sincerely,



Elihu York, M.D., Director
Occupational Medicine/Employee Health

EY:mb

Enclosure



7/2/86
Thank you for your input Elihu!
However - it is not a medical
rule its operational, and to date the
Administration has not wanted to
change the operational rule. The
petition is being studied by OPS &
Legal & will be responded to
in due course. We will continue
to discuss the medical
issues with the
Grand Jury
Dr.

Population aging and health

Robert N Butler

International
Longevity Center
(U.S.), Mount Sinai
Medical Center,
New York,
NY 10029, USA
Robert N Butler,
chief executive officer
robert.butler@
smplink.mssm.edu

BMJ 1997;315:1082-4

10/25/97

Trends in population aging

People in industrialised nations are living longer than ever before. In this century alone, average life expectancy from birth has increased by more than 25 years, and nearly five of those 25 years has been added to average life expectancy from base age 65. Indeed, the most rapidly growing age group comprises those aged 80 and above, and in some countries people over the age of 100 are leading the way in the rate of population growth by age. In most parts of the world women tend to live longer than men—nearly seven years longer in industrialised nations. In addition, reports from Japan, the United States, and Europe show that people are living not only longer but more healthily. In the United States, for example, the rate of disability has decreased noticeably despite population aging (fig 1).

Unfortunately, the developing world has not enjoyed the same revolutionary increase in longevity. None the less, 60% of people aged 60 and older live in developing countries—which have huge populations—and this percentage is expected to rise to 80% towards the middle of the next century. The marked inequalities in life expectancy between the developed and developing worlds, as well as discrepancies in life expectancies within particular nations, correlate with inequalities of wealth and income, and these in turn are associated with how much or how little education and access to health care the populations have. Many countries already have at least 10% of their populations aged 65 and older (table). Figure 2 shows the rapidity of the projected percentage increase in the population aged 65 and older in the developing world. Figure 3 details the dramatic growth of the population aged 80 and over. As it is in this population that disabilities and dementias increase markedly, this figure illustrates the dramatic impact of population aging on health care.

Western societies with declining birth rates are approaching the point where older people will soon

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Summary points

People in all parts of the world, and particularly in industrialised nations, are living longer than ever before

This unprecedented population aging trend has profound effects on society and its institutions, including health care

Biomedical research and better healthcare measures, as well as other factors, have enabled people to live longer and reduced disability rates

Increased life expectancy, however, brings new challenges, including longer lifetime exposure to toxic agents and greater demands on healthcare systems and social entitlements

Individuals, society, government, and the research community all have a responsibility to meet these challenges and improve the quality of life

outnumber children. This unprecedented trend in population aging has profound effects on society and its institutions, such as the state of the economy, delivery and use of health services, pension systems, family life, medical research agendas, end of life decision making, private and public resource allocation, and living arrangements. One especially critical concern is the perceived role of population aging in driving up "unsustainable" health costs, although so far technology is the main cause of rising health expenditures.

Countries with at least 10% of population aged 65 and over in 1994 (adapted from Hobbs F et al²)

Country	Total population (000s)	% aged 65 and over
Western Europe		
France	57 840	15.4
Germany	81 088	15.4
Italy	58 138	15.9
Poland	38 655	10.9
Spain	39 303	14.7
Sweden	8 788	17.5
United Kingdom	58 135	15.8
Eastern Europe		
Russia	149 609	11.6
Ukraine	51 847	13.8
Asia:		
Japan	125 107	13.7
Americas		
Canada	28 114	12.1
United States	261 090	12.7
Uruguay	3 199	12.2
Middle East		
Israel	5 051	10.2
Oceania		
Australia	18 007	11.7

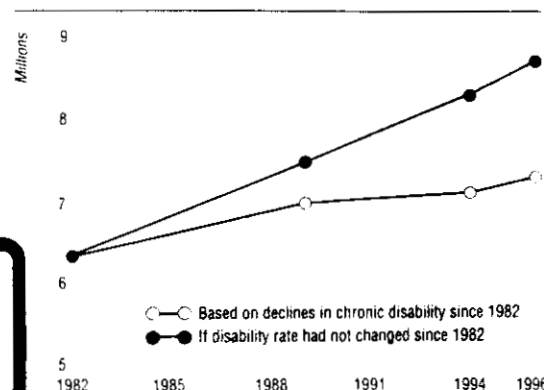


Fig 1 Number of chronically disabled Americans aged 65 and over, 1982-96 (total number of Americans aged 65 and over was 26.9 million in 1982, 30.8 million in 1989, 33.7 million in 1994, and 34.1 million in 1996). Reproduced with permission of *Proceedings of the National Academy of Sciences of the United States of America* from Manton et al¹



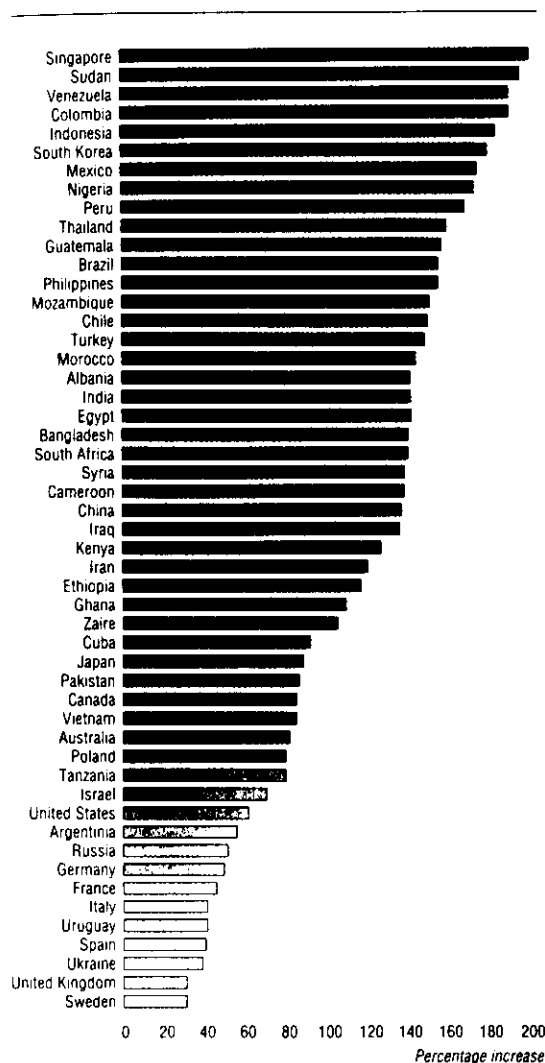


Fig 2 Projected percentage increase in populations aged 65 and over, 1994-2020. Adapted from Hobbs et al¹

Impact of health on population aging

The age structure of any society's population depends on birth rates, death rates, and net migration in or out of the society. Population aging was first the result of declining birth rates and was first noticed in France in the 1830s. But by the 20th century population aging was widespread in industrialised nations because of both lower death rates and lower birth rates. Lower death rates were due in part to an increase in people's consumption of calories. It has been estimated, for example, that in preindustrial France as many as one third of the population had inadequate caloric intake. One of the consequences of the industrial revolution was the increased availability of food, followed by increased stature and greater longevity. In addition, there is synergy between inadequate nutrition and higher susceptibility to infection. With higher caloric consumption, the incidence of infection declined. Infectious diseases were reduced still further with modern sanitation and the increased availability of immunisations, antitoxins, immune sera, and, later, antibiotics.

Gradually the early cruelties of industrial factory life, such as overcrowded living conditions and the

resulting spread of infectious diseases, began to decline. Material existence began to improve with the growth of the middle class in Europe, North America, and Japan. The availability of pension funds, access to health care, and medical research further increased average life expectancy. By the 1970s the earlier marked reductions in maternal, childhood, and infant mortality were joined by reductions of up to 50% of deaths from heart disease and stroke. Both disease driven and basic biomedical research, including the biology of aging, continue to reduce disability and mortality. Hip replacements, angiotensin converting enzyme inhibitors, and intraocular implants illustrate the practical applications of such research. Moreover, the decline in disability rates along with the availability of social entitlements have improved the quality of life. None the less the extent of frailty and dementia accompanying population aging continues to prompt concern over quality of life issues and healthcare expenditures associated with late life.

Impact of population aging on health

Clearly, advances in health have promoted population aging. However, the reverse—the impact of population aging on health—is more difficult to describe. With population aging came the possibility of a longer lifetime exposure to various potential toxic agents, either recognised or unrecognised. This is particularly true of tobacco and food substances such as fats. Tobacco contributes to heart disease and stroke as well as cancer of the lung and chronic pulmonary disease. The modern high fat diet has been associated with heart disease and certain cancers, such as colon cancer and possibly breast cancer. Other aspects of lifestyle, too, over time, have an impact on health. Lack of exercise leading to physical deconditioning contributes to the chronic diseases of late life. Osteoporosis or bone thinning, sarcopenia or muscle thinning, and inadequate cardiac conditioning, for example, all follow from a lifetime of inadequate physical fitness. Indirectly, population aging could also have adverse effects on the health of populations in general if society does not allocate resources effectively and fairly along the life span, to ensure that children and older people receive the resources they need. Surprisingly, there is not a propor-

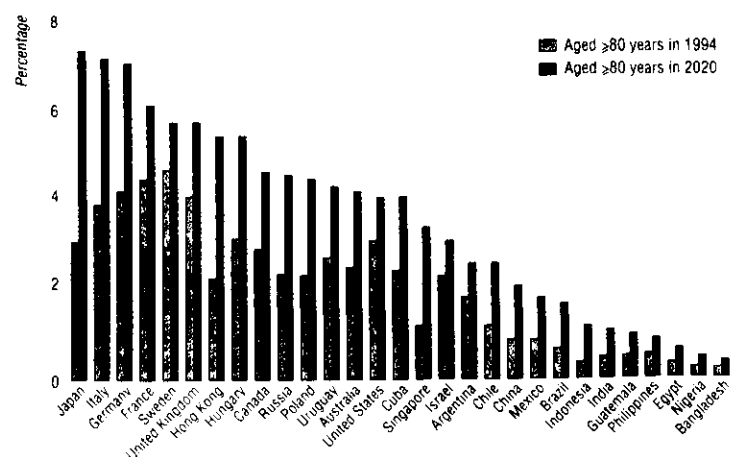
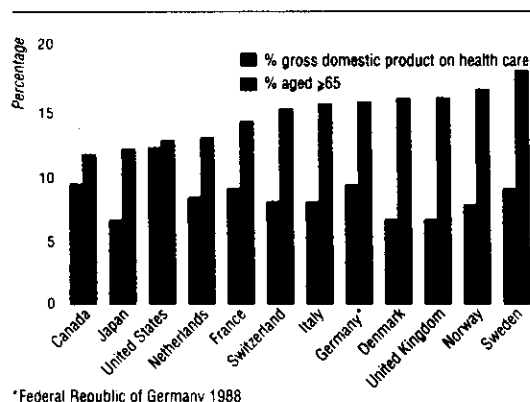
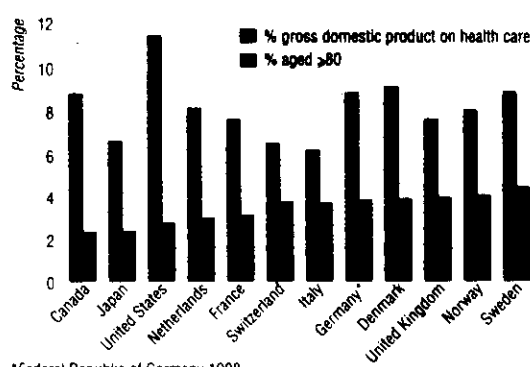


Fig 3 Percentage of population aged 80 and over, 1994 and 2020. Adapted from Hobbs et al¹



*Federal Republic of Germany 1988

Fig 4 Selected nations ranked by percentage of population aged 65 years and older, compared with percentage gross domestic product spent on health care, 1990. Reproduced with permission of Binstock³



*Federal Republic of Germany 1988

Fig 5 Selected nations ranked by percentage of population aged 80 and older, compared with percentage of gross domestic product spent on health care, 1989. Reproduced with permission of Binstock³

tionate relation between the percentage of older people and the percentage of gross domestic product devoted to health care, according to Binstock (figures 4 and 5). Administrative costs, profits, the healthcare delivery system, and society's commitment to health care are among the factors that partially account for this discrepancy.

Despite population aging, however, healthcare policymakers in various nations have not generally constructed ideal systems of geriatric medicine and long term care (only Britain has a well developed specialty in geriatrics), and much remains to be done. Links between acute and long term care services—the two pillars of comprehensive geriatrics—need to be made. While families are the primary caregivers, their capacities to be caregivers to older people have changed in response to modern conditions such as the entry of women—the traditional caregivers—into the workforce. Therefore, expansion of hospital services, nursing homes, and community based services, as well as assisted living housing—for example, blocks of flats with meal and other services for frail and disabled residents—are recognised in most industrial countries as being necessary adaptations to population aging.

One common goal of long term care programmes in industrialised countries is the prevention of impoverishment. A major exception is the United States, where the only available public funding is part of public assist-

ance for the poor (Medicaid). About half of bills for nursing home costs and an even greater proportion of bills for the cost of home care are paid privately and without insurance, whereas some other industrialised nations have publicly supported programmes of social and personal care—for example, respite care, home help, adult day care—and services are allocated according to individual need, not ability to pay. Sweden has one of the most systematic approaches to long term care, with a range of services for elderly people, including nursing homes and housing.

Different nations have tackled the financing of long term care in different ways. In Germany public long term care insurance predominates, whereas in Britain commercial long term care insurance has burgeoned. In Australia, long term care is provided mostly by the private sector (profit and non-profit organisations), and includes retirement villages, hostels, and nursing homes operated by voluntary agencies and private corporations, with state governments providing a smaller portion of services. In contrast, in 1990 the Japanese government announced a 10 year "golden plan" for the welfare of elderly people and in 1997 legislated on a public long term care insurance plan modelled on Germany's.

Taking responsibility for population aging

Sustaining a growing older population is the responsibility of everyone—from the government, to the private sector, to individuals themselves. As people are living longer they clearly must plan to take better care of themselves throughout life. They must prepare financially by saving and investing more and working longer. They must also take some responsibility for their health by adopting healthy habits early in life and maintaining them throughout life. Strong relations seem to exist between having goals and structure in life and a person's health, longevity, and higher quality of life. Societies will be able to sustain longer life expectancies and population aging better if people not only prepare for their old age but are encouraged by society to remain productive through paid work or voluntary activities.

Government and the private sector should assume more responsibility in assuring less disability in late life by making greater investments in medical research. The benefits of medical research for older age groups will derive principally from efforts to reduce frailty and dementia, which today are people's greatest fears about old age. Once Alzheimer's disease and the other dementias are preventable or treatable, the negative imagery associated with individual and population aging will be dramatically reduced. For countries to respond effectively to population aging, they must make further investments in geriatrics and biomedical research. This necessitates systematic reforms in healthcare delivery as well as disease prevention and health promotion efforts and a reversal in the current trend of cutting research budgets.

- 1 Manton KG, Corder L, Stallard E. Chronic disability trends in elderly United States populations, 1982-1994. *Proc Natl Acad Sci USA* 1997;March;25:93-8.
- 2 Hobbs F, Damon B. 65+ in the United States. In: *Current Population Reports*. Washington, DC: US Bureau of the Census, 1996;23-190.
- 3 Binstock RH. Health care costs and the elderly. In: Butler RN, Grossman L, Oberlink MR. *Life in an older America*. New York: Twentieth Century Fund (in press).



U.S. EQUAL EMPLOYMENT OPPORTUNITY COMMISSION
Washington, DC 20507

OCT 14 1993

Office of
Chairman

Federal Aviation Administration
Office of Chief Counsel
Attention: Rules Docket (AGC-10)
Docket No. 27264
800 Independence Avenue, S.W.
Washington, D.C. 20591

To Whom It May Concern:

As Chairman of the U.S. Equal Employment Opportunity Commission (EEOC or Commission), I am writing in response to notices published in the Federal Register¹ soliciting comments about whether the Federal Aviation Administration (FAA) should initiate rulemaking about its regulation commonly referred to as the Age 60 Rule, 14 C.F.R. 121.383(c) (1993). The Age 60 Rule bars individuals who have reached their sixtieth birthday from serving as pilots or copilots in flight operations governed by Part 121 of the FAA's rules, typically commercial flights.

The Commission has long been concerned about the impact of the Age 60 Rule on pilots and copilots.² The Commission enforces the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. 621 *et seq.* (ADEA) and also provides leadership and coordination for all Federal agencies' EEO programs under Executive Order 12067. The Executive Order requires the FAA to coordinate with EEOC to insure that its rules are consistent with the Commission's

¹ 58 Fed. Reg. 21,336 (1993) and 58 Fed. Reg. 33,316 (1993).

² The Commission's longstanding interest in the Age 60 Rule is demonstrated in public testimony, comments, and statements including: Testimony of Constance L. Dupre, Associate General Counsel, EEOC, Panel on the Experienced Pilots Study, National Institute on Aging, National Institutes of Health, May 27, 1981; EEOC's Final Interpretations of the Age Discrimination in Employment Act of 1967, 49 Fed. Reg. 47,724 (1981); EEOC Comments on the FAA's Advanced Notice of Proposed Rulemaking at 47 Fed. Reg. 29,784 (1982); Testimony of former EEOC Chairman Clarence Thomas before the House Select Committee on Aging, October 1985; August 12, 1986 letter from former EEOC Chairman Clarence Thomas to former FAA Administrator Donald Engen urging the FAA to grant a petition by 39 pilots for exemptions from the Age 60 Rule so they could participate in a controlled study envisioned by the National Institute of Aging panel.



interpretation of the ADEA. For the reasons set forth below, I urge the FAA to initiate rulemaking about its Age 60 Rule and to lift the age 60 limit for commercial pilots and co-pilots.

The ADEA prohibits employment discrimination against individuals at least 40 years of age. Under the ADEA, it is unlawful for an employer to have a maximum age limitation for its employees unless the employer can establish that the age limitation is a bona fide occupational qualification (BFOQ) "reasonably necessary to the normal operation of the particular business." 29 U.S.C.A. 623 (f)(1) (West 1985). An EEOC regulation sets forth what an employer must prove to establish that age is a BFOQ:

That (1) the age limit is reasonably necessary to the essence of the business, and either (2) that all or substantially all individuals excluded from the job involved are in fact disqualified, or (3) that some of the individuals so excluded possess a disqualifying trait that cannot be ascertained except by reference to age. If the employer's objective in asserting a BFOQ is the goal of public safety, the employer must prove that the challenged practice does indeed effectuate that goal and that there is no acceptable alternative which would better advance it or equally advance it with less discriminatory impact.

29 C.F.R. 1625.6(b) (1992).³

The EEOC does not believe that a chronological age limitation for commercial pilots is a BFOQ because pilot skills and health can be assessed accurately on an individual basis, regardless of age. Indeed, the FAA itself relies on individualized testing as a basis for issuing medical certificates to people of all ages, including those age 60 and above, who serve as pilots in non-Part 121 flight operations. Moreover, in Commission litigation challenging pilot age limits imposed by employers whose flight operations are not governed exclusively by Part 121, the EEOC's experts have testified that Class I medical testing is fully sufficient to identify health or performance problems that may surface for pilots regardless of age. These experts also have stated that, to the extent further testing may be desirable, cardiac stress tests, enhanced blood

³ The EEOC's standard was cited with approval by the Supreme Court in Western Air Lines, Inc. v. Criswell, 472 U.S. 400, 416-17 (1985) (affirming a judgment that Western Airline's mandatory retirement rule for flight engineers did not qualify as a BFOQ).

work-ups, and neuropsychological screening could be added to the standard battery of Class I tests for all pilots.⁴

As a result of the Commission's enforcement efforts under the ADEA, pilots over the age of 60 who had been restricted by company age limitations now fly in a variety of flight operations not governed by Part 121. Individuals over the age of 60 serve as pilots of experimental test flights in high performance military aircraft, fly jumbo jets both in testing and in certain passenger operations not subject to Part 121, and pilot corporate jets.

In litigation brought by the Commission under the ADEA challenging the Boeing Company's policy of removing pilots at age 60 from flight status in non-Part 121 operations, the U.S. Court of Appeals for the Ninth Circuit held that the FAA's Age 60 Rule did not establish a BFOQ as a matter of law. EEOC v. Boeing, 843 F.2d 1213 (9th Cir. 1988). This litigation was resolved in 1990 with a consent decree under which qualified Boeing pilots are permitted to remain on flight status up to their 63rd birthdays. Boeing will reassess this age policy in 1995. Subsequent to the entering of a similar consent decree in EEOC v. Rockwell Int'l. Corp., C.A. No. 91-0760 MRP (C.D. Cal.), the Commission has refused to consider any settlement that would involve a pilot age limitation of less than age 65.⁵ In fact, in the most recent consent decree of this type, which was entered in EEOC v. Grumman Corp., C.A. No. 92-1034 (E.D.N.Y.), all pilot age limitations were eliminated.⁶

The report titled "Age 60 Project, Consolidated Database Experiments, Final Report" (Hilton Report), recently prepared for the Civil Aeromedical Institute of the FAA, supports the conclusion that the age 60 limit for pilots is not defensible as a BFOQ under the ADEA. Based on careful statistical analysis, this report found

⁴ Those employers that have resolved EEOC litigation by entering into consent decrees lifting age 60 policies are using such additional tests for certain groups of pilots, including but not limited to those over age 60, to develop data about their health. See infra discussion of EEOC litigation.

⁵ See EEOC v. Lockheed Corp., C.A. No. 90-5253 TJH (C.D. Cal.) (consent decree raised age limit to 65); EEOC v. McDonnell Douglas Corp., C.A. No. 91-0450 TJH (C.D. Cal.) (consent decree raised age limit to 65 for pilots at Douglas Aircraft Company Division).

⁶ The Commission also entered into a conciliation agreement with McDonnell Douglas Corporation to eliminate pilot age limitations at the company's McDonnell Aircraft Company Division. During the course of directed investigations, Northrop Corporation, General Dynamics Corporation, United Technologies Corporation, and General Electric eliminated their pilot age limitations.

"no hint of an increase in accident rate for pilots of scheduled air carriers as they neared their 60th birthday."⁷ This conclusion is especially significant in light of the report's avowedly conservative interpretation of the data.⁸

In sum, the Age 60 Rule should be lifted by the FAA. Medical and proficiency tests on an individual basis are effective and non-discriminatory ways to assure that commercial pilots maintain the highest standards of safety at all ages.

Because the Age 60 Rule has precluded the development of data about pilots in Part 121 flight operations who are age 60 and older, raising the age limit for Part 121 pilots to age 65 for a specific period of time as a transitional measure may be a reasonable interim step.⁹ This would allow commercial pilots to continue flying beyond age 60 while the FAA plans a full transition to individualized testing. While the Hilton Report cautiously recommends raising the age limit to 63, the data presented does not support an age 63 limitation under the ADEA. Moreover, an age limit of 63 would likely bar development of sufficient health and safety data about commercial pilots over the age of 60 to assess the need for any pilot age limits at all.

I look forward to working together with the FAA on this important matter in the future.

Sincerely,


Tony E. Gallegos
Chairman

⁷ Hilton Report at 6-2.

⁸ Id.

⁹ The Commission's position is that age cannot be a BFOQ for commercial or any other pilots because pilot skills and health can be accurately assessed on an individual basis, regardless of age. However, as noted earlier, the Commission has settled litigation after the employer agreed to increase the pilot age limitation to age 65, thereby allowing the development of data about the health and safety record of pilots over age 60. See infra at pages 2 - 3.

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 06/14/86 PAGE 1

EMP CODE	DOB	WATV NO
UAL	280722 401	98315
OTHE	531128 400	78015
COMA	521215 400	38115
DAL	420510 100	18615
FAL	331203 400	18415
USA	470730 100	58515
TWA	421129 101	18115
OTHE	590924 100	08315
OTHE	590112 100	48615
BRIT	510618 30F	38515
REP	510908 100	58315
OTHE	630806 20F	88325
OTHE	570321 100	48515
OTHE	550814 100	58015
PDA	320308 100	08015
OTHE	330812 100	38215
CAL	361102 100	78115
OTHE	240228 101	78015
PLTX	571219 100	68515
REP	311122 101	68115
OTHE	491129 400	18515
REP	410729 400	28515
OTHE	480626 400	18015
OTHE	550305 100	08225
OTHE	330828 101	48415
OTHE	500122 100	38115
EAL	281121 408	28315
OTHE	250312 100	48315
OTHE	300727 400	08415
OTHE	340605 101	78115
OTHE	561028 30F	38615
OTHE	460914 400	38015
EAL	321123 400	58215
NWA	390210 100	08315
UAL	370816 100	08215
OTHE	550605 100	28325
OTHE	410910 300	98215
AAL	260117 438	08415
OTHE	230713 400	48115
UAL	270903 100	38615
UAL	291216 401	58115
OTHE	541014 100	88315
ANV	410801 301	98015
OTHE	360612 100	08115
MSA	460410 400	38015
OTHE	310410 100	48615
OTHE	570622 400	08415
OTHE	530405 30F	18015
OTHE	610905 400F	58415
OTHE	580818 400	08315
REP	591229 100	48615
KORA	281128 101	58115
TWA	340705 400	78115
AAL	350223 101	08215

PETITIONER'S
 EXHIBIT
 73

EMP CODE	DOB	WATV NO
AWC	430429	400 98215
OTHE	291228	100 48415
OTHE	501107	100 08115
UAL	520812	35D 98015
OTHE	531004	30F 58115
TRAA	250703	408 08215
OTHE	590709	30F 38015
OTHE	560811	100 48025
DAL	290211	401 68415
OTHE	530814	100 38515
TWA	371208	341 58415
REP	311227	100 08115
EAL	391017	100 28215
OTHE	450319	100 48415
UAL	381224	401 68315
REP	360225	408 68415
BRIT	421102	30F 88315
REP	510516	4CF 88115
PION	340103	400 38515
OTHE	470205	400 78315
TWA	330410	300 38515
WAL	380322	101 28115
OTHE	530822	400 88415
PAI	491101	30F 98115
DAL	370323	401 48015
OTHE	560905	100 68615
OTHE	470619	100 98315
UAL	330624	101 78415
COMA	521215	100 48115
OTHE	581008	100 68125
FAL	481226	10F 88515
OTHE	500125	100 78515
OTHE	600602	400 28015
OTHE	510311	100 78115
UAL	400704	301 28515
UAL	380815	408 28315
OTHE	581111	100 18615
OTHE	590423	101 78415
OTHE	480222	400 78515
OTHE	421114	171 48615
OTHE	460902	100 58515
OTHE	551208	400 68015
OTHE	540916	100 88415
UAL	411014	100 08115
CAL	280131	101 68115
MSA	550802	400 98315
AAL	400617	100 28315
OTHE	620106	100 48615
OTHE	590330	100 18515
AWC	561114	100 48515
OTHE	550709	30F 58215
EAL	381227	30X 78515
PAI	50809	400 88515

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 06/14/86 PAGE 3

EMP CODE	DOB	WAIV NO
OTHE	560522 10F	28615
USA	470316 100	N8115
OTHE	530818 30F	68015
OTHE	390618 30I	08315
DAL	271027 40B	88315
DAL	290228 300	88015
UAL	390829 100	18215
PAI	541223 30F	68115
OTHE	630301 400	78125
OTHE	500102 400	18115
OTHE	421129 100	38115
OTHE	600619 100	18025
OTHE	620226 21F	38015
OTHE	541222 100	58025
UAL	310907 400	38015
REP	301229 40I	88115
PAI	540616 100	08015
AAL	550926 30F	38215
CAL	460123 35F	78515
XXXX	220429 40B	18415
OTHE	570417 100	68515
OTHE	531211 150	58215
OTHE	611105 30F	18415
UAL	220612 100	78115
OTHE	400926 100	48315
DAL	320412 30F	28215
NORA	640125 100	08225
OTHE	550221 30F	68415
OTHE	290603 100	18325
OTHE	330705 100	58325
TWA	280825 10I	78115
DAL	410919 10I	88415
REP	330915 40B	58015
OTHE	610426 100	48515
OTHE	600606 400	48215
WAL	360625 10I	48115
AAL	340608 100	N8315
AWC	450403 40B	D8015
OTHE	540930 100	88115
OTHE	610314 100	28525
OTHE	421201 40B	N8115
OZA	280501 40B	D8115
OTHE	560706 100	98225
OTHE	460416 400	38415
OTHE	430105 100	48315
WAL	440104 30F	48615
OTHE	621122 100	78325
OTHE	510509 100	48125
REP	471218 100	38615
OTHE	491222 10I	N8315
OTHE	550628 300F	08415
OTHE	620716 300	18415
REP	280623 400	N8315
OTHE	550329 100	38415

EMP CODE	DOB	WAIV NO
OTHE	630405 100	58615
EAL	600216 30F	38215
OTHE	560203 30F	48115
NVA	481209 400	38615
AAL	550104 32F	98315
OTHE	500115 30F	68015
OTHE	420610 100	48615
OTHE	610714 100F	NR125
REP	530809 100	18015
EAL	550711 400	88015
FAA	230102 43D	38415
AAL	310720 43B	48315
OTHE	561114 100	28615
OTHE	351218 101	98315
REP	320806 400	18015
OTHE	470224 331	38015
OTHE	411224 101	58515
PION	340808 100	38515
NVA	360926 100	D8215
TWA	290305 401	08015
OTHE	550416 100	D8315
NVA	400307 408	48115
DAL	240914 428	48215
OTHE	430624 400	38215
OTHE	530306 30F	28015
MSA	571129 400	98415
UAL	320331 401	28415
EAL	320714 321	18415
BRIT	561001 400	78415
REP	501231 300	88515
OTHE	540929 32D	58615
OTHE	620225 100	D8315
EAL	410516 100	D8315
ZAN	610125 400	D8115
REP	340423 301F	D8115
FTLX	600408 400F	38515
AAL	280925 10F	58515
COMA	600315 400	D8415
PION	520714 30F	58015
OTHE	610625 400	48415
OTHE	270611 401	88415
OTHE	371012 400	78515
OTHE	451126 10F	78115
OTHE	570110 30F	38515
SWA	571223 400	98015
BHA	530926 100	28125
ASA	391101 100	38615
BHA	570925 400	18415
OTHE	570709 30F	88015
OTHE	510821 400	48015
OTHE	580331 33F	78215
OTHE	520209 33F	48515
CAL	910229 301	28515
REP	0616 30F	D8115

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 06/14/86 PAGE 5

EMP CODE	DOR	WAIV NO
BNF	340319	100 58515
PAI	300111	30F 98515
EAL	340613	400 28015
EAL	380507	408 58415
FAL	320323	101 38215
OTHE	561016	400 08115
UAL	391017	100 88515
ASA	570330	100 78415
BNF	250320	101 78015
OTHE	341008	100 28315
PDA	340215	100 38615
OTHE	570720	400 38515
OTHE	221103	100 98015
OTHE	300708	408 58615
ZAN	590713	30F 58015
EMR	481201	400 08315
TWA	331226	100 78215
OTHE	410803	401D 68015
OTHE	470516	100 18115
AAL	581208	30F 78015
AAL	321004	100 98315
OTHE	270610	101 78415
UAL	370103	100 58515
OTHE	630814	400 08415
HAI	320107	408 48615
OTHE	571027	100 38125
OTHE	500423	100 58615
EAL	330904	301 38515
REP	310828	100 28615
OTHE	590511	100 48615
CAL	610901	400 38315
EAL	290208	400 08415
OTHE	560709	100 18215
OTHE	500209	100 78115
REP	350101	400 88315
KORA	330712	408 68415
PDA	590907	30F 18215
UAL	250324	100 78215
OTHE	421214	100 38415
OTHE	600607	14D N8315
BNF	291129	101 48115
OTHE	551002	100 38115
OTHE	600628	300 68515
OTHE	471027	100 08115
OTHE	320923	400 N8015
OTHE	560919	400 48515
WAL	401016	400 38615
OTHE	560119	400 38115
AAL	370706	100 08015
OTHE	590501	30F 68115
OTHE	560915	100 68615
UAL	340807	100 98115
OTHE	471017	101 38215
OTHE	451128	100 78415

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 06/14/86 PAGE 6

EMP CODE	DOR	WAIV NO
OTHE	570815 40D	08515
HAI	491008 37F	28115
OTHE	600527 40D	28415
AAL	521121 30F	08015
EAL	411119 40D	98215
EAL	231122 40I	88115
CAL	290530 10I	38615
REP	610907 40D	98415
USA	590727 10D	08515
OTHE	630116 40D	18615
OTHE	220621 40D	N8115
OTHE	260925 10D	48615
EAL	360707 30D	N8415
AWC	550805 40D	48015
PSA	321120 40D	18515
DAL	250424 10D	98115
PDA	330814 10I	98115
BSKA	471216 10D	38115
TWA	401009 10D	08515
FAL	341127 40B	38215
OTHE	510617 10D	48215
OTHE	590124 30F	68115
TWA	250921 10I	98215
PAI	421129 10D	48315
USA	350730 40B	18215
OTHE	601226 40D	38315
CAL	540303 30I	28115
BRIT	531006 40D	08115
OTHE	550623 10D	38125
CAL	230501 10D	28215
EAL	531116 40D	88515
OTHE	600803 40D	98315
PAI	611113 40D	58215
REP	560202 30F	98415
DAL	580126 40D	78315
INDU	421014 10D	88315
BNF	331004 10D	48415
OTHE	390419 10D	48115
ACA	441214 10D	88515
PDA	300503 40I	08515
PAI	540109 10D	08215
OTHE	560928 10D	18215
OTHE	480902 40D	58415
UAL	211030 40I	38115
OTHE	430728 10D	48615
OTHE	511121 30Y	78515
OTHE	590928 10D	28615
PDA	611231 40D	18515
OTHE	490103 40D	88415
REP	260907 40D	48615
PDA	380203 40B	38515
INDU	540808 10D	58315
NYA	540418 40D	18115
JAL	10426 10D	38115

EMP CODE	DOB	WATV NO
EAL	560402 400	28015
AAL	580912 30F	58215
TWA	380811 30I	58415
OTHE	580905 30D	38215
AAL	361112 10F	28015
OTHE	461210 400	88315
OTHE	601103 400	78415
EAL	320703 400	08515
SPEN	431110 40IF	98115
OTHE	481218 100	28415
CAL	340920 40D	38115
PDA	330616 10I	58015
EAL	320524 10D	08115
OTHE	420817 10D	08225
UAL	320124 400	98515
OTHE	580513 400	58515
AAL	281101 40B	28615
OTHE	540302 42D	98515
OTHE	490127 400	38215
PSA	330904 40I	98115
OTHE	580308 30F	68315
OTHE	570325 30F	28515
AAA	600203 31F	88015
NWA	220503 10I	68515
TWA	220223 10I	38015
AAL	270129 40D	68015
AAL	590210 10F	98015
UAL	250424 10I	68215
UAL	590624 40D	18415
DAL	301001 40I	08015
BRIT	500327 40D	98215
AAL	271215 40B	58515
OTHE	440412 10F	78515
NWA	370205 40D	08415
OTHE	501226 30F	18615
EAL	300314 10I	58115
OTHE	310331 10I	18115
OTHE	620702 40D	88315
OTHE	320511 10D	28025
EAL	370206 40D	38515
REP	400512 10D	98115
DAL	370112 40D	88415
OTHE	570221 10D	08315
UAL	360209 40I	48415
COMA	590610 40D	18215
POA	270209 30I	78515
OZA	330815 40D	48315
NVA	560313 10D	98515
OTHE	500311 40D	48115
OTHE	271231 10D	18615
AAL	220103 10D	08015
OTHE	540620 10D	58215
OTHE	571206 10D	48215
OTHE	260323 40I	68015

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 06/14/86 PAGE 8

EMP DOB WAIV NO
CODE

PAI	440203	42D	08215
OTHE	450520	270	98315
OTHE	440313	10F	N8515
PAI	280614	300I	38315
OTHE	551114	400	18615
OTHE	590720	30F	68015
PDA	350530	481	98215
OTHE	401018	30F	68015
OTHE	601016	100	38125
UAL	421127	400	68515
EAL	350316	100	N8115
PAI	520811	30F	88015
AWC	530714	400	D8015
OTHE	381008	101	08015
FAL	450818	400	38315
OTHE	560215	30F0	18215
OTHE	431014	400	68015
REP	320524	401	28315
OTHE	521213	100	38615
TWA	391229	100	48115
OTHE	560613	401	78415
OTHE	471229	100	68215
OTHE	580809	400	88215
OTHE	570606	30Y	68015
OTHE	510130	100	N8115
FAL	290913	101	98415
AAL	310227	100	58115
TWA	370808	100	58115
UAL	610909	400	N8415
REP	351015	100	48315
OTHE	600224	400	68515
CAL	381018	401	18415
OZA	410417	408	88415
BNF	300331	30F1	58015
CAL	540327	30F	38515
BRIT	561016	100	98115
OTHE	560729	30F	48415
UAL	340211	100	68615
OTHE	511229	20F	48025
AAL	550828	30F	78215
UAL	410102	300	28515
PSA	351111	100	88315
OTHE	380504	400	48515
EAL	400926	101	28115
OTHE	540831	400	28415
BRIT	480529	400	N8315
CAL	350710	408	D8315
AAL	260105	100	88215
OTHE	600922	30A	88315
FAL	340611	40F	48015
EAL	460101	100	88315
TWA	341128	100	18615
OTHE	550416	400	68315
OTHE	0301	400	28015

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 06/14/86 PAGE 9

EMP CODE	DOB	WAIV NO
OTHE	430215 100	88515
OTHE	620417 400	98315
PAT	570518 400	88415
UAL	290208 100	58615
OTHE	520619 400	08415
REP	490219 100	08015
OTHE	530217 470	38415
OTHE	570921 300	78515
BNF	211211 401	78015
CAL	570413 100	08215
OTHE	540902 30F	38315
AAL	381119 400	38615
OTHE	461203 100	88515
UAL	291105 101	98015
BHA	601210 400	78415
OTHE	581202 100	48215
NYA	571030 30F	88315
OTHE	531219 40F	08115
EAL	220627 101	38015
REP	310606 400	18415
UAL	270429 408	78515
OTHE	550803 100	18415
OTHE	570927 10F	48615
UAL	351009 101	38415
REP	580110 100	18515
OTHE	590328 400	28215
TWA	230102 101D	38215
NWA	420720 10F	68515
UAL	281116 408	88315
PAT	490801 400	38615
AAL	560806 400	98415
ZAN	270327 18A	08215
PDA	211116 401	88115
AAL	290615 40R	NR415
OTHE	540901 100	08125
OTHE	450508 400	D8015
OTHE	570218 100	58515
BRIT	600311 400	58515
USA	330731 400	78115
TWA	370302 100	88315
OTHE	290530 401	88515
TWA	250204 400	38115
MSA	560713 400	78115
OTHE	481115 100	48215
OTHE	500710 20F	58115
NWA	570113 100	18215
OZA	290511 408	18615
SWA	440706 100	48115
OTHE	550505 100	58515
OTHE	580122 30F	18515
OTHE	570716 100	88315
AAL	350526 400	D8215
OTHE	620505 400	38515
PDA	350919 100	28615

EMP CODE	DOB	WAIV NO
OTHE	601024 30F	68515
CAL	541011 400	18415
OTHE	530811 100	58225
OTHE	600806 400	58515
ZAN	561212 100	18415
AWC	540729 400	98315
OTHE	571103 30Y	28115
UAL	450501 100	08515
PDA	350704 100	18315
OTHE	520713 300	58515
AAL	320430 408	48515
PAI	560330 100	48115
OTHE	550424 100	88515
OTHE	570821 10F	08515
AAL	241030 100	N8115
OTHE	571024 170	N8415
OTHE	370425 400	18015
OTHE	540511 30F	N8515
OTHE	581114 400	08315
BNF	211228 100F	108015
OTHE	520605 100	N8515
PDA	261019 400	48515
NWA	260729 30W	38215
OTHE	530126 400	28515
OTHE	480328 30F	18415
OTHE	570111 400	18315
OTHE	431212 101	08015
NWA	390628 100	38415
PSA	521105 46F	38115
OTHE	550322 30F	08315
OTHE	601203 40A	68515
OTHE	590723 400	58415
OTHE	520325 400	58015
FAL	400203 408	N8315
OTHE	500202 100	18515
EAL	320119 101	48315
OTHE	551218 300	38115
PAI	401113 300	08515
PRIN	480327 100	N8015
OTHE	451012 100	18415
REP	610307 100	88115
OTHE	550506 10F	68015
OTHE	460228 100	98315
OTHE	560705 101	48515
OTHE	570703 100	08515
OTHE	620131 400	88415
OTHE	550716 30F	58515
OTHE	540506 401	58415
OTHE	590827 100	08515
OTHE	560223 30F	58515
OTHE	480101 100	18315
TRAA	441024 101	18615
EAL	00319 408	58315
OTHE	0602 101	58515

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 06/14/86 PAGE 11

EMP DOB WAIV
CODE NO

OTHE	530622	400	28415
EAL	320225	400	18215
OTHE	530530	100	78115
OTHE	471019	100	48515
OTHE	220531	101	38315
ATL	570227	100	28225
AAL	370331	400	38215
OTHE	590827	30F	68215
WAL	380811	100	28515
OTHE	230808	101	98315
OTHE	450912	400	88015
OTHE	580422	100	18615
NORA	630126	3EF	08015
OTHE	600524	100	28515
OTHE	521103	100	08515
OTHE	550117	400	08015
OTHE	500721	10F	68015
UAL	390215	100	58315
OTHE	580712	400	08115
REP	450814	100	18315
OTHE	290526	20FD	28025
COMA	600702	400	58515
BRIT	550504	400	38015
OTHE	560312	30F	58515
OTHE	540111	100	18525
BRIT	550916	400	48115
OTHE	610430	100	N8025
BNA	441228	400	58115
OTHE	550409	400	28115
OTHE	500706	100	48515
OTHE	610901	300	48515
OTHE	391222	100	48515
PAT	481224	30F	28015
PION	540124	100	18215
UAL	400716	400	38515
OTHE	511005	30F	48015
INDU	540915	30F	N8015
TWA	300406	100	08515
OTHE	271111	300	98415
ASA	541222	400	28215
TWA	250720	101	38215
AWC	370611	101	D8115
OTHE	630914	400	08415
DAL	490421	100	18415
DAL	360207	100	98515
COMA	610326	400	78315
OTHE	561213	100	38615
TWA	361104	100	38615
WAL	410815	408	58515
OTHE	591112	30F	48215
REP	330830	100	98515
CAL	560616	300	38115
OTHE	600203	100F	78315
ASA	210116	101	28015

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 06/14/86 PAGE 12

EMP CODE	DOB	WAIV NO
OTHE	450914	400 18015
NWA	251231	100 28415
PSA	350608	408 68215
PAT	580312	400 18025
PDA	401017	100 58415
KORA	340109	401 28115
BRIT	580826	30F N8315
OTHE	221106	400 48015
EAL	370718	101 N8515
TWA	320703	400 08314
EAL	550516	100 48515
DAL	360508	100 28215
OTHE	571228	100 68515
REP	471029	400 D8115
AAL	320828	100 58615
OTHE	450601	301 D8015
OTHE	460819	121 38515
EAL	360210	400 08415
OTHE	590426	400 18415
WAL	390819	400 08315
PITX	230407	408 78315
DAL	340605	300 38115
OTHE	570627	300 48415
OTHE	360120	101 68115
OTHE	561010	100 98325
TWA	370723	100 28515
OTHE	500128	400 88115
PAT	290421	408 68115
AWC	500330	301 28115
OTHE	500707	100 68415
OTHE	620710	400 D8415
OTHE	600924	400 38015
OTHE	471213	400 38515
OTHE	460902	100 48115
WLA	380429	401 D8115
UAL	250922	101 88515
BHA	520415	100 08515
OTHE	420616	101 68515
OTHE	600205	400 98415
TWA	351031	100 28115
AAL	330515	101 18215
UAL	350716	100 18615
OTHE	461025	400 D8515
UAL	351021	101 38015
OTHE	490406	400 38415
OTHE	581205	100 68515
OTHE	560812	30F N8415
PDA	350609	101 08515
DAL	361027	100 88415
FAL	430810	301 N8015
BNF	301106	408 58615
OTHE	560226	35F 08315
OTHE	31023	1001 68515
OTHE	1114	400 18015

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 PAGE 13

EMP CODE	DOB	WAIV NO
OTHE	421112 301	78315
MSA	610612 400	N8025
PDA	271025 408	68515
UAL	300324 408	58415
OTHE	560108 400	18125
OTHE	600326 101	08515
USA	431005 100	18215
OTHE	550309 30F	98415
OTHE	610426 400	28315
OTHE	461121 100	28115
BRIT	530424 300	68015
PAI	590511 101	68515
EAL	240801 401	08015
UAL	300522 100	18415
FTLX	370131 100	08115
REP	470710 10F	68315
HAI	271229 100	N8515
CAL	571012 30F	28015
UAL	340925 100	18415
OTHE	321221 301	08215
TWA	410512 301	08315
OTHE	600706 100	N8125
PSA	400807 400	98215
UAL	340805 400	48215
REP	580102 400	18415
OTHE	500607 100	N8415
UAL	560829 100	98215
FAL	250501 101	N8015
CAL	390117 100	18315
BRIT	560921 40AD	88415
UAL	541006 100	38215
OTHE	321222 161	08115
OTHE	430802 100	88015
OTHE	451015 100	08415
ASA	561125 35F	N8315
OTHE	470320 30F	98315
OTHE	600312 400	48515
CAL	361102 401	58515
OTHE	220525 408	08515
EAL	340205 401	38115
OTHE	420721 100	38415
SWA	461102 400	48025
OTHE	300421 300	08415
OTHE	460214 4001	78015
OTHE	590407 400	48615
AAL	560709 400	N8215
OTHE	570726 400	38225
OTHE	191107 100	28115
PDA	270521 100	N8315
OTHE	551119 301	28515
OTHE	540810 400	08215
EAL	390121 100	08115
OTHE	540110 30F	28215
OTHE	450112 471	48215

EMP CODE	DOB	WAIV NO
PAT	240811 401	28414
OTHE	610318 400	78015
OTHE	501021 401	08115
OTHE	571025 37F	48115
AAL	361008 408	48615
OTHE	560207 30F	88415
EAL	321024 100	N8415
OTHE	351102 30F	98115
UAL	220121 401	18015
OTHE	610405 400	18415
OZA	300904 30F	48515
OTHE	511025 100	58015
ZAN	450314 30Y	58215
OTHE	541123 400	58415
XXXX	411103 400	78015
EAL	350623 18F	98515
PAT	420921 101	88015
OTHE	530821 400	28415
OTHE	321210 100	28415
USA	290718 100	38215
UAL	280103 100	08515
POA	370804 401	08315
WAL	320326 100	98515
PAT	471017 400	08015
AAL	560511 10F	48015
REP	590901 35F	78515
REP	511002 100	78415
OTHE	510726 100	08215
UAL	220112 401	88015
OTHE	450410 30FD	48615
EAL	330312 101	88215
AVG	490729 30F	88515
UAL	290411 100	98115
EAL	410823 100	68215
OTHE	560829 27F	58115
OTHE	291029 300	98015
OTHE	500924 400	38015
POA	320512 101	N8115
OTHE	470303 400	08415
UAL	300309 100	58415
AAL	350324 100	98415
REP	610611 400	58015
AAL	331209 100	18415
UAL	310504 400	68415
TRAA	290822 408	N8015
OTHE	380119 101	28115
BRIT	540823 10F	68515
TWA	210331 408	68015
DAL	410109 300	68315
REP	550202 30F	78215
OTHE	520208 30F	68415
ATL	580728 40F	18515
OTHE	*50725 30A	18525
OTHE	1010 400	78315

EMP CODE	DOB	WAIV NO
DAL	250218 100	D8315
UAL	531126 35F	58415
OTHE	401229 100	58515
OTHE	521211 100	D8115
CAL	280821 301	58615
OTHE	350303 401	18015
OTHE	580203 400	D8315
ATL	520105 100	28015
OTHE	510924 30F	28115
OTHE	390303 101	58015
OTHE	531223 100	D8515
OTHE	430210 301	18015
TWA	301119 100	28015
EAL	400205 100	68425
OTHE	340210 401	28115
DAL	381013 100	38415
UAL	421204 100	48115
OTHE	230423 10F	48015
DAL	390930 100	18415
OTHE	610329 30F	D8315
AAL	390302 100	D8515
REP	501103 400	88215
OZA	211105 4001	68115
OTHE	231024 100	58515
TRAA	480320 400	48215
WAL	350331 101	58115
EAL	340131 100	D8115
NWA	400109 100	18415
TRAA	320607 100	48615
OTHE	510804 10F	38015
UAL	330316 100	18125
OTHE	510519 100	68315
BRIT	590419 100	58325
CAL	420601 100	48115
OTHE	460227 100	D8415
USA	580717 400	38315
CAL	360305 130	48115
OTHE	530321 100	68515
OTHE	540427 100	18015
EAL	321028 101	28215
OTHE	170908 308	58215
UAL	290310 401	08515
KORA	360825 401	98015
CAL	571112 30F	38415
TWA	360715 301	18415
OTHE	561204 400	N8315
ASA	290416 4001	48615
PDA	340308 100	D8515
OTHE	501023 100	D8225
OTHE	611007 100	78515
HAI	551209 46F	38115
OTHE	420809 100	D8425
UAL	260805 101	18615
AAL	231104 100	78115

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 06/14/86 PAGE 16

EMP CODE	DOB	WAIV NO
MSA	560R02 30F	88015
OTHE	580526 30A	48215
FAL	420117 100	38315
PION	590318 400	68315
OTHE	500227 400	08115
EAL	310614 100	78415
PAI	550529 400	48115
OTHE	341120 401	98415
HAI	581206 30F	38415
OTHE	310522 401	98115
DAL	370201 101	18215
OTHE	561017 100	48615
FAL	291016 100	28315
UAL	400809 400	18615
OTHE	510606 400	08515
CAL	510618 300	68415
OTHE	470318 100	18515
AAL	360404 100	68315
PSA	380127 400	88315
OTHE	621005 341	58415
OTHE	410202 100	88115
OTHE	421225 100	88115
OTHE	430316 401	88115
TWA	390528 100	18515
OTHE	620703 30F	18215
OTHE	470705 100	18415
REP	430310 400	58015
USA	380117 400	78515
OTHE	590924 100	98215
USA	261220 100	88315
OTHE	240322 100	98015
UAL	331118 101	98215
KORA	330528 400	98015
EAL	360405 408	78315
OTHE	570806 400	58415
SWA	540130 30F	28015
OTHE	560421 30F	98415
UAL	390102 100	48615
USA	350625 100	88415
CAL	310325 101	28315
OTHE	420524 400	68015
UAL	351230 100	48615
OTHE	590806 30F	08315
PDA	410727 100	88315
OTHE	350705 100	08125
ATRI	550701 400	18625
EAL	430106 100	78515
OTHE	441130 100	68015
XXXX	560805 100	38615
AAL	311106 100	58115
OTHE	560707 400	48215
UAL	301125 100	98015
PDA	11203 100	58415
OTHE	11202 100	48025

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 06/14/86 PAGE 17

EMP DOB WAIV
CODE NO

OTHE	331003	470F	68515
REP	430403	400	08315
OTHE	580601	100	78515
OTHE	601205	100	58315
OTHE	531006	400	68315
OTHE	451108	301	88015
OTHE	560109	300F	68415
USA	290410	30F	18015
EAL	310123	100	18615
AAL	290305	100	58315
KORA	250303	101	28215
ZAN	600607	400	58415
OTHE	610708	100	98515
DAL	321204	400	68215
OTHE	430226	101	58515
OTHE	110622	400	98525
OTHE	461119	30F	98015
OTHE	590223	3CF	08515
OTHE	570719	400	58515
OTHE	260327	401	58015
PAI	400519	10F	08315
OTHE	530306	400	88015
OTHE	460117	100	58615
OTHE	520321	400	28015
AAL	241025	101	48115
AAL	291111	101	08015
EAL	370109	300	58115
AAL	321221	408	48615
OTHE	550731	35F	38015
OTHE	560523	400	18615
OTHE	380113	100	58015
UAL	390401	408	48615
REP	511023	100	88315
UAL	310719	100	08215
OTHE	550217	37F	28015
AAL	390701	101	N8015
CAL	501229	100	28315
CAL	341120	101	18115
REP	490728	400	68415
OTHE	490711	100	38015
OTHE	530301	400	88415
OTHE	280825	400	58315
EAL	350804	100	N8115
TWA	420704	101	58115
PAI	400612	33F	98315
OTHE	541016	100	08215
FTLX	320801	408	58615
EAL	340417	100	68415
OTHE	560928	100	98315
UAL	520421	170	N8215
OTHE	531214	100	58225
TRAA	350130	100F	18515
OTHE	370313	101	N8515
OTHE	521228	100	38115

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980

EMP CODE	DOB	WATV	NO
OTHE	390722	10Y	78115
OTHE	370228	10I	38115
OTHE	331126	100	18215
OTHE	331114	100	18315
AWC	430821	400	68515
TWA	410307	10I	68215
OTHE	521201	400	88315
OTHE	390119	100	78415
MEIR	470601	100	38615
RNF	270218	10I	D8415
AAL	220312	10I	N8015
OTHE	280912	100	48515
PDA	321012	408	78015
NWA	331014	100	88515
PAI	370218	40I	78015
OTHE	421223	100	18615
OTHE	480425	100	58415
REP	510224	300	48415
OTHE	471129	100	N8015
AAL	300608	408	68415
USA	340327	30F	38515
AAL	330220	400	38015
OTHE	510731	400	48015
UAL	250126	40I	N8415
OZA	491116	100	38215
USA	581003	100	38115
OTHE	531130	400	58115
OTHE	520501	30F	38415
OTHE	540610	400	48215
MSA	590502	400	08315
UAL	301125	400	88215
PION	491101	400	68115
OTHE	420428	100	38215
OTHE	610325	40F	98515
OTHE	560318	30I	D8415
AAL	391007	400	08315
NYA	530915	100	48015
UAL	271223	400	38515
XXXX	210115	100	68415
PAI	370615	100	N8415
OTHE	510520	100	48215
OTHE	580321	30F	78415
COMA	580217	40F	68415
WLA	291126	30I	08015
FAL	360209	408I	58515
OTHE	310627	400	68315
OTHE	530418	31F	88515
OTHE	460725	400	98015
OTHE	590828	30F	08115
AAL	521121	45F	N8315
OTHE	540510	400	D8115
EAL	320829	208	68415
OTHE	50221	30F	08115
OTHE	1012	30F	58315

EMP CODE	DOR	WAIV NO
FTLX	270624	101 08225
OTHE	470726	100 58615
UAL	280918	100 08315
CAL	341210	100 88215
OTHE	531025	100 18515
OTHE	640924	10F 68415
TWA	441023	100 48415
FAL	340323	100 88115
OTHE	460712	30F NR015
OTHE	530917	10F 38615
UAL	250707	351 38115
OTHE	501119	400 48015
OTHE	370924	100 58125
OTHE	471024	100 08125
OTHE	410128	20F 48415
PSA	420907	400 58415
PDA	320229	100 08415
PTON	470829	300F 08215
OTHE	530701	400 18615
EAL	290420	100 58315
PDA	360819	400 68015
WRLB	171210	408 08215
OTHE	570506	100 48425
UAL	400630	20F NR115
UAL	551226	100 48115
ASA	461019	100 98315
UAL	290725	401 48615
CAL	531130	400 38215
OTHE	360611	100 58615
WAL	310827	450 48515
REP	530512	400 08315
WLA	250813	101 48015
OTHE	580930	100 59115
UAL	291106	400 38515
UAL	331217	100 08215
PDA	240121	101 18215
NWA	340130	100 18415
OTHE	390427	100 08315
EAL	281113	321 18415
UAL	400923	100 08115
AAL	360730	100 18315
AAL	251017	30F 28215
CAL	351115	408D 18515
ASA	560419	300F 78215
WRLB	240317	408 78215
OTHE	460829	100 48125
TWA	280316	401 88415
OTHE	280424	101 28515
PDA	320217	100 98115
USA	290322	100 08115
OTHE	601005	400 78525
CAL	410116	101 NR015
DAL	350523	100 18515
OTHE	550424	100 18615

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 06/14/86 PAGE 20

EMP CODE	DOR	WAV NO
OTHE	351209 100	18215
TWA	381012 101	98215
OTHE	481212 301	48025
UAL	290726 408	48615
OTHE	290824 400	18015
OTHE	560412 30F	98015
REP	441231 101	18615
OTHE	461018 400	98415
OTHE	561102 400	58515
OTHE	370408 100	88415
EAL	380223 100	88515
EAL	320207 100	38115
REP	261111 401D	08015
EAL	571217 100	78215
FAL	550911 400	58015
CAL	380724 100	28215
XXXX	540215 40F	38215
WAL	231122 101	38115
WAL	540208 400	48315
OTHE	600217 20F	08315
TRAA	540130 47F	08215
OTHE	450702 400	58315
PAI	550814 400	18215
NWA	321203 101	68615
OTHE	540717 400	08315
OTHE	600917 30F	48415
OTHE	440122 400	38515
NWA	120507 20F	78315
OTHE	321125 101	78115
OTHE	331011 100	78215
OTHE	281211 408	N8515
KORA	310206 101	D8115
OTHE	501210 30F	58215
TWA	260322 100	98315
UAL	270724 101	58215
OTHE	580417 400	08315
COMA	410203 30F	58015
HAI	591002 400	38125
OTHE	530918 100	18415
EAL	341227 400	08515
OTHE	401224 408	28315
OTHE	570529 400	08215
OTHE	480907 100	N8215
OTHE	541108 400	68415
TWA	310915 100	78115
EAL	350905 408	68315
AAL	330725 101	58415
OTHE	550921 100	48515
OTHE	510612 30F	58215
MIAF	431007 100	18425
OTHE	360815 101	08015
CAL	480411 40F	R8415
REP	11111 400	38415
CAL	5424 401	08515

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 06/14/86 PAGE 21

FMP CODE	DOB	WAV NO
PION	530425	100 28515
BNF	260109	100 58415
UAL	401118	101 78015
TWA	210620	101 68015
MSA	590814	400F 48515
OTHE	310417	100 18215
OTHE	560324	30F 48115
CAL	431212	400 88515
WAL	281109	408 18315
TWA	330625	100 98315
USA	291028	301 08015
OTHE	520601	100 98215
CAL	490730	100 38615
EAL	280424	100 48415
OTHE	560110	400 48515
OTHE	590727	100 58215
OTHE	590519	400 38415
OTHE	470325	30Y 48015
OTHE	550313	400 08415
IMP	550627	400 98015
OTHE	540213	100 58015
WAL	420112	100 18615
WAL	471118	101 08115
CAL	200505	101 28015
CAL	530604	30F 48215
OTHE	470805	100 48415
ANV	510228	400 08115
DAL	471129	100 N8215
HAI	330922	401 58315
OTHE	550630	400 78515
OTHE	540429	100 58015
UAL	410123	100 58215
AWC	521216	400 98215
TWA	250512	100 N8115
OTHE	430120	400 88015
EAL	420128	301 08015
OTHE	620128	400 D8215
COMA	560413	100F N8115
UAL	360709	100 18215
CAL	380404	100 78315
OTHE	480105	30F N8015
MSA	480509	100F D8115
OTHE	590830	400 68015
TRAA	340208	100 98215
AAL	311213	301 58025
OTHE	471219	35F 48015
OTHE	381005	401 98515
UAL	331120	100 38115
WAL	440923	170 58615
UAL	410303	400 68615
UAL	290607	401 98015
OTHE	620921	400 D8415
INDU	510211	400 38515
AAL	500820	100 58425

EMP CODE	DOB	WALV NO
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AAL	250421 408	08315
TWA	280804 101	48015
OTHE	550914 100	D8115
NWA	411220 401	98515
OTHE	570210 100	38125
REP	280121 400	D8415
USA	350124 100	68115
OTHE	601104 20F	08125
OTHE	280401 4001	78215
OTHE	580807 30F	98215
UAL	420208 100	08415
OTHE	610818 30F	18515
REP	560324 400	48615
PTON	440104 101	58115
OTHE	470621 101	98115
MSA	610609 100	68615
OTHE	530414 100	38515
OTHE	550323 430	88415
OTHE	330704 101	88115
OTHE	430524 400	28015
AAL	240727 101	68015
AAL	330207 100	08415
REP	331117 400	08415
OTHE	590409 100	88415
OTHE	470329 400	58115
OTHE	511228 300	38615
OTHE	530718 100	98515
OTHE	490805 100	88315
OTHE	500718 10F	88415
POA	320918 100	28015
UAL	220920 400	08215
UAL	370817 100	28515
OTHE	490109 40A	68515
OTHE	480207 100	28615
AAL	540506 300	D8415
OTHE	550415 400	38415
EAL	301201 100	38115
OTHE	390325 171	D8415
OTHE	640331 400	28215
OTHE	351001 401	28115
NWA	390704 100	98415
PDA	371015 100	N8115
DAL	441010 100	58415
TWA	250105 100	38215
OTHE	560523 30F	18215
OTHE	620217 100	48615
OTHE	560310 30YD	48315
OTHE	630306 330	38615
OTHE	560110 400	98125
OTHE	540115 300	78515
OTHE	500627 20F	28615
FAL	380720 301	78415
UAL	10228 30F	68015
EAL	1006 100	88315

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 06/14/86 PAGE 23

EMP CODE	DOB	WAIV NO
OTHE	450504 400	58215
OTHE	321030 101	88315
OTHE	601108 30F	08215
OTHE	400521 38W	08015
OTHE	490503 400	N8515
OTHE	580519 400	18615
TWA	320620 101	D8015
OTHE	490316 400	18015
UAL	261011 101	38115
OTHE	370328 100	78515
PAL	500314 40F	08315
OTHE	480921 400	D8015
EAL	301107 408	D8215
AAL	251216 401	88215
OTHE	510612 30F	78515
OTHE	470705 100	38315
NSA	540513 100	88415
TWA	290730 400	88515
AAL	270614 400	68415
DAL	391206 10F	38015
DAL	450621 100	88415
UAL	340211 100	58315
OTHE	591109 400	38215
XXX	280424 400	18215
COMA	600805 400	38415
UAL	360314 100	78415
OTHE	430327 30F	78015
OTHE	520115 30F	28015
OTHE	510405 400	D8315
OTHE	570705 170	58215
OTHE	471106 400	N8115
ACA	451103 100	D8115
OTHE	631122 30F	18515
AAL	270520 408	58615
OTHE	410908 400	78215
TWA	360204 408	38415
OTHE	560611 400	38415
OTHE	601231 30F	88515
ACA	510619 100	98425
PSA	490224 100	38225
OTHE	541116 400	18315
TRAA	440916 100	18315
OTHE	520225 300	D8415
OTHE	571111 100	D8315
OTHE	540821 400	28415
OTHE	421202 30F	38215
OTHE	600518 400	48415
AAL	250321 100	78215
OTHE	330612 101	98115
UAL	281104 101	38115
XXX	631119 20F	48025
ASA	360229 400	18115
DAL	271021 300	78515
TWA	351227 100	88015

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 06/14/86 PAGE 24

EMP CODE	DOB	WAIV NO
WAL	290607 401	N8A15
NWA	311014 100	28515
DAL	480302 100	N8215
EAL	391227 408	48515
OTHE	570624 100	N8125
OTHE	510322 478	N8315
AAL	251017 401	58015
OTHE	550213 30F	D8A15
OTHE	440915 430	28015
OTHE	530127 400	N8015
OTHE	491116 100F	98015
CAL	380101 100	N8115
OTHE	501112 30Y	48015
REP	510123 400	88415
PAI	420912 101	38615
PDA	300616 100	88515
OTHE	560205 400	88015
TWA	341211 408	18615
NWA	330221 408	28615
OTHE	450323 3ED	28015
OTHE	581223 400	N8415
OTHE	470712 400	28515
OTHE	320721 100F	58115
ASA	541021 100	78015
UAL	250720 101	D8115
DZA	470215 408	N8415
OTHE	450415 3EF	N8015
HAI	471010 100	38615
OTHE	381021 100	48615
PDA	350309 400	68115
OTHE	571130 1SD	58215
OTHE	520312 100	D8115
PDA	321007 100	88415
OTHE	300715 100	18015
OTHE	630319 400	18515
FTLX	390217 100	48015
INDU	461119 30FD	28515
OTHE	230427 100	28225
OTHE	541210 100	28415
INDU	350506 400	48215
OTHE	550429 400	28515
OTHE	390129 101	D8015
AAL	300709 438	98315
CAL	601227 30F	88215
EAL	370330 408	48415
OTHE	600921 400	28015
OTHE	590904 400	48615
OTHE	460918 400	08415
TWA	281202 101	08015
INDU	540815 400	D8115
OTHE	380527 401	98115
OTHE	470108 101	88115
UAL	90429 400	58615
MSA	1226 401	38215

EMP CODE	DOB	WAIV NO
DAL	401023 100	48315
OTHE	520213 400	58315
OTHE	600413 400	58115
OTHE	500621 100	28415
OTHE	541004 400	78015
AAL	340314 401	98415
WAL	550322 100	48415
SCA	600521 471	18115
FTLX	330310 30AD	78515
OTHE	590408 100	28125
AAL	281009 108	78515
UAL	330810 400	N8215
CAL	470323 101	58015
TWA	280221 408	58415
OTHE	570618 400	98315
OTHE	180618 100	18315
OTHE	490629 400	08315
OTHE	571023 100	18515
OTHE	531101 30F	18115
OTHE	410610 100	08225
FTLX	330424 408	08515
NWA	300226 300	18315
OTHE	440807 100	78315
OTHE	561222 400	78215
OTHE	311012 400	N8315
OTHE	560721 400	48415
OTHE	350927 100	18415
HAI	570823 30F	98115
EAL	350114 100	18515
REP	510429 100	88115
EAL	390514 408	08115
OTHE	571002 300	38015
CAL	390419 401	08515
UAL	300408 400	68315
OTHE	431123 100	28015
OTHE	610629 100	88515
INDU	490703 33F	48515
POA	340810 100	68515
OTHE	511026 30F	18415
OTHE	581008 100	58125
OTHE	590428 100	48615
DAL	310522 100	38215
EAL	301003 408	88115
AAL	250720 400	78215
BASE	500621 100	88325
OTHE	490328 101	78215
OTHE	490106 100	58325
OTHE	410110 101	88115
OTHE	360203 101	78015
TWA	230101 101	48115
OTHE	521104 400	98315
OTHE	610421 400	88315
XXXX	531113 400	88215
NWA	480206 400	N8115

FMP
CODE

DOB

WAIV

NO

OTHE	611108	100	28225
PDA	320101	101	D8115
OTHE	551011	100	N8315
OTHE	310313	30F	98215
UAL	360102	100	58215
OTHE	580427	100	58125
BRIT	550927	100	48515
OTHE	531129	401	88515
OTHE	451127	100	38115
NWA	370225	101	N8315
OTHE	530506	400	88315
TWA	310901	401	38115
CAL	580703	30F	08015
FAL	450515	10F	78415
AAL	360819	400	98515
OTHE	520929	400	78015
OTHE	580323	100	68515
AAL	230627	101	N8015
OTHE	541021	100F	58015
TWA	330331	100	18015
OTHE	341125	301	28415
AAL	330913	408	88515
OTHE	491214	100	88115
AWC	560802	400	88415
WAL	430311	100	68515
REP	420611	100	N8115
OTHE	410909	47F	08015
OTHE	550317	30F	D8115
OTHE	571027	400	08115
NWA	391218	400	68615
OTHE	401015	101	28015
OTHE	611227	400	58415
OTHE	541020	30F	98415
WRLB	440423	408	08015
AAL	290304	101	18215
ACA	431019	100	98515
OTHE	331130	100	D8015
BRIT	520712	30F	98515
UAL	300720	10F	48615
TWA	350117	101	D8115
AAL	330414	400	38515
ACA	450402	30F	98015
AWC	550311	100	N8115
FAL	260425	408	38415
TWA	390427	100	88415
OTHE	470328	100	58115
AAL	491215	100	18215
PDA	381017	101	58515
METR	560319	400	38215
OTHE	520627	30A	78315
OTHE	460501	400	28015
OTHE	561102	100	88515
WAL	371228	101	98015
OTHE	10310	30F	68415

EMP CODE	DOR	WAIV NO
OTHE	520929	10F 98515
OTHE	490917	100 38115
PAI	491018	30F 58415
OTHE	550429	100 38015
OTHE	530318	100 88215
UAL	300327	100 88415
BRIT	470521	400 18415
OTHE	611125	400 88415
CAL	431201	101 28315
TWA	280706	100 88015
EAL	310207	321 08415
TWA	251109	400 68215
UAL	290306	401 08415
EAL	380307	100 08315
COMA	591130	400 28415
USA	500208	100 88315
TWA	300805	300 88515
AAL	380517	400 98315
OTHE	590517	400 78515
CAL	390531	400 48515
CAL	580506	32F 88015
UAL	250619	101 38315
AAL	340127	408 08215
TWA	361001	100 28615
OTHE	480423	40F 18215
OTHE	560703	400 38015
INDU	341205	101 18215
OTHE	580418	400 48015
OTHE	180930	101 38115
OTHE	650210	20F 58325
USA	261126	30F 28515
UAL	560130	10F 08315
OTHE	480519	30F 88115
OTHE	500630	30F 88415
UAL	250709	408 08415
DAL	360708	400 78515
DAL	400302	401 98415
USA	430421	100 58115
SCA	580829	400 28415
OTHE	560126	10F 08315
FTLX	250719	408 28515
OTHE	611003	30F 18515
OTHE	561112	100 88115
SWA	500214	30F 88315
NSA	591118	400 38115
SWA	380131	100 88115
OTHE	621207	100 28425
DAL	270815	40A 28215
OTHE	550805	30F 48115
PDA	320222	401 48015
OTHE	520716	100 38115
UAL	281006	101 38115
WAL	361101	408 78415
AAL	290111	100 28215

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980

PAGE

28

EMP CODE	DOB	WATV NO
OTHE	580128 40D	28515
OTHE	540119 40D	78315
OTHE	530721 10D	78415
OTHE	461214 40B	78415
OTHE	580520 40D	28215
EAL	431127 10D	28315
NWA	310719 10D	28215
OTHE	561004 30F	18515
OTHE	310520 40D	18515
OTHE	430519 30D	68415
OTHE	460926 40D	28415
OTHE	521127 30U	18115
OTHE	551003 40D	58415
OTHE	561104 40D	18515
OTHE	600812 10D	48425
OTHE	620327 10D	88425
OTHE	591122 40D	48525
BHA	620120 40A	68515
DAL	290915 40D	28515
OTHE	220511 10I	28015
AAL	240914 10D	68215
OTHE	611203 30F	88415
OTHE	470110 25F	98315
PAI	380707 10F	88515
REP	530731 10D	28315
PDA	380703 10D	18415
UAL	320926 20F	68015
OTHE	560807 10D	D8015
OTHE	631101 10D	58515
TWA	280627 10I	68015
MSA	600321 10D	08425
EAL	560211 30F	28015
OTHE	510329 31F	58415
IMP	480728 30F	18415
CAL	320819 10D	88515
OTHE	430521 10F	78515
UAL	301214 10F I	98015
OTHE	490925 10D	08115
ANV	560924 10A	78515
OTHE	600229 35F	18315
PDA	221026 40B	68215
UAL	281016 40I	N8015
PDA	340118 40B	38315
AAL	311106 10D	08015
OTHE	231221 10I	N8115
OTHE	431223 10A	28615
NWA	400819 40D	48315
TRAA	310226 30F	98515
REP	330212 10D	58115
OTHE	550208 10D	N8315
OTHE	510216 30Y	98115
USA	350820 40B	68215
OTHE	10131 30F	D8115
OTHE	10709 30F	D8215

EMP CODE	DOB	WATV NO
OTIE	540407 100	78415
UAL	330204 408	48315
BRIT	591202 100	58215
OTIE	580531 30F	68015
NWA	580422 10F	38315
CAL	500318 30F	68015
ATL	350507 400	98315
OTIE	220414 408	08015
OTIE	610516 400	68415
OTIE	520927 400	58215
OTIE	530426 300	88015
OTIE	481109 100	28215
OTIE	330924 10F	08415
OTIE	560217 301	08115
OTIE	540608 400	08415
REP	561107 100	48225
DAL	261012 1001	88515
UAL	320405 100	88415
OTIE	501114 100	48512
UAL	270214 400	08115
OTIE	490221 470	58315
PDA	260917 101	28615
OTIE	550301 40A	48615
DAL	370130 428	08015
OTIE	550509 400	18315
ATL	620815 10F	88515
BNF	290816 101	88015
PAT	390613 421	98215
UAL	270611 401	98515
DAL	331023 101	N8015
AAL	400217 100	18515
FAL	341223 100	48515
OTIE	550226 400	58315
OTIE	600505 30F	08315
DAL	470926 301	88015
OTIE	271204 101	68015
OTIE	510623 100	NR115
OTIE	350208 100	48615
OTIE	421106 100	48115
OTIE	590922 34F	98215
AAL	330215 101	48215
OTIE	480422 400	18315
OTIE	570911 400	88415
TIAI	550325 400	58015
REP	290910 1001	48415
UAL	320703 101	58215
CAL	570525 30F	88115
OTIE	511206 400	78215
AAL	540306 40F	28515
OTIE	540501 100	38215
OTIE	400411 100	48315
OTIE	481027 400	78115
OTIE	410709 470	38115
OTIE	570223 100	38015

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 06/14/86 PAGE 30

EMP CODE	DOB	WAIV NO
ASA	350808 101	38515
OTHE	311201 100	08415
PAT	320804 400	48415
PAI	340917 401	78315
EAL	240406 408	08015
NWA	201130 101	48015
OTHE	530906 400	28515
OTHE	420517 431	78015
REP	350523 100	48015
UAL	370129 101	58515
OTHE	570311 30X	N8215
OTHE	590527 30F	28115
OTHE	590629 30F	68215
CAL	370923 408	98315
OTHE	451206 30F	28115
OTHE	470416 100	98115
FAL	460828 400	48315
MSA	550112 100	48615
OTHE	410605 301	48415
OTHE	481109 100	28515
OTHE	541223 400	N8315
UAL	311018 100	58215
EAL	310726 30F	08215
REP	330418 101	48215
CAL	600830 400	08115
EAL	320512 400	N8515
UAL	280117 400	48515
TWA	300306 101	48115
ZAN	501129 400	08415
FTLX	280124 100	38015
OTHE	530510 100	88425
AAL	331128 408	68315
OTHE	500212 301	88015
OTHE	280917 171	48515
TWA	330315 408	88515
OTHE	909115 100	78515
OTHE	590811 100	08315
OTHE	180201 400	48115
OTHE	560330 30F	78415
OTHE	300420 101	38215
OTHE	550916 30F	98015
OTHE	590326 400	18515
OTHE	541110 400	28015
MSA	560725 400	18415
AAL	300919 480	08115
WAL	421101 408	08415
REP	281106 408	88515
OTHE	480926 100	48315
OTHE	550811 100	98115
OTHE	560711 400	78515
OTHE	311110 271	58225
OTHE	561207 400	48315
EAL	1016 100	48615
SWA	1002 408	08315

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 06/14/86 PAGE 31

EMP CODE	DOB	WAIV NO
DAL	341204 408	38615
OTHE	201101 101	18115
OTHE	581211 30F	88415
OTHE	520213 400	08315
AAL	300217 101	88015
OTHE	370327 400	58415
METR	550306 400	28315
TWA	410331 100	68515
DAL	381114 408	88015
NWA	341224 408	18315
BRIT	531012 100	28215
REF	380425 101	58615
EAL	320522 401	88015
AAL	411018 100	88015
EAL	320301 408	08215
BRIT	480706 400	78315
UAL	290315 401	N8015
OTHE	510712 400	58015
OTHE	560428 30F	N8515
CAL	580221 100	08325
OTHE	520414 400	28015
AAL	630411 20F	08415
PION	580430 400	N8215
OTHE	581005 30A	98215
OTHE	520909 37F	18115
OTHE	511216 100	48515
WAL	351004 400	78415
OTHE	200111 100	68215
OTHE	470705 400	88215
OTHE	350327 30F	48615
OTHE	511222 100	08315
OTHE	390619 100	68515
OTHE	500805 100	48115
FAL	390422 100	48615
OTHE	620904 30F	08115
OTHE	370524 101	88015
BRIT	311227 100	28015
TWA	360123 100	28115
OTHE	511129 400	08415
AAL	380502 401	78315
CAL	210102 101	68015
OTHE	610529 100	98325
UAL	320304 100	18615
USA	390622 300	98415
AAL	340214 101	08015
DAL	301019 101	38215
WRLB	370815 400	N8015
COMA	560724 30F	48315
DAL	241001 408	88315
EAL	300627 101	28515
UAL	250522 101D	98415
OTHE	521014 33F	08315
OTHE	470320 400	78515
TWA	240102 100	28015

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 06/14/86 PAGE 32

EMP CODE	DOB	WATV NO
PDA	371222 101	58115
OTHE	541205 400	18315
DAL	320809 301	08515
PDA	320826 100	08115
OTHE	460623 10A	18015
BNF	290604 100	68515
UAL	240410 101	28015
AAL	320302 438	08415
TWA	360502 100	08515
OTHE	290821 100	08015
XXXX	540708 100	68015
OTHE	471012 100	18415
DAL	320926 100	68315
OTHE	571015 100	58115
MSA	560404 100	78515
OTHE	470325 101	58115
OTHE	601212 100	38325
OTHE	600115 100	68225
OTHE	620315 30F	N8115
OTHE	270119 100	08215
OTHE	500420 10F	78115
OTHE	620803 400	08315
OTHE	620123 400	58125
OTHE	600207 10F	68515
OTHE	600401 400	18615
OTHE	600409 30F	18515
OTHE	601207 35F	78315
OTHE	310509 100	88115
OTHE	630512 400	88515
OTHE	580823 400	N8415
OTHE	600306 10F	68515
OTHE	570322 30F	88415
SWA	430607 400	N8415
OTHE	541028 100	98515
OTHE	511003 100	28215
OTHE	601126 400	N8215
OTHE	460725 400	28415
OTHE	620824 400	N8515
OTHE	600809 400	08125
OTHE	430125 300	18215
BRA	451230 400	68615
OTHE	570421 400	78415
OTHE	371030 408	48215
OTHE	601215 100	48615
OTHE	570615 400	98415
OTHE	510314 40F	58415
OTHE	610811 100	28315
KORA	370812 401	48615
COMA	610730 400	18515
OTHE	600311 100	48625
OTHE	641104 400	48415
OTHE	360922 100	98325
OTHE	50309 30F	78515
OTHE	0114 400	78225

AIRLINE PILOTS WITH WAIVER SINCE JAN 1, 1980 06/14/86 PAGE 33

EMP CODE	DOR	WATV NO
OTHE	380619 32F	58615
DAL	380927 42D	78215
OTHE	590804 20F	98225
OTHE	630903 40D	88315
TWA	400803 40D	98015
OTHE	631202 40D	08215
DAL	430427 10D	08515
OTHE	580610 40D	38515
OTHE	570509 30D	18515
KORA	340412 40B	48615
AAL	240707 341	08215
OTHE	610607 40D	68515
OTHE	590511 30D	68415
FTLX	330606 10D	98215
OTHE	360311 351	68115
OTHE	610829 30F	68215
EAL	530717 10D	08215
AAL	360103 401	88015
OTHE	621220 40F	48315
MSA	590328 30F	48015
OTHE	590603 40D	68015
AAL	610907 30D	28515
DAL	430326 10D	48515
OTHE	610219 47D	58315
CAL	400417 30F	08115
OTHE	580801 30F	98415
OTHE	550528 10D	18615
OTHE	420420 40D	08415
REP	591220 40D	18415
OTHE	590509 10F	58615
OTHE	591006 10D	28515
FTLX	490323 40F	18515
OTHE	440903 40F	08115
INDU	471020 40D	28415
OTHE	391019 101	28615
OTHE	590314 10D	48615
OTHE	600505 20FD	48315
UAL	330606 40B	28515
USA	350114 10D	28215
OTHE	590512 40D	48615
OTHE	630721 10D	08125
TWA	250605 101	58015
OTHE	500922 10D	88515
NWA	270304 40BF	68515
PION	590906 10D	38615
WAL	370714 301	98515
OTHE	500330 40F	68515
OTHE	510321 42D	18215
OTHE	580817 10YF	38215
COMA	600523 40A	28215
OTHE	540708 40D	08215
HAI	570522 40D	48315
PTLX	271014 40B	08515
OTHE	361111 401	18415

EMP DOB WAIV
CODE NO

OTHE 581213 400 08115
EAL 420217 401 18515
OTHE 571120 400 58415
OTHE 570611 100 80515
OTHE 611027 400 38025
BRIT 510225 100 38515
OTHE 600905 100 60515
OTHE 310908 401 18125
OTHE 450106 301 48125
AAL 290316 101 88015
OTHE 600522 20F 18525
OTHE 520411 30Y 28615
UAL 290520 408 18515
AAL 390726 100 38615
OTHE 540504 400 08015
PAI 331215 300 48415
EAL 320601 300 78515
DAL 290827 408 48615

COUNT = 1800

EMPLOYER CODES

<u>CODE</u>	<u>EMPLOYER</u>
AERO	AEROMECH AIRLINES
AMEX	AEROMEXICO
ACA	AIR CALIFORNIA
ACN	AIR CANADA
ACO	AIR COLORADO
AFL	AIR FLORIDA
AFR	AIR FRANCE
AHA	AIR HAWAII
AIL	AIR ILLINOIS
LIFT	AIRLIFT ASSOCIATES
ANB	AIR NEBRASKA
ANV	AIR NEVADA
ANE	AIR NEW ENGLAND
AOR	AIR OREGON
APA	AIR PENNSYLVANIA
AUS	AIR U.S.
AVG	AIR VIRGINIA
AWC	AIR WISCONSIN
ASA	ALASKA AIRLINES
AAA	ALLEGHENY COMMUTER AIRLINES
TPA	ALOHA AIRLINES
AAL	AMERICAN AIRLINES
AFAX	AMERICAN FLYERS
APO	APOLLO AIRWAYS

EMPLOYER CODES

<u>Code</u>	<u>Employer</u>
SPEN	ASPEN AIRWAYS
ATL	ATLANTIC AIRLINES
BANK	BANKAIR, INC.
BHA	BAR HARBOR AIRLINES
BSKA	BIG SKY AIRLINES
BNF	BRANIFF INT'L AIRLINES
BRA	BRITISH AIRWAYS
BRIT	BRITT AIRWAYS
CAPA	CAPITOL AIR SERVICE
PITX	CAPITOL INTERNATIONAL AIRWAYS
CBIA	CARIBBEAN INTERNATIONAL AIRLINES
CATA	CATALINA AIRWAYS
CATS	CATSKILL AIRWAYS
CENT	CENTURY AIRLINES
CHIN	CHINA AIRLINES
COMA	COMAIR, INC.
CAL	CONTINENTAL AIRLINES
COPP	COPPER STATE AIRLINES
DAL	DELTA AIRLINES (NORTHEAST)
EAL	EASTERN AIRLINES
EMER	EMERY AIR
ERIE	ERIE AIRWAYS
FLA	FLORIDA AIRLINES
FTLX	FLYING TIGER LINES (SEABOARD WORLD)
FAL	FRONTIER AIRLINES
GOLD	GOLDEN STATE AIRLINES

Code Schedule H (Continued)

EMPLOYER CODES

<u>Code</u>	<u>Employer</u>
GOWA	GOLDEN WEST AIRLINES
GLKA	GREAT LAKES AIRLINES
HAI	HAWAIIAN AIRLINES
IBER	IBERIA
IMP	IMPERIAL AIR
JAL	JAPAN AIRLINES
KLM	KLM - ROYAL DUTCH AIRLINES
KOAX	KODIAK WESTERN ALASKA AIRLINES
KORA	KOREAN AIRLINES
LKA	LAKER AIRWAYS
LVA	LAS VEGAS AIRLINES
LOT	LOT - POLISH AIRLINES
LUFT	LUFTHANSA - GERMAN AIRLINES
METR	METRO AIRLINES
MFA	METROFLIGHT AIRLINES
MPA	METROPLEX AIRLINES
MEXI	MEXICANA DE AVIACION
MSA	MIDSTATE AIRLINES
MWA	MIDWAY AIRLINES
MISS	MISSISSIPPI VALLEY AIRLINES
MZA	MUNZ NORTHERN AIRLINES
NYA	NEW YORK AIR
NYH	NEW YORK HELICOPTER
NCA	NORTH CANADA AIR
NORA	NORTHERN AIRLINES
NWA	NORTHWEST ORIENT AIRLINES (NWA & ORIA)

Code Schedule H (Continued)

EMPLOYER CODES

<u>Code</u>	<u>Employer</u>
OZA	OZARK AIR LINES
PCA	PACIFIC CAL AIR
PNA	PACIFIC NATIONAL AIRWAYS
PSA	PACIFIC SOUTHWEST AIRLINES
PWA	PACIFIC WESTERN AIRLINES
PDA	PAN AMERICAN WORLD AIRWAYS (NATIONAL)
PAI	PIEDMONT AVIATION
PION	PIONEER AIRWAYS
PRIN	PRINAIR-PUERTO RICO INTERNATIONAL AIRLINES
QANT	QANTAS AIRWAYS
RAA	REEVE ALEUTIAN AIRWAYS
REP	REPUBLIC AIRLINES (NOR, SOU)
REPW	REPUBLIC AIRLINES WEST (HUGHES AIRWEST)
SCA	SOUTHCENTRAL AIR
SWA	SOUTHWEST AIRLINES
SUNI	SUN INTERNATIONAL AIRWAYS
SUNW	SUN WEST AIRLINES
TTA	TEXAS INTERNATIONAL AIRLINES
TIME	TIME AIR
TRAA	TRANSAMERICA AIRLINES
TRCT	TRANS-CENTRAL AIRLINES
TIAI	TRANS INTERNATIONAL (OVERSEAS NATIONAL ONAX)
TNY	TRANS NEW YORK
TWA	TRANS WORLD AIRLINES
UAL	UNITED AIRLINES
USA	U.S. AIR

Code Schedule H (Continued)

EMPLOYER CODES

<u>Code</u>	<u>Employer</u>
WAL	WESTERN AIRLINES
WLA	WIEN AIR ALASKA (WLA & AIRA)
WRLB	WORLD AIRWAYS
ZAN	ZANTOP AIRWAYS
FAA	Federal Aviation Administration
GOVX	Government, other than FAA or military, includes state and local government (except fixed base operators)
AIRI*	Aircraft Industry, industry engaged in aircraft production; aircraft corporation, airplane company or corporation, etc.
INDU	Industry, any industry other than aircraft industry
BASE	Fixed Base Operation; airport operators, managers, and airport flying schools
SELF	Self-Employed (except fixed base operators)
OTHE	Other (non-scheduled airlines, charter service, foreign military, cargo/freight operations)--or scheduled airlines recently formed or merged & not incorporated into our computer system, i.e., Peoples, etc.)
XXXX	Not Applicable (non-aeronautical)
MIAF	Air Force, Air Reserve, and Air National Guard
MIAM	Army, Reserve, and National Guard
MICG	Coast Guard
MINA	Marines and Navy, and Reserve
NASA	National Aeronautics and Space Administration

AIRCRAFT INDUSTRIES

Aero Commander, Inc. (North American Rockwell)
Aeronca Manufacturing Corporation
Beech Aircraft Corporation
Bell Helicopter Corporation
Bellanca Aircraft Corporation
Boeing Airplane Company
Cessna Aircraft Company
Champion Aircraft Corporation
Convair Division - General Dynamics
Curtiss - Wright Corporation
De Havilland Aircraft Company, Ltd.
Douglas Aircraft Company, Inc.
Fairchild Engine and Airplane Corporation
Grumman Aircraft Engineering Corporation
Hiller Aircraft Corporation
Hughes Aircraft Company
Laister-Kauffmann Aircraft Corporation
Lockheed Aircraft Corporation
Luscombe Airplane Corporation
Macchi
McDonnell Aircraft Corporation
Mooney Aircraft, Inc.
Navion Aircraft Company
North American Aviation, Inc.
North American Rockwell Corporation
Northrup Aircraft, Inc.
Piper Aircraft Corporation
Ross Aircraft Company
Ryan Aircraft Corporation
Sikorsky Aircraft - Division of United Aircraft
Stearman Aircraft Company
Stinson Division Consolidated Vultee Aircraft Corporation
Taylorcraft, Inc.
Vertol Aircraft Corporation
Waco Aircraft Company

Note: This list represents a consolidation of the most frequently appearing aircraft industries and is not intended as sole authority.

Code Schedule T

PREPARATION OF FAA Form 8500-15, STATEMENT OF DEMONSTRATED ABILITY (WAIVER)

This form will be prepared by the office of the issuing authority and signed by the certifying officer for the Federal Air Surgeon. The issuing officer will complete the form by adding a waiver number in the area indicated on page 142. The number will have the following format:

A. Basis. A one digit numeric code used for the basis of issuance.

<u>Code</u>	<u>Basis</u>
1	Operation Experience
2	Special Practical Test
3	Special Flight Test
4	Other (Special Examination or Administrative Decision)

B. Authority. A one digit alpha or numeric.

<u>Code</u>	<u>Authority</u>	<u>Code</u>	<u>Authority</u>
0	Aeromedical Certification Br.	7	Alaskan Region
1	Eastern Region	8	Federal Air Surgeon
2	Southern Region	C	Great Lakes Region
3	Southwest Region	*D	Reserved
4	Central Region	E	New England Region
*5	Western-Pacific Region	*S	Northwest Mountain Region
*6	Reserved		

C. Cause. A one digit alpha code indicating cause of issue. Three possible cause codes.

<u>Code</u>	<u>Cause</u>	<u>Code</u>	<u>Cause</u>
A	External Eye Problem	J	Ear
B	Internal Eye Problem	K	Nose
C	Glaucoma	L	Throat
D	Deficient Distant Vision	M	Mute
E	Deficient Near Vision	N	Respiratory System
F	Deficient Color Vision	O	Heart Disease-General
G	Deleted	P	Heart Disease-Valvular
H	Field of Vision (Visual Field Deficiency)	Q	Heart Disease-Vascular
I	Deficient Hearing	R	Heart Disease-Arrhythmia
		S	Electrocardiogram Abnormalities

Code Schedule T (Continued)

<u>Code</u>	<u>Cause</u>	<u>Code</u>	<u>Cause</u>
T	Abdominal	X	Muscles
U	Neurological	Y	Miscellaneous Category
V	Mental and Nervous	Z	Malignancy
W	Bone and Joint	1	Amputation

- D. Month. A one digit alpha numeric code indicating the month issued. All printouts from the computer will be converted to a two digit number representing the proper month.

<u>Code</u>	<u>Month</u>	<u>Code</u>	<u>Month</u>
1	January	7	July
2	February	8	August
3	March	9	September
4	April	(Alpha Zero) 0	October
5	May	N	November
6	June	D	December

- E. Year. A two position numeric code indicating the year of assignment such as 84 for 1984.

- F. Class. A one digit numeric code showing class of the airman.

<u>Code</u>	<u>Class</u>
1	First Class
2	Second Class
3	Third Class

- G. Duration. A one digit numeric code showing the time limit of the waiver.

<u>Code</u>	<u>Duration</u>
1	Six Months
2	Twelve Months
3	Eighteen Months
4	Twenty-four Months
5	Permanent



U.S. Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave., S.W.
Washington, D.C. 20591

July 18, 1986

Dear Senior AME:

Some months ago I wrote you concerning our implementation of an automated electrocardiograph (EKG) system network for transmittal and receipt of required EKGs for first-class airmen applying for medical certification. Our experience to date with the automated network has been quite successful.

Many of our senior Aviation Medical Examiners (AMEs) joined the network during the early stages of implementation and while we have recognized and resolved several "program bugs" common to new automated systems, we find we are able to recognize technical problems and pathology much sooner than was possible under the old manual system. This capability has allowed us to deal with certification problems more expeditiously to the benefit of all concerned. Obviously, the management of our EKG and certification workload has been simplified and safety enhanced by early recognition of pathology.

In an environment where dwindling resources demand increased efficiency we feel compelled to make those changes which we feel will contribute to the realization of those objectives. Therefore, effective August 1, 1987, all senior AMEs will be required to be a part of the automated network. The Datamed Corporation, acting on behalf of FAA, will be contacting senior AMEs beginning August 1st of this year to arrange for your participation and to explain alternatives. Two options are available for AMEs to electronically transmit first-class pilot EKGs to the Aeromedical Certification Branch (1) by using a previously equipped transmitting EKG machine (2) by adding a transmitting capability to existing equipment. Both of these options may be used for private patients by transmitting to an interpretive service facility.

I have enclosed a "fact sheet" which includes a list of compatible EKG equipment and vendor services. Please assure compatibility of any equipment or services you are considering prior to entering into any agreement. Should questions arise please contact the appropriate personnel listed on the last page of the enclosure.

As always, we appreciate your service to the aviation community and the FAA and look forward to your continuation as a senior AME. However, please be assured that should you choose not to participate in the automated network, for whatever reason, you may continue to participate as an AME for second- and third-class medical certification.

Sincerely,

Frank H. Austin, Jr., M.D.
Federal Air Surgeon

Enclosure



Cost

The FAA has worked with the EKG industry to design a unique system that keeps costs to a minimum and provides maximum compatibility with existing EKG transmission equipment, while still providing the FAA with essential data on the pilot being examined. The FAA recognizes that AMEs will probably desire to use their transmitter to send non-FAA EKGs to a nearby cardiologist or to a national center to achieve maximum utilization of AME investment in equipment. To this end the FAA system has been designed to be compatible with the DATAMED single-channel format, the IBM 5885 digital format, and the two most widely used three-channel analog formats -- the Hewlett Packard 3SL format and the Marquette D300-3SL format (configured for 22 digits to allow for sufficient site IDs). While this array of formats will not cover every possible EKG machine, it is the most comprehensive of any EKG network in the nation by a significant margin. Every AME should easily be able to work out a choice of equipment that will be compatible with the FAA network and also serve the AME's own needs for non-FAA EKGs in transmitting to a local cardiologist.

There are basically two options available to AMEs to transmit their EKGs to the Aeromedical Certification Branch: (1) AMEs can use a transmitting three-channel EKG machine, whether existing or newly purchased, or (2) AMEs can add the transmitter to their single- or three-channel EKG machine, whether existing or newly purchased. Either option may be used for private patient purposes. The only other expenses to the AME being part of the FAA network should be the telephone charges for EKG transmission which are typically under \$1.00 per EKG for both single- and three-channel EKGs, and telephone line/jack charges.

Many AMEs do not presently have EKG machines that can transmit; however, most existing machines can be upgraded by adding a transmitter purchased either from the EKG machine vendor or from Datamed Corporation. Three-channel transmitters can be purchased for approximately \$2900 or leased for about \$100 per month. Single-channel transmitters can be purchased for approximately \$1200 or leased for about \$40 per month. The transmitter must be the same number of channels as the EKG machine; however, within the three-channels, a choice of Marquette or Hewlett Packard format may be made if the cardiologist or computer center chosen by the AME for non-FAA EKGs has a preference.

Some AMEs will be taking advantage of this opportunity to purchase or lease a new EKG machine to replace equipment which is either worn out or obsolete. Since three-channel transmissions will yield to the FAA the maximum advantage, the FAA recommends AMEs consider upgrading to three-channel equipment if existing equipment is being replaced.

Several companies market EKG machines which are or can be compatible with the FAA computer system. To assist AMEs, a list of EKG machines known to be compatible with the system is attached. For information on any machine, please contact the manufacturer or local dealer directly. Should you have a technical question about compatibility, please contact Datamed Corporation. The FAA recommends that AMEs secure from any vendor written guarantees (including money back) on FAA compatibility when purchasing or leasing a machine represented to be compatible with the FAA system. This simple step could save AMEs from potential problems as they are contacted by vendors regarding new equipment.

FACT SHEET

FAA - AME Electrocardiograph System

In February 1985, the FAA Aeromedical Certification Branch began operating a national electrocardiograph system to simplify and expedite the first-class medical certification of airmen requiring an electrocardiogram (EKG). The new system permits designated Aviation Medical Examiners (AMEs) to send first-class pilot EKGs by telephone directly to the Aeromedical Certification Branch in Oklahoma City. Air Traffic Controller EKGs will continue to be manually transmitted to the appropriate regional medical facility. The purpose of this fact sheet is to provide information concerning the background, operation, cost, and status of the electrocardiograph system.

Background

In recent years, the Aeromedical Certification Branch in Oklahoma City has experienced problems in processing airman medical certification applications. The number of airmen has been increasing and applications are still being processed manually. The processing of EKGs required by airmen seeking first-class medical certification is another factor that causes long and serious delays in the processing of medical applications. The EKGs are often lost or delayed in the mail, at times are not even mailed, and copies instead of original EKGs are sent to the Aeromedical Certification Branch that are not interpretable. As a result, the FAA, AME, and airman experience long delays in the medical certification process.

After several years of analysis, the FAA has installed a system that will enable AMEs to transmit these EKGs by telephone directly to the Aeromedical Certification Branch in Oklahoma City. A computer records the EKG, the pilot's name, AME number, date, and other information. This automatic recording eliminates mistakes due to poor handwriting, manual transcription, and general human error. The other major benefit is that the system immediately notifies the sender in the AME's office whether a transmission has been received. If there is a problem with the transmission, the individual sending the EKG is notified promptly so that another EKG may be sent while the patient is still in the office. In addition, AMEs are relieved of the administrative burden of preparing and mailing EKGs.

The immediate receipt and verification of a tracing, therefore, eliminates most requests for "retakes" and reduces inquiries from anxious pilots concerning the status of their certification. Earlier detection of potential cardiovascular risk benefits the airman and the flying public.

Operation

EKG processing is much faster and more effective than in the past. In addition to receiving, logging, and storing all EKGs, the computer analyzes all three-channel EKGs using the IBM Bonner program. The Bonner program has been used for more than 15 years to interpret millions of EKGs with an exceptionally high degree of accuracy. In all cases, borderline and abnormal EKGs are being overread by FAA physicians and/or consultant specialists. An important objective of this program is not to interfere with the AME's relationship with the pilot. AMEs continue to obtain tracings, however, and read them if they desire. At the same time, the AME transmits the EKG to Oklahoma City by merely dialing an assigned telephone number after preparing the pilot for the EKG. Sufficient telephone lines have been installed so that the likelihood of delay will be minimized. The system does not affect the AME's responsibility and role concerning the pilot.

Transmitters connect to the telephone system through conventional telephone jacks identical to those used for home telephones. If the AME examination room does not have such a jack, a nearby jack may be accessed using the 25 - foot cord provided with the transmitter. The telephone jack needs to be on a telephone line used only for this purpose but by using the long cord, one line and jack may serve more than one room. Typically the telephone jacks can be installed for less than \$70.

All costs associated with participation in the system must be borne by the AME, possibly by including some costs in the examination fee charged to the pilot. In determining the added costs, if any, AMEs should consider the cost savings of not cutting, labeling, mounting, or mailing EKG tracings to the FAA.

Implementation

The FAA's National EKG System is now fully operational. Because we have over 3,000 Senior Designated Aviation Medical Examiners, we will have to schedule each one to connect to the system. You will be advised when it is your time to get on the system, and the Technical Representative (Datamed Corporation) will work with you to select the option best fitting your needs.

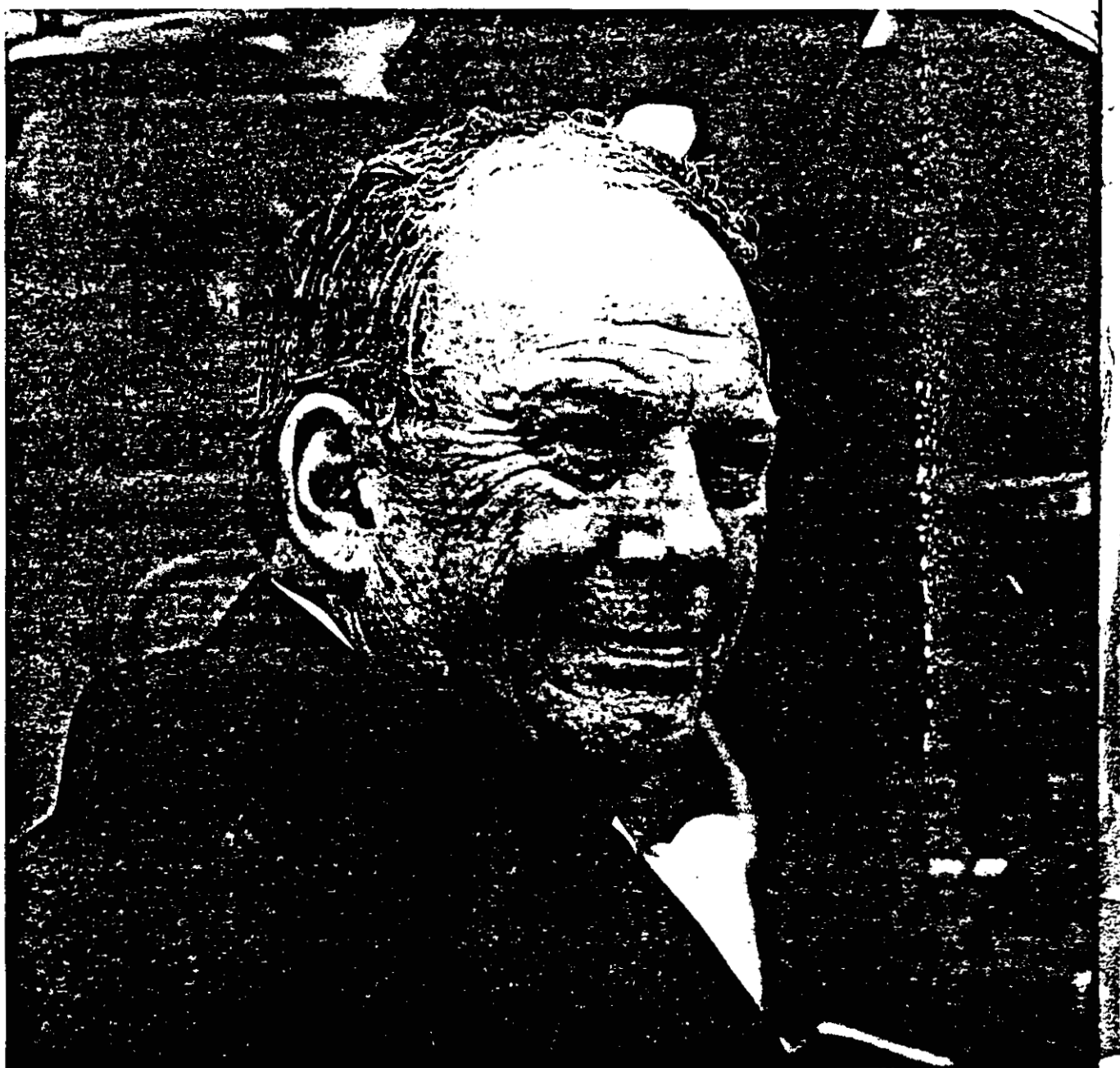
Please complete and return the enclosed postcard as soon as possible to assist in planning. Questions may be addressed to the FAA Project Coordinator or Technical Representative at the addresses listed below. All technical questions should be directed to the Technical Representative, Datamed Corporation.

The FAA Project Coordinator is:
Charles F. Booze, Jr., Ph.D.
FAA, Aeromedical Certification Branch
Telephone: (405) 686-4884

The FAA Project Technical Representative is:
Datamed Corporation
4029 Knight Arnold Road
Memphis, TN 38118
Contact: Pat Osborne
Telephone: 1-800-523-5408
or 901-363-3688

Some of the companies marketing EKG machines compatible with the FAA's
National EKG Network are:

- 1) Birtcher Corporation
4501 North Arden Drive
El Monte, CA 91734
800-423-4889 or 818-575-8144
- 2) Brentwood Instruments, Inc. (Fukuda)
3425 Lomita Boulevard
Torrance, CA 90505
Contact: Raymond Cohen
800-624-8950 or 213-618-9488
- 3) Burdick Division - Kone Instruments,
Inc.
15 Plumb Street
Milton, WI 53563
800-356-0701 or 800-554-4386
- 4) Cambridge Medical Instruments
73 Spring Street
Ossining, NY 10562
Contact: John Smith
800-892-0012 or 914-941-8100
- 5) Gerard Medical, Inc.
12425 Knoll Road
Elm Grove, WI 53122
Contact: Jim Gerard
414-784-9043
- 6) Hewlett Packard Company
1700 South Baker Street
McMinnville, OR 97128
800-952-2212 or 503-472-5101
- 7) Medical Systems Corporation
One Plaza Road
Greenvale, NY 11548
Contact: Harry Benedict
516-466-2000 or 516-621-9190
- 8) Marquette Electronics, Inc.
8200 West Tower Avenue
Milwaukee, WI 53223
Contact: Larry Nemie
800-558-7044 or 414-355-5000
- 9) Phone-A-Gram Systems
1201 Corporation Blvd.
Reno, NV 89502
Contact: Dick Barron, National Sales Director
702-348-1011
- 10) Quinton Instruments, A.H.
Robins Company
2121 Terry Avenue
Seattle, WA 98121
800-426-0337 or 206-284-4400
- 11) Telemed
2345 Pembroke Ave.
Hoffman Estates, IL 60195
Contact: Peter Glocker,
Director of Sales and
Marketing
312-884-5900



DOCTOR'S ORDERS

*The FAA's top medical man, Frank Austin, has
a new prescription for the agency's medical branch.*

by Eric Weiner
PHOTOGRAPH BY GORDON BOWEN



The following Three-Channel EKG Machines require DATAMED transmitters in either HP (351A) or Marquette (331A) formats and are fully compatible with the FAA system when used with these transmitters. The cardiologist or computer center selected for non-FAA EKGs may have a preference of formats, otherwise the HP (351A) format will be used because of its flexibility in the ID fields.

<u>Manufacturer</u>	<u>Model</u>	<u>Comments</u>	<u>Current Production</u>
Burdick-Kone	EK-6	DATAMED 331A/351A	No
Burdick-Kone	EK-670	DATAMED 331A/351A	No
Burdick-Kone	E-310	DATAMED 331A/351A	Yes
Burdick-Kone	E-320	DATAMED 331A/351A	Yes
Cambridge	3000	DATAMED 331A/351A	Yes
Cambridge	3038	DATAMED 331A/351A	No
Fukuda-Brentwood	FCP-200	DATAMED 331A/351A	Yes
Hewlett Packard	1505A	DATAMED 331A/351A	No
Hewlett Packard	1513A	DATAMED 331A/351A	No
Hewlett Packard	1514A/B	DATAMED 331A/351A	No
Hewlett Packard	1515A	DATAMED 331A/351A	No
Hewlett Packard	1516A	DATAMED 331A/351A	No
Hewlett Packard	1517A	DATAMED 331A/351A	No
Hewlett Packard	4700A	DATAMED 331A/351A	Yes
Marquette	3000SA Series	DATAMED 331A/351A	No
Marquette	4000SA	DATAMED 331A/351A	No
Marquette	Mac I-SA	DATAMED 331A/351A	No
Nihon Kodan	5403	DATAMED 331A/351A	No
Nihon Kodan	5503	DATAMED 331A/351A	No
Quinton	630A	DATAMED 331A/351A	Yes

Some of the cardiologists and computer centers who have expressed an interest in reading non-FAA EKGs for AMEs and who have single-channel receivers compatible with the FAA network and DATAMED 112A transmitters are:

1. Cardiology Consultants of Memphis, Inc. - Arthur J. Sutherland, III, M.D.
1325 Eastmoreland Avenue, Suite 315
Memphis, TN 38104 Phone (901) 725-6708
2. Chicago Medical Computers, Inc. - Ralph S. Zitnik, M.D. or
2800 West 95th Street Michael F. Schwartz
Evergreen Park, IL 60642 Phone (312) 425-7227
3. ECG Analysis Center - Nicholas M. Brandler
2929 Calder Avenue, Suite 310
Beaumont, TX 77702 Phone (409) 835-3315
4. Phone-A-Gram Systems - Dick Barron
1201 Corporation Blvd.
Reno, NV 89502 Phone (702) 348-1011

In addition to the above who have both single-channel and three-channel receiving capability, there are several dozen hospitals and computer centers nationwide who can receive three-channel EKGs in Marquette, Hewlett Packard, or IBM formats. AMEs must make their own arrangements directly with the selected receiving center or with their local cardiologists.

Equipment


Listed are EKG machines presently known to be compatible with the FAA's National EKG System either with built-in transmitters or with add-on transmitters available from Datamed Corporation. Please note that neither the FAA nor the Technical Representative is making any endorsement or recommendation for or against any vendor or specific EKG machine by making this list for AMEs. It is to be used for reference purposes only. AMEs are advised to seek references from manufacturers or vendors before entering into any agreement. Questions about non-listed machines should be directed to the Technical Representative. This list will be updated from time to time as other EKG Machines are determined to be compatible with the FAA system.

The following Single-Channel EKG Machines require DATAMED Transmitters and are fully compatible with the FAA system when used with these transmitters. The cardiologist or computer center used for single-channel non-FAA EKGs will require a compatible single-channel receiver.

<u>Manufacturer</u>	<u>Model</u>	<u>Comments</u>	<u>Current Production</u>
Burdick-Kone	EK-4	DATAMED 112A	No
Burdick-Kone	EK-5/5A	DATAMED 112A	No
Burdick-Kone	EK-8	DATAMED 112A	Yes
Burdick-Kone	E-200	DATAMED 112A	Yes
Birtcher	365	DATAMED 112A	Yes
Birtcher	399	DATAMED 112A	No
Cambridge	VS-3	DATAMED 112A	No
Cambridge	VS-4	DATAMED 112A	No
Cambridge	VS-550	DATAMED 112A	Yes
Fukuda-Brentwood	FX-102	DATAMED 112A	Yes
Sanborn (HP)	100	DATAMED 112A	No
Hewlett Packard	500	DATAMED 112A	No
Hewlett Packard	1500A/B	DATAMED 112A	No
Hewlett Packard	1511A/B	DATAMED 112A	No
Medical Systems Corp.	7111	DATAMED 112A	Yes

The following Three-Channel EKG Machines have built-in transmitters and are fully compatible with the FAA system by programming in the correct telephone number and setting the 22 ID digits in the FAA format. Most of Marquette (MEI) format devices require the 21st and 22nd digits to be set internally.

<u>Manufacturer</u>	<u>Model</u>	<u>Format</u>	<u>Comments</u>	<u>Current Production</u>
Burdick-Kone	EK-7	MEI	Add 21 & 22 digits	No
ECG Systems, Inc.	Med I	MEI	Standard-FAA	Yes
Gerard Medical	R-2000	MEI	Add 21 & 22 digits	Yes
Hewlett Packard	1517A opt. 02	HP	Standard-5.4 sec.	No
Hewlett Packard	4700A w/4710A	HP	Standard-5.4 sec.	No
IBM	5885	IBM	Standard	No
Marquette	3000T Series	MEI	Add 21 & 22 digits	No
Marquette	4000T	MEI	Add 21 & 22 digits	No
Marquette	MAC I-AT	MEI	Add 21 & 22 digits	No
Phone-A-Gram System	Telemed	MEI	Add 21 & 22 digits	No
Telemed/Health Tech	HT300	MEI	Add 21 & 22 digits	No
Telemed/Health Tech	HT310	MEI	Add 21 & 22 digits	No
Telemed/Marquette	All Models	MEI	Add 21 & 22 digits	No



GOOD HEALTH IS vital for everyone, but for pilots it is especially crucial. Whether it be a first-class certificate for an airline career or a third-class ticket for an occasional Sunday afternoon jaunt at the local airport, every pilot fears "busting" a medical. For those unlucky ones who didn't meet the standards, the problem was compounded by a sluggish FAA appeal process that discouraged many pilots from trying to fly again.

When Frank Austin, Jr., MD took over as Federal Air Surgeon 16 months ago, one of his priorities was to clear out the bureaucratic backlog. *Flying* Associate Editor Eric Weiner spoke with Dr. Austin about his progress, as well as a variety of health concerns, ranging from the risks of corrective eye surgery to the effects of marijuana on pilot performance.

Flying: Why did the FAA withdraw its proposal to extend the duration of the third-class medical?

Dr. Austin: There would be an increased risk of accidents due to medical reasons. We will reconsider it at the time we go out for rulemaking after the AMA [American Medical Association] report. In other words, the withdrawal had nothing to do with the AMA report at all, but once we decided to withdraw it we volunteered the fact that we would reexamine the issue in light of the experts' opinion concerning frequency of examinations. It was misconceived by some folks that we withdrew it because of AMA objections, but it was not AMA objections at all. The objections were raised by individual aviation medical examiners and flight surgeons in the community.

Flying: Where is the evidence that increasing the duration of the third-class medical will lead to an increase in accidents?

Dr. Austin: An analysis showed that if aircraft accidents are caused by some sort of medical condition, and we have to presume they are in some rare cases, then if you extend the duration of the medical certificate you will decrease the detection of these conditions. And merely by decreasing the detection of conditions you end up with an increased number of aircraft accidents due to medical conditions. The problem is whether that [number] is significant or not. The report showed there were going to be potentially 3.6 additional deaths per year. Over 10 years it turned out to be 36 folks, and that's just a little bit heavy. Other factors went into the decision process, but of course increased deaths is not something that we like to accept.

Flying: Isn't there a conflict of interest when the AMA makes recommen-

dations to the FAA concerning the duration of the medical exams?

Dr. Austin: Their analysis is not related only to the duration of the medical exams. They look at the standards from a specialist medical standpoint—cardiology, neurology, endocrine, orthopedics, eyes and ears—and advise us if the standards are valid or if they need some modification. The AMA itself and those on the committee are not those who would gain from doing physicals for us, because generally they are not the aviation medical examiners. They have nothing to gain financially or prestige-wise from making a recommendation one way or another.

Flying: When you took over as Federal Air Surgeon 16 months ago, you were determined to reduce the bureaucratic backlog for those pilots who were appealing a denied medical. What progress have you made toward that goal?

Dr. Austin: The backlog was very excessive at Oklahoma City, our main certification branch, and at headquarters, where we had our final reviews before issuing waivers—which we now call special issuances, as opposed to what used to be a legal process called an exemption. We worked very hard to increase the number of people working on it administratively and to decrease the processing time and the number of tests we needed and the consultants who had to look at it. Our progress at headquarters has been substantial. We have decreased the backlog about 88 percent, which is tremendous. We have reduced the time delays here at headquarters from what used to be eight months—or more—to below two months. In 1985 we issued twice as many waivers as the year before.

One of the things I did was to take a very close look at our criteria for reconsideration. The regulations have not changed since I took over—the disqualifying defects are the same—but we looked at each of the different areas. Most of our attention was on recertifying pilots who had had cardiovascular problems, and we tried to determine whether the risk is actually as high as we were considering. When we thought that the risk was not significantly higher than for the population that is out there flying, particularly in the third-class area, we certified those people with waivers. So far we haven't had any indication that this has had an adverse impact on safety.

Flying: A bypass operation used to mean permanent grounding for a pilot. Are these people now being recertified?

Dr. Austin: They started recertifying one-artery bypass cases back in the

1970s. The difference was that it was a very slow process, and because it took so long and was so demanding in the special tests and so forth, we were getting a huge backlog. So we took a real critical look at the criteria that we were applying to determine if someone was a risk or not, and made judgments that were less conservative than they were shortly before I came here. But this has been an evolutionary process.

In late 1984 we hadn't certified anybody with more than a two-artery bypass. After talking to a lot of cardiologists, I thought the number of arteries that had to be bypassed was a medical judgment that was not relevant to whether the person was at greater risk. We can be less conservative than we were before and not affect safety.

We have reduced the time for when a bypass patient can reapply from two years to six months. If he is clinically well, according to his doctors, we can then do the special tests. If he shows no signs of ischemia [lack of blood getting to the heart] and he is not smoking—anybody that has a heart attack and continues to smoke is a total idiot in my mind—and if his cholesterol is down, his chances of being certified are very good.

Flying: I spoke with several people who have noninsulin-dependent diabetes. These cases seem to be easily controlled by a careful diet and through hypoglycemic drugs. Are you planning to allow noninsulin-dependent diabetics to fly?

Dr. Austin: We haven't gotten the final report from the AMA, but I have a feeling from the grapevine that there will be medical evidence to allow us to certify this type of case [with no complications and no risk of sudden hypoglycemic attack]. We will probably be able to certify them in the near future. We have already certified selected cases.

I should point out that diabetes, as well as epilepsy, cardiovascular disease, angina and heart attacks, will remain disqualifying. Once a person is treated and gets better, can they request a special issuance or waiver? Yes, and in many of those cases they will be certified.

Flying: Are there procedures for a recovered alcoholic seeking a third-class medical to be recertified?

Dr. Austin: Yes. We're having some success individually. If a person is documented to have had a recovery program

and is documented to have been without alcohol for two years, we can certify him under the regulations. Short of two years we have to have real good assurance that they are maintaining sobriety. A recovering alcoholic, of course, has to abstain totally from alcohol. It's very difficult for private pilots to give us that assurance because we can't make the flight operations department one of their monitors, like we do in the airlines. I would suggest to any recovering alcoholic who feels he's had a very good rehabilitation program, and can document it, that we would consider a special waiver for him after about eight months or a year of sobriety.



**"THERE IS CERTAINLY
a time when many people
should quit flying.
Some should quit when
they are 17."**

Flying: Many young pilots are having the radial keratotomy procedure [a surgical method of improving vision] to better their chances of airline employment. Do you feel that this procedure is safe?

Dr. Austin: Some people think the risks are major and some people feel they are acceptable. If the eye function is good, we will certify them. Radial keratotomy, to us, is not a disqualifying factor; however, it has been a disqualifying condition for the airlines and the military, and probably will remain so, because there is still some uncertainty about the long-term effects.

Flying: With the population aging, and considering the medical advances that have been made, isn't the age-60 retirement rule an anachronism? Would you consider a retirement rule based on health rather

than age to be more fair?

Dr. Austin: It is a policy decision of the FAA to maintain the age-60 rule, which is not a medical rule; it is an operations rule. It has medical implications, and that's why medical gets involved. The problem is that we still cannot determine with great assurance if a person above age 60 is at an increased risk. Certifying pilots over age 60 would be a very labor-intensive activity, and it would provide great uncertainty to the individual to have to be tested every three to six months with exotic procedures to determine if they continue to remain qualified. And we still are not certain if the tests would give us the

answer.

Flying: Is there a time when the private pilot is too old to fly?

Dr. Austin: There is certainly a time when many people should quit flying. Some of them should quit flying when they are 17. I know a lot that are 24 that should probably quit flying. There's a batch in the middle range that should quit flying, as they lose proficiency. And certainly there are older pilots who can fly very safely and there are those who are hazardous. It's a matter of proficiency.

Flying: For the normal, healthy pilot, what is the greatest health risk?

Dr. Austin: Smoking, and the use of tobacco in any form, is detrimental to health and certainly will lead to a greater risk of losing a license. Marijuana, which some people think is innocuous, is not harmless. A regular smoker of pot who smokes 12 hours

before flying is probably going to have lessened performance. Some people have shown decreased performance 24 hours after smoking. The wise thing to do, as aviators have always done, is not to take medication of any kind that has those effects.

Flying: Do over-the-counter drugs pose any danger?

Dr. Austin: Antihistamines and other such medicines can make people pretty goofy. The best test is to take them when you're not flying and see what happens. If you have a bad cold and you're taking cold medicine, there are two reasons not to fly: one is because of the cold medicine, which can make you not so swift; and number two is because of the underlying problem—you can rupture your eardrum. And of course you're not so sharp physically and mentally. □

Cardiovascular Epidemiology, Exercise, and Health: 40-Year Followup of the U.S. Navy's "1000 Aviators"

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YORK E, MITCHELL RE, GRAYBIEL A. Cardiovascular epidemiology, exercise and health: 40-year followup of the U.S. Navy's "1000 aviators." *Aviat. Space Environ. Med.* 1986; 57:597-9.

The interrelationship of aging, performance, and stress modification has been the subject of investigations in the U.S. Navy. Beginning in 1940, a study of 1,056 student and instructor pilots lowered previously high attrition rates in training by emphasizing both physical and psychological screening. After World War II, when 208 pilots in the group died, followup studies of the survivors were conducted in 1951, 1957, 1963, 1969-71, 1977, and 1980-81. In February 1981, 715 questionnaires were mailed to known survivors, with 500 replies subsequently analyzed. Additionally, 114 of the respondents who had previously been examined during 1969, were again examined in 1980-81; those individuals were markedly different in their lifestyle, particularly in exercising regularly, abstaining from cigarette smoking, and drinking alcoholic beverages moderately, as contrasted to 28 aviators also examined in 1969 who died in the interim. Healthy lifestyle may alter cardiovascular risk, preventing premature death.

THE INTERRELATIONSHIP of aging, performance, and stress modification has been the subject of investigations in the U.S. Navy. Beginning in 1940, the Navy has collected detailed information periodically on a selected group of 1,056 pilots, referred to as the "1000 Aviators" (4). Previous reports identified electrocardiography (5), blood pressure (6), lung volumes (10), and stress tests (11) as possible

predictors of disease. Recent reviews have examined epidemiologic correlates of aging, fitness and survival (1-3, 8,9,12-19). The current investigation explores the hypothesis that active, regularly exercising individuals have lower mortality compared to matched subjects in the "1000 Aviators" cohort.

MATERIALS AND METHODS

The first followup study was launched in 1951. A travelling physician using a mobile van examined 703 of the known survivors; 208 pilots died during World War II. In 1957, 785 subjects were examined, their mean age 40, again using a mobile van, with 20 additional new deaths recorded since the previous study. In 1963, evaluations were centralized at Naval Air Station, Pensacola, FL, with 685 subjects coming for examination. During 1969-71, extensive (2 d per subject) evaluation was performed on 675 men coming to the Naval Aerospace Medical Institute, Pensacola, mean age then 53 years. In 1977, 128 men came to the laboratory with 554 additionally responding to mailed questionnaires; 95 nonmilitary deaths were then totaled for the entire group since 1945. From January 1980 through June 1981, 140 subjects returned for examinations at the Naval Aerospace Medical Research Laboratory, Pensacola. Additionally, 715 questionnaires were mailed during January, 1981, detailing lifestyle, exercise, diet, smoking habits, and the use of alcoholic beverages. Five hundred completed questionnaires were returned and subsequently analyzed. Of the questionnaire respondents, 114 were physically examined by the author (EY) during 1969 and returned for examination by him during 1980-81; 28 other individuals examined (by EY) during 1969 subsequently died of cardiovascular disease,

This manuscript was received for review in May 1985. The revised manuscript was accepted for publication in August 1985.

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The opinions and conclusions contained in this report are those of the authors, and do not necessarily reflect the views or endorsement of the Navy Department.

TABLE I. CARDIOVASCULAR RISK FACTORS AND MORTALITY.

	Group I (114 alive)	Group II (28 deceased)	Probability
EXERCISE	62 (60%)	3 (11%)	$p < 0.01$
SMOKING	9 (8%)	17 (61%)	$p < 0.001$
CHOLESTEROL	217 mg% average	230 mg%	$p < 0.05$
HYPERTENSION	10 (8%)	5 (18%)	$p < 0.02$
CV DISEASE (known prior)	6 (5%)	10 (35%)	$p < 0.001$
ALCOHOL	< 6 oz/day	> 8 oz/day	
	102 (87%)	20 (77%)	$p < 0.05$
	non-drinkers	non-drinkers	
	15 (13%)	6 (23%)	$p < 0.02$

precluding any assessment during 1980. Thus, there were two separate groups available for comparison of any relationship between exercise and cardiovascular disease: Group I (114 alive), and Group II (28 deceased).

RESULTS

MacIntyre *et al.* during 1977 compared the causes of death in the "1000 Aviators" population to those of unselected American males (12). The "1000 Aviators" cardiovascular mortality rate was less than half what might otherwise have been predicted. By June, 1981, an additional 13 cardiovascular deaths had occurred, still much lower than might have been predicted. The nonmilitary overall mortality rate of 9.3 per 1000, and the cardiovascular mortality rate of 4.8 per 1000, remained approximately half of what might have been predicted for unselected males in the American population of similar age and ethnic characteristics. Since the inception of the "1000 Aviators" study in 1940, there have been 365 known deaths, 208 operational during 1941-45. From 1946-81, 157 deaths occurred; 51 of those were due to cardiovascular disease (32%), the number 1 cause of death for similar American males. From 1971-80, 28 cardiovascular deaths occurred. In the Table, some of the risk factors for cardiovascular disease are contrasted in Group I (114 alive in 1981) and Group II (28 deceased since 1970).

DISCUSSION

Lowering cardiovascular risk factors may be associated with the lower mortality due to heart disease in the "1000 Aviators" population. Of particular interest in the current study was the relationship of regular, vigorous exercise, defined as at least 0.5 h · d⁻¹ on at least four separate days of each week. Those who maintained such a level of exercise at a minimum were the same ones who either never smoked cigarettes or had ceased smoking for more than 5 years prior to 1980. From 1945-57, 57% of all the "1000 Aviators" were smoking at the rate of at least one pack per day; by 1981, only 20% of the survivors overall were smoking. They also had a lower incidence of hypertension and hyperlipidemia. The average fasting serum cholesterol for the group in 1957 was 227 mg% and had fallen to 220 mg% by 1971; however, it was 230 mg% for those in 1969-71 who died in the intervening years,

contrasted to 217 mg% for survivors measured in 1980-81. Hypertension was found in only 17 subjects of 140 examined in 1980-81. Alcoholic beverage consumption was moderate-to-absent in many of the survivors (group I) contrasted to the heavier drinking patterns in the deceased (group II) during the past decade.

A regular exercise program was incorporated into the lifestyle of 70% of those returning for examination during 1980-81. The men in Group I (mean age 65) averaged 9 or more hours weekly in brisk walking (3 MPH), jogging, rowing, swimming, or tennis. Fewer than 7% of those responding to the questions about exercise admitted to no aerobic activity at all, as defined above. Paffenbarger has shown that those individuals who quantify exercise as to duration, frequency, and intensity expending at least 2000 kilo-calories per week, enhance survivability (17). Exercise contributes to altered biochemical and physiological parameters by lowering blood lipids, improving glucose metabolism, lowering systemic blood pressure, decreasing myocardial oxygen demand and work, and improving myocardial efficiency (2,7,16). Emotional factors—such as alleviating anxiety, decreasing depression, and harnessing hostility—help the "1000 Aviators" and others not only survive but perhaps prevail.

Speculation as to the role of exercise in prolonging life, by reducing both morbidity and mortality, continues (1-3,7,12-19). Haskell comments that although there are both benefits and risks to exercise, health-enhancing activity may confer cardiovascular protection (7). Oberman has stated that exercise must be habitual, vigorous, and continuous to provide protection from coronary artery disease. In his review, he concludes that population studies by others generally demonstrate that active people develop coronary artery disease less frequently, but clinical trials may still be necessary to test the hypothesis that exercise either prevents or postpones disease in previously inactive individuals (16).

In summary, the "1000 Aviators" cohort, a highly selected group of American males, extensively evaluated over 40 years, adds evidence that endurance exercise (aerobics) may be a final common pathway favorably modifying cardiovascular risk factors. The healthy aviation survivors should stimulate sedentary individuals to adopt preventive measures for meaningful longevity, fulfilling the aphorism of the Roman historian Tacitus: "Always active, never impulsive".

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FAA Statistical Handbook of Aviation

Calendar Year 1983



U.S. Department
of Transportation
Federal Aviation
Administration

PETITIONER'S
EXHIBIT

77

TABLE OF CONTENTS (Continued)

	<u>Page</u>
VII. AIRMEN.....	127
7.1 Estimated Active Pilot Certificates Held: December 31, 1974 - 1983.....	128
7.2 Estimated Active Women Pilot Certificates Held: December 1974 - 1983.....	129
7.3 Pilot Certificates Issued, by Category: CALENDAR YEARS 1979 - 1983.....	130
7.4 Instrument Ratings Issued: 1983, 1983, and 1979.....	131
7.5 Estimated Instrument Ratings Held, by Class of Certificates: December 31, 1983 and 1982.....	132
7.6 Estimated Active Helicopter Pilots, by Class of Certificates: December 31, 1983.....	133
7.7 Estimated Active Glider Pilots, by Class of Certificates: December 31, 1983.....	134
7.8 Estimated Active Helicopter and Glider Pilots: December 31, 1979 - 1983.....	135
7.9 Estimated Total Pilots and Instrument Rated Pilots: December 31, 1979 - 1983.....	135
7.10 Estimated Active Pilot Certificates Held, by Category and Age Group of Holder: 1983, 1982, and 1978.....	136
7.11 Estimated Active Pilots and Flight Instructors, by FAA Region and State: December 31, 1983.....	137
7.12 Estimated Active Nonpilot Airmen Certificates Held, by FAA Region and State: December 1983.....	139
VIII. GENERAL AVIATION AIRCRAFT.....	141
8.1 Active General Aviation Aircraft, by Aircraft Type and Primary Use: 1983.....	143
8.2 Active General Aviation Aircraft, by Aircraft Type: 1979 - 1983.....	144
8.3 Active General Aviation Aircraft Total Hours Flown, by Aircraft Type and Primary Use: 1983.....	145

TABLE 7.10

ESTIMATED ACTIVE PILOT CERTIFICATES HELD,
BY CATEGORY AND AGE GROUP OF HOLDER
1983, 1982, AND 1978

Age Group	Type of Pilot Certificates															
	Total Active Pilots					Student			Private			Commercial			Airline Transport	
	1983	1982	1978	1983	1982	1978	1983	1982	1978	1983	1982	1978	1983	1982	1978	
Total	213,004	213,255	196,333	147,197	156,361	204,974	318,643	322,094	337,644	159,495	165,093	125,333	75,926	73,471	55,361	
14-15	290	322	361	280	322	361	0	0	0	0	0	0	0	0	0	
16-19	19,595	22,960	32,295	14,188	16,458	24,203	4,959	5,863	7,445	267	319	374	0	0	0	
20-24	70,679	77,535	93,546	29,759	33,072	45,153	28,039	30,369	36,405	10,806	11,911	10,402	622	678	437	
25-29	97,060	102,067	118,503	29,019	31,163	41,872	40,229	42,257	47,995	18,640	19,549	21,888	6,038	6,026	4,214	
30-34	104,166	105,873	131,012	24,195	25,080	32,722	46,459	47,309	49,989	18,585	20,740	35,006	11,577	12,208	10,005	
35-39	107,327	109,415	110,402	18,049	18,415	22,100	45,670	46,176	44,779	26,219	28,235	32,582	14,628	13,936	9,160	
40-44	59,756	67,746	89,250	11,857	12,020	14,411	39,859	38,512	38,271	23,913	23,940	26,062	12,594	11,793	9,208	
45-49	71,234	70,592	75,930	7,819	7,901	11,058	32,483	32,092	36,627	12,684	19,120	20,347	11,221	10,476	7,665	
50-54	61,035	61,315	63,994	5,718	5,915	7,232	30,941	32,372	35,985	15,065	14,478	14,176	4,479	7,714	5,462	
55-59	46,738	46,750	48,877	3,541	3,488	3,604	26,481	25,589	21,794	10,825	11,676	15,754	5,175	5,325	6,745	
60+	49,534	45,378	31,663	2,732	2,527	2,158	23,523	21,555	16,354	16,491	15,015	9,240	5,704	5,315	2,965	

Age Group	Type of Pilot Certificates									
	Helicopter (only)		Glider (only)2		Lighter-than-air2		Flight Instructor1			
	1983	1982	1978	1983	1982	1978	1983	1982	1978	1978
Total	2,337	2,034	2,874	8,157	7,842	6,541	62,201	62,492	52,201	
14-15	0	0	0	0	0	0	0	0	0	
16-19	11	10	10	152	185	243	108	117	137	
20-24	311	305	239	551	592	935	5,533	6,205	4,632	
25-29	1,591	1,740	1,254	1,043	1,093	1,090	9,511	9,305	7,972	
30-34	1,633	1,531	2,023	1,373	1,322	1,011	256	9,612	10,383	
35-39	1,732	1,590	733	1,260	1,143	706	342	10,642	10,620	
40-44	545	591	335	633	743	554	409	8,081	7,730	
45-49	296	263	167	647	539	547	513	6,221	6,085	
50-54	125	128	71	632	654	537	459	4,831	4,434	
55-59	63	55	31	632	592	487	462	3,272	3,491	
60+	27	16	11	1,034	923	434	454	2,224	2,261	

1. Not included in total active pilots.

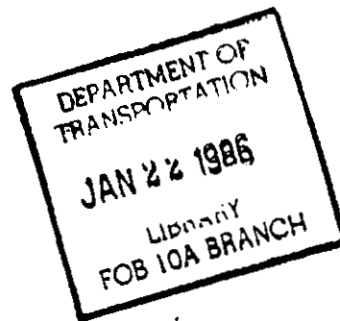
2. Pilots for lighter-than-air pilots are not required to have a medical examination, however, total.

3. Total 1978 is based on 1978-1979 data.

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FAA Statistical Handbook of Aviation

Calendar Year 1984



U.S. Department
of Transportation
Federal Aviation
Administration



VII.	U.S. CIVIL AIRMEN.....	135
7.1	Estimated Active Pilot Certificates Held: December 31, 1975 - 1984.....	136
7.2	Estimated Active Women Pilot Certificates Held: December 1975 - 1984.....	137
7.3	Pilot Certificates Issued, by Category: CALENDAR YEARS 1980 - 1984.....	138
7.4	Instrument Ratings Issued: 1984, 1983, and 1980.....	139
7.5	Estimated Instrument Ratings Held, by Class of Certificates: December 31, 1983 and 1984.....	140
7.6	Estimated Active Helicopter Pilots, by Class of Certificates: December 31, 1984.....	142
7.7	Estimated Active Glider Pilots, by Class of Certificates: December 31, 1984.....	143
7.8	Estimated Active Helicopter and Glider Pilots: December 31, 1980 - 1984.....	144
7.9	Estimated Total Pilots and Instrument Rated Pilots: December 31, 1980 - 1984.....	144
7.10	Estimated Active Pilot Certificates Held, by Category and Age Group of Holder: 1984, 1983, and 1979.....	145
7.11	Estimated Active Pilots and Flight Instructors, by FAA Region and State: December 31, 1984.....	147
7.12	Estimated Active Nonpilot Airmen Certificates Held, by FAA Region and State: December 1984.....	149
VIII.	GENERAL AVIATION AIRCRAFT.....	151
8.1	Active General Aviation Aircraft, by Aircraft Type and Primary Use: 1983.....	153
8.2	Active General Aviation Aircraft, by Aircraft Type: 1979 - 1983.....	154
8.3	Active General Aviation Aircraft Total Hours Flown, by Aircraft Type and Primary Use: 1983.....	155

TABLE 7.10
ESTIMATED ACTIVE PILOT CERTIFICATES HELD
BY CATEGORY AND AGE GROUP OF HOLDER
1984, 1983, 1980

Age Group	Type of Pilot Certificates														
	Total Active Pilots			Student			Private			Commercial			Airline Transport		
	1984	1983	1980	1984	1983	1980	1984	1983	1980	1984	1983	1980	1984	1983	1980
Total	722,376	718,084	827,071	150,081	147,197	199,833	320,086	318,643	357,479	155,929	159,495	183,442	79,192	75,918	69,569
14-15	269	260	260	269	280	260	0	0	0	0	0	0	0	0	0
16-19	17,816	19,595	31,071	13,588	14,188	23,335	3,912	4,959	7,069	184	267	468	0	0	0
20-24	65,665	70,679	94,956	28,726	29,759	44,946	25,768	28,039	35,825	9,174	10,806	12,334	630	622	686
25-29	95,406	97,060	120,234	29,549	29,019	40,503	38,793	40,229	50,423	17,823	18,640	20,627	6,133	6,038	5,975
30-34	104,484	104,166	134,396	24,939	24,195	32,461	47,320	46,459	54,510	17,603	18,585	29,774	11,470	11,577	13,656
35-39	110,280	107,927	115,600	19,489	18,089	21,448	47,023	45,670	48,309	24,666	26,219	31,695	15,553	14,628	11,865
40-44	93,214	89,756	91,898	12,814	11,857	13,718	41,312	39,859	40,393	24,187	23,913	25,353	13,004	12,494	10,870
45-49	72,168	71,234	78,758	8,083	7,819	9,749	32,581	32,483	37,177	18,643	18,684	21,164	11,784	11,221	9,408
50-54	61,657	61,035	66,185	5,758	5,718	7,210	30,204	30,941	37,976	15,499	15,065	13,669	9,387	8,479	6,100
55-59	47,428	46,738	52,785	3,816	3,541	3,734	27,393	26,481	25,662	10,279	10,825	15,783	5,168	5,175	6,576
60+	53,969	49,534	40,928	3,050	2,732	2,469	25,780	23,523	20,135	17,871	16,491	12,575	6,063	5,704	4,433

TABLE 7.10 (continued)
ESTIMATED ACTIVE PILOT CERTIFICATES HELD

BY CATEGORY AND AGE GROUP OF HOLDER

1984, 1983, 1980

Age Group	Type of Pilot Certificates												Flight Instructor ¹		
	Helicopter (Only)			Glider (Only) ²			Lighter-than-air ²								
	1984	1983	1980	1984	1983	1980	1984	1983	1980	1984	1983	1980			
Total	<u>7,532</u>	<u>7,237</u>	<u>6,030</u>	<u>8,390</u>	<u>8,157</u>	<u>7,039</u>	<u>1,166</u>	<u>1,337</u>	<u>3,679</u>	<u>61,173</u>	<u>62,201</u>	<u>60,440</u>			
14-15	0	0	0	0	0	0	0	0	0	0	0	0			
16-19	13	11	11	126	152	168	13	18	20	71	108	170			
20-24	778	811	435	527	551	631	62	91	99	4,932	5,533	6,227			
25-29	1,963	1,891	1,338	982	1,043	1,098	163	200	270	8,860	9,511	9,614			
30-34	1,525	1,633	2,321	1,368	1,373	1,263	259	344	411	9,202	9,612	11,246			
35-39	1,876	1,732	1,081	1,356	1,260	850	317	329	352	10,370	10,642	9,581			
40-44	809	648	483	929	833	640	159	152	441	8,349	8,081	7,163			
45-49	339	296	206	657	647	543	81	84	511	6,331	6,221	5,785			
50-54	126	125	105	621	622	634	62	75	491	5,022	4,831	3,872			
55-59	71	63	35	668	632	517	33	21	478	3,304	3,272	3,602			
60+	32	27	15	1,156	1,034	695	17	23	606	4,732	4,390	3,180			

Estimated: 1984 and 1983 data is based on a 25-month criteria. 1980 is based on a 27-month criteria only.

¹ Not included in total active pilots.

² Glider and lighter-than-air pilots are not required to have a medical examination; however, totals above represent pilots who received a medical examination.

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Department
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U.S. Civil Airmen Statistics 1984

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79

PREFACE

THE U.S. CIVIL AIRMEN STATISTICS IS AN ANNUAL STUDY PUBLISHED TO MEET THE DEMANDS OF FAA, OTHER GOVERNMENT AGENCIES, AND INDUSTRY FOR MORE DETAILED AIRMEN STATISTICS THAN THOSE PUBLISHED IN OTHER FAA REPORTS.

STATISTICS PERTAINING TO AIRMEN, BOTH PILOT AND NONPILOT, WERE OBTAINED FROM THE OFFICIAL AIRMAN CERTIFICATION RECORDS MAINTAINED AT THE FAA AERONAUTICAL CENTER, OKLAHOMA CITY, OKLAHOMA.

AN ACTIVE AIRMEN IS ONE WHO HOLD BOTH AN AIRMEN CERTIFICATE AND A VALID MEDICAL CERTIFICATE. AIRMEN WHO MUST HAVE A VALID MEDICAL TO EXERCISE THE PRIVILEGES OF THEIR CERTIFICATE ARE ALL AIRPLANE PILOTS, CONTROL TOWER OPERATORS, FLIGHT NAVIGATORS, FLIGHT ENGINEERS, AND FLIGHT INSTRUCTORS. THE GLIDER AND LIGHTER-THAN-AIR PILOTS ARE NOT REQUIRED TO HAVE A MEDICAL EXAMINATION BUT THE NUMBERS REPRESENT ONLY THOSE WHO HAD A VALID MEDICAL CERTIFICATE. MECHANICS, PARACHUTE RIGGERS, GROUND INSTRUCTORS, AND DISPATCHERS CERTIFICATES REPRESENT ALL CERTIFICATES ON RECORD AT THE AERONAUTICAL CENTER.

THIS STUDY WAS PREPARED IN THE OFFICE OF MANAGEMENT SYSTEMS, INFORMATION AND STATISTICS DIVISION, INFORMATION ANALYSIS BRANCH (AMS-420), BY PATRICIA W. CARTER.

DISTRIBUTION: ZMS-348E

CONTENTS

	Page
I. Active Pilot Certificates Held	3
II. Nonpilot Certificates Held	25
III. Airmen Certificates Issued	31

Tables

1. Active Pilot Certificates Held: December 31, 1975-1984	4
2. Active Women Pilot Certificates Held: December 31, 1975-84 ..	5
3. Active Pilot and Nonpilot Certificates Held, by Class of Certificate, and by FAA Region: December 31, 1984	6
4. Active Pilots and Flight Instructors by FAA Region and State: December 31, 1984	10
5. Active Women Pilots and Flight Instructors by FAA Region and State: December 31, 1984	13
6. Active Helicopter Pilots by Class of Certificates: December 31, 1984	15
7. Active Glider Pilots by Class of Certificates: December 31, 1984	16
8. Active Helicopter and Glider Pilots: December 31, 1980-84 ..	17
9. Total Pilots and Instrument Rated Pilots: December 31, 1980-84	18
10. Airline Transport Certificates Held, by Selected Age Groups: 1975-84	19
11. Active Pilot Certificates Held, by Category and Age Group of Holder: 1984, 1983, 1979	20
12. Instrument Ratings Held, by Class of Certificates: December 31, 1984 and 1983	21
13. Instrument Ratings Held, by Class of Certificates, by FAA Region: December 31, 1984	22
14. Active Nonpilot Airmen Certificates Held, by FAA Region and State: December 31, 1984	26
15. Active Women with Nonpilot Certificates Held, by FAA Region and State: December 31, 1984	28
16. Pilot Certificates Issued, by Category: Calendar Year 1980-1984	32

C O N T E N T S (Continued)

	Page
17. Pilot Certificates Issued, by Category and Conductor: December 31, 1984	33
18. Instrument Ratings Issued: 1984, 1983, 1980	34
19. Student Certificates Issued, by Month: 1980-84	35

Charts

Figure

1. Federal Aviation Administration Regions and Regional Offices ..	1
2. Active Pilot Certificates Held: Region and State: December 31, 1984	9
3. Active Women Pilot Certificates Held: Region and State: December 31, 1984	12

AIRMAN AGE GROUP SUMMARY

RIS MS-8070-29
A/O DATE 01/01/86

AGE GROUP	TOTAL PILOTS	STU	PRIV	COMM	ATR	HEL ONLY	GL ONLY	OTHER PILOT	F/I	TOTAL MONPIL	MECH	RIG	G/I	DISP	CIO	NAV	ENG
TOTAL	709540	146652	311086	151632	82740	8123	8168	1139	58940	412741	274100	9395	58214	8511	17802	1542	43377
14-15	266	266	0	0	0	0	0	0	0	7	6	1	0	0	0	0	0
16-19	16869	13184	3382	135	1	20	130	17	65	447	396	3	31	1	14	0	2
20-24	59171	26389	22727	8193	528	789	506	45	2379	17529	14050	66	1239	128	1737	0	309
25-29	91188	28420	35897	17323	6370	2178	847	153	8218	41631	29551	436	4212	775	3809	2	2846
30-34	103012	24868	46081	17036	11807	1572	1399	249	8640	46319	28162	1161	6241	1103	3868	5	5779
35-39	109676	19785	27322	22866	15981	1945	1485	312	9859	57508	34195	1831	8218	1242	3303	22	8697
40-44	93050	13191	40288	23683	13790	944	978	176	8330	52862	32209	1373	8354	1132	1758	105	7931
45-49	72354	8029	32153	18432	12541	407	698	94	6251	44567	26322	1334	5781	802	1206	510	8612
50-54	59956	5513	28473	18274	9833	153	571	46	4826	39634	26647	1103	4253	726	1699	420	5386
55-59	47698	3716	27206	10310	5695	77	660	34	3363	31540	23473	700	4027	596	438	201	2105
60&UP	56210	3711	27566	18337	6065	38	897	13	4881	80656	59023	1388	15833	2006	370	277	1766
UNDET	31	11	6	3	8	0	0	0	0	27	13	1	23	6	0	0	0

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EDWARD R. ROYBAL, CALIFORNIA
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FERNANDO TORRES-GIL
STAFF DIRECTOR

U.S. House of Representatives
Select Committee on Aging
Washington, DC 20515

Telephone: (202) 228-3376

September 16, 1986

Dr. T. Franklin Williams, Director
National Institute on Aging
9000 Rockville Pike
Building 31, Room 2C-02
Bethesda, MD 20892

Dear Dr. Williams:

Thank you for your letter of August 22, 1986, in which you describe the meeting between yourself, Dr. Koonce and Dr. Mohler and the Federal Air Surgeon, Dr. Frank Austin and his deputy, Dr. Jon Jordan.

I am aware of the examination protocol for airline pilots that was developed by you, Dr. Fox and Dr. Koonce in response to a request by this Committee. I am also aware that Dr. Earl Carter and several colleagues developed a similar examination protocol which is contained in the application of Melvin M. Aman, et al, Docket 25008, for exemptions from the Federal Aviation Administration (FAA) Age 60 Rule.

From your letter, I understand that during your meeting on August 18, 1986, you discussed these two examination protocols with Dr. Austin and Dr. Jordan and that you gave them copies of both for their evaluation. In order to avoid any possible misunderstanding by the FAA, I would like to ask you:

1.) Is the examination developed by the Carter Panel essentially equivalent to the one developed by you and your panel? and

2.) In your opinion, would granting exemptions to pilots who pass the Carter protocol, if the test results are evaluated by a panel of experts who recommend the applicant for an exemption, provide a level of safety equal to or better than that provided by the Age 60 Rule itself?

Thank you again for your assistance in this matter.

Sincerely,

Edward R. Roybal
Edward R. Roybal
Chairman

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PAUL SCHLEGEL
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80



DEPARTMENT OF HEALTH & HUMAN SERVICES

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SEP 21

September 23, 1986

The Honorable Edward R. Roybal
Chairman, Select Committee on Aging
House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your letter of September 16, 1986. I would like to respond to your questions concerning the examination protocol developed by the Carter Panel as follows:

1. In my judgment, the Carter protocol is essentially equivalent to the one developed by Drs. Fox, Koonce, and me.
2. Granting exemptions to pilots who pass the Carter protocol, provided the test results are evaluated by a panel of experts who recommend exemption, in my opinion would provide a level of safety equal to or better than that provided by the Age 60 rule.

Sincerely yours,

T. Franklin Williams, M.D.
Director
National Institute on Aging

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81



TRAVELERS CENTER ON AGING



Health Center Programs in Aging
Schools of Medicine and Dental Medicine
Farmington, Connecticut 06032-9984
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University Programs in Aging:
Schools of Family Studies, Allied Health,
Nursing, Pharmacy and Social Work
348 Mansfield Road, U-58
Storrs, CT 06268
(203) 486-4049/4043

October 20, 1986

FEDERAL AVIATION ADMINISTRATION
Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
800 Independence Avenue, S.W.
Washington, D.C. 20591

Re: In the Matter of the Petition of Melvin M. Aman et al, for
Exemption from the Age 60 rule, Public Docket No. 25008

Gentlemen:

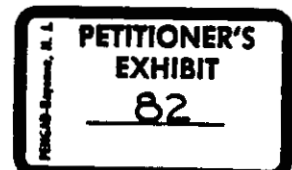
I am writing this letter to support the petition of Melvin M. Aman et al, to exempt experienced pilots from the age 60 rule. As an experienced geriatrician and Director of the Travelers Center on Aging at the University of Connecticut, it is my opinion that age alone should not be a criterion for denying older pilots the right to work. Our studies of biological aging clearly indicate enormous variability from person to person, and in the presence of good health, it is clearly established that physical and intellectual vigor can persist well into the 70's. Therefore, individual evaluation of otherwise healthy older pilots should be the mechanism by which decisions for continued work or compulsory retirement are made. Abundant tests for professional competence already exist for pilots, and physiologic assessment protocols are numerous and widely available. Such flexible evaluation should be the standard for the industry.

Sincerely,

Richard W. Besdine, M.D.
Director

/bbf

cc: Alan M. Serwer ✓
Haley, Bader & Potts



Essay

The Great American Pilot Shortage

It's the next national deficit the United States will be forced to face.

By Steven Thompson

All major airlines in the United States soon will be faced with a crisis: they will be losing pilots at a rate faster than they can replace them. There was a time when people would give their eyeteeth to become an airline pilot, but those days seem to be over. You'd think that today, when America's youth seems to prefer a good job over a good cause, the thousands of unfilled jobs in aviation would incite a stampede into flight training. You'd think so. But you'd be wrong.

In fact, the entire population of pilots in the United States—including both professional and recreational pilots—has been aging and shrinking, and both trends show no sign of slowing down. And while that big picture may be worrisome, a shortage of airline pilots is downright critical. The Future Aviation Professionals of America estimates that more than 8,000 new airline pilots were hired in 1985 alone and that during each of the next 14 years, more than 2,000 pilots will retire at age 60. To replace them, airlines have already begun to reduce entry standards for experience, education, and fitness.

According to Federal Aviation Administration (FAA) records, the average "active pilot" (holding a current medical certificate) was four years older in 1984 (the most recent year for which the figures are available) than in 1970, and the pilot population dropped from just under 733,000 in 1970 to about 709,000 in 1985. The picture is even bleaker if you look at what happened during this period: there was actually a steady gain during the 1970s, and the number of pilots peaked at just over 827,000 in 1980—but then began a long, steep slide. Thus, it took ten years to nurture, train, and license 94,000 new pilots but only five years to lose 118,000 old pilots.

There's more to the situation than simple supply and demand. Pilots are not consumer products; they're people who work hard, bear many burdens, and pay a high price for their certificates. They are also a national resource, important not just because of the critical job they perform but because of what they symbolize for our society: they are a persistent

human presence in an increasingly automated industry. Simply put, we are willing to fly because up front, running the machine, there is a fellow human being in whom we place our trust. So when their numbers change dramatically, we need to understand why and what it might mean for all of us, both as users of air transportation and as citizens.

All pilots are not equal, at least not in the eyes of the FAA. A series of ratings provides the means by which the FAA ensures that a pilot is qualified to fly a given airplane. Among the pilots themselves, the hierarchy of ratings becomes a series of career milestones and professional caste marks. The figures for active pilots cited here include all non-military pilots; refined to show the *kinds* of pilots in that declining population, 43.8 percent are private pilots, 21.3 percent are commercial pilots, 20.6 percent are students, 11.6 percent are airline pilots, and 2.4 percent are classified as "other." Implicit in this hierarchy is upward mobility; a student pilot, given sufficient motivation, "tuition" money, and health, can aspire to become an airline captain by progressing, via training and accumulated experience, through a private certificate, commercial rating, and finally, the airline-pilot rating.

For years, the airlines have relied on this continuous progression, along with the constant infusion of military pilots, to supply them with professional pilots. The shortage of professional pilots, while apparently sudden, is the result of a gradual but relentless disruption of that natural progression. Two factors are at work: the number of student pilots starting civil flight training has declined even further and faster than the decline of the pilot population as a whole, and more of our military aviators are remaining in the military.

Pilot recruiting for the military services may tell us what's happening—or not happening—in the civil pilot world. In U.S. colleges and universities, the services aggressively persuade students to become officers by funding their education through the Reserve Officer Training Corps. Even without the recent

return of the cinematic fighter jock as hero (Tom Cruise's Navy pilot in *Top Gun*), military aviation has sustained a presence among students as an option—albeit a tough one—after graduation. Consequently, none of the services has difficulty attracting pilot candidates. Nothing like this system exists in the United States for civil aviation. But it once did.

Not long before World War II, U.S. military and civilian aviation leaders, fearful that war was inevitable and alarmed at the dearth of pilots, persuaded the Roosevelt Administration to train thousands of civilians to fly. The Civilian Pilot Training Program was hugely successful and instrumental in meeting the ultimate demand for all kinds of pilots.

Some members of the aviation community view the current shortage of pilots with an almost wartime sense of alarm. The leaders of the Aircraft Owners and Pilots Association (AOPA), a group formed in 1939 that has become the largest association of pilots in the world, consider the plummeting professional pilot population to be a significant national threat. In response, they have proposed to members of Congress and the Reagan Administration that some aspects of the wartime training scheme be reactivated in the form of a plan they call the National Pilot Training (NPT) program.

"The NPT program," states the AOPA white paper, "would be administered as a series of flight training 'scholarships' to students already enrolled at two- and four-year institutions in the United States. The object of their training would be to take them from a nonpilot status through qualification as commercial pilots with instrument ratings." The AOPA suggests that the money for the program would come from the huge surplus

Today's students are still fired by the ageless dream of flight . . . but they think, mistakenly, that aviation offers no jobs. And that scares many of them off.

in the Aviation Trust Fund, which is up for renewal next year. The Trust Fund, funded from taxes on airfares and fuel sales, is intended for air transportation system improvements. The cost per student is an estimated \$20,000, and AOPA's management believes use of Trust Fund money to cover that cost is necessary because, "If more people cannot be encouraged to join the ranks of pilots and, more specifically, professional pilots, then the air transportation system will be unnaturally constrained."

That "constraint" concerns the AOPA not only because it might adversely affect its members but also because it affects air safety. There is a growing perception that airlines of all sizes may be hiring pilots with too little experience. And in 1985, for the first time since World War II, the majority of airline pilots hired came from civilian rather than military training backgrounds. In practical terms, this means that fewer of the new-hires have extensive experience. It is almost universally agreed in aviation that judgment saves lives, and that judgment derives not just from training but experience, so the pilot shortage is understood to be a threat to safety as well as an economic issue.

Pilots used to be the personification of progress. They were

the men and women who provided our wings, moved us and our goods, defended our borders, and lifted our spirits with their feats of endurance, skill, and dedication. To be a pilot was to be an adventurer, to challenge a hostile environment and prevail. Pilots symbolized heroism and the highest aspirations of humanity. They were widely perceived as among our society's best and brightest, regarded as role models, and when pilots evolved into astronauts, they became true national heroes. So it is tempting to lay the blame for the decline of the pilot population on an erosion of respect for pilots as symbols, and further, to wonder if that erosion signals some change in the nation's values, perhaps linked to a failure of collective nerve, a flagging of spirit, even a diminution in our capacity as individuals to accept responsibility. At any airport in the country, you can hear old pilots grumble that the Age of the Pilot is past, that kids don't care about flying any more, and that the reason is simple: the rewards are gone.

And yet Arthur M. Saddoris, Associate Director of Career Development at the University of Maryland, says that he and his office are besieged by students who "love flying, love space, love anything to do with technology or aviation, from a hang glider to the space shuttle." His view is echoed by other university career counselors across the nation and underscored by the lack of difficulty that colleges specializing in aerospace have in filling their classes. Listen to people like Saddoris and you hear that today's college students are still fired by the ageless inner flame of flight . . . *but*. But they think there are no jobs in the field. They, unlike their immediate predecessors, are highly job-oriented—cheerful, optimistic about the future, but pragmatic. According to Saddoris and his colleagues, aviation simply scares many of them off. And even if they do try to pursue their fragile, youthful hopes, they have a hard time getting "access"—access to airplanes and to airfields. (Next time you're at a local airport, see if *you* can find the front door.)

When you talk with the likes of Louis Smith, president of Future Aviation Professionals of America, you hear about unfilled cockpit seats, about the dramatic shortage of career pilots—indeed, shortages in *every* skill relating to aviation—that the AOPA cites as the rationale for its National Pilot Training program. When you ask if the students know about this, Smith says, "Oh, no. Academia doesn't have the word yet." And when you talk with college career counselors, you realize that they seem indeed not to have gotten the word. And then you wonder if the whole pilot shortage is not really a question of shifted societal values but simply a case of a colossal failure to communicate.

If so, and if there is value to us all in having a robust and continually reinvigorated aviation culture, then you are left with two conclusions. The first is that the aging and shrinking of our pilot population is a matter of national concern. And the second is that, in light of the inaction of the rest of the aviation community, the AOPA National Pilot Training proposal deserves the closest scrutiny by the Administration and the Congress for inclusion in the Aviation Trust Fund legislation—not just because the program can train, but because it can communicate. And sometimes communication is more important than training, for without the former, there is all too often no need for the latter. —

Where Have All the Pilots Gone?

By Robert Moorman

Massive hiring of new pilots and retirements of older ones are diminishing the supply of qualified pilots.

The large headline above the *New York Times* article—"Job Possibilities Soaring in the Aviation Industry"—jumps off the page and brings a smile to the face of the recent graduate of Embry-Riddle Aeronautical University, a Part 141 flight school.

He scans the article looking for the salient points of interest: a possible \$100,000-plus yearly salary for senior captains, a relaxation of flight time requirements by some airlines, pilot unemployment less than 4 percent, and most importantly, a projected hiring of around 8,000 pilots in 1986.

The young graduate, with just under 250 hours of flight time and a newly earned instrument rating, shows only a cursory interest in the smaller sub-head directly beneath the headline—"Facing Shortages, Carriers Are Said to Ease Criteria."

He reaches for the phone, knowing his parents will be pleased to know that their money was well spent.

Records being broken

In 1985, major and national carriers hired 7,872 cockpit crew members, clobbering the previously held records of 5,750 hired in 1984 and 4,600 in 1983. Approximately 1,256 pilots were recalled from furloughs and 3,046 pilots were hired by the regionals last year. And that voracious appetite for pilots shows no sign of abating anytime soon, according to the Future

Aviation Professionals of America, an Atlanta-based career information and placement service for pilots, flight attendants, and airline mechanics.

In May 1986, major carriers hired 558 pilots, while regional carriers added 371 pilots to their ranks. For the first five months of 1986, air carriers hired 3,168 new pilots, approximately one-fifth more than the 2,647 hired for the same period in 1985.

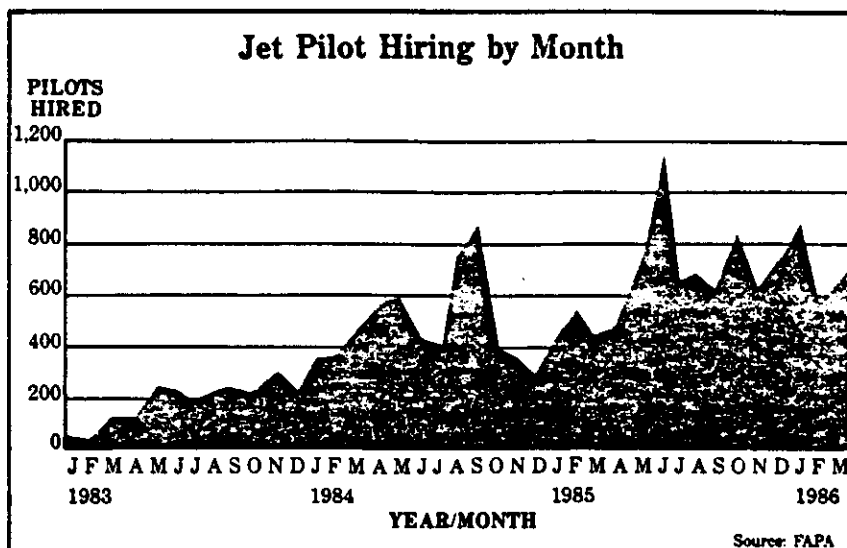
The airlines' voracious appetite for pilots shows no sign of abating anytime soon, according to FAPA.

FAPA predicts that 8,000 or more pilots will be hired in 1986. Indeed, the demand for professional pilots has not slackened.

While industry and ALPA applaud the current hiring boom, both are concerned about a possible shortage of qualified pilots around the late 1980s and early 1990s caused by the number of senior pilots who will be retiring. Furthermore, both are concerned that the trauma of an impending pilot shortage could cause a lowering of standards for becoming an airline pilot.

ALPA's 1986 *Age/Wage Analysis*, a research document compiled annually by the association for use in contract negotiations, provides grist for the worry mill. By 1995, approximately 7,161 ALPA-represented pilots will have reached age 60 and retired. Of that amount, 90 percent, or 6,483 pilots, will be from the majors, according to ALPA figures.

To break it down further, 662 ALPA pilots will retire at age 60 in 1986-87;



1,066 in 1988-89; 1,387 in 1990-91; 1,831 in 1992-93; and 2,215 in 1994-95.

By 1995 United, TWA, Eastern, and Pan Am will lose to retirement 2,353, 1,205, 1,099 and 683 pilots, respectively, with USAir losing 391 and Northwest 373 pilots, according to ALPA's figures. Piedmont and Frontier will fare better than other large carriers with 123 and 148 pilots retiring by 1995, respectively.

This coming retirement-prompted pilot shortage is exacerbated by a growing number of early retirements. At TWA and Eastern, two carriers with ongoing management problems, senior pilots are electing to retire before they reach the mandatory retirement age of 60. Reasons for early retirement vary from an attempt by pilots to protect pensions at financially troubled carriers to general disenchantment with management.

At Eastern, 75 senior-level pilots below the age of 60 retired during the first three months of 1986, according to ALPA statistics.

At TWA, 136 pilots have left during the first five months of 1986. Of that number, only 32 would have reached age 60 during 1986. ALPA's Retirement

and Insurance Department now estimates that 10 percent of the 3,000 pilots on TWA's seniority list will retire in 1986—roughly 8 percent more than would normally retire.

The growth rate for the U.S. jet transport fleet, which the Federal Aviation Administration projects at 2.6 percent per year from now until 1997, will also add to the increased demand for pilots. According to the same projections, by 1997 the U.S. jet transport fleet will number 4,000 aircraft and will carry more than twice as many passengers as were carried in 1985.

Using these FAA projections, FAPA believes that more than 31,790 new airline turbojet pilots will be hired over the next decade; the regionals are expected to hire an additional 10,000 over that period. Of those pilots hired by airlines, 13,849 will be hired as a direct result of growth and 17,941 will be hired to replace retiring pilots, predicts FAPA.

While the current need for pilots is a function not so much of retirement but of economic growth, retirement is definitely a coming factor.

Fewer military pilots

Another significant factor in the imminent pilot shortage phenomenon is that fewer military-trained pilots are being hired by the airlines today than in 1980, when nearly 83 percent of all airline pilots had military flying ex-

perience, according to a recent study by the Congressional Research Service, a division of the Library of Congress. Even though the Air Force and Navy are continuing to lose pilots to the airlines, the military has lost its position as the predominate supplier of pilots.

About 18 months ago, FAPA released figures showing that approximately 60 percent of those pilots hired by the airlines were civilian trained, compared to 40 percent trained by the military. While the regionals and the military together continue to supply a significant share of the major-airline pilot work force, separately they "cannot meet the present or future demand," explains Kit Darby, FAPA's vice-president for marketing.

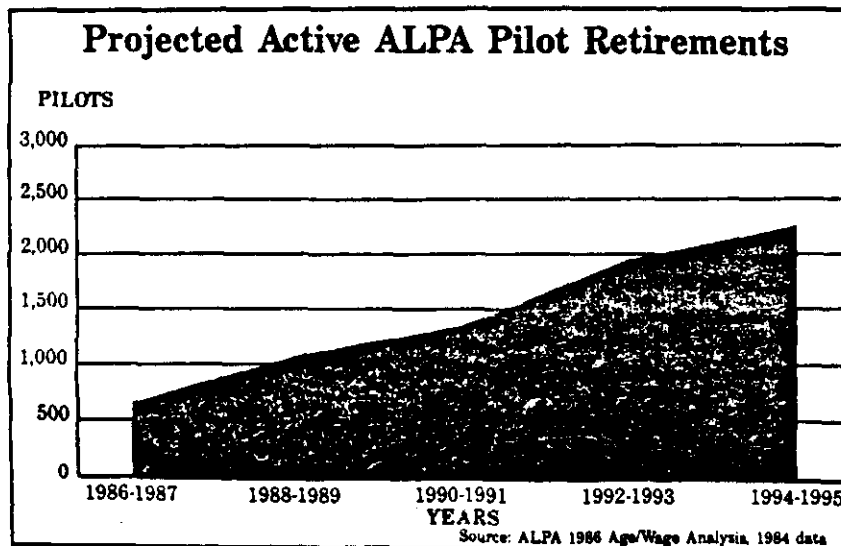
The airlines currently hire around 1,500 former military pilots per year. Most of these new-hires are senior Air Force captains or just-promoted majors or Navy lieutenant commanders. Furthermore, FAPA shows that an additional 500 retired military pilots were hired by the airlines in 1985. The number of retired military pilots being hired by the airlines is expected to climb, says FAPA. Many retired military pilots, who receive a lifetime pension, are, for now, content to fly for nonunion carriers like Presidential, People, New York Air, or Continental.

The retired military pilot who seems to be willing to fly for a lower-paying nonunion carrier, however, is a temporary phenomenon, predicts Darby, "when you consider many of them have many years of earning time left."

However, the Gramm-Rudman-Hollings Act, the balanced-budget bill recently passed by Congress, may unwittingly restore the military to the No. 1 position of pilot supplier. Secretary of Defense Caspar Weinberger was successful last year in exempting the military from any Gramm-Rudman cuts for 1986, which would have cut 186,000 employees from the military; some of these would have been pilots. Those protections, however, do not apply to 1987 and years beyond.

When asked to comment on the possible effect Gramm-Rudman would have on its pilot force in 1987, the Air Force was typically low key. "Any

The number of senior ALPA pilots retiring may cause a shortage of qualified pilots by the early 1990s.



Gramm-Rudman reductions for the officer force would most likely combine reducing the number of people assessed into the Air Force [pilot trainees], voluntary retirements, and as a last resort, a voluntary separation of active duty officers," stated the Air Force spokesman.

FAPA said it has received numerous calls from irate military pilots, who say their commanders are trying to influence them to resign or to retire from active duty.

Gramm-Rudman could create problems for the airline industry as well, which except for first quarter 1986 losses caused by fare wars, is generally healthy under deregulation, says the CRS study. For instance, Gramm-Rudman cuts in the controller or inspector work force could force FAA to limit the number of airline flights as well as reduce other services. Transportation Secretary Elizabeth Dole has assured air travelers that there would be no cuts in the controller or inspector work force. Members of Congress, however, say that the law specifies that the cuts be made equitably, across the board. And that, they say, means a reduction in the number of controllers and inspectors.

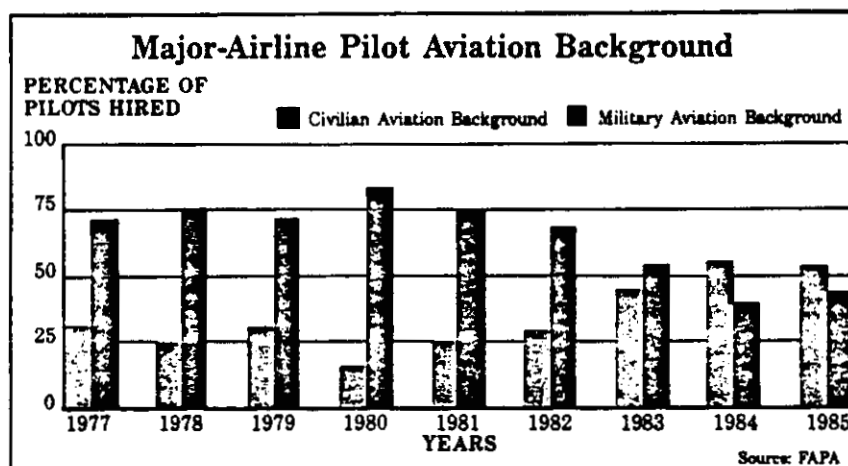
The average attrition rate at regional carriers varies between 30 and 50 percent, or 2,000 pilots, per year, records FAPA, with one carrier having had to replace all of its pilot force during 1985. Approximately 90 percent of those pilots who leave the smaller carriers go to work for the major airlines.

Where will they come from?

If the military and regionals can't meet the projected demand for airline pilots, where will they come from? "A lot of them will come out of the woodwork," answers Darby.

Darby believes that thousands of private pilots will come into the field at the bottom, filling the openings at smaller carriers, openings that are created when their pilots jump to the larger airlines.

"These pilots are an excellent source to meet future needs," he adds. "When we say there is a shortage of qualified pilots, we don't include these people



Airlines are hiring fewer military-trained pilots; the military is no longer the major supplier of pilots.

in the current list. That is one reason we are redirecting a lot of our efforts to showing the private pilot how he or she can become an airline pilot."

Another source for airline pilots may be the airlines themselves. "If pilot demand continues at current high levels, then both the airline industry and the military may have to rethink traditional patterns for meeting their pilot requirements," states the CRS study. "For example, the airline industry may have to do more of its own pilot training."

American Airlines had toyed with the idea of establishing an in-house pilot training academy, which would have trained pilots from ground school on up and then would have integrated them into the system. American abandoned the idea because "we felt we could continue to get the pilots we would need from the general aviation and the commuter communities, as well as a few from the military," explains American spokesman John Hotard.

American, whose fleet size will increase from 300 to 500 aircraft in the next five years, may be overly optimistic. Sources say that a year-old American study on long-term pilot needs calls for more money to be spent in training. But the study is con-

sidered proprietary and will not be released by the company, says Hotard. The airline is currently hiring around 75 pilots a month.

People Express, in an attempt to hold onto its pilots and ensure standardization of training, has developed a novel "farm club" concept, according to FAPA. New-hires will cut their teeth at Provincetown-Boston or Britt Airways—two regional airlines now owned by People—before they begin flying heavier aircraft with the parent company. Many years ago, Hughes Airwest instituted a similar farm club policy: young pilots flew Fokker F27s in Saudi Arabia for approximately a year and a half and then were integrated into the parent company back home.

The CRS study suggests that the current high demand for more pilots, coupled with a coming pilot shortage, may produce some gains for experienced pilots who may want to shop around for the best salary before locking themselves into a long-term commitment. Furthermore, massive retirements in the late 1980s and early 1990s will give the B-scale pilots a better chance of upward mobility and lesser chance of furlough, suggests FAPA.

"Any shortage will allow pilots to force the airlines to pay more for their services," says the CRS study. "This could seriously damage the effectiveness of the two-tier system in holding down airline unit labor costs. It would also give back to pilots, and potentially to their professional association,

the Air Line Pilots Association, some of the economic and political clout they are thought to have lost in the early 1980s."

Foreign-trained pilots

Another means of fulfilling pilot quotas in the next decade is to employ foreign-trained pilots who are experienced in flying large jet aircraft. FAPA will soon release an in-depth report on the concept of hiring foreign pilots to meet future pilot needs. FAPA says it has talked to a number of airlines that are considering forming a pool of jet-qualified foreign pilots.

Thus far, 300 foreign pilots have contacted the Atlanta-based employment service and are attempting to immigrate to U.S. carriers. Of those foreign pilots calling FAPA, 40 percent were Canadian; there were also several senior-level British Airways pilots who had opted for the early-out retirement plan offered by their company. The airlines will hire foreign pilots only if the shortage becomes critical, reveals FAPA.

"I have no problem with U.S. carriers hiring foreign pilots, providing they are integrated at the bottom of the seniority list," says Capt. Tom Ashwood, ALPA first vice-president and a former British military pilot who was hired by TWA in the mid-1960s as a result of a pilot shortage. "It will be a cold day in August before you see expatriates flying left seat without going through sequence."

The average flight time of airline new-hires is holding steady at 3,000 hours, according to FAPA's statistics. The amount of jet-flying time required by airlines, however, has gone from 2,300 hours of flight time in 1983 to 1,600 in 1984 and 800 in 1985. At that rate, the airline would not require any jet-flying time in 1986. Few in the industry, however, believe that jet time requirements will drop much further.

Training new pilots

Basically, two schools of thought exist on the training of pilots. One is that the market will create conditions mandating that enough pilots be trained. In other words, major carriers

may be forced to develop in-house, ground-up training facilities just to keep pace with the need for pilots, as well as to keep abreast of the competition.

The second school of thought, and one supported vigorously by ALPA, involves the long-term goal of establishing civil aviation "academies" throughout the nation, similar to the U.S. Merchant Marine Academy in New York. That goal also calls for enhancing the efforts of 400 colleges and universities that offer courses in aeronautical study. If we are not careful, ALPA leaders caution, pilot qualifications standards could be lowered as a result of the upcoming pilot shortage.

During the 29-day United pilots' strike, management sought pilot applicants with the following minimum qualifications: a high school graduate with 350 fixed-wing pilot-in-command hours and an FAA commercial license with instrument rating, as well as 20/70 vision corrected to 20/20.

According to data compiled by Michael A. Schukert, Ph.D., president of Academic Resources, a Columbus, Ohio-based enterprise focusing on the development of aviation-related programs in academia, U.S. colleges and universities currently offer the following programs:

- 33—bachelor's degrees in aviation,
- 80—two-year associate degrees in aviation,
- 2—master's degrees in aviation,
- 19—some kind of pilot credentials without degree, and
- 13—some kind of ground school training only.

ALPA's president, Capt. Henry A. Duffy, stresses the need for establishing an accredited discipline in aviation at many of the nation's colleges and universities, as well as upgrading the licensing standards for Part 121 air transport pilot rating (ATP) and commercial tickets.

"We look to reach those who aspire to be airline pilots, those who are already trained but are in nonflying jobs, and those who seek the left seat with only minimum hours in their logbooks," he said, adding, "we seek to establish professional commercial

piloting as an accredited discipline at colleges and universities."

Thus far, ALPA's long-term goal of making aviation an accredited discipline has generated enthusiastic cooperation from the deans of aviation at Parks College, Auburn University, Middle Tennessee State College, Ohio State, and Embry-Riddle.

Unrelated to the college effort is ALPA's work to upgrade licensing standards for Part 121 ATP and commercial tickets. ALPA expects to submit soon its formal petition to FAA for rulemaking to upgrade licensing standards. The petition calls for raising the minimum 1,500 flight-hour total needed to qualify for an ATP.

How long the airlines' expansion efforts and increased need for qualified pilots will continue is anybody's guess. Expansion efforts in the 1960s lasted nine years.

Embry-Riddle's president, Gen. Ken Tallman (USAF-Ret.), is convinced that the airlines will have to turn to colleges and universities to meet the growing demand for pilots.

"I saw a briefing at American Airlines recently that projected airline pilot requirements for the next 10 years will be 7,000 pilots per year," said Tallman. "Of that amount, the military could provide roughly 2,500 pilots per year, leaving the rest to be filled from other sources, such as the regional or corporate environments."

Even then the airlines "would come up 1,500 pilots short every year," he said.

Tallman, who was superintendent of the U.S. Air Force Academy from 1977 to 1981, said Embry-Riddle has been working closely with the smaller and larger airlines to place some of its graduates, but has yet to commit to buying expensive flight simulators and to serving generally as an ad-hoc hands-on training ground for the airlines.

"I still think that's the airlines' job."

"I do think the schools are the saving grace for pilots," Tallman concluded. "We have been spoiled in the past because the airlines' requirement for pilots was adequately met by the military. But we no longer have that luxury." ✈



U.S. Department
of Transportation
Federal Aviation
Administration

Office of the Administrator

800 Independence Ave. S.W.
Washington, D.C. 20591

Aging

AUG 15 1986

The Honorable Edward R. Roybal
Chairman, Select Committee on Aging
House of Representatives
Washington, D.C. 20515

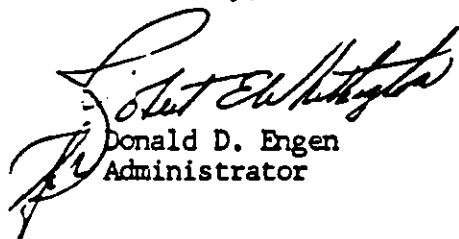
Dear Mr. Chairman:

Thank you for your letter of July 28 proposing a meeting among doctors to discuss the Age 60 Rule.

As you know, I am willing to consider further suggestions concerning the rule. I must emphasize, however, that my principal concern is the duty of air carriers, as recognized in the Federal Aviation Act, to perform their services with the highest possible degree of safety. In consideration of the complexities of the Age 60 Rule issues, you should be aware that any examination of the Age 60 Rule will be done carefully and judiciously by the agency, just as it has in the past.

I understand that through your staff, Dr. Williams and his colleagues have arranged to meet with Dr. Austin on August 18. I look upon this meeting only as an opportunity for the doctors to discuss views. Based upon our recent considerations of the age 60 issue, I see no likelihood that this meeting could arrive at a consensus on developing an examination protocol for pilots that will enable them to receive exemptions from the Age 60 Rule. I look forward to receiving from Dr. Austin a report on what is discussed at the meeting.

Sincerely,


Donald D. Engen
Administrator

PETITIONER'S
EXHIBIT

85



JAA Seeks to Revise Commercial Pilot Retirement Age to 65

Europe's Joint Aviation Authority (JAA), is seeking to make age 65 the standard retirement age for commercial pilots among its 29 member states. According to a JAA spokesman, France intends to apply for a "national variant" concerning the rule, in the hope of maintaining age 60 as the mandatory retirement age. Under the proposed JAR-FCL 1.060 rule, one pilot of a two-man crew may be as old as 65, provided the other is under 60.

NBAA 1999, Atlanta, Ga.

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French age-60 rule draws ire from other JAA pilots

by Charles Alcock and Jeff Apter

French civil aviation authorities have strongly denied allegations that foreign pilots more than 60 years old will be banned from commercial flights through the country's airspace. But European pilot unions are continuing to protest that France's refusal to adhere to the Joint Aviation Authorities' new flight crew licensing requirements (JAR-FCL 1.055), which do permit copilots between the ages of 60 and 64 to work on commercial flights, is tantamount to a blanket ban.

Under JAR-FCL, which came into effect in all JAA member states this past July, pilots aged 60 to 64 can continue to work for commercial carriers as long as the pilot-in-command is less than 60. France demanded a so-called "national variant" clause (JAR-FCL 1.060) to this rule, excluding all pilots over the age of 60.

European pilot unions say that this could cost "hundreds" of 60-plus pilots their jobs because commercial operators will not feel able to roster them for flights through French airspace. This includes many European corporate flight departments and fractional ownership programs that have to operate under commercial certificates for tax and other legal reasons.

A DGAC spokesman told **AIN** that even though its JAR-FCL "national variant" does theoretically allow it to ban all 60-plus foreign pilots from commercial flights in its airspace, in practice it intends to apply the rule only to French pilots or to foreign pilots working for French airlines. "Logically, of course, all pilots overflying French airspace must be in line with French legislation," he admitted. "All countries are familiar with the rules of the countries they fly over. But we cannot control everything and cannot be behind every pilot.

"We have never been confronted with cases of pilots over 60 flying for foreign airlines," he continued. "In any case it would be rare, except for some private flights. If, for example, there were an enforcement procedure in France and it was found that a pilot was over 60 there would be no sanctions. There would be a discussion between the DGAC and the corresponding civil aviation authority to once again inform them of our laws in the matter."

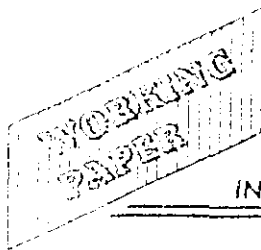
The French ban on 60-year-oldplus commercial pilots is in line

with existing International Civil Aviation Organization (ICAO) rules. However, having committed to their new JAR-FCL code, JAA member states are free to allow copilots to continue flying up to their 65th birthday, provided they first notify ICAO.

The British Air Line Pilots Association (BALPA) has insisted that this laissez-faire interpretation of the French "Age-60 rule" cannot be accepted at face value. It told **AIN** that no operator would compromise its commercial license by breaching the airspace rules of another European state.

BALPA has protested that the French position is discriminatory and has demanded that the DGAC be brought into line with the JAR-FCL standard. Union official Carolyn Evans predicted that this is unlikely to happen until the JAA's rules have the full backing of European Union law, rather than being subject to the whims of national legislators.

Underpinning France's unwillingness to allow commercial pilots to continue flying over the age of 60 is the country's strict 1982 employment legislation, requiring most professionals to retire at 60. By 1995, this law finally was applied to the civil aviation sector.



INTERNATIONAL CIVIL AVIATION ORGANIZATION

AN-WP/7089
15/2/96

AIR NAVIGATION COMMISSION

ANC Task No. MED-7101: Upper age limits for flight crew members

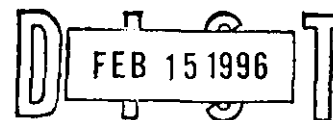
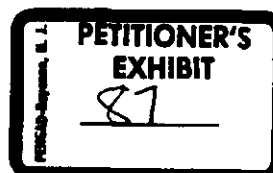
(Presented by the Director of the Air Navigation Bureau)

<p style="text-align: center;">SUMMARY</p> <p>Based on replies to State letter AN 5/16-95/14 with regard to the upper age limit for pilots and in particular the experience of States with allowing pilots above age 60 to continue flying, the Secretariat has continued its evaluation of the aeromedical foundation for the current "Age 60 Rule".</p> <p>Action by the Air Navigation Commission is proposed at paragraph 7.</p>				
<p style="text-align: center;">CO-ORDINATION</p> <p>OPS/AIR, PEL/TRG</p>				
<p style="text-align: center;">REFERENCES</p> <table><tr><td>AN-WP/6940</td><td>Annex 1 — <i>Personnel Licensing</i></td></tr><tr><td>ANC 137-12</td><td>* State letter AN 5/16-95/14</td></tr></table> <p>_____ *Principal reference</p>	AN-WP/6940	Annex 1 — <i>Personnel Licensing</i>	ANC 137-12	* State letter AN 5/16-95/14
AN-WP/6940	Annex 1 — <i>Personnel Licensing</i>			
ANC 137-12	* State letter AN 5/16-95/14			

1. INTRODUCTION

1.1 On 10 November 1994, the Air Navigation Commission (137-12) reviewed a progress report (AN-WP/6940) on Task No. MED-7101 (Upper age limits for flight crew members) with respect to assessing the medical validity of the current upper age limit for pilots contained in Annex 1. The Commission requested the Secretariat to seek further information from States and international organizations about age limits and medical as well as operational considerations pertaining to certification of pilots over the age of 60 years.

(42 pages)
MED



3.1.3 One State does not issue national licences, but accepts foreign licences. As this State aligns itself with the Joint Aviation Authorities (JAA) regulations, it has for the purpose of this working paper been considered to enforce an age limit of 65 years with certain restrictions as proposed by JAA.

3.2 Question C

3.2.1 Sixty-three of the seventy-three responding States have answered Question C regarding medical and operational experience with pilots older than 60 years. Twenty-one States have no experience at all, simply because they do not allow older pilots to continue flying. Of the remaining forty-two States, five States have experience with frequent or occasional medical problems, three States have no statistics available, whereas the majority, thirty-two States, declare that they have no negative experience — two States even say "good experience" and "only positive experience". Finally, two States are somewhat uncertain about this question, mainly due to insufficient data. No State declares problems with incidents or accidents caused by older pilots, but some States mention the fact that numbers are too small to allow statistical evaluation.

3.3 Question D

3.3.1 Question D regarding particular provisos in case of a new, higher upper age limit was answered by sixty-five States. Of these, eleven States would favour the same medical requirements for older pilots as for younger pilots, whereas fifteen States would be somewhat stricter, requiring Class 1 assessment without waiver. Twenty-nine States would require more frequent medical examinations, and forty-three States would restrict older pilots to multi-crew only. Thirty-six States would request "a clean bill of health", and ten States would have other provisos such as increased operational assessment, extended medical examination at frequent intervals, revised medical assessment with more detailed examinations (stress-ECG, EEG, angiogram, etc.), and, in several cases, require the other pilot/s in a multi-crew to be younger than 60 years. In summary, two-thirds of the States would restrict pilots over 60 years of age to multi-crew operations, and more than half of the States would request a "clean bill of health" and almost half of the States would require more frequent medical examinations.

3.4 Question E

3.4.1 Question E regarding expected change of upper age limit regulations within the next three years was answered by sixty-nine States. Forty-one States do not envisage any such change, but some of these States already have an upper age limit of 65 years or no age limit at all. More importantly, twenty-six States intend to elevate their upper age limit; of these, eighteen prefer 65 years and only three prefer 63 years. It is particularly interesting to note that some JAA States declare no expectation of changing their upper age limit from the current 60 years, although one would assume that they would have an obligation to do so in order to comply with the forthcoming JAA regulations, expected to be adopted this year and fully implemented by 1 July 1998. One of these States voices support for an age limit at 63 years, though.

5. DISCUSSION

5.1 It appears that the majority of States (forty-five of the respondents or 65.2 per cent) operate with a *de facto* legal age limit of 63-65 years. In many cases, also in States with no upper age limit, the operational age limit is kept at a lower level by established airline policies and may be as low as 55 years. In addition, agreements between employers and unions may set age limits as may market forces.

5.2 Many States allow pilots to continue flying after the age of 60, but only few airlines employ older pilots. No State has experienced any particular operational problems caused by older pilots. A few States, however, report an increase in medical problems with older pilots.

5.3 There is no question that a majority of States prefer to have an upper age limit. A clear majority would probably accept a limit above 60 years, especially since two-thirds of the responding States already allow higher limits, but only with a number of special limitations as indicated in paragraph 3.1.2 above.

5.4 Based on the data now available and, in particular, as two-thirds of the States responding to this State letter allow pilots to fly beyond age 60 and as the experience of many States seems to indicate that a higher age limit does not entail more accidents or cause other problems, it may seem reasonable for ICAO to consider increasing the upper age limit.

5.5 No provision, however, can be seen in isolation from pertinent procedural requirements. Most States allowing pilots to continue flying after age 60 are developed countries, whereas many States with strict enforcement of the age limit at 60 years are developing countries. The JAA upper age limit proposal is based on European conditions and implies advanced and frequent health examinations. Caution must be exercised if this rule is to be extended for global application. On the other hand, ICAO provisions are minimum requirements. States which feel that they may be best served by maintaining the age limit at 60 years for their own licence holders are free to do so.

6. CONCLUSION

6.1 There is currently a clear trend amongst Contracting States towards increasing the upper age limit for commercial pilots. This is illustrated by the proposed European regulations, developed by the JAA. It is further emphasized by the fact that many States allow commercial pilots to continue flying beyond the age of 60 years.

6.2 As a consequence, the Secretariat holds the opinion that an amendment to Standard 2.1.10 of Annex 1 with a view to increasing the upper age limit for airline transport pilots and commercial pilots may be warranted. In the present situation, however, it seems prudent to await the outcome of the work done by the European Joint Aviation Authorities.

APPENDIX A

SUMMARY OF REPLIES TO STATE LETTER AN 5/16-95/14 - Questions A and B

QUESTION A

According to your national legislation, what upper age limit, if any, is applicable to professional pilots holding CPL? ____ years ATPL? ____ years

QUESTION B-1

Are pilots older than the limits stated under (A) allowed to continue their flying career?
Yes ____ No ____

If Yes, list applicable provisos as special medical and operational requirements, limitations, and conditions (like CPL Only, Without Medical Waiver, Clean Bill of Health Only, More Frequent and/or More Extensive Medical Examinations, Domestic Flights Only, As Co-Pilot Only, Multi-Crew Only, etc.).

Note: - Provisos are listed at the end of this table.

QUESTION B-2

Does any final upper age limit apply to these pilots?:
Yes ____ No ____

If Yes, what age?: ____ years

State/international organization	Question A		Question B-1		Question B-2		
	CPL	ATPL	Yes	No	Yes	No	Age
Afghanistan							
Albania							
Algeria							
Angola							
Antigua and Barbuda							
Argentina	60	50	X			X	
Armenia							
Australia	NIL	NIL				X	
Austria							
Azerbaijan							
Bahamas							
Bahrain							
Bangladesh							
Barbados	60	60	X			X	
Belarus	60	60		X			
Belgium	65	65		X			
Belize							
Benin							
Bhutan							
Bolivia							
Bosnia and Herzegovina							
Botswana	NIL	60 ¹		X			
Brazil	60	60	X			X	
Brunei Darussalam							
Bulgaria							
Burkina Faso	53	53	X		X		60
Burundi	60	60		X			
Cambodia							
Cameroon							
Canada	NIL	NIL	X			X	
Cape Verde							
Central African Republic							
Chad							
Chile	NIL	NIL	X			X	
China	60 ²	60 ²		X			

State/international organization	Question A		Question B-1		Question B-2		
	CPL	ATPL	Yes	No	Yes	No	Age
Colombia							
Comoros							
Congo							
Cook Islands							
Costa Rica							
Cote d'Ivoire							
Croatia							
Cuba	60	60		X		X	
Cyprus	60	60		X		X	
Czech Republic	60	60		X		X	
Democratic People's Republic of Korea							
Denmark	60	60	X		X		67
Djibouti							
Dominican Republic							
Ecuador							
Egypt	60	60	X			X	
El Salvador							
Equatorial Guinea							
Eritrea							
Estonia	60	60		X		X	
Ethiopia							
Fiji	NIL	NIL	X			X	
Finland	60	60	X		X		63
France	60	60		X			
Gabon							
Gambia							
Georgia	60	60	X			X	
Germany	NIL ¹	NIL ¹	X			X	
Ghana							
Greece	65	65		X		X	
Grenada							
Guatemala							
Guinea							
Guinea-Bissau							
Guyana							

A-3

State/international organization	Question A		Question B-1		Question B-2		
	CPL	ATPL	Yes	No	Yes	No	Age
Viet Nam							
Yemen							
Zaire							
Zambia							
Zimbabwe	NIL	60	X			X	
International Organizations							
IATA							
IFALPA							
WHO							
AsMA							
IAASM							
TOTALS	17:NIL 1:53 44:60 6:65	13:NIL 1:53 49:60 7:65	37	25	19	33	1:60 1:61-62 7:63 7:65 1:67

¹ Botswana

ATPL = 60 years, only for aircraft with MTOW above 20 000 kg.

² China

male: 60 years, female: 55 years.

³ Germany

There is an operational recommendation addressed to commercial operators not to engage pilots of more than age 60 in flight operations.

⁴ Mexico

(Note. - See appropriate partial language version of this AN-WP for original text.)

Mexico does not issue CPL.

⁵ Monaco

(Note. - See appropriate partial language version of this AN-WP for original text.)

Monaco has no regulations of its own concerning flight personnel. Licences are issued through equivalency with licences issued by ICAO Member States with the same period of validity. Monaco will align itself with the European regulations being developed by the IAA.

⁶ South Africa

On 13 July 1995 South Africa informed ICAO that they apply an age limit of 60 for commercial pilot except for multi-crew where the age limit is 65.

⁷ Turkey

In accordance with proposed JAA regulations.

⁸ United Kingdom

Upper age limit of 60 years for single pilot public transport operations. Upper age limit of 65 years for 2 pilot public transport operations subject to the other pilot being appropriately qualified and under the age of 60 years. No upper age limit for aerial work operations subject to retaining Class 1 medical status.

⁹ Uzbekistan

(Note. - See appropriate partial language version of this AN-WP for original text.)

Yes, in isolated cases.

If Yes to Question B-1, list applicable provisos as special medical and operational requirements, limitations, and conditions (like CPL Only, Without Medical Waiver, Clean Bill of Health Only, More Frequent and/or More Extensive Medical Examinations, Domestic Flights Only, As Co-Pilot Only, Multi-Crew Only, etc.).

ARGENTINA

(Note. - See appropriate partial language version of this AN-WP for original text.)

Except that the individual cannot act as pilot-in-command and/or co-pilot in air transport operations, whether scheduled or non-scheduled, passenger or cargo, domestic or international.

AUSTRALIA

Increased operational surveillance (6/12).

Increased medical surveillance over 60 years with additional medical tests.

Multi crew for high capacity operations over 65 years.

GERMANY

Clean bill of health.

ICELAND

Clean bill of health. Medical examination every four months.

IRELAND

"An ATPL licence holder shall not, at any time after he attains the age of sixty years, fly as a pilot in command of a public transport aircraft carrying passengers, if its maximum total authorised weight exceeds 45 000 lb or a public transport aircraft not carrying passengers if its maximum total authorised weight exceeds 50,000 lb."

ISRAEL

In large A/C the upper age limit for co-pilot and for second-in-command is 65. There is no upper age limit for other A/C if there are no passengers on board.

ITALY

Multi-crew only.

JAPAN

As concerns international transport, pilots older than 60 years can be engaged only in non-revenue flights. They are required to pass the more extensive medical examinations.

JORDAN

Multi-Crew only. Aircraft less than 40 seats.

KENYA

- 1) Medical examinations every six months.
- 2) Domestic flights only.

MALAWI

After 60 years he may act as pilot-in-command on domestic flights only.

MALAYSIA

- 1) Unless the aeroplane is fitted with dual controls and carries a second pilot who has not attained the age of 60 years.
- 2) Unless the authorised maximum total weight does not exceed 20 000 kilogrammes.

MALDIVES

As co-pilot with valid medical; on public transport flights and either pic/co-pilot on all other non public transport flying.

SWEDEN

CPL only, Clean Bill of Health, As PIC only on JAR/FAR 23 AC on domestic flights in commercial air transport operation. As copilot on JAR/FAR 25 AC (international flights).

THAILAND

As Co-Pilot, special medical examination is required for every 4 months. The other requirements should be the same as Pilot under the age of 60 years.

UNITED ARAB EMIRATES

- a) Private operations only (CPL or ATPL).
- b) Medical every six months by approved doctor.
- c) Multi-crew with other pilot less than 60 years.

UNITED STATES

Pilots over the age 60 holding an ATPL or a CPL may continue to be employed as flight engineers in operations conducted under Part 121 of the Federal Aviation Regulations (FAR), and in all capacities in operations conducted under parts other than Part 121 of the FAR.

UZBEKISTAN

(Note. — See appropriate partial language version of this AN-WP for original text.)

More frequent and more extensive medical examinations; multi-crew only.

ZIMBABWE

ATPL holder over 60 years shall not at any time fly such an aeroplane for the purpose of public transport as pilot-in-command on any international flight if its maximum authorized mass exceeds 20 000 kilograms.

APPENDIX B

SUMMARY OF REPLIES TO STATE LETTER AN 5/16-95/14 – Question C

QUESTION C

What is your experience up to date with pilots above the age of 60 years?
(incidents, accidents, medical problems, revocations of licence, etc.)

ARGENTINA

(Note. – See appropriate partial language version of this AN-WP for original text.)

Since the 60-year limit was placed on the activity of airline pilots, there have been no recorded incidents or accidents, except for one isolated case, in non-scheduled air transport, in which the existing standards were violated. In general aviation accidents, the fact that a pilot is over 60 years of age has been considered a contributing factor when combined with very low levels of training or flight time (especially if the individual began flying after the age of 50), and if in addition pilot error or judgement has been found to be a contributing factor.

AUSTRALIA

No evidence of any increased incidence of aviation events including in-flight incapacity.

BARBADOS

No reported incidents, accidents, medical problems or revocation of licences.

BELARUS

Nil.

BELGIUM

(Note. – See appropriate partial language version of this AN-WP for original text.)

None.

BOTSWANA

No significant problems on record.

BRAZIL

We have no special statistics about the subject. However there isn't nothing remarkable to be related.

B-3

FINLAND

No negative experiences. Statistically insignificant because only 5-6 pilots over 60 years in five years (today no one).

GEORGIA

(Note. -- See appropriate partial language version of this AN-WP for original text.)

No statistics available.

GERMANY

Good experience. No remarkable problems.

GREECE

No particular experience.

ICELAND

No negative experiences.

INDIA

Exercise of residual privileges is very limited.

IRELAND

No observed problems.

ISRAEL

Very few incidents, no accidents, same medical problems as in the general population for these ages, no revocations of licences at all.

ITALY

No problem at all.

JAPAN

Nothing.

B-5

NETHERLANDS, KINGDOM OF THE

Since 1980: Incidents: not readily tracable.
Accidents: 2 accidents with fatal injury.
Two revocations of licence.
Medical problems: data unknown at the present moment.

NEW ZEALAND

New Zealand's experience has not highlighted any problems with pilot licence holders over 60 years of age. Our records show that of 3 000 accidents over the last 20 years, only 40 pilots were over 60 years of age.

Obviously medical problems do increase with age and pilots who do not pass the medical examination will be unable to use their licence, although as lifetime licence holders they will still hold their licences.

OMAN

Nil.

PAKISTAN

In older pilots medical risk increases requiring additional medical screening and surveillance resulting greater financial burden on medical checks with frequent operational limitations.

PERU

(Note. — See appropriate partial language version of this AN-WP for original text.)

In general, the problems are medical problems (ailments or some deterioration in health), possibly as a result of extreme fatigue related to the age of the individual.

POLAND

None.

QATAR

Nil.

REPUBLIC OF KOREA

Nil.

B-7

THAILAND

Medical problems.

TURKEY

None.

UGANDA

We have not had any Ugandan pilots so far operating for public transport category above 60 years. Other nationals who seek Ugandan licences when they are over 60 years or operators of foreign registered aircraft who seek to operate public transport in Ugandan airspace with pilots over 60 years are equally not accepted.

UKRAINE

(Note. — See appropriate partial language version of this AN-WP for original text.)

Revocation of licence in view of negative change in state of health.

UNITED ARAB EMIRATES

a) No incidents or accidents.

b) One Licence Extension has been denied due to discovery of coronary problems during special "Over 60 Medical".

UNITED KINGDOM

No significant problems are identified.

UNITED STATES

The United States does not have recent experience with pilots above the age of 60 in operations conducted under Part 121 of the FAR. Because pilots over the age of 60 may continue to fly in operations conducted under Parts 91 and 125 through 137 of the FARs, a body of experience and knowledge exists as to those pilots. However, the U.S. Federal Aviation Administration (FAA) is uncertain whether, and to what degree, this information is readily accessible.

UZBEKISTAN

(Note. — See appropriate partial language version of this AN-WP for original text.)

None.

VANUATU

Nil.

ZIMBABWE

Nil.

APPENDIX C

SUMMARY OF REPLIES TO STATE LETTER AN 5/16-95/14 - Question D

QUESTION D

If the upper age limit were to be raised or removed, which of the following provisions should apply for pilots above age 60? (tick those which are applicable)

No change (i.e. same as for pilots under age 60) _____ = NC
 Class 1 assessment without waivers _____ = Class 1
 Increased frequency of medical assessment _____ = IF
 Multi-crew operation only _____ = MC
 Clean bill of health* _____ = CBH
 Other _____ = Other

* A "clean bill of health" is a medical assessment where no signs and symptoms of any disease or condition that may entail unsuitability for flying duty, including age-related disorders, have been found.

State/international organization	NC	Class 1	IF	MC	CBH	Other
Afghanistan						
Albania						
Algeria						
Angola						
Antigua and Barbuda						
Argentina				X	X	
Armenia						
Australia			X	X		X ¹
Austria						
Azerbaijan						
Bahamas						
Bahrain						
Bangladesh						
Barbados				X		
Belarus			X	X		
Belgium						X ¹
Belize						
Benin						
Bhutan						
Bolivia						
Bosnia and Herzegovina						
Botswana	X					
Brazil		X	X	X		
Brunei Darussalam						
Bulgaria						
Burkina Faso	X					
Burundi						
Cambodia						
Cameroon						
Canada	X					
Cape Verde						
Central African Republic						
Chad						
Chile			X		X	
China						
Colombia						
Comoros						
Congo						
Cook Islands						
Costa Rica						
Côte d'Ivoire						
Croatia						
Cuba			X	X	X	

State/international organization	NC	Class 1	IF	MC	CBH	Other
Cyprus		X	X	X	X	
Czech Republic		X		X	X	X ¹
Democratic People's Republic of Korea						
Denmark				X	X	
Djibouti						
Dominican Republic						
Ecuador						
Egypt			X			
El Salvador						
Equatorial Guinea						
Eritrea						
Estonia			X	X	X	
Ethiopia						
Fiji			X		X	
Finland				X	X	
France			X			
Gabon						
Gambia						
Georgia	X					
Germany					X	
Ghana						
Greece	X					
Grenada						
Guatemala						
Guinea						
Guinea-Bissau						
Guyana						
Haiti						
Honduras						
Hungary						
Iceland			X		X	
India				X	X	X ¹
Indonesia						
Iran, Islamic Republic of			X		X	
Iraq						
Ireland				X		
Israel		X	X	X	X	
Italy				X		
Jamaica						
Japan						
Jordan				X	X	
Kazakhstan						
Kenya	X					

- ¹ Australia
Increased operational assessment.
 - ² Belgium
(Note. - See appropriate partial language version of this AN-WP for original text.)
Application of JAA regulations.
 - ³ Czech Republic
CPL - Extended medical examination in six month intervals.
 - ⁴ India
Revised medical standards for crew above 60 years should apply.
 - ⁵ Kuwait
Not to act as training captain.
 - ⁶ Mauritius
More detailed assessment e.g. stress, ECG, etc.
 - ⁷ Netherlands, Kingdom of the
Data not available.
 - ⁸ New Zealand
Not applicable to New Zealand.
 - ⁹ Oman
EEG and angiogram (international medical panel opinion) would be needed.
 - ¹⁰ Peru
(Note. - See appropriate partial language version of this AN-WP for original text.)
Only as co-pilots and on the latest equipment on which they qualified.
 - ¹¹ Poland
In commercial air transport operations.
 - ¹² Romania
As frequently as over 45 years, every 6 months.
 - ¹³ Thailand
To request for approval case by case from the authority.
 - ¹⁴ Ukraine
(Note. - See appropriate partial language version of this AN-WP for original text.)
Presence in crew of two equally qualified pilots, one of whom is under 60 years of age.
 - ¹⁵ United Kingdom
The United Kingdom CAA Medical Division would not support public transport beyond the age of 65 years. It would not recommend single crew operation above the age of 60 years and if one pilot is over 60 the other should be under 60. There is currently no firm policy as to whether a pilot over 60 can fly with a medical waiver (as or with co-pilot) and at present in aircraft under 20 000 kg he may have such a waiver but over this weight he may not.
 - ¹⁶ United States
If the United States would decide to raise or remove the upper age limit for pilots engaged in operations under Part 121 of the FAR, it also would determine what, if any, medical criteria should be applied when evaluating those pilots.
- - - - -

APPENDIX D

SUMMARY OF REPLIES TO STATE LETTER AN 5/16-95/14 - Question E

QUESTION E-1

Does your State envisage to change its regulations on age limit within the next three years?

Yes _____ No _____

If Yes, do you expect to establish a new age limit? (specify which age)

_____ years

QUESTION E-2

or do you expect to remove any reference to an age limit?

Yes _____ No _____

State/international organization	Question E-1			Question E-2	
	Yes	No	Age	Yes	No
Afghanistan					
Albania					
Algeria					
Angola					
Antigua and Barbuda					
Argentina		X			X
Armenia					
Australia		X			
Austria					
Azerbaijan					
Bahamas					
Bahrain					
Bangladesh					
Barbados		X			
Belarus		X			
Belgium	X		65		
Belize					
Benin					
Bhutan					
Bolivia					
Bosnia and Herzegovina					
Botswana	X		65		X
Brazil					
Brunei Darussalam					
Bulgaria					
Burkina Faso		X			
Burundi					
Cambodia					
Cameroon					
Canada		X			
Cape Verde					
Central African Republic					
Chad					
Chile		X			
China	X				
Colombia					
Comoros					
Congo					
Cook Islands					
Costa Rica					
Côte d'Ivoire					
Croatia					
Cuba	X		65		X

State/international organization	Question E-1			Question E-2	
	Yes	No	Age	Yes	No
Cyprus	X		65		
Czech Republic					
Democratic People's Republic of Korea					
Denmark		X			X
Djibouti					
Dominican Republic					
Ecuador					
Egypt	X			X	
El Salvador					
Equatorial Guinea					
Eritrea					
Estonia		X			X
Ethiopia					
Fiji		X			
Finland	X		65		
France		X			
Gabon					
Gambia					
Georgia		X			
Germany	X		65	X ²	
Ghana					
Greece		X			
Grenada					
Guatemala					
Guinea					
Guinea-Bissau					
Guyana					
Haiti					
Honduras					
Hungary					
Iceland	X		65		
India		X			X
Indonesia					
Iran, Islamic Republic of		X			
Iraq					
Ireland	X		65		
Israel	X		65		X
Italy		X			X
Jamaica					
Japan	X ¹		63		X
Jordan	X		65		
Kazakhstan					
Kenya		X			X

D-3

- ¹ Czech Republic
Under consideration.
 - ² Germany
Operational recommendation will be cancelled.
 - ³ Japan
We are planning to raise the upper age limit to 63 for pilots for remuneration or hire by aircraft certified that the number of the flight crew is more than 2.
 - ⁴ Monaco
(Note. — See appropriate partial language version of this AN-WP for original text.)
Monaco has no regulations of its own concerning flight personnel. Licences are issued through equivalency with licences issued by ICAO Member States with the same period of validity.
Monaco will align itself with the European regulations being developed by the JAA.
 - ⁵ Netherlands, Kingdom of the
The Netherlands Aerospace Medical Centre carried out an investigation in this field; the results, however, are not available yet.
 - ⁶ Poland
In commercial air transport operations.
 - ⁷ Singapore
Regulations under review.
 - ⁸ Sweden
As a member of JAA Sweden will comply with JAA requirements, once adopted.
 - ⁹ United States
The United States is currently considering whether a revision to its rules on age limits for pilots is appropriate.
 - ¹⁰ United States
The United States is evaluating this issue.
 - ¹¹ Vanuatu
Not determined.
- - - - -

APPENDIX E

SUMMARY OF REPLIES TO STATE LETTER AN 5/16-95/14 – Question F

QUESTION F

What is the policy of your State with regard to granting authorization for foreign pilots over age 60 to use your national airspace?

ARGENTINA

(Note. – See appropriate partial language version of this AN-WP for original text.)

We have no objections, subject to what is indicated under Question (B).

AUSTRALIA

No policy.

BARBADOS

The operation must be multi-crew and the second pilot under age 60.

BELARUS

(Note. – See appropriate partial language version of this AN-WP for original text.)

Negative.

BELGIUM

(Note. – See appropriate partial language version of this AN-WP for original text.)

They are authorized to fly in Belgian airspace if they so request.

BOTSWANA

No established policy.

BRAZIL

We do not allow commercial operations in our airspace conducted by foreign pilots over age 60.

E-3

DENMARK

Authorization is only granted for the exercise of CPL/IR privileges and not after the age of 67.

EGYPT

(Note. – See appropriate partial language version of this AN-WP for original text.)

We have been complying with ICAO practices.

ESTONIA

We accept the limitations of foreign States.

FIJI

We will accept pilots holding valid overseas licence, subject to any conditions imposed on the licence, regardless of age.

FINLAND

Authorization is only granted with the privileges given in the licence and only for multi pilot crew, when the other pilot is under 60 years of age.

FRANCE

(Note. – See appropriate partial language version of this AN-WP for original text.)

Up until 5 February 1995, French regulations did not provide for any age limit. France therefore authorized foreign pilots over 60 to use French airspace. Since the adoption in France of the age limit of 60 in commercial transport (law of 4/2/1995, published on 5/2/1995), France has applied to foreign pilots the Standard in paragraph 2.1.10.1 of ICAO's Annex 1 and France therefore prohibits overflights by pilots-in-command over 60.

GEORGIA

(Note. – See appropriate partial language version of this AN-WP for original text.)

Not restricted.

GERMANY

Authorizations are granted on an individual basis under following provisos:

- in multi-pilot operations only.
- one pilot at age 60 or more only.
- up to age 65.

E-5

KENYA

We shall follow the ICAO guidelines since we do not have the resources to evaluate the issues involved.

KUWAIT

Presently not allowed.

LEBANON

No authorization is granted for foreign pilots over age 60 to use our national airspace.

LITHUANIA

Positive.

MALAWI

Multi-crew operation on application only.

MALAYSIA

- i) Application must be made in writing by the State of operator to our Department.
- ii) Consideration for approval is only given if the nature of request is at least equivalent to our legislation requirements.

MALDIVES

- If flying a Maldivian registered aircraft; same conditions prevail.
- If on a foreign registered aircraft the issuing States rules apply.

MALTA

Foreign pilots over 60 are allowed to use national airspace if they are authorized by the country issuing the licence and they meet the JAA proposed requirements for pilots over 60.

MAURITIUS

Authorize provided pilots are duly authorized by their State and also provided their States have filed a difference with ICAO.

E-7

QATAR

To allow pilots whose licensing authority permits up to age 65 to operate in Qatar airspace.

REPUBLIC OF KOREA

The Republic of Korea would like to agree with the age limit for pilot:

- a) if a State asks us for the permission of its age limit for pilot; or
- b) if a State has notified the ICAO of any differences between its national regulations and practices and the International Standards contained in Annex 1 to the Convention on International Civil Aviation, by Article 38 of the Convention.

ROMANIA

We accepted every authority request regarding over 60 years old pilots operations in or over Romania if the said authority grants the licence.

RUSSIAN FEDERATION

(Note. — See appropriate partial language version of this AN-WP for original text.)

Such authorization is given.

SINGAPORE

In general, not in favour at this stage.

SLOVAK REPUBLIC

We shall accept foreign pilots over age 60 to use our national airspace.

SLOVENIA

Pilots age of 60-65 are permitted to operate provided this is a 2 pilot operation.

SPAIN

(Note. - See appropriate partial language version of this AN-WP for original text.)

National regulations are applied.

SURINAME

Authorization is granted for foreign pilots over age 60 in so far this is allowed by their foreign operator.

E-9

VANUATU

No objection.

ZIMBABWE

Foreign pilots operating into Zimbabwean airspace are governed by their respective countries regulations as long as they fly non-Zimbabwean registered aircraft.

- - - - -

APPENDIX F

SUMMARY OF REPLIES TO STATE LETTER AN 5/16-95/14 – Question G

QUESTION G

Do you have any other comments on the age limit for pilots?

AUSTRALIA

The arbitrary application of an age restriction cannot be justified in today's world, despite the fact that it makes things administratively simple. The process of medical certification is a process of risk assessment and only when the risk of incapacitation for an age and health matched group exceeds the risk target should restrictions be imposed.

BARBADOS

The limit applies to pilots engaged in scheduled and non-scheduled international operations.

BELGIUM

(Note. – See appropriate partial language version of this AN-WP for original text.)

Only one pilot over 60 per crew.

BOTSWANA

Botswana is seriously considering the adoption of European JAR as its national legislation. In which event the accepted age limit will be as set down in JAR-FCL which is understood to probably be 65 years.

BRAZIL

The Brazilian Civil Aviation Department has been studying this subject but doesn't have any conclusion yet.

BURKINA FASO

(Note. – See appropriate partial language version of this AN-WP for original text.)

We want to have the restriction in order to avoid age-related problems.

F-3

DENMARK

However arbitrary and however individually different the effect of age we find that a fixed age limit for professional pilots is necessary. We do not think that the same age limit is representative for the whole world's pilot population but that ethnic and cultural differences apply — which of course complicates the issue further. Maybe the following addition to Annex 1 2.1.10.1 could be a way out: "....unless the holder has a clean bill of health with no signs and symptoms of any disease or condition that may entail unfitness for flying duty including age-related disorders and the privileges of the licence are limited to multi crew operation only and the holder has not attained his 63rd birthday."

FINLAND

Finland is planning to change the regulations this year so that CPL and ATPL pilot can hold his licence after age of 60 years with ICAO Annex 1 restrictions (para 2.1.10). When JAA requirements JAR-FCL have been accepted, Finland intends to follow JAR-FCL.

GERMANY

Social security regulations and the socio-economical condition in Germany prevent strict enforcement of the existing ICAO Annex 1 age-60-rule. An age-65-rule would not collide with the above regulations and therefore be more acceptable in Germany.

ICELAND

Iceland considers it imperative that a consensus be reached on the issue of pilot age limit as the current situation can present significant problems in crew rostering for airlines.

IRAN, ISLAMIC REPUBLIC OF

We believe that regarding the organism of body 60 years age is the best limit for pilots and co-pilots under paragraph 2.1.10.1 and 2.1.10.2. But in special case and conditions this limitation could be increased to 62 years for domestic general aviation only.

IRELAND

Amending legislation is being prepared by the Irish Aviation Authority in accordance with the appended draft — which is in accordance with JAA-FCL (Draft 5) proposal.

ITALY

Italian regulation has been modified according to JAA-FAR-FCL (draft) provisions.

F-5

NEW ZEALAND (cont'd)

New Zealand is of the view that the medical standards and the biennial flight review are the practical controls on the pilots ability regardless of age.

New Zealand also has legislation which prohibits discrimination solely on the basis of age.

OMAN

We consider that present age limit is good and proved. However, increasing the age limit to 63 with the restriction 9, 10, 11, 13 under Question (D) is considered to be sufficient for over age monitoring. The raise of pilot age limit will affect the promotion of young pilots.

PAKISTAN

The older pilots are considered potential risk on account of multiple medical problems requiring frequent medical checks and surveillance at the cost of airline. Besides aircrew 60 years retiring policy is based upon national retirement age-policy for other officers and executives in the national air-carrier as well as in other vital fields. If age limit of pilots is enhanced, the same will be considered discriminatory for other officers some of whom might be engaged in vital services of national importance.

PERU

(Note. — See appropriate partial language version of this AN-WP for original text.)

All human beings have their own requirements according to their bodies. It should be noted that at an advanced age their reactions will not be the same as those of younger pilots and quarterly assessments would be recommended. Pilots at an advanced age could only be authorized to act as pilots/co-pilots on the latest equipment on which they qualified and on which have the most experience.

QATAR

Qatar will monitor the rate of medical revocations between ages 60-65.

REPUBLIC OF KOREA

The Republic of Korea would like to exert all possible efforts to conform with the International Standards contained in the Annex to the Convention.

F-7

UNITED KINGDOM

In the United Kingdom, professional pilots may continue working without age limit when undertaking Aerial Work. However, for this they do not need a CPL or ATPL, but a licence which is peculiar to the United Kingdom, i.e. a "Basic Commercial Pilot's Licence". The majority of these pilots continue working as flying instructors on light aircraft. However, at age 70 they are required to undergo a cardiological review to include a treadmill exercise test. If satisfactory, continued medical certification is permissible, although this assessment is again required at age 75 and three yearly thereafter.

UZBEKISTAN

(Note. — See appropriate partial language version of this AN-WP for original text.)

We wanted to reduce the age qualification to 55 years, but this did not pass the Labour Law Code.

VANUATU

Vanuatu currently has no upper age limit but is considering a comprehensive review of this policy and may impose an upper limit with strict guidelines.

ZIMBABWE

Flight safety considerations should be paramount in any decision finally arrived at.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)

IATA considers that changes to the age 60 rule is in the best interest of the Airline Industry. We recommend that amendment to the rule should be supported by the establishment of appropriate medical and operational protocols to ensure the maintenance of safety.

INTERNATIONAL FEDERATION OF AIR LINE PILOTS' ASSOCIATIONS (IFALPA)

The current formal policy of IFALPA is to seek deletion of the provisions of ICAO Annex 1, para. 2.1.10.1 and 2.1.10.2 in support of the view that the upper age limit for pilot licensing should not be based solely on chronological age. However, the subject is again under active review by IFALPA and it is possible that this policy could change in the foreseeable future.

— END —



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Embry-Riddle Destinations...

WANTED:

Pilots and Technicians

Fueled by a booming economy, airliners everywhere are flying full. But as passenger lines grow longer, the lines of those who fly the jets and fix them are steadily shrinking. Air carriers are starting to awaken to a looming shortage of qualified pilots and technicians that has the potential to ground much of the airline industry.

As the world's largest university specializing in aviation and aerospace, Embry-Riddle Aeronautical University has launched several initiatives to help ease the shortages and promote longterm solutions. They include direct-hire and training programs, a public information campaign, and plans to forecast and define future skill and training needs.

Good economy bad for recruiting

In this missing persons report, the chief culprit is a muscle-bound economy. More people can afford to fly more often, so airlines have been increasing their fleets and flights to meet the demand and match their rivals. Additional aircraft and flights, in turn, require more pilots to fly them and more technicians to keep them running.

The military, the traditional source of new commercial pilots, has shrunk since the end of the Cold War, and many of its pilots are leaving for higher-paying airline jobs, despite offers of up to \$110,000 to reenlist. But even if they all were to quit, there would be airline jobs left unfilled. Many of the openings are being created as more pilots reach the mandatory retirement age of 60.



With a finite pool of qualified personnel to choose from, the major carriers are "skimming" pilots and technicians from the regionals, which are having the most trouble replacing those lured away by higher pay and better benefits.

Several additional factors contribute to the shortfall of technical experts who work on aircraft engines and airframes and keep the planes in the air. With a general unemployment rate of four percent, a skilled trades jobless rate of only two percent, and a smaller number of 20-24-year olds, fewer candidates are available for openings.

Some in the industry feel that an outdated image of technicians as ill-paid "wrench turners" deters young people from entering the field. "The description 'aviation maintenance,' which was widely used in the past, does not correctly portray this tremendously skilled field, which requires an extensive, diversified technical education," says Fred Mirlg, professor of aviation technology at Embry-Riddle.

Shortage hard to measure, but real

The record growth of the U.S. airline industry has hit the regional airlines the hardest, according to Embry-Riddle graduate Kit Darby (BAST77), president of AIR Inc. The



number of qualified candidates has dwindled, dropping to 5,000 in 1998 from 15,000 in 1996, he says, while the market for new pilots has been at record levels in recent years and shows no sign of slowing. "We're at a point where we're seeing 1,000-2,000 jobs every month," he says.

Darby hesitates to call the situation a pilot shortage, however, claiming that most of the regionals' problems stem from an inability to train pilots fast enough to make up for the accelerating rate of attrition.

"Airlines have varied the standards to determine what 'qualified' is," Darby adds. "Due to a good pilot market and the Americans with Disabilities Act, pilots today are younger, older, taller, and fatter than they used to be. Twenty-five percent wouldn't have been hired 10-15 years ago because they don't have perfect vision."

"There is a pilot shortage," says Paul McDuffee, Embry-Riddle's vice president of aviation training and industry relations. "It's the magnitude of it that's in question." Based on data from The Canaan Group and its own surveys, the university projects that in the next decade the world's major airline industry will grow by 3.9 percent and need 11,469 new pilots annually. The estimate does not include regional carriers. McDuffee says Embry-Riddle has the capability to target and meet the training needs of 2.5 percent of the entire new pilot market.

Nationwide, 137,000 people are employed as aviation technicians. According to trade groups such as the Professional Aviation Maintenance Association and the National Air Transportation Association, the industry requires 10,000-12,000 additional specialists every year to replace retirees and fill new positions. Last year, however, only 7,400 new technicians were certified, a 20-percent decrease from 1988. In order to keep their jets flying, the airlines need roughly two technicians for every pilot.

Embry-Riddle has a big stake in heading off the shortages. In any given year, more than 2,500 students on its residential campuses are pursuing a degree in aeronautical science, favored by professional pilots, the largest number enrolled in the nation at any university. An additional 550 are enrolled in aviation maintenance technology programs. The university produces more pilots and rated officers for the U.S. Air Force than any other non-military institution and more new employees for the major airlines than any other collegiate aviation program.

Training more pilots, faster

Since 1997, Embry-Riddle has created three fast-track programs designed to shrink the gap between a student's completion of an aeronautical science degree and employment on a flight crew.

Attracting pilots has become an important concern for East Coast Flight Services, an executive charter service that is feeling the crunch as many of its pilots are lured away by larger airlines. To recover from the loss, the company is participating in one of the university's direct-hire programs.

The program is a valuable resource for the company, which is often in need of new talent. "When we anticipate a new position opening at East Coast Flight Services, we call Embry-Riddle because they share a special bond with their recent alumni," said Brenda Brown, vice president and general manager. "It has been our experience that they can always put us in touch with a candidate who meets or exceeds our time requirements. Many recent alumni start out in the right hand seat until they've accumulated enough hours to move into the pilot's seat."

To make the transition to the charter operation easier, plans are underway to install some of East Coast's equipment at the university to give potential pilots first-hand experience with their aircraft. Embry-Riddle has similar direct-hire partnerships with Atlantic Coast Airlines and Atlantic Southeast Airlines.

Partners in pilot training

The agreements were made possible by the 1997 opening of the Advanced Flight Simulation Center on the Daytona Beach campus, a joint venture with FlightSafety

International (FSI). At the controls of Boeing 737-300 and Beech 1900D simulators, students in the direct-hire programs safely replicate advanced flight and recovery maneuvers, reducing the overall training time needed to land a pilot's job with the sponsoring carrier. The simulators also meet the training needs of pilots sent by Commutair, Continental, Delta, Mesa Air Group, Pan Am, Skyway Airlines, and other carriers.

The university is also providing flight training services to non-U.S. carriers, including Saudi Arabian Airlines and Turkish Air, and to INAC, the Argentinian aviation academy. Negotiations are underway to develop professional pilot training programs in South Africa and several other countries.

As the demand for pilot training has grown, FSI has seen an increased utilization of its simulators, which are located at 51 sites worldwide. "In 1997, we trained approximately 50,000 pilots," says Beth Thornton, manager of the company's New Hire Program, headquartered in the university's simulation center. Her program, which evaluates and places new pilots with participating airlines, screened 1,189 candidates and placed 793 new pilots with seven airlines and one corporate carrier in 1998.

Embry-Riddle is a partner with the FAA, NASA, and industry in the Advanced General Aviation Transport Experiment (AGATE), a visionary effort to design small planes that will put personal flight within reach of anyone in the United States. A \$2.5 million research project led by Steve Hampton, professor of aeronautical science, is developing curricula and training materials to reduce the time and cost of getting an instrument rating for the new aircraft.

In tests, the new curriculum has reduced ground and flight training time by 29 percent and costs by 20 percent, and saves 83 percent in total elapsed time in the production of a pilot certified for visual and instrument flight rules. Partners in the project are Advanced Creations Inc., Cessna Aircraft Co., Jeppesen Sanderson, Ohio State University, and Raytheon Aircraft.

Building on a 73-year track record in pilot education and its experience creating new pilot materials for AGATE, Embry-Riddle President George Ebbs has challenged the university to become a "center of excellence for the development of pilots of the next century." His initiative, dubbed "Pilot 2020," would forge partnerships with industry to define the skills and knowledge pilots will need to be successful in the cockpits of the future.

Industry rallies

To tackle the technician shortage, Embry-Riddle has been taking a different approach.

Last November, the university called on competing companies that employ and train aviation technicians to discuss the problem at an emergency conference in Daytona Beach that it organized with Aviation Maintenance magazine. It was the first time aircraft maintenance competitors have joined together to face an industry-wide problem. At a follow-up conference in February, which drew 80 attendees, four working groups recommended solutions.

Eileen Taylor, principal of Aviation High School, an aviation technician magnet school in New York City, and a member of the education working group, said aviation companies, schools, and universities must communicate more about aviation careers and career fairs "so we can better prepare our young people to work in aviation." She also urged industry to provide student scholarships and internships, partnerships with educators, equipment and parts, tours, and resources for guidance counselors.

David Shotsberger, Continental Airlines' senior director of technical operations for the southeast U.S., Europe and Caribbean and chair of the professional working group, agreed. "We need to talk about the skills that are needed, foster mentoring relationships with interested students, and get the word out that there will always be a good future and solid jobs in this field."

The military and government group recommended making it easier for military aircraft technicians to transfer their training and experience to the civilian marketplace. They said there is a need to develop training programs that "bridge" the gap between military training

and that which the FAA requires for the airframe and powerplant certificate.

"Make it Fly"

Conference attendees voted to launch a coordinated effort by aviation companies, educators, and government to attract more young people to careers in aviation maintenance technology through education, training, career counseling, and public outreach. They coined the marketing slogan "Make It Fly," and formed the Make It Fly Foundation to coordinate the campaign. The foundation's director is Michael Sonshine, chief operating officer of STS Holdings, an aviation staffing, compliance, and training company.

The next meeting of the industry group is June 8 on Embry-Riddle's Daytona Beach campus. Information is also available at www.MakItFly.com.

The "Make It Fly" campaign was introduced to the aviation maintenance, repair and overhaul industry at the MRO'99 trade show last April. At the show, Embry-Riddle President George Ebbs also unveiled "Technician 2010," a new program that will use the university's education and research expertise to help the industry develop a new model for training technicians.

New training and career models needed

The plan calls for the university to work with industry partners to identify the skills technicians will need in the future, develop new training content, streamline the training process, and lobby for regulatory reforms. This is needed because as aircraft technology becomes increasingly complex, the training and expertise of technicians, particularly in computers and electronics, is becoming more advanced and requires continuous upgrading.

If the aviation industry wants to stem the exodus of technicians, Ebbs says it must develop new models for training and career development. For example, corporate sponsorship of training would free young people from having to pay \$10,000-\$15,000 up front and get them into a job from which they could repay their employer. He says companies also need to treat aviation technology as a profession, which means giving their employees opportunities for ongoing training and promotion to management positions.

For information about "Pilot 2020," or to share your ideas, contact Thomas Connolly, dean of the School of Aviation, at (904) 226-6291 or connollt@cts.db.erau.edu. For the "Technician 2010" program, contact Paul McDuffee, vice president of aviation training and industry relations, at (904) 226-6201 or mcduffep@db.erau.edu.

*By Robert Ross,
with reporting by Valerie Jordan Reece*

How the demand for pilots affects Embry-Riddle

For Embry-Riddle students, the route to a seat in an airline cockpit starts with the aeronautical science degree. After graduation, most work as flight instructors until they log at least 1,000 total hours and 100 hours flying multi-engine aircraft, the minimum required to join a flight crew at a commuter or freight line. They must accumulate at least 3,000 total hours and 500 multi-engine hours to be eligible for a job with the majors.



"Five years ago, when the airlines weren't hiring, we had flight instructors on staff with five to seven years' experience," says Ken Doucette, chief flight instructor at Embry-

Riddle's Daytona Beach campus. "We were hiring about 20 a year, and our annual turnover was about 10 percent. Now, they're rotating out of here after one to one-and-a-half years. We're losing a couple every week." The instructor pool averages 170 at Daytona Beach and 45 at Prescott, most of them Embry-Riddle graduates.

"There's constant excitement in the air: who will get that long-awaited call next?" says Larry Thomas, a flight instructor and supervisor at Daytona Beach.

Most calls come from regional carriers such as Atlantic Coast, Atlantic Southeast, Business Express, Continental Express, Mesa, Mesaba, and Skyway, although some hiring is also done by Northwest, TWA, and United.

About 20 percent of the university's aeronautical science students take jobs upon graduation with Atlantic Coast, Atlantic Southeast, American Eagle, or Continental Express, four regional airlines with direct-hire "bridge" programs that significantly reduce the flight time required for preselected students.

"About 12 percent of the pilots now flying for these airlines are Embry-Riddle graduates," says Andrew Broom, senior placement program manager at the Daytona Beach campus. Another sign of the stepped-up interest, he says, is that more airlines are paying to fly students in for on-site simulator performance and evaluation.

[Back to Table of Contents](#)

<http://comm.db.erau.edu/leader/spring99/short.html>
page last modified: June 24 1999, maintained by: ERAU Communications



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Section B

Sunday, November 21, 1999

Bill aims to ease pilot pinch

By AMANDA BOHMAN
Staff Writer

Small air carriers in Fairbanks had pressed to find new pilots could get relief if Congress passes a law raising the mandatory retirement age for pilots with the larger carriers from 60 to 68.

A nationwide shortage of pilots has made it harder for small rural carriers to attract aviators.

"It's difficult to find qualified pilots," said Paul Lawrence, operations manager at Larry's Flying Service. "Two, three, four, five years ago they were running down the doors. Today we're lucky to see anyone walk in."

Four out of six local airlines the News-Miner spoke to complained that burgeoning large air carriers based in the Lower 48 are wooing their experienced pilots or the corps of young pilots they used to attract in order to either replace retirees or fill gaps in expanding operations.

"Insofar as openings are created at the top, there's a ripple effect all the way down the pilots food chain," said Dave Carlstrom, director of marketing of Fairbanks International Airport.

While the number of certified pilots has dropped nationwide by 11 percent, in Alaska it's even steeper. According to data provided by U.S. Sen. Frank Murkowski's office, the number of certified pilots has steadily fallen 18 percent from 10,200 to 8,700.

Murkowski is sponsoring the legislation. He cited a 1993 Federal Aviation Administration study showing no connection between accident rates and pilots nearing age 60.

The 40-year-old mandatory retirement rule doesn't make sense to many local air carriers.

Pilots flying planes with 11 or more seats are required to retire when they turn 60—those who fly planes with 10 seats or less are allowed to fly as long as they can pass the twice yearly physical exam.

"It's kind of a shame to take someone with all of that experience and common sense and tell them it's time to go out to pasture," said Mike Morgan, chief pilot at Warbelow's Air Ventures.

"It's kind of a shame to take someone with all of that experience and common sense and tell them it's time to go out to pasture."

—Mike Morgan, pilot
Warbelow's Air
Ventures

B-2 LOCAL

PILOTS: Bill to raise mandatory retirement age

Continued from Page B-1

Morgan said he's had to go out of the country to find good, experienced pilots to fly Warbelow's planes.

By the same token, Frontier Flying Service has had a 35 to 40 percent turnover in pilots the last year because pilots have gone to larger carriers. "We very rarely lose anybody to like-size equipment," said president Bob Hajdlovich.

Air Cargo Express also finds

this pilot pinch. Howard Hardee, director of operations, said the legislation will help smaller carriers such as his.

"Major airlines won't have to replace pilots that fall prey to the mandatory retirement rule," he said.

Another air carrier official said his operation has been lucky to be untouched by the pilot drought thus far. Bob Bursial, owner of Wright Air Service, said

90 percent of his pilots have been flying for him for more than five years but he knows he'd probably have a difficult time if he was looking to hire.

"Compared to a United Airlines captain making \$200,000 a year—that's not the entry level job, that's the pie in the sky—the pay is notoriously low," Bursial said of smaller air carriers.

An official at Tednook Flying Service also said his carrier was unaffected.

Carlstrom said air taxi and commuter activity at the airport waned this summer as compared with last year—from July to September flights were down 14.7 percent—but said he didn't know if it was a result of the pilot's shortage.

"There are too many other factors to consider," he said. The Senate Commerce Committee will consider the legislation early next year. The bill is SB-1855.





U.S. Department
of Transportation
**Federal Aviation
Administration**

Mike Monroney Aeronautical Center
Civil Aeromedical Institute (CAMI)
Aeromedical Certification Division

P.O. Box 26080
Oklahoma City, OK 73126

June 23, 1999

Alan M. Serwer
Bell, Boyd and Lloyd
Three First National Plaza
70 West Madison Street, Suite 3300
Chicago, IL 60602

Dear Mr. Serwer:

The following information is provided in accordance with your request of May 13. Please accept my apology for the delay in responding to your inquiry. Statistics are included for active airmen holding a medical certificate as of December 31 for each respective year, 1994 - 1998 (not calendar year). The medical conditions listed are usually, but not always, Special Issuance.

These data are provided by class of medical certificate issued. There is currently no method of determining which first- and second-class airmen are airline pilots without performing a special computer run, which can be cost-prohibitive. Previous estimates have been approximately two to five thousand dollars.

There is no fee for the enclosed information. Statistics requested under provisions of the Freedom of Information Act would be no different than that provided.

Please let me know if I can be of further assistance.

Sincerely,

Leslie E. Downey
Aeromedical Certification Division



As of December 31, 1998:

Pathology	First Class	Second Class
Heart Transplant	-	-
Myocardial Infarction	250	259
Coronary Angioplasty Procedure	270	242
Coronary Artery Bypass Surgery	209	249
Implanted Pacemaker	7	21
Valve Replacement – Mechanical	6	24
Valve Replacement – Tissue	8	12
Liver Transplant	2	6
Kidney Transplant	10	32
Convulsive Reactions (epilepsy, grand/petit mal)	46	48
Alcoholism	915	278
Diabetes, Controlled by Diet	198	430
Diabetes, Controlled by Insulin	-	-
Diabetes, Controlled by Hypoglycemic Drugs	166	366

As of December 31, 1997:

Pathology	First Class	Second Class
Heart Transplant	-	-
Myocardial Infarction	203	214
Coronary Angioplasty Procedure	203	182
Coronary Artery Bypass Surgery	164	227
Implanted Pacemaker	2	13
Valve Replacement – Mechanical	5	17
Valve Replacement – Tissue	5	8
Liver Transplant	1	5
Kidney Transplant	9	23
Convulsive Reactions (epilepsy, grand/petit mal)	32	39
Alcoholism	856	223
Diabetes, Controlled by Diet	178	369
Diabetes, Controlled by Insulin	-	-
Diabetes, Controlled by Hypoglycemic Drugs	114	236

As of December 31, 1996:

Pathology	First Class	Second Class
	-	-
Heart Transplant	178	187
Myocardial Infarction	178	147
Coronary Angioplasty Procedure	158	178
Coronary Artery Bypass Surgery	3	8
Implanted Pacemaker	6	19
Valve Replacement – Mechanical	4	8
Valve Replacement – Tissue	-	3
Liver Transplant	12	15
Kidney Transplant	20	34
Convulsive Reactions (epilepsy, grand/petit mal)	879	218
Alcoholism	166	339
Diabetes, Controlled by Diet	-	-
Diabetes, Controlled by Insulin	99	165
Diabetes, Controlled by Hypoglycemic Drugs		

As of December 31, 1995:

Pathology	First Class	Second Class
Heart Transplant	-	-
Myocardial Infarction	166	190
Coronary Angioplasty Procedure	166	146
Coronary Artery Bypass Surgery	152	181
Implanted Pacemaker	2	6
Valve Replacement – Mechanical	4	11
Valve Replacement – Tissue	5	8
Liver Transplant	-	3
Kidney Transplant	10	13
Convulsive Reactions (epilepsy, grand/petit mal)	22	24
Alcoholism	869	196
Diabetes, Controlled by Diet	134	307
Diabetes, Controlled by Insulin	-	-
Diabetes, Controlled by Hypoglycemic Drugs	77	121

As of December 31, 1994:

Pathology	First Class	Second Class
Heart Transplant	-	-
Myocardial Infarction	150	174
Coronary Angioplasty Procedure	156	120
Coronary Artery Bypass Surgery	130	166
Implanted Pacemaker	3	4
Valve Replacement – Mechanical	4	10
Valve Replacement – Tissue	7	5
Liver Transplant	-	3
Kidney Transplant	6	15
Convulsive Reactions (epilepsy, grand/petit mal)	20	20
Alcoholism	851	178
Diabetes, Controlled by Diet	120	293
Diabetes, Controlled by Insulin	-	-
Diabetes, Controlled by Hypoglycemic Drugs	71	104



U.S. Department
of Transportation
Federal Aviation
Administration

Mike Monroney Aeronautical Center
Civil Aeromedical Institute (CAMI)
Aeromedical Certification Division

P.O. Box 28080
Oklahoma City, OK 73128

May 24, 1999

Mr. Bert M. Yetman
PO Box 1116
Grapevine, TX 76099

Dear Mr. Yetman:

The information on the following pages is provided in accordance with your request of May 11. Statistics are included for airmen holding an active medical certificate as of December 31 for each respective year, 1994 - 1998 (not calendar year).

These data are provided by class of medical certificate issued. There is no method of determining which of the first- and second-class airmen are airline pilots without performing the special computer run we discussed over the telephone, which would probably be cost-prohibitive.

Several of the pathology conditions listed (cardiovascular conditions, alcoholism, and diabetes requiring the use of insulin) are usually, but not always, Special Issuance.

I hope this information is helpful. Please let me know if you have questions.

Sincerely,

Leslie E. Downey
Aeromedical Certification Division

As of December 31, 1998:

Pathology	First Class	Second Class	Third Class
Aphakia	169	424	1,410
Glaucoma	295	604	1,767
Artificial Lens Implant	436	1,146	3,203
Blindness or Absence of Either Eye (light perception only)	215	608	2,364
Defective Hearing, Deafness, NEC	744	1,434	2,032
Heart Transplant	-	-	-
Myocardial Infarction	250	259	2,557
Coronary Angioplasty Procedure	270	242	2,062
Coronary Artery Bypass Surgery	209	249	2,772
Implanted Pacemaker	7	21	137
Mitral Valve Prolapse	646	655	1,573
Valve Replacement - Mechanical	6	24	137
Valve Replacement - Tissue	8	12	72
Liver Transplant	2	6	17
Kidney Transplant	10	32	86
Urolithiasis (kidney stones)	4,201	5,707	12,726
Stroke, Embolism, Aneurysm, etc.	195	250	741
Convulsive Reactions (epilepsy, grand/petit mal)	46	48	154
Multiple Sclerosis, Chronic Brain Disease, etc.	32	34	81
Parkinsonism	16	20	65
Alcoholism	915	278	436
Hyperglycemia	108	223	424
Hypothyroidism - Graves' Disease	248	302	614
Hypothyroidism, Thyroid Cancer	954	1,354	3,377
Diabetes, Controlled by Diet	198	430	1,207
Diabetes, Controlled by Insulin	-	-	210
Diabetes, Controlled by Hypoglycemic Drugs	166	366	1,420
Diabetes Insipidus	9	10	11
Other Endocrine-Cushing's, Addison's, Pituitary, etc.	162	155	351

As of December 31, 1997:

Pathology	First Class	Second Class	Third Class
Aphakia	155	390	1,172
Glaucoma	265	572	1,468
Artificial Lens Implant	389	1,035	2,635
Blindness or Absence of Either Eye (light perception only)	191	600	2,121
Defective Hearing, Deafness, NEC	762	1,345	1,570
Heart Transplant	-	-	-
Myocardial Infarction	203	214	2,099
Coronary Angioplasty Procedure	203	182	1,667
Coronary Artery Bypass Surgery	164	227	2,305
Implanted Pacemaker	2	13	86
Mitral Valve Prolapse	599	584	1,286
Valve Replacement - Mechanical	5	17	100
Valve Replacement - Tissue	5	8	44
Liver Transplant	1	5	14
Kidney Transplant	9	23	68
Urolithiasis (kidney stones)	3,827	5,042	10,397
Stroke, Embolism, Aneurysm, etc.	168	208	575
Convulsive Reactions (epilepsy, grand/petit mal)	32	39	124
Multiple Sclerosis, Chronic Brain Disease, etc.	24	27	68
Parkinsonism	14	22	52
Alcoholism	856	223	324
Hyperglycemia	115	192	399
Hyperthyroidism - Graves' Disease	209	245	440
Hypothyroidism, Thyroid Cancer	828	1,166	2,780
Diabetes, Controlled by Diet	178	369	932
Diabetes, Controlled by Insulin	-	-	74
Diabetes, Controlled by Hypoglycemic Drugs	114	236	849
Diabetes Insipidus	6	9	11
Other Endocrine-Cushing's, Addison's, Pituitary, etc.	149	140	289

As of December 31, 1996:

Pathology	First Class	Second Class	Third Class
Aphakia	141	359	1,024
Glaucoma	246	551	1,407
Artificial Lens Implant	363	953	2,491
Blindness or Absence of Either Eye (light perception only)	184	638	2,169
Defective Hearing, Deafness, NEC	790	1,322	1,247
Heart Transplant	-	-	-
Myocardial Infarction	178	187	1,917
Coronary Angioplasty Procedure	178	147	1,466
Coronary Artery Bypass Surgery	158	178	2,172
Implanted Pacemaker	3	8	78
Mitral Valve Prolapse	550	574	1,234
Valve Replacement - Mechanical	6	19	79
Valve Replacement - Tissue	4	8	43
Liver Transplant	-	3	15
Kidney Transplant	12	15	64
Urolithiasis (kidney stones)	3,514	4,722	9,368
Stroke, Embolism, Aneurysm, etc.	139	181	543
Convulsive Reactions (epilepsy, grand/petit mal)	20	34	101
Multiple Sclerosis, Chronic Brain Disease, etc.	23	28	71
Parkinsonism	15	22	48
Alcoholism	879	218	318
Hyperglycemia	124	203	373
Hyperthyroidism - Graves' Disease	183	221	399
Hypothyroidism, Thyroid Cancer	775	1,111	2,546
Diabetes, Controlled by Diet	166	339	860
Diabetes, Controlled by Insulin	-	-	-
Diabetes, Controlled by Hypoglycemic Drugs	99	165	552
Diabetes Insipidus	3	7	13
Other Endocrine-Cushing's, Addison's, Pituitary, etc.	134	108	267

As of December 31, 1995:

Pathology	First Class	Second Class	Third Class
Aphakia	124	358	908
Glaucoma	242	561	1,384
Artificial Lens Implant	342	923	2,380
Blindness or Absence of Either Eye (light perception only)	189	665	2,242
Defective Hearing, Deafness, NEC	829	1,314	1,058
Heart Transplant	-	-	-
Myocardial Infarction	166	190	1,771
Coronary Angioplasty Procedure	166	146	1,319
Coronary Artery Bypass Surgery	152	181	2,070
Implanted Pacemaker	2	6	73
Mitral Valve Prolapse	526	577	1,223
Valve Replacement - Mechanical	4	11	76
Valve Replacement - Tissue	5	8	40
Liver Transplant	-	3	14
Kidney Transplant	10	13	73
Urolithiasis (kidney stones)	3,336	4,728	9,010
Stroke, Embolism, Aneurysm, etc.	131	169	506
Convulsive Reactions (epilepsy, grand/petit mal)	22	24	78
Multiple Sclerosis, Chronic Brain Disease, etc.	23	27	70
Parkinsonism	16	21	51
Alcoholism	869	196	309
Hyperglycemia	117	209	367
Hyperthyroidism - Graves' Disease	174	212	376
Hypothyroidism, Thyroid Cancer	720	1,067	2,340
Diabetes, Controlled by Diet	134	307	821
Diabetes, Controlled by Insulin	-	-	-
Diabetes, Controlled by Hypoglycemic Drugs	77	121	427
Diabetes Insipidus	5	6	13
Other Endocrine-Cushing's, Addison's, Pituitary, etc.	118	115	243

As of December 31, 1994:

Pathology	First Class	Second Class	Third Class
Aphakia	129	310	746
Glaucoma	232	463	1,100
Artificial Lens Implant	308	840	1,902
Blindness or Absence of Either Eye (light perception only)	188	635	2,026
Defective Hearing, Deafness, NEC	815	1,235	775
Heart Transplant	-	-	-
Myocardial Infarction	150	174	1,356
Coronary Angioplasty Procedure	156	120	892
Coronary Artery Bypass Surgery	130	166	1,603
Implanted Pacemaker	3	4	51
Mitral Valve Prolapse	472	528	978
Valve Replacement - Mechanical	4	10	50
Valve Replacement - Tissue	7	5	32
Liver Transplant	-	3	9
Kidney Transplant	6	15	56
Urolithiasis (kidney stones)	3,151	4,256	7,483
Stroke, Embolism, Aneurysm, etc.	119	159	368
Convulsive Reactions (epilepsy, grand/petit mal)	20	20	54
Multiple Sclerosis, Chronic Brain Disease, etc.	18	27	55
Parkinsonism	10	14	37
Alcoholism	851	178	226
Hyperglycemia	112	172	293
Hyperthyroidism - Graves' Disease	148	170	289
Hypothyroidism, Thyroid Cancer	619	888	1,791
Diabetes, Controlled by Diet	120	293	634
Diabetes, Controlled by Insulin	-	-	-
Diabetes, Controlled by Hypoglycemic Drugs	71	104	305
Diabetes Insipidus	4	3	13
Other Endocrine-Cushing's, Addison's, Pituitary, etc.	104	109	196

Robert R. Perry
4441 Main St., PO Box 751
Yarmouthport, MA 02675

February 24, 2000

Captain Bert Yetman, President
Professional Pilots Federation

Dear Bert:

Several years ago, during David Hinson's tenure at the FAA, airliners with ten to thirty passenger seats were moved from Part 135 rules to Part 121 rules. Pilots flying these airliners were permitted to continue flying beyond their 60th birthday under Part 121 until December 20, 1999, at which time every pilot over age sixty would no longer be allowed to fly the line.

At your request, I contacted a number of these over-60 Part 121 pilots to determine how many hours they'd flown the line beyond age 60, and how many accidents or incidents they'd experienced in their over-60 flying. The results of this survey are shown on the attached two pages. Thirty-one pilots accumulated 101,800 flight hours beyond age 60 without a single accident or incident.

The survey was stopped after attaining over 100,000 Part 121 accident-free hours by over-60 pilots. There are other Part 121 over-60 pilots who retired either on 12/20/99 or prior to that date. I do not know the exact number, but estimate that it lies between 100 and 200. This estimate is based on the number of over-60 pilots that I have known in my airline during the past five years. I am not aware of any over-60 pilot outside this survey being involved in an accident or incident.

Two of the pilots in the survey flew the Beech 1900 19-passenger airliner after reaching age 60. The other twenty-nine flew the 30-passenger EMB-120 Brasilia after reaching age 60. The EMB-120 is a highly complex twin turboprop airliner that requires a skilled, well-trained crew. Fourteen of the 300 EMB-120s originally built have been lost in accidents.

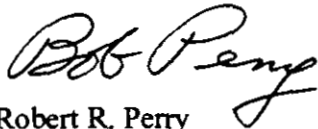
These thirty-one pilots are highly competent and in good health. I found them hard to reach, because many had found new employment. Some have been retained by their



airlines in the training department. Others are flying for private carriers in this country under Part 91 or Part 135 rules. Others are flying overseas. Others are in business. One over-60 pilot has just been awarded the PhD degree, and is starting a new career. Another is an Iron Man athlete. Still another has attained 38,000 pilot hours. In spite of their forced retirement, their outlook is optimistic. My impression is that they're getting along very well after having to stop flying the line. On the other hand, I suspect their airlines will find it hard to replace the experience and skills they lost on 12/20/99.

This group's over-60 flying experience indicates that safety is not compromised by the use of older pilots. This group also demonstrates that good health and high professional competence of pilots, not age, is what matters in safe airline flying.

Sincerely yours,

A handwritten signature in cursive script that reads "Bob Perry". The signature is written in dark ink and is positioned above the printed name.

Robert R. Perry
EMB-120 Check Airman and FAA Designated Examiner

PART 121 FLYING BEYOND AGE SIXTY

NAME	AGE	PT 121 HOURS FLOWN SINCE AGE SIXTY	ACCIDENTS OR INCIDENTS SINCE AGE SIXTY	TOTAL PILOT HOURS FLOWN
Bernie Albers	65	4,800	0	23,000
Joe Bartak	67	4,000	0	26,000
Art Bell	65	3,500	0	31,000
Morris Bethards	60	340	0	18,000
Walt Bohan	67	4,800	0	24,000
Lew Boone	62	300	0	19,000
Hugh Brown	62	1,300	0	16,000
Howard Brush	62	1,400	0	25,000
John Cruikshank	61	300	0	11,000
Dave Culver	65	4,000	0	29,000
Charles DeBerry	66	5,000	0	26,000
Frank Elkins	63	2,800	0	24,000
Gary Haws	60	600	0	12,000
Bob Hoover	62	1,100	0	38,000
Ken Hughbanks	68	8,000	0	19,500
Robert Kindred	63	3,000	0	15,000
Stan Knight	65	4,000	0	20,000
Dick Law	65	4,000	0	22,000
Howard Magrane	65	5,000	0	15,000
Jim McGraw	65	3,800	0	13,000
Bob Perry	71	9,000	0	12,600
Barton Pfautz	64	3,000	0	16,000
Bill Query	66	4,800	0	21,000

	AGE	PT 121 HOURS FLOWN SINCE AGE SIXTY	ACCIDENTS OR INCIDENTS SINCE AGE SIXTY	TOTAL PILOT HOURS FLOWN
Jerry Rich	62	2,000	0	17,000
Phil Semler	65	4,000	0	23,300
Doug Solberg	61	800	0	20,000
Ron Vicker	60	60	0	12,000
Ron White	62	2,000	0	22,000
Lyle Wilkinson	65	5,000	0	28,000
Dale Wolfe	64	3,600	0	17,900
Ron Wolfe	68	5,500	0	16,000
TOTAL - 31 PILOTS		101,800	0	632,300

IN THE INDUSTRIAL RELATIONS COURT)
OF AUSTRALIA)
NEW SOUTH WALES DISTRICT REGISTRY)

No. NI. 879 of 1994

BETWEEN: JOHN BAILLIE CHRISTIE
Applicant

AND: QANTAS AIRWAYS LIMITED
Respondent

CORAM: WILCOX CJ
PLACE: ADELAIDE (HEARD IN SYDNEY)
DATE: 12 MAY 1995

MINUTES OF ORDER

THE COURT ORDERS THAT:

1. The proceeding be dismissed.

Note: Settlement and entry of orders is dealt with in
Order 36 of the Industrial Relations Court Rules.



IN THE INDUSTRIAL RELATIONS COURT)
OF AUSTRALIA)
NEW SOUTH WALES DISTRICT REGISTRY)

No. NI. 664 of 1994

BETWEEN: DALLAS JOHN WILLIAM
ALLMAN

Applicant

AND: AUSTRALIAN AIRLINES
LIMITED

Respondent

CORAM: WILCOX CJ
PLACE: ADELAIDE (HEARD IN SYDNEY)
DATE: 12 MAY 1995

MINUTES OF ORDER

THE COURT ORDERS THAT:

1. The respondent, Australian Airlines Limited, reinstate the applicant, Dallas John William Allman, by reappointing him to the position in which he was employed immediately before the termination of his employment on 7 August 1994.
2. For all purposes, the said respondent treat the said applicant as having been continuously employed by it from the date of termination to the date of reinstatement.
3. The said respondent pay to the said applicant the remuneration lost by him because of the termination.

Note: Settlement and entry of orders is dealt with in Order 36 of the Industrial Relations Court Rules.

IN THE INDUSTRIAL RELATIONS COURT)
OF AUSTRALIA)
NEW SOUTH WALES DISTRICT REGISTRY)

No. NI. 879 of 1994

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No. NI. 664 of 1994

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ALLMAN

Applicant

AND: AUSTRALIAN AIRLINES
LIMITED

Respondent

CORAM: WILCOX CJ
PLACE: ADELAIDE (HEARD IN SYDNEY)
DATE: 12 MAY 1995

REASONS FOR JUDGMENT

WILCOX CJ: These two cases challenge the policy of Qantas Airways Limited ("Qantas") of compulsorily retiring pilots at the age of 60. They were heard together by consent, the evidence in each case being treated as evidence in the other to the extent of its relevance.

The applicant in one case, John Baillie Christie, was employed as a pilot by Qantas from 1964 until his 60th birthday on 21 September 1994. Throughout that period he flew

aeroplanes servicing Qantas' international routes. With the exception of a short period in 1989, the applicant in the other case, Dallas John William Allman, was employed as a pilot by Australian Airlines Limited, flying its Australian domestic routes, from 21 January 1957 until he turned 60 on 7 August 1994. When Mr Allman commenced this employment his employer was known as Trans Australia Airlines. By the time he left, it was a wholly-owned subsidiary of Qantas and generally referred to as "Qantas domestic".

Both cases are brought under Division 3 of Part VIA of the Industrial Relations Act 1988, each applicant claiming that his employment was terminated by his employer in contravention of para.(f) of s.170DF(1). The paragraph reads:

"An employer must not terminate an employee's employment for any one or more of the following reasons, or for reasons including any one or more of the following reasons:

(a) ...

(b) ...

(c) ...

(d) ...

(e) ...

(f) race, colour, sex, sexual preference, age, physical or mental disability, marital status, family responsibilities, pregnancy, religion, political opinion, national extraction or social origin.

(g) ..."

Subsection (2) provides a defence to a claim under s.170DF(1)(f):

"(2) Subsection (1) does not prevent a matter referred to in paragraph (1)(f) from being a reason for terminating employment if the reason is based on the inherent requirements of the particular position."

In the case of Mr Christie, the respondent denies that it terminated his employment. It argues that the employment came to an end by effluxion of time, the contract of employment between it and Mr Christie being limited to the period before his 60th birthday. If, contrary to this argument, the respondent did terminate Mr Christie's employment, it admits that this was because of his age; but it claims that this reason is based on the inherent requirements of the particular position, so s.170DF(2) applies.

In the other case, Australian Airlines concedes that it terminated Mr Allman's employment. It too relies on s.170DF(2), but it also raises an objection to the competency of the claim. It says that s.170CD of the Act excludes an application by Mr Allman under Division 3. It is convenient to deal first with the objections to competency.

Mr Christie's entitlement to claim

In order to determine the preliminary point taken by Qantas in respect of Mr Christie it is necessary to consider

several documents. The first document is a printed form of letter of appointment dated 30 April 1964, addressed to Mr Christie and signed on behalf of the Staff Manager of Qantas Empire Airways Limited, as the company was then known. That letter appointed Mr Christie from that day "as a Pilot for duty as required by the Company in any part of the world". The letter said that Mr Christie would initially be classified as a probationary pilot, pending completion of training and commencement of operational duties. Upon completion of his probation, Mr Christie would be appropriately graded and receive salary and allowances as set out in the company's staff instruction manual. The letter dealt with termination in this way:

- "4(a) During your employment, your services may be terminated by the Company or yourself by the giving of notice or payment or forfeiture of salary in lieu thereof in accordance with the agreement covering Airline Pilots employed by Qantas Empire Airways Limited.
- (b) You are reminded that should you at any time, in the opinion of the Company be guilty of misconduct, neglect of duty, gross inefficiency or breach of Company instructions, the Company may terminate your employment without notice."

The letter included numerous other conditions and this paragraph:

- "19. The abovementioned conditions of employment are to be read in conjunction with and are supplementary to the terms of any enactment industrial agreement or

award specifically covering your
employment with this Company."

The foot of the letter contained a printed
endorsement:

"I have read the conditions of employment set
out above and accept appointment in accordance
therewith."

Mr Christie signed this endorsement, thus creating a contract
of employment between himself and Qantas in accordance with
the terms of the letter.

Despite the terms of cl.19, nothing has been put
before me to suggest the existence in 1964 of any relevant
industrial award or agreement. An agreement was made in 1984,
known as the International Airline Pilots' Agreement 1984. It
is not in evidence and I do not know its terms.

In 1986 the 1984 agreement was replaced by another
agreement, the International Airline Pilots' Agreement 1986.
This agreement was made between Qantas and Australian
International Pilots Industrial Organisation, a registered
employee organisation now known as Australian International
Pilots Association ("AIPA"). The 1986 agreement was certified
under s.115 of the Industrial Relations Act by the Australian
Industrial Relations Commission ("AIRC" or "the Commission")
on 19 June 1989.

Section 2 of the certified agreement provided that it should be binding on Qantas, on the organisation - that is, AIPA - and its members and on "pilots employed by the company for whom the association is deemed to act as agent". Section 3 provided that the agreement "shall operate from 21 November 1986 in respect of all matters and shall remain in force until 20 November 1988 in respect of rules and conditions of work". This section went on to refer to variations intended to become effective from various dates in 1987, to permit the submission of "proposals for a new award or agreement or variations to this agreement not earlier than 90 days prior to expiration date of this agreement", to require a meeting to consider those proposals, and to provide for variation of the agreement during its currency by mutual agreement.

Section 5 of the agreement was headed "Contract of employment". It opened with a provision that the "services of a pilot shall be terminable by either the company or the pilot" by 14 days written notice during the first 12 months of employment and thereafter by 28 days' notice in writing or by payment or forfeiture of the requisite number of days' pay in lieu of notice. The section made no reference to termination on account of age.

Section 5(e) provided:

"The company may employ its pilots and the pilots shall serve the company in any part of the world where the company may from time to time be operating."

It is unnecessary to refer to the remaining sections in the agreement. They made elaborate provision in connection with all manner of subjects, including wage rates.

It seems to be common ground that the agreement was extended beyond its original expiry date and that pilots employed by Qantas, including Mr Christie, were paid in accordance with rates fixed by the agreement, as amended from time.

The 1986 agreement made no reference to a retiring age. However, this subject was addressed in one of several letters of agreement that were physically bound with the copy of the certified 1986 agreement tendered in evidence. This letter was addressed by Qantas' Director of Flight Operations to Mr F D C Caterson of the Australian Federation of Air Pilots. It commenced:

"This letter sets out in full the various agreements reached between the company and the Australian Federation of Air Pilots in respect of the extension of a pilot's employment beyond the 'normal date of his retirement'.

It is agreed between the company and the Australian Federation of Air Pilots that as and from the first day of July 1974 notwithstanding any agreement, company custom or practice to the contrary, the following provisions shall apply to an offer and acceptance of the extension of a pilot's employment beyond the 'normal date of retirement' (designated as 1 July following his 55th birthday)."

The provisions that followed allowed a pilot to elect "to extend his employment beyond the normal retirement date "on a year by year basis up to but not beyond the date of his 58th birthday", by giving appropriate notice to the company. Mr Caterson was asked to sign and return a copy of the letter. According to an endorsement on the bound copy, the letter was adopted, on 17 December 1981, by officers of Qantas and AIPA. The notice requirements were subsequently varied by a letter of agreement dated 27 March 1984 a copy of which was also bound up with the certified agreement.

The status of these letters of agreement is obscure. Although copies were bound with a copy of the certified agreement, the Commission's certificate does not appear to have been intended to extend to them. The certificate referred to "the attached document", in the singular, and described that document as "a memorandum of the terms agreed on in respect of the abovementioned industrial dispute" between Qantas and AIPA.

A further letter of agreement is also in evidence. It was not bound with the certified agreement. So far as the evidence indicates, it has never been produced to the Commission. This letter is dated 14 January 1991 and signed by officers of Qantas and AIPA. The letter recorded an agreement "that the following rules should apply to pilots wishing to extend their employment beyond normal retirement age". The first stated rule was that "a pilot may elect to

extend his employment beyond the normal retirement date on a year by year basis up to but not beyond the date of his sixtieth birthday". The other rules related to notice of extension and ancillary matters.

In response to a letter of inquiry from Qantas, on 25 April 1987 Mr Christie advised his intention to extend his period of service beyond his 55th birthday, due on 21 September 1989. Qantas treated his letter as an election to extend his employment until his 56th birthday. In September 1989 Qantas asked him whether he wished to extend to his 57th birthday. He elected to do so. In September 1990, in response to a further inquiry, he elected to extend his employment to his 58th birthday; and, in July 1991, until his 59th birthday. In September 1992 Mr Christie was asked whether he wished to extend to his 60th birthday, on 21 September 1994, and he responded by electing to do so.

On 6 July 1994 Mr Christie wrote a letter in these terms to Captain R J Heiniger, Qantas' Director of Flight Operations and Chief Pilot:

"My current retirement date is 21.9.94 my sixtieth birthday. I believe recent legislation may now override any requirement for a retirement to be based on age. It is my wish to continue flying for Qantas beyond 21.9.94.

I am aware that there may be some restrictions to my flying due to certain overseas regulations, but I am prepared to bid around any such restrictions.

Due to the relatively short time available before 21.9.94 I trust that you can give me an early reply."

Mr Christie received two letters in response to this letter but neither stated a final position. On 22 August 1994 his solicitors wrote a further letter to Captain Heiniger which referred, amongst other things, to s.170DF(1)(f) of the Industrial Relations Act and pressed Mr Christie's claim to be entitled to continue in his employment after 21 September.

On 8 September two letters were sent. One was written on behalf of Captain Heiniger to Mr Christie himself. It read:

"I write to clarify the position with respect to your retirement on 21st September, 1994.

As you know, the International Airline Pilots' Agreement and the Company's policy requires that pilots retire no later than upon reaching the age of 60 years.

Insofar as this is a matter of policy, it is based on safety and operational considerations. It reflects the particular requirements of and qualifications for the position of pilot within the employ of Qantas.

The Agreement and the policy are still appropriate and remain operative. Accordingly, it is necessary that your retirement take effect as planned on 21st September, 1994."

The other letter was sent by Qantas' solicitors to Mr Christie's solicitors. It was to the same effect. Accordingly, Mr Christie ceased his employment with Qantas on

21 September. He received a superannuation payment pursuant to the scheme operated by the company.

Counsel for Qantas argue that the duration of Mr Christie's employment was governed by the 1991 agreement between Qantas and AIPA providing for extension of a pilot's employment until his sixtieth birthday. They concede that Mr Christie was not a party to this agreement. They also accept that there is no evidence that this agreement was certified by the Commission, so as to be binding on Mr Christie as a member of AIPA: see s.149(2) of the Industrial Relations Act. But they submit that, by his subsequent conduct, Mr Christie adopted the agreement. They say that his elections to extend, year by year, are explicable only on that basis. His final notice of election, to extend his employment until 21 September 1994, they say, constituted an agreement that the employment should terminate on that day.

Counsel do not submit that the letters of agreement bound with the certified agreement apply to Mr Christie. They accept that there is no reason to suppose that the Commission's certification extended to these letters. But they say that Mr Christie obviously knew of the existence of the agreement for extensions beyond age 55 and took advantage of it; accordingly, he is now estopped from denying that it was part of his contract of employment.

I do not accept these submissions.

The original contract between Qantas and Mr Christie contained no condition as to the duration of his employment. The employment was to continue indefinitely, subject to the possibility of termination by a party pursuant to cl.4. If Qantas then had a policy about retirement at a particular age, it neglected to make this a condition of Mr Christie's employment contract. In that situation, the question is whether there was ever a variation of the original contract so as to include a term requiring Mr Christie to retire at 60, or any other particular age.

The letters of agreement bound with the certified agreement did not effect a variation of the contract of employment. Mr Christie was not a party to them. Although he was at the time a member of AIPA and would have been bound by a certified award, these letters do not appear to have been certified by the Commission. Furthermore, even if the letters bound Mr Christie, their terms would not have constituted a variation of his contract of employment. All that the parties agreed by the letters was that, from 1 July 1974, certain rules should apply to "an offer and acceptance of the extension of a pilot's employment beyond the 'normal date of retirement' (designated as 1 July following his 55th birthday)". But Mr Christie did not need to negotiate an extension of his employment beyond age 55. He was entitled to continue his employment unless and until that employment was terminated in accordance with his original contract of employment.

The same reasoning applies to the correspondence between Mr Christie and Qantas concerning the making of year by year elections to extend. This correspondence was misconceived. Mr Christie did not need an extension; he was entitled to continue until terminated. It is true that this correspondence may have caused Qantas not to terminate the contract of employment in accordance with cl.4 of the letter of 30 April 1964. If so, that was because of Qantas' own error. Contrary to the suggestion of counsel, there is no question of promissory estoppel. Mr Christie made no promise. At no time did he say that he would retire at 60, or any other age. The formula used in the letters of extension, devised by Qantas rather than Mr Christie, was "I elect to extend my employment to (a specific date) being my (number inserted) birthday". Particularly in a context where the same formula was used year after year, only the date and number being altered, Qantas could not have understood an election to extend to a particular date as a statement that Mr Christie agreed to retire on that day.

Qantas has failed to demonstrate that Mr Christie's employment came to an end through effluxion of time. On the contrary, it is apparent from the letters of 8 September that he was forced to cease work on his 60th birthday because Qantas insisted that he comply with its policy "that pilots retire no later than upon reaching the age of 60 years". By this insistence Qantas terminated Mr Christie's employment on

account of his age; so the outcome of his case depends on the availability to Qantas of the defence stated in s.170DF(2).

Mr Allman's entitlement to claim

Australian Airlines accepts that Mr Allman's employment was terminated by it, not by effluxion of time. But it contends that he is not entitled to make an application under Division 3 because of the operation of s.170CD(1) of the Act. That subsection provides that Subdivisions B to F inclusive of Division 3 "do not apply to a termination of employment of an employee who is not employed under award conditions" if, on the termination day, the wages of the employee exceeded "the applicable amount" or a proportion of that amount calculated on a daily basis. The "applicable amount" is \$60,000 or such indexed amount as may be prescribed by regulations. No indexed amount has yet been prescribed. Prior to his retirement, Mr Allman received a salary exceeding \$60,000. His claim depends on the application to him of Subdivisions B and C of Division 3. So the critical question is whether he was "employed under award conditions". Subsection (3) of s.170CD explains what is meant by that phrase:

"For the purposes of this section, an employee is taken not to be employed under award conditions if wages and conditions of employment of the employee are not regulated by one or more relevant awards that bind the employer of the employee."

The term "relevant award" is defined by subs.(4) for the purposes of s.170CD as meaning "an award or a State award". The word "award", in turn, is defined by s.4 of the Act to include, not only an award or order of the Commission under s.143(1) of the Act, but also a certified agreement and an enterprise flexibility agreement.

In support of their argument that Mr Allman's wages and conditions of employment were regulated by one or more awards, his counsel referred to three awards, the Australian Airlines Pilots Award 1989 ("the Airlines Award"), the Qantas/Australian Airlines Pilots Integration Award 1994 and the Qantas (Shorthaul Pilots) Enterprise Bargaining Award 1995. However, the last two awards were not made until 27 October 1994, more than two months after the termination of Mr Allman's employment, and 25 January 1995, respectively. It is true that each contained a provision that it "shall come into force" on an earlier date, 1 September 1993 and 1 July 1994, respectively. But such a provision only means that the obligations imposed by the award, when it was made, were referable to an earlier date. It does not mean that the award bound the parties before it was made: see Federated Engine Drivers and Firemen's Association of Australia v Adelaide Chemical and Fertiliser Company Limited (1920) 28 CLR 1 at 11. Neither of these last named awards was in force during Mr Allman's employment by Australian Airlines. Neither regulated his wages and conditions.

The Airlines Award commenced on 13 October 1989. Clause 2 provided "This award shall be binding on Australian Airlines Ltd in respect of its operations throughout Australia for the benefit of all pilots employed in the classifications covered by the award". The word "pilot" was defined in cl.4 of the award in terms of the meaning ascribed to it in cl.1 of Schedule 1 of the Industrial Relations Act; that is, in relation to an aircraft, as including "a pilot in command, co-pilot or pilot of any other description".

It is clear that Mr Allman was a pilot, within the ordinary meaning of that term, and was employed by Australian Airlines in that capacity. He was at that time both a "Captain" and a "Check captain". These were "classifications covered by the award". Consequently, it is clear that, when it was made in 1989, the award bound Australian Airlines in respect of him. However, the award was amended in August 1990. According to counsel for the respondents, the amendments took Mr Allman outside the purview of the award. Their reason is that Mr Allman was then employed as a check captain in A300 aircraft, a position he continued to hold until the termination of his employment.

In order to follow the respondents' argument it is necessary to note some definitions contained in cl.4 of the award, as originally framed. "Administrative captain" was defined as "a captain appointed to a management position by the employer". The term "Captain" was defined as:

"a pilot employed by the employer who is appointed as a captain by the employer and who is currently licensed by the Civil Aviation Authority (CAA) to act in command of an aircraft."

"Check captain" was defined as:

"a captain who is approved by the CAA and appointed by the employer to conduct flight proficiency tests for the issue and renewal of airline transport pilots' licences, and who certifies as to the competency of pilots so tested."

The August 1990 amendments included a rewriting of cl.10 of the award, dealing with pay. Paragraph (a) of the old cl.10 set out pay rates in para.(a) for captains and first officers. The captain's rate of pay depended on the aircraft for which he achieved line competency. The rate for an A300 captain was \$120,522 per annum. Paragraphs (e) and (f) of the clause provided special allowances for check captains and administrative captains. The new clause 10 rationalised the pay structure for captains. It divided the aircraft in the employer's fleet into two groups, A300 aircraft and the rest. The pay rate for an A300 captain was increased to \$124,138. The special allowances for check captains and administrative captains were omitted.

The evidence discloses the circumstances of these amendments. They stemmed from employer applications made to the AIRC in May 1990. The respondent to the applications was the Australian Federation of Air Pilots but another organisation representing pilots, Australian Transport Officers' Federation ("ATOF"), intervened in support of the

orders sought. It appears that the application was based on some structural efficiency agreements that had been negotiated between the employers and ATOF. On 2 July 1990 Deputy President Hancock indicated that he would accede to the applications. In reasons given that day he said:

"All agreements stipulate that references to Check Captains and/or Administrative Captains will be deleted from the awards. The purpose of these variations is to allow the companies to treat the officers concerned as managerial staff."

On 15 August Deputy President Hancock made formal variation orders.

On 29 August 1990 Captain T D Wiltshire, Head of A300 Operations and Deputy Chief Pilot of Australian Airlines, sent a memorandum to Mr Allman stating:

"AGREEMENT HAS BEEN REACHED WITH THE MANAGING DIRECTOR REGARDING YOUR SALARY AS AN A300 EXECUTIVE CAPTAIN.

THE PACKAGE IS AS FOLLOWS:

ANNUAL A300 LINE CAPTAIN SALARY	
\$124,138.00	
CHECK/ADMIN. ALLOWANCE	\$ 42,040.78
GROSS ANNUAL SALARY	\$166,178.78

PLUS-

A FULLY MAINTAINED MOTOR VEHICLE

YOU WILL CONTINUE TO BE PAID A FIXED DAILY TRAVELLING ALLOWANCE OF \$3744.00 AND THE ANNUAL LOSS OF LICENCE INSURANCE OF \$750.00.

WITH THE EXCEPTION OF THE MOTOR VEHICLE YOUR SALARY PACKAGE WILL CONTINUE TO BE LINKED TO THE AUSTRALIAN AIRLINES PILOTS AWARD 1989.

AN ANNUAL ASSESSMENT OF LINE PILOT PRODUCTIVITY WILL BE UNDERTAKEN TO BE REFLECTED IN THE 'ADMINISTRATIVE' ALLOWANCE.

SHOULD THERE BE ANY QUERIES REGARDING THE PACKAGE PLEASE FEEL FREE TO CONTACT ME AT ANY TIME TO DISCUSS THE MATTER.

COULD YOU PLEASE SIGN THIS MEMO TO INDICATE YOU HAVE READ AND ACCEPT THE PACKAGE. A COPY WILL BE FORWARDED TO YOU FOR YOUR RECORD.

THANK YOU FOR YOUR PATIENCE IN THIS MATTER."

On 26 June 1991, following a decision by AIRC to increase by 2.5% the salaries provided by the Airlines Award, Australian Airlines increased Mr Allman's salary to \$170,333.24. Apparently, this was calculated by applying the 2.5% increase to the A300 line captain component of his salary.

Counsel for the respondents argue that the variation to the award made by Deputy President Hancock took Mr Allman outside its coverage. They put two arguments. First, they say that Deputy President Hancock's reasons make clear that he intended to exclude check captains from the scope of the award, and Mr Allman was a check captain. Second, and against the possibility that it should be held that Deputy President Hancock was concerned only to deal with wages, not conditions, they contend he was no longer a person "employed under award conditions". They argue that a person is not "employed under award conditions" unless the award regulates both the wages and conditions of the employment; it is not enough that it governs one of them.

There is no doubt that one purpose of the 1990 amendments was to remove from the award the special allowances payable to check captains and administrative captains and allow the wages of those employees to be regulated by agreement. In order to achieve this, the old paras. (e) and (f) were to be omitted. As the defined terms "Administrative captain" and "Check captain" were used only in paras. (e) and (f), it was logical also to omit those definitions. Deputy President Hancock did this. However, there is nothing to indicate that either Deputy President Hancock or the parties to the application intended that the conditions included in the award should no longer apply to administrative captains and check captains.

The fact that the award was amended in such a way as to facilitate agreements for over-award payments to captains who undertook particular responsibilities does not mean that those captains were taken out of the general protection of the award. They remained "pilots". They remained "captains". There is no reason to doubt that the parties, and Deputy President Hancock, intended that the provisions of the award, other than the omitted provisions for special allowances, would continue to apply to them. The award continued to bind Australian Airlines "for the benefit of all pilots employed in the classifications covered by the award". One of those classifications was "Captain". A check captain is simply a particular type of captain, as the old definition of that term made plain. When one considers the terms of the award, it is

apparent that, with the exception of cl.10, they are as relevant to check captains as to any other category of pilots. For example, cl.5 imposes important obligations on pilots. As check captains are pilots, and fly scheduled services, the employer needs the benefit of these provisions as against check captains as much as against anyone else. Similarly, provisions like cl.6 (duties of a pilot), cl.7 (hours of services), cl.8 (termination), cl.9 (stand-down), cl.11 (pay deductions), cl.12 (daily travelling allowance), cl.13 (accommodation and transport), cl.16 (accidents and incidents) and cl.17 (sick leave) are all relevant to check captains. Indeed, it seems to me that Mr Allman, as a captain, would have been entitled to insist on the award pay rate of \$124,138, if no salary agreement had been reached; although the parties obviously expected that a higher rate would be agreed.

As I see the position, after August 1990 Mr Allman's wages were governed by the agreement made between Australian Airlines and himself, but his conditions of employment continued to be regulated by the award. Is this enough? Contrary to the submission by counsel for the respondents, I think it is. In framing the test set out in s.170CD(3), Parliament employed a double negative: "an employee is taken not to be employed under award conditions if wages and conditions of employment of the employee are not regulated" by one or more awards. As counsel for the respondents point out, the words "wages and conditions" are conjunctive, not

disjunctive. Wages and conditions means both wages and conditions; not either wages or conditions. But because Parliament used the negative "not regulated", the effect of this is that the stipulated test is satisfied only if both wages and conditions are not regulated by an award or awards. If an employee's conditions are regulated by an award, this is enough to prevent satisfaction of the negative test.

This result is understandable in policy terms. In his Second Reading speech to the Industrial Relations Amendment Bill (No.2) 1994, the Bill which introduced s.170CD into the Act, the Minister for Industrial Relations explained that the purpose of Division 3 of Part VIA of the Act was "to guarantee adequate forms of protection for people who do not otherwise have them". A person who has been able to negotiate a contract of employment under which he or she is paid \$60,000 per annum, or more, and which also regulates the conditions of his or her employment, is likely to have had at least the opportunity for alternative protection. He or she is likely to have had sufficient bargaining strength to insist on the insertion of a fair termination provision. But if there is no contract dealing with conditions of employment, because this is to be left to an award, there may not have been an opportunity to deal with termination. If the respondents' reading of s.170CD(3) is correct, any agreement between the employer and employee for payment of a benefit not prescribed by the relevant award, even a small over-award wage payment or a special allowance, would have the effect of depriving the

employee of the benefit of the statutory unlawful termination provisions. It seems unlikely that Parliament intended to go that far. Certainly, there is nothing in the Minister's speech to suggest this was his intention.

In my opinion, it should be held that, as Mr Allman's conditions of employment remained regulated by the Airlines Award, notwithstanding the August 1990 amendments, the facts of the case do not satisfy the test imposed by s.170CD(3); he was not a person "not employed under award conditions". Consequently, the exclusion provided by s.170CD does not apply to the termination of his employment. His case must be considered on its merits.

"Inherent requirements of the particular position"

Counsel for each party put submissions as to the approach the Court should adopt in applying the phrase, in s.170DF(2), "the inherent requirements of the particular position". The phrase seems to be an adaptation of cl.1(2) of the International Labour Organisation's Discrimination (Employment and Occupation) Recommendation 1958, which was made Schedule 9 of the Industrial Relations Act. That sub-clause speaks of a "particular job", rather than "particular position", but raises the same problem of the degree of particularity that is involved in the words "inherent requirements". Referring to what was said by McHugh J in Australian Iron & Steel Proprietary Limited v Banovic (1989)

168 CLR 165 at 196-197 and by Mason CJ and Gaudron J in Waters v Public Transport Corporation (1991) 173 CLR 349 at 359-360, counsel for Mr Christie say the provision ought to be interpreted narrowly. They suggest that an inherent requirement, for the purposes of s.170DF(2) is "something so fundamental to the carrying out of the work or duties of the job that it could not be carried out without the possession of that qualification". The relevant position, they say, is not to be determined by reference to a particular rank or, in the present case, a particular aircraft type. The relevant position, here, is simply "pilot". Counsel go on:

"The inherent requirements relevant to these proceedings are:

- a. possession of a current pilot's licence in terms of the Civil Aviation Regulations;
- b. medical fitness (as exemplified by possession of a Class 1 medical certificate under the Regulations).

Parenthetically it can be accepted that in some employments possession of certain physical attributes may be considered an essential requirement, eg sight and the effective use of one's hands in the case of a watchmaker. However, these matters are not separate requirements in the present case because to the extent relevant they are included in the medical certification process."

Being aged less than 60, they say, is not an inherent requirement of being a pilot; the respondents' requirement that its pilots be less than 60 years of age is company policy, not an inherent requirement of the position.

Counsel for Mr Allman takes a similar approach. He puts the following matters:

- (i) the whole of Division 3 of Part VI of the Act is beneficial legislation directed towards the granting of remedies to employees in respect of termination of their employment;
- (ii) the legislation seeks to give effect to Australia's obligations under relevant international Conventions;
- (iii) in particular, s.170DF(1)(f) gives effect to the Convention concerning Discrimination in respect of Employment and Occupation and the Discrimination (Employment and Occupation) Recommendation, instruments that have as their dominant purpose the elimination of discrimination in employment;
- (iv) as s.170DF(2) provides a defence to an action that is prima facie discriminatory, it should be interpreted narrowly. This approach is supported by the choice of the term "inherent requirements", in contrast to the wider term "operational requirements" used in s.170DE(1) of the Act;

(v) accordingly, the words "inherent requirements" should be limited to requirements that are "fundamental, intrinsic or essential characteristics of the position". It is not sufficient that the requirement on which a termination is based be an operational or policy requirement of the employer. Nor is it enough that the requirement be one imposed by the employer reasonably and in good faith. Whether or not a particular requirement is inherent in a position is a matter to be objectively determined having regard to the range of duties required of the occupant of the particular position. The position under s.170DF(2) contrasts with that applying under s.49I(1) of the Anti-Discrimination Act 1977 (NSW) where it is a defence to discrimination on the ground of physical impairment that the person concerned "would be unable to carry out that work". In Jamal v Secretary Department of Health (1988) 14 NSWLR 252 the New South Wales Court of Appeal held that this formula does not confine attention to the essential duties of the position but the whole of the work actively required to be performed.

Counsel for the respondents say that s.170DF(2) should not be interpreted narrowly. They say it ought to be interpreted objectively. They compare the approach taken by the High Court of Australia in Re Grimshaw; ex parte Australian Telephone and Phonogram Officers' Association (1986) 60 ALJR 588 at 592, a case referred to by the applicants and dealing with a proviso to a union eligibility rule. They accept that the purpose of s.170DF(1)(f) is to eliminate discrimination in employment but say that subs.(2) qualifies that purpose to the extent of permitting discrimination in certain circumstances. There is nothing in the legislation to suggest the Court should "lean" in one direction or the other in giving effect to that qualification. They cite Searle Australia Pty Ltd v Public Interest Advocacy Centre (1992) 108 ALR 163 at 167-168, a case relating to an analogous issue arising under the Freedom of Information Act 1982. Counsel submit that the applicants' arguments ignore the word "particular" and criticise the proposition that the only inherent requirements of the positions occupied by these applicants are a current pilot's licence and a medical certificate.

I do not think there is a substantial conflict between the various submissions concerning interpretation of the phrase "inherent requirements of the particular position". It is plain that s.170DF(1)(f) is designed to prevent termination of employment on any one of a number of grounds that are generally regarded as unjustifiably discriminatory.

But subs.(2) operates on the view that there will be occasions, related to the nature of the particular job, where discrimination is defensible. To read the defence too narrowly would be to deny this view.

I agree with counsel for Mr Christie that the question whether a particular requirement is an inherent requirement of a particular position is a matter to be determined objectively. It does not depend upon the attitude or operational methods of the particular employer. I also agree that the word "inherent" refers to a requirement that is fundamental, intrinsic or essential to the position, not something that is truly unnecessary, although insisted on by a particular employer. To illustrate the point by reference to the facts of these cases, it is common ground that possession of an appropriate current licence and medical fitness, in accordance with the standard prescribed for pilots, were inherent requirements of the positions occupied by Mr Christie and Mr Allman immediately before their retirements. If they had not fulfilled those requirements, they would not have been allowed to fly. They would not have been able to carry out the work for which they were employed. The respondents say it was also an inherent requirement of the positions that the employee be less than 60 years old. The reason, they say, is that older pilots are more likely to be involved in an aircraft accident; to maintain acceptable safety standards, all pilots should retire by age 60. The applicants agree that it was an inherent requirement of their positions that they

maintain a level of fitness compatible with acceptable safety standards. But they say that it is simplistic and inaccurate to relate acceptable fitness to age. The contest on this matter is the major factual issue in the case. I will call it the "medical issue". In the case of Mr Christie, alone, there is a second "inherent requirements" issue. Qantas says that, even if there is no medical justification for all airline pilots retiring at or before age 60, the policies of relevant foreign governments make this an inherent requirement of pilots flying its international routes. Mr Christie contests this claim. He says that such a matter is incapable of constituting an inherent requirement of the position; anyway, it would be possible for Qantas to find him a full schedule of work without conflicting with those policies. I will call this the "operational issue".

Although there is no substantive conflict between the submissions concerning interpretation of the phrase "inherent requirements of the particular position", there is a dispute about its application. As mentioned, counsel for Mr Christie say that the relevant position should simply be described as "pilot", so that a termination is defensible only on a ground applicable to all pilots. Counsel for the respondents say this is too broad a characterisation. The evidence shows that Qantas pilots enjoy a career progression through various stages of responsibility in various aircraft. Counsel submit that the relevant position must be that held at the time of termination; in the case of Mr Christie, captain

of a B747-400 aircraft; in the case of Mr Allman, a check captain on an A300 aircraft. I think this is correct. It would be artificial to ignore the actual position reached by an employee and refer merely to his or her basic qualification and broad categorisation.

The rationale of a fixed age-limit

In order to put the medical issue into context, it is important to say that the respondents do not suggest that pilots suffer a sudden and dramatic loss of health or fitness on their 60th birthdays, so that a person who was certainly fit to fly one week was certainly unfit the next. Their case, in the words of their counsel, is that the requirements of both the subject positions "included a requirement that all risks to the safe operation of the aircraft be eliminated or minimised, and therefore that the pilot in charge of the aircraft be of an age that Qantas - and its Chief Pilot in particular - could be satisfied that no such risk arose from the fact of the pilot's age". They acknowledge that some pilots who have attained their 60th birthdays remain competent to fly, both physically and mentally. But they say there is no reliable way of identifying those people; consequently, it is necessary to fix an age-limit and apply it to everyone. They concede that any age-limit is arbitrary, in the sense that it forces the retirement of some pilots who remain fit enough to fly, but they argue that empirical studies demonstrate that an age-limit of 60 years strikes a fair balance between the interests of those pilots who wish to

extend their careers as long as possible, on the one hand, and public safety, on the other.

The applicants do not question the paramount importance of public safety. Qantas has an enviable safety record. As I understand the position, no airline in the world can match its record, in terms of numbers of accidents against hours flown. The applicants have made a contribution to this record and are proud of it. If they believed that a relaxation of the 60 year age-limit might compromise the record, neither of them, I am sure, would support relaxation. The same statement may be made of their expert witnesses, two people with a long interest in aviation safety issues: Dr Adrian Zentner, a former Director of Medical Services of Australian Airlines, and Dr Robert Liddell, the current Director of Aviation Medicine in the Civil Aviation Authority of Australia ("CAA"). The issue is not whether there should be any compromise with safety standards, but whether insistence on retirement at age 60 is necessary to minimise accident risk.

In the United States, there is a long-standing rule that airline pilots should retire at age 60. This rule is applied by the relevant regulatory authority, the Federal Aviation Administration ("FAA"). The rule has been questioned from time to time. Several studies have been undertaken, at the behest of the FAA or a Congressional Committee. The most recent study revealed by the evidence was carried out on

behalf of the FAA by a team of researchers from Lehigh University, Pennsylvania and Hilton Systems Inc. of New Jersey. The team's final report, generally called "the Hilton report", was presented in 1993 and published in October 1994. In the words of an FAA abstract of its contents:

"The results present a converging body of evidence which fail to support a hypothesis that accident rates increased at or about the age of 60 years."

Nonetheless, the FAA has not changed its rule that pilots may not fly scheduled airline services after they turn 60. Nor should it do so, according to Dr Charles Billings, an expert witness called on behalf of the respondents in this case. Dr Billings has had a long association with this topic. He is a physician, resident and practising in Columbus, Ohio. He is a qualified pilot and flew for many years until, consistently with his espoused position, his 60th birthday. Dr Billings served in the United States Air Force between 1955 and 1957. At that time he undertook a course in aviation medicine and this has since been his primary field of professional interest. From 1960 to 1973 Dr Billings was a Professor and Director of the physician training program in aviation medicine at Ohio State University. Thereafter he worked as a medical research officer at the National Aeronautics and Space Administrations' Ames Research Center, retiring as Chief Scientist in 1992. Over the years, Dr Billings has written, or contributed to, numerous papers on aeromedical topics. He has been an active member of several professional societies,

including President of the Aerospace Medical Association in 1979-1980. As will appear, Dr Billings participated in one of the studies usually cited in support of the Age 60 rule, as it is called in the United States. Recently, he offered comments on the Hilton report, being critical of its methodology and conclusions. There is no question of his deep interest in this topic and the sincerity of the views he enunciated in the witness box.

Dr Billings expressed the opinion that Qantas' policy to retire its pilots at the age of 60 "is prudent and necessary" and justified by medical and operational data. He identified those data. To a large extent, his evidence consisted of an analysis of them. Possibly because of his training as a scientist, and despite his personal involvement in aviation medicine and experience as a pilot, Dr Billings did not attempt to support his opinion except by reference to the cited data.

The published data

In the written report that constituted his evidence-in-chief, Dr Billings referred to four published papers. I will deal with them in chronological order and then refer briefly to two other reports mentioned during the course of Dr Billings' oral evidence.

The earliest of the four papers was published in 1971. It was written by three authors, including Dr Billings himself. The paper is entitled "Epidemiological Study of In-flight Airline Pilot Incapacitation". It was referred to in evidence as "Kulak", after Dr Linton Kulak, its leading author. The authors examined 891 cases of fatal and non-fatal airline pilot career terminations over an 11-year study period. The study divided the terminated pilots into age categories, less than 30, 30-34, 35-39, 40-44, 45-49, 50-54 and 55-58. Accidents, almost all fatal but not necessarily airline accidents, accounted for 229 terminations; diseases the other 662. The three largest disease categories were heart and cardio-vascular (2.91 per 1,000 pilots per year), psychological (0.93 per 1,000 pilots per year) and eye (0.41 per 1,000 pilots per year). The incidence of disease in each category increased with age but, dealing with the most significant category, the authors noted that "the age-specific incidence of coronary heart disease is statistically significantly lower in the airline pilot population than in the US male population". They commented that this "is not an unexpected finding, considering the medically select nature of the pilot population". The paper included a table comparing pilot mortality rates with those of the 1961 United States white male population. Up to age 34 the pilot mortality rate was higher, according to the authors because of the incidence of aircraft accidents. Above age 35 the pilot mortality rate was lower, the gap between that rate and the overall white male mortality rate widening with increasing age.

The paper concluded with comments on what the authors called "potentially serious in-flight pilot failure". The authors said that only "serious disease manifestations, such as sudden coronary death or convulsive seizures" occurring "with little or no prior warning to either the affected crew member or remaining crew" fall into this category. They compiled a table setting out the "estimated probability of serious in-flight incapacitation" for the various age cohorts included in the study. The stated probability rose from 1 per 58,000 pilots aged 30-34 to 1 per 3,500 pilots aged 55-59 years. The estimate seems to have been drawn directly from the incidence of heart and cardiovascular disease at various ages. To put these estimates into perspective, the authors stated that such an event "occurring during the cruise phase of flight has not previously resulted in a serious operational problem in a dual pilot aircraft". They concluded:

"However, if the command pilot was so incapacitated during the final stages of approach and landing, or during the early stages of takeoff and climb, flight safety could be severely compromised. During these flight phases, the absence of, or inappropriate control input for as little as a few seconds could result in ground contact, especially under adverse weather conditions.

Immediate recognition of the problem by the remaining pilot and competent, rapid control takeover are essential under these conditions. Airline transport crew training and cockpit design must therefore be compatible with this type of response to in-flight pilot failure."

In his evidence in these cases, Dr Billings brought up to date the information about the relationship between medical incapacitation and accidents. He was aware of only two fatal airline accidents involving medical incapacitation, a Lockheed Electra at Ardmore, Oklahoma and a British European Airways Trident on take off at London's Heathrow airport. In each case there were other factors contributing to the accident. Dr Billings attributed the infrequency of accidents from medical incapacity to "the presence of multiple crew members".

The second paper mentioned by Dr Billings was "An Epidemiological Investigation of Occupation, Age and Exposure in General Aviation Accidents" by Dr Charles Booze of the FAA Civil Aeronautical Institute in Oklahoma City, Oklahoma. It was published in 1977. The paper reported conclusions derived from a study of information relating to 4,491 general aviation (not airline) accidents that occurred in 1974. Dr Booze analysed the information about the affected pilots by reference to several factors: occupation (most of the pilots were not professional pilots), age and flight experience. Unsurprisingly, he found that professional pilots had a much better record than all other occupational categories. Their accident rate per 100,000 hours of recent flight time - that is, flight time within the previous six months - was one-sixth or one-seventh that of several other major occupational groups and only half that of the whole study population. When the accident rate per 100,000 hours cumulative flight time was

considered, the comparison favoured professional pilots even more. Some occupational groups had accident rates 15 to 16 times that of professional pilots. The accident rate for the overall study population was 2 1/2 times that of professional pilots.

The paper contains a paper specifying the accident rate per 1,000 pilots by reference to cumulative experience and age. As might be expected, the rate is relatively low for pilots with low cumulative experience because of their low exposure to risk. For pilots with between 1,001 and 2,000 cumulative hours, the accident rate per 1,000 pilots was as follows: age 20-29, 26.8; age 30-39, 16.8; age 40-49, 10.7; age 50-59, 7.7; age 60-69, 4.8; 70 and above 12.4. For pilots having more than 2,001 flying hours the rates were: 24.9; 14.0; 12.1; 9.7; 12.8 and 8.3. When recent experience was combined with age, the pattern was somewhat similar. The figures for those with more than 201 hours of flying in the preceding six months were: age 20-29, 23.3; age 30-39, 14.0; age 40-49, 11.4; age 50-59, 8.7; age 60-69, 20.7.

Next, Dr Billings referred to a document entitled "Report of the National Institute on Aging Panel on the Experienced Pilots Study" published in August 1981 by the National Institutes of Health of Bethesda, Maryland ("the NIA report"). The panel, of which Dr Billings was himself a member, was constituted in response to legislation requiring a study to determine the justification of an age limitation for

pilots. The major task of the panel was to review a report on the subject by the Institute of Medicine of the National Academy of Sciences. The panel held three meetings and heard submissions from representatives of six organisations. It stated its main conclusion in this way:

"The Panel concluded that there is no convincing medical evidence to support age 60, or any other specific age, for mandatory pilot retirement. However, it found abundant and persuasive evidence that, among pilots as well as others, disease, disability and death rates rise increasingly steeply during each half-decade beyond the age of 50 ... The Panel was impressed by evidence indicating that air carriers, operating under the limiting conditions of the age 60 rule, have achieved a very high level of safety during the past two decades. This achievement appears to be the result of a complex interplay among several factors, including striking advances in technology, a complex system of performance evaluation by air carriers and the Federal Aviation Administration, a variably effective system of government and air carrier medical surveillance, and a complex system of regulations designed to minimize risks to the travelling public. The net result of this complicated interplay has been a generally effective aviation system which has promoted public safety. One inevitable, but unfortunate, by-product of the present system is the unavailability of adequate data concerning the medical status and piloting performance of air carrier pilots past the age of 60 since, under the age 60 rule, persons have not been permitted to continue as air carrier pilots past that age."

The Panel referred to accident data, noting that it "found no convincing evidence that older pilots have better safety records, in proportion to exposure, than do younger pilots. On the contrary, several studies dealing with accident risk related to age have demonstrated increasing risk

with increasing age". The Panel then summarised the data of Booze, noting that "(n)o comparable data for air carrier pilots age 60 and older were available". The Panel concluded that the age 60 rule should be retained and, indeed, extended to non-scheduled commercial services. It gave eight reasons:

"Although the Panel was compelled by the available data to recommend that the age 60 rule be retained and extended to pilots in part 135 operations, it also gave considerable attention to methods of developing data that could form the basis for a relaxation of the rule. One possible approach is described in the final section of this report. The following points were considered in developing the approach:

- (1) Although the age 60 rule appears indefensible on medical grounds, the national aviation system has operated effectively and safely within its bounds for 20 years.
- (2) Although age 60 represents no medical 'breakpoint' in the progressive deterioration that comes with age, the likelihood of cardiovascular accidents increases markedly once the sixth decade is entered.
- (3) Despite the attractiveness of current risk factor concepts for the prediction of cardiovascular disease, these factors deal with populations rather than individuals, and they suffer from a lack of predictive accuracy and from a progressive decrease in discriminatory power as age 60 is approached.
- (4) Graded tests of cardiovascular performance to enable better prediction of individuals at risk would add considerably to the cost of medical surveillance.
- (5) Psychological tests designed to identify subtle changes in cognitive functioning have not been systematically administered to pilots. Their relevance to such essential skills as decision-making, resource management and vigilance under stress is therefore unknown.
- (6) Age-related data from longitudinal studies are currently insufficient to permit extrapolation

of available information about the medical and physical fitness and performance of pilots beyond age 60.

- (7) Graded tests of health and performance could probably be developed and applied within the present medical appraisal system if standard longitudinal risk factor profiles were determined for all pilots; additional screening and diagnostic procedures would be required to define health status and as a guide to prognosis for those individuals with risk above some defined level.
- (8) The periodic nature of current medical and performance appraisals provides an opportunity for deterioration in health and performance in the intervals between examinations, although this can be minimized to some extent for individuals with identified risks and older persons by increasing the frequency of examinations for these groups."

The reference to "part 135 operations" requires explanation. Part 121 of the United States Federal Aviation Regulations deals with scheduled airline services and aircraft carrying more than 30 passengers or weighing more than a specific weight. Those operations are many referred to as "part 121 operations". Part 135 of the regulations relates to non-scheduled commercial services. These are often called "part 135 operations".

Dr Billings' final reference was to a report prepared by the Office of Technology Assessment of the United States Congress in September 1990 called "Medical Risk Assessment and the Age 60 Rule for Airline Pilots". He referred to this document as "the OTA report". It appears from the report that Dr Billings played an important role in its work, supplying several graphs containing data.

The key data considered by OTA came from two sources: the 1981 NIA report and a report called "The Influence of Total Flight Time, Recent Flight Time and Age on Pilot Accident Rates" prepared by Richard Golaszewski and published in 1983. The report stated that "OTA interviewed FAA officials and medical experts and reviewed aeromedical literature, pilot health and safety data, and medical technologies". It stated five "key findings":

- " . Pilots between 60 and 69 years old who are permitted to fly under FAA's strictest medical requirements (Class I and II medical certificates) have an accident rate twice as high as similar pilots who are in their 50s (see figure 1).
- . Virtually all pilot-caused accidents stem from judgment, communication, or decision-making deficiencies, rather than impairment or incapacitation caused by medical disease. Sudden physical impairment has not been a factor in airline accidents. For this reason, more exacting medical examinations are unlikely to have a substantial effect on accident rates.
- . We do not presently have the ability to predict with certainty development of medical conditions that could affect pilot performance. In 1981, the Institute of Medicine (IOM) specified a number of screening and detecting methods that could improve evaluation of pilot health conditions, although none of these is now required for FAA medical certification. OTA has identified recently developed procedures and technologies for medical risk assessment ... that could enhance the protocol IOM suggested for examining older pilots. However, even these procedures and technologies are not sufficient to ensure that current levels of pilot performance would be maintained if the age rule were abolished.
- . Using all the enhanced medical screening procedures and technologies listed in table 2 for pilots between age 60 to 65 would more than triple the average annual costs for Class

1 medical exams, increasing them from about \$300 to over \$1,000. On average, approximately \$1,000 more in follow-up exams would be required for pilots who have abnormal screening results.

Improved neuropsychological measures of cognitive performance would need to be developed and validated before FAA could reliably ground only the 'high risk' pilots who are over 60. These pilots cannot be identified at this time."

Figure 1, referred to in the first quoted finding, was a graph prepared by Dr Billings using data collected by Mr Golaszewski in 1983 with additional information supplied by the National Transportation Safety Board ("NTSB") in respect of pilots holding a Class I or Class II medical certificate. In his evidence in these cases, Dr Billings explained how figure 1 was derived:

"I will simply begin by saying that in 1983 under a contract from the Federal Aviation Administration Richard Golaszewski prepared or performed, I am sorry, a substantial study of flight time and accident experience in the United States. In that study Mr Golaszewski made use of the entire data base resources of the Federal Aviation Administration for the five years 1976 through 1980. He obtained flight time data from pilot medical certificates on which pilots are requested to provide their total flying time and their flying time during the previous six months. He combined those data, which were available in computer readable form, with data from the National Transportation Safety Board accident experience over that same period of time. And from that he derived accident rates for two classes of pilots. He obtained accident rates for the entire community of medical certified and therefore active pilots in the United States. That is classes, medical classes, 1 2 and 3. And he also made a similar study for class 3 only, that is to say recreational or

private pilots only. I have all of those data available to him in computer form. He was able to elicit accident rates for pilots of either all classes or just private pilots as a function of total flying time, as a function of recent flying time, as a function of age, because those data were likewise available in the medical certificate applications, date of birth, actually. I believe there were a couple of other variables that he was requested under contract to study but those are the ones that are of interest here and the ones that I am familiar with. Mr Golaszewski wrote up his study in the form designed to answer the specific questions that the FAA had asked in its statement of work to him. But the body of data in the appendices to his report provided others with the opportunity to make use of them as they would. This was the first, to my knowledge, the first comprehensive study, not just of a sample of pilots in the United States but of the population of pilots and over a period of five years. It was a huge data base. I became interested in looking at these data after they came to my attention in perhaps 1987 or so. The study was not very well publicised. And in 1990 I took the Golaszewski data which are incorporated on this tabular page. By that time I had become aware that Mr Golaszewski had used accidents that had occurred in general aviation but not accidents that had occurred in schedule air transportation - that is air transportation covered under Part 121 of our Federal Aviation Regulations - nor of data provided by commuter air carriers flying under Part 135 of the Federal Aviation Regulations. In order to find out whether that omission had made any difference I obtained from the National Transportation Safety Board a listing of all of Part 135 and Part 121 accidents that had occurred from 1976 through 1980 and combined them with Mr Golaszewski's data yield the table that you have before you. These purport to represent accidents, ... hours in thousands and resulting accident rates expressed in terms of accidents per 100,000 flying hours."

Figure 1 is a graph showing rates of accidents per 100,000 pilot flight hours for Class I and II pilots with more than 1,000 hours total flying experience and more than 50

hours recent (last six months) flight time. A Class I pilot is a pilot holding the most stringent medical certificate, necessary to fly Part 121 operations but also held by some pilots flying other operations. A Class II pilot is one who has passed the second most stringent medical examination. A pilot flying Part 135 operations must hold either a Class I or Class II certificate. A Class III certificate suffices for pilots flying non-commercial operations, although many such pilots hold a Class I or Class II certificate. If so, and these were involved in an accident, this accident would be included in the graph. The graph peaks at a figure of slightly above five accidents per 100,000 flying hours for age group 20-29, drops to a little less than four at 30-39, to about 2.6 at 40-49, 2.4 at 50-59 and rises to about 4.7 at 60-69.

The report contained two further figures prepared by Dr Billings, also drawing on the Golaszewski and NTSB data and concerning Class I and II pilots. One related the rate of accidents to age and various levels of total flying time, the other to age and various levels of recency. The greater the total flying time or recent flying time, the lower the accident rate per 100,000 flying hours. Plainly, experience is a very important factor in minimising accidents. There was some variation in the detail of the graph lines but on all of them the accident rate for age 60-69 was higher than for 50-59.

During examination-in-chief Dr Billings was asked about the extent to which any of these graphs could be used as a proxy for airline transport pilots. He responded:

"Only to a limited degree, there have been studies done since that time that have broken out this heterogeneous group of class 1 and 2 pilots more effectively but clearly most air carrier pilots after a certain period of time in the profession have more than 5000 total hours, most at least until their last decade of service nearly all fly more than 400 hours per year and incidentally subsequent data by Golaszewski and some others have indicated that above about 400 hours per year one does not see a continuing increment in safety as a function of acquiring more flying hours. I may not have put that very well but what I am trying to say is that 400 hours a year seems to be adequate to keep a civil or transport pilot fairly proficient. Recency of flying is much more important than total flying experience in the maintenance of proficiency if these data are to be believed."

The reliance placed by OTA, and Dr Billings, on data based on general aviation operations worried me. It seemed to me that there were several reasons why accident rates on scheduled airline services could be expected to be lower than those applying in Part 135 or general aviation operations: the prevalence of multi-pilot operations on scheduled services, the high total experience and recent flight time of scheduled airline pilots, and likely higher standards of training, discipline and aircraft maintenance. I asked Dr Billings whether he had any figures enabling a comparison of the accident rates in different categories of operation. He obtained them overnight. They dramatically confirmed my suspicion. According to data collected by the International Civil Aviation Organisation ("ICAO"), in the year 1991 the

rate of fatal accidents in scheduled air transport operations was 0.10 accidents per 100,000 flying hours. The corresponding rate for general aviation accidents was 16 times higher, 1.6 per 100,000 flying hours. These figures covered carriers all over the world with the exception of the former Soviet Union and China. Speaking of the United States, Dr Billings quoted data from the Hilton study that, during the period 1976 to 1988 (except 1986, for which year data were not available), the United States scheduled airline accident rate, fatal and non-fatal, was 0.59 per 100,000 flying hours; whereas the general aviation accident rate during the same period was almost 20 times higher at 10.36 per 100,000 flying hours.

Although they were not mentioned in his written report, Dr Billings referred in oral evidence to two 1985 papers. The first one, "Comparative Study of Physical and Mental Incapacities Among Portuguese Airline Pilots Under and Over Age 60", was written by Dr A Castello-Branko and two others. The study evaluated the number of flight incapacities and deaths that occurred among Portuguese airline pilots between 1945 and 1983 and included information about the post-retirement health of pilots over 60. The study covered 436 people, 408 pilots under 60 and 28 former pilots over 60. There were a total of 21 deaths and incapacities, all of them occurring under age 60. Twenty deaths or incapacities occurred violently or unexpectedly. There were six violent deaths, five tumours (four mortal), four cardiovascular

disease (three mortal), two respiratory (one mortal) and three mental illnesses. Of the over-60 year olds (20 in the 60-64 age group, eight in the 65-69 age group), 10 had incompatibilities for flight service: six cardiovascular syndromes, three depressive syndromes and there was one ophthalmological case. The authors reported that these 10 cases "resulted from slow, chronic degenerative cases, with the association of both organic and psychic involution". They said "all cases resulted from degenerative situations which had already been formed before the age of 60". The study concluded:

"The rate of incapacities due to physiopsychological reasons increases suddenly after the age of 60 as a consequence of a chronic degenerative slow evolving pathology. This is closely linked to the age decay, which is easily controllable through medical and psychological observations.

The incapacities found in the age groups under age 60 were generally the consequence of violent deaths or serious illnesses (tumours and CVDs), the majority of which were lethal and occurred between the 6-monthly medical check-ups.

It may also be concluded that the retirement from the professional activity after the age of 60 leads to reactive depressions and to the reduction in preventive health care. Nevertheless, out of 28 pilots over the age of 60, 18 (64%) would be perfectly capable of continuing their activity as airline pilots both from the physical and from the psychomotor points of view.

Therefore, the authors consider that the 60 year age limit may be useful in several countries for social and administrative reasons, but conclude that pilots with no medical or psychological disturbances who would wish to continue flying, could be given

the respective medical certificate, at least under a waiver condition."

Dr Billings' comment on this study, and others to like effect, emphasised the other side of the picture: "They all show an increasing and accelerating risk of disability and death from natural causes as a function of increasing age".

The other 1985 paper was written by Dr Geoffrey Holt and two others and titled "Airline Pilot Disability: The Continued Experience of a Major US Airline". The paper focused on the utility of airline medical departments and emphasised their role in pre-employment medical screening and the assessment of individual disability claims. The authors suggested these activities might be more important than regular pilot review in determining long term disability rates. This paper is only peripheral to the present issue, although the authors tabulate the reasons for separation from the company of the 225 pilots who left during the eight year study period. Of the 225 pilots, 42 retired for medical reasons; half of them because of cardiovascular problems. The studied pilots were, of course, all less than 60 years old when they retired.

It is not necessary to mention the other pre-Hilton medical papers tendered in evidence; no reliance was placed on them by any witness. But it is necessary to discuss the Hilton report; all the medical witnesses thought this important.

The proclaimed purpose of the study was "to conduct statistical analysis on historical data to investigate the relationship between pilot age and accident rates". It was primarily directed at "pilots who fly for FAR Part 121 air carriers who are subject to the Age 60 Rule", although the opportunity was taken to analyse data relevant to other pilots flying beyond age 60.

The report is lengthy. I do not intend to summarise its conclusions, many of which have little relevance to this case. I will note the points mentioned by one or more of the witnesses. First, the authors of the report heavily criticised Golaszewski's conclusions. They said it was inappropriate to combine pilot classes as this produced misleading accident rates:

"... pilots holding Class I medical certificates had relatively fewer accidents and higher flight hours. The accident rate profile of a heterogeneous group was influenced by the proportion of Class I pilots in that group. Further, because Class I pilots were involved in so few accidents, Golaszewski did not compute the accident rates within various categories of flying by Class I pilots. The fact that accidents involving Class I pilots were so rare strongly suggested that the distribution of such accidents across the various categories was different than for the groups of pilots Golaszewski did study, Class III pilots alone and all pilots. Further, although Class I pilots were involved in few accidents they accumulated a substantial number of flight hours. Thus they contributed substantially to the denominators (hours flown) of the accident rates and contributed relatively little to the numerators (number of accidents). This meant

that differences in accident rates could have been artifacts; they could have reflected differences in flight hours accumulated by Class I pilots rather than differences in the likelihood of accidents."

The report authors also noted that Mr Golaszewski included accidents by pilots whose medical certificates had lapsed and whose flight hours were accordingly not recorded in the medical database on which he relied. These pilots contributed to the numerator (accidents) but not the denominator (hours flown). They also said:

"The Age 60 Rule represents a sharp cutoff, presumably reflecting some relatively dramatic change in the pilots as they approach 60 years. The 10-year age categories used by Golaszewski were too gross to get a clear picture of such a change. A more fine grained analysis, say by year, would have been more appropriate."

The authors set out the principles guiding their own methodology:

"First, it was inappropriate to aggregate data across medical classes, because this created heterogeneous groups with misleading accident rates. For example, Class I pilots had relatively few accidents and relatively high flight hours. If the medical class of the pilots was ignored in forming groups, the accident rates of the groups would have reflected differences in the proportion of Class I pilots in the various groups.

Second, the data for Class I pilots shed some light on the accident rates of Part 121 pilots, subject to a number of constraints. Only pilots younger than 60 should have been

included, because no Part 121 pilots flew after 60. Further, the data for Class I pilots with high recent flight time were more characteristic of Part 121 pilots. Third, the data for Class III pilots provided convergent evidence on the effects of age on accident rate. While Class III pilots were less like Part 121 pilots, the data for that class were less affected by changes in the membership of the groups with age, especially the dramatic change seen for Class I pilots after age 60. Further, the accident rates for Class III pilots provided evidence for the general effects of aging. Finally, the Class II pilots formed a heterogeneous group and were the least useful group for shedding light on the age 60 rule."

In relation to Class I pilots, the study was undertaken in three stages. First, regard was had to "those Class I pilots most like pilots of scheduled air carriers by considering only those pilots who had the necessary minimum total flight hours and who had the number of recent flight hours characteristic of pilots of scheduled air carriers". Next, the team considered the record of Part 121 pilots with high recent flight hours. Finally, they looked at Class III pilots with high recent flight hours "to provide a different view of the effect of age on accident rate".

The results of the study were published as answers to a series of questions. The first was "Did Accident Rates of Class I Pilots Change with Age?" The answer was given by reference to all Class I pilots without regard to total and recent flight experience, not confined to Part 121 pilots but giving rates only up to age 55-59. The conclusion was that accident rates declined sharply until age 45-49, rose slightly

for age 50-54 and declined at 55-59 to the 45-49 rate. The same question was then applied to Class I pilots with more than 2,000 hours total flying time. The answer showed a similar pattern except that the age 55-59 rate was slightly higher than for 45-49 and the 50-54 rate was lower than both. When the criterion of high recent flight time was added, the accident rates were much lower than before. For example, the accident rate per 100,000 pilots dropped from 15, for pilots aged 45-49 with less than 100 recent (previous 12 months) flying hours, to six accidents per 100,000 pilots in the same age group who had 100 to 200 recent hours, to four accidents for 45-49 old pilots with 600-700 recent hours and about two accidents for those with more than 700 recent hours. There were similar reductions at other ages. The graph lines for the three highest recent hour categories were almost flat.

Although they thought that the heterogeneity of Class II made the question not very useful, the authors examined the relationship between age and recent flight time for Class II pilots. They found that the accident rate continued to decline after 60, it being lower for the 60-64 age group than for 55-59. The rate increased for the age group 65-69, but to a level less than that for 45-49.

The position in relation to Class III pilots was similar. Age group 60-64 showed the lowest accident rate. The rate for 65-69 was slightly higher, the same as that for age 50-54. This analysis was then refined. The authors

restricted themselves to Class III pilots with more than 50 hours recent flying time and 500 hours total flying time and grouped pilots in single-year intervals from age 50 to age 69. The lowest accident rate (four accidents per 100,000 recent flight time hours) was for pilots aged 63, the highest (7.8) for pilots aged 67. The rate for 68 year olds was the same (6.1) as for 52 and 55 year olds, that for 66 year olds (5.0) the same as 54 year olds. In short, there was no consistent correlation between age and accident rates.

The authors stated four conclusions from their flight time analyses:

- (i) "When the accident rate for each medical certificate class of pilots was examined as a function of age, a decrease in accident rate was found for the younger pilots, followed by a levelling off for older pilots."
- (ii) "... the more recent flight time a pilot had, the less likely the pilot would be in an accident. Indeed, recent flight time was the dominant factor affecting accident rates. Further, for Class I pilots with more than 2,000 total flight hours, no effect of total flight time on accident rates was found."
- (iii) In relation to Part 121 pilots, with the exception of over 700 hours recent flight time, after which no age effect was found, "the data indicated a modest decrease in accident rate with age, with a levelling off for older pilots."
- (iv) "When the rates of Class III pilots aged 50 to 70, with more than 500 total flight hours, and with more than 50 recent flight hours were examined as a function of age, year by year, no effect for age was found."

The conclusions of the study team in relation to the Age 60 Rule included the following observations:

"Our analyses provided no support for the hypothesis that the pilots of scheduled air carriers had increased accident rates as they neared the age of 60. Most of the analyses indicated a slight downward trend with age, but those results must be treated cautiously because of the number of potentially confounding factors. The data did provide indirect evidence that any changes in takeoffs and landings per flight hour with age had little effect on accident rate, because such an effect would only occur for Part 121 pilots exercising seniority. Yet the data for all the various groups of pilots were remarkably consistent in showing a modest decrease in accident rate with age, That is, the same modest effect of age appeared in all the data and was not solely due to changes in takeoffs per flight hour as the pilot aged. On the other hand, substantial changes in membership of the groups of pilots from year to year made interpretation of the modest decrease in accident rate with age problematic. It was as easy to conclude that the FAA's system improved the composition of the groups over time as it was to conclude that pilots' performance improved with age.

In all of our analyses, we saw no hint of an increase in accident rate for pilots of scheduled air carriers as they neared their 60th birthday. There were no data available on scheduled air carrier pilots beyond age 60. To what age could retirement for those pilots be safely put off? This question must be answered very conservatively because of the possibility of catastrophic results.

Statisticians distinguish between 'planned' and 'post-hoc' tests. Planned tests are formulated before collecting the data while post-hoc tests are formulated after looking at the data. Statistical controls are applied to the latter test to counteract their being biased in favor of finding statistical significance. In the analyses discussed below, the statistical tests were treated as planned tests to maximise the probability of

finding even hints of an increase in accident rate with age for pilots near age 60. It is quite likely that any trend detected is spurious, but we were being conservative. Because we were concerned with accident rates for pilots after age 60, we were forced to look at the data for Medical Class II and III pilots.

Examining the data for all Medical Class II pilots ..., the accident rate for group 60-64 did not differ from that of group 55-59 ..., but was lower than that of group 65-69 ...

For all Class III pilots, ..., the accident rate for group 60-64 did not differ from that of 50-59 ... but was lower than that of group 65-69 ...

For Class III pilots with more than 500 total flight hours and more than 50 recent flight hours ..., the accident rate for group 60-64 did not differ from that of group 55-59 ... or from that of group 65-69.

Finally, looking year-by-year at the accident rates of Class III pilots with more than 500 total flight hours and more than 50 recent flight hours ..., there was an increase in accident rate for the years 63 through 69 ...

Taken together, these analyses give a hint, and a hint only, of an increase in accident rate for Class III pilots older than 63 years of age. This suggests that one could cautiously increase the retirement age to age 63."

In comments made to the FAA, both Dr Billings and Mr Golaszewski criticised the conclusions of the Hilton report, basically for the same reason: they relied substantially upon data concerning Class III pilots, a population not like airline pilots because of the high proportion of the population who were not professional pilots. In a letter dated 9 October 1993, Dr Billings submitted that a better course would have been to looking at the record of

professional pilots who flew after age 60 in non-airline operations. Mr Golaszewski went further. On 29 September 1993 he wrote a letter suggesting that, if this course had been taken, the study would have found that accident rates of both Class I and Class II pilots increased after age 60. He referred to a study undertaken by him in 1991 concerning the accident rates of non-airline professional pilots holding Class I or Class II medical certificates. He said the Class I (his Group A) and Class II medical certificate pilots (Group B) that he examined each averaged between 400 and 500 hours of flying each year. He compared their accident rates with Class III medical certificate pilots averaging around 100 hours per year. Mr Golaszewski enclosed with his submission a graph showing the accident rate per 100,000 hours for each of these groups. Group A (Class I pilots) had a rate of about 4.5 accidents per 100,000 at age 20-29, dropping to 3.4 accidents per 100,000 hours at age 40-49, rising to about 5 at 50-59 and about 6.8 at age 60-69. Group B (Class II pilots) had a rate of about 3.4 at age 20-29. This figure rose for each ten year group to about 8.7 at age 60-69. Group C (Class III pilots) started at 3.2 (age 20-29) rose slightly to a peak of about 4 at 50-59 and declined to 3.5 at age 60-69.

Mr Golaszewski did not say how many individuals were included in each of his study groups. Particularly in the absence of that data, it is difficult to attach weight to his figures. His suggestion that the accident rate for Group B and Group C pilots was at its lowest at age 20-29 is

inconsistent with the data in all the other studies I have seen. They say that young pilots have the highest accident rate of all. Moreover, it is extremely difficult to accept that an accident rate amongst Class III pilots, averaging only 100 hours per year, is at any age lower than that of Class I and II pilots averaging 400-500 hours per year. If one thing is clear from the various studies, it is that there is a strong correlation between high recent flying hours and pilot safety. It is even more difficult to accept that Class III pilots have a better safety record than Class I and Class II pilots in three out of the five age brackets (20-29, 50-59 and 60-69) when it is recalled that Class I and II pilots have passed a more stringent medical test than Class III pilots and are generally, if not exclusively, professional pilots whereas a large proportion of the Class III pilots are non-professionals.

Given the amount of time and effort that has been expended in America examining the justification of the Age 60 rule, it is remarkable to say so; but it seems to me that none of the cited studies supports any conclusion about the relationship between that rule and aircraft safety. The Kulak study throws some light on the causes of age-related incapacity; but it does not quantify the incidence of post-60 incapacity. Nor does it say anything about the incidence of sudden incapacity, the type of incapacity that is relevant to air safety. Dr Booze's study is based on general aviation statistics. It therefore examines accident rates related to a

wide range of operations and classes of pilots, mostly non-professionals. Even on that level, its message is ambiguous. Amongst those having 100-200 recent flying hours (last six months) the accident rate of pilots aged 60-69 is higher (at 22.1 per 1,000 pilots) than that of pilots aged 40-49 (19.7) and 50-59 (14.3) but it is lower than for pilots aged 20-29 (26.1) or 30-39 (25.9). For pilots with more than 200 recent flying hours, a similar picture emerges except that the 60-69 rate is higher than that for age 30-39. Moreover, in considering the significance of these figures, it is relevant to note the possibility of distortion caused by the low number of over-60 pilots. According to Dr Booze, only 1.9% of the total pilot population was in the 60-69 age group. The number of pilots in each of the age brackets with more than 200 recent flying hours who did not sustain an accident in the relevant year was: age 20-29, 13,137; age 30-39, 20,252; age 40-49, 13,934; age 50-59, 9,342 and age 60-69, 710. Dr Booze's figure concerning the accident rate for pilots aged 60-69 with more than 200 recent flying hours is based on 15 accidents. His figure for pilots aged 60-69 with 100 - 200 recent flying hours is based on 16 accidents. We know nothing about the circumstances of these accidents. Some or all of them may have resulted from a mechanical defect or the fault of another pilot. They did not necessarily occur in the air.

The Golaszewski study heavily influenced the OTA panel and is the foundation of Dr Billings' present thinking.

It is deeply flawed. To start with, it seems to me surprising for a study to take all accidents, without making any attempt to classify them according to cause. The only relevant accidents, surely, are those stemming from the conduct or health of the pilot. But perhaps this illogicality is spread evenly over all age cohorts. There is a more significant point. The numerator Mr Golaszewski used in calculating accident rates per 100,000 hours for pilots less than 60 years of age comprised hours flown in all types of operations, including the most safe (scheduled airline flights). The numerator he used in relation to over-60 pilots continued to include hours flown in the more risky types of operations, but none from the most safe (scheduled airline flights, which are 15 to 20 times more safe than general aviation operations). Given this statistical bias, in order to avoid a significantly higher rate per 100,000 hours than that of younger age groups, over-60 pilots would have had to be markedly safer pilots than their juniors. It is not possible to say how much safer, without knowing the proportion of total hours flown by under-60 pilots that were flown in scheduled airline operations. Surprisingly, none of the studies contains this information. Neither is there any evidence about it. All that one can say is that, having regard to the number and length of scheduled services operating in the United States, the proportion must be significant. I find it surprising, when I take that point into account, that the increase in the post-60 accident rate is as small as it is.

I raised this problem with Dr Billings. In a short discussion he conceded the point:

"Well now you talked about apples and oranges before but up to age 59 inclusive you are counting hours that are airline hours as well as commercial hours and general aviation hours?---That's correct.

After age 59 all the hours whatever else we know about them are non airline hours?---That is correct.

In other words to say the cohorts up to 50-59 have the benefit of including the safest form of hours?---Yes.

Well, is not that a worry, I mean you using the statistics to get a result of what the performance is after 60?---It is certainly a worry and a worry that has been expressed. This was the best we could do at that point in time to derive truth in the face of uncertainty if you will but that is one of the major reasons that Mr Golaszewski continued to the sorts of analyses that he conducted that are summarised here and that are still ongoing, that he summarised in his presentation to the FAA aged 60 years. That was an attempt to derive a sample, if you will, which was entirely free of the potential bias that you have just mentioned. There are no airline hours and there are no airline pilots in that group of class 1 qualified people flying on average 400 or more hours per year who indicated that they were flying professionally and that that was in fact their profession. It is the best surrogate that we have had and I feel that they are the cleanest data we have had, they are not perfect and unfortunately to get perfect data will require taking some risks that my government at least has not yet felt itself willing to do."

Mr Golaszewski's presentation to the FAA mention in Dr Billings' last answer is the submission of 29 September 1993 about which I have expressed scepticism.

It will be apparent from my comments that I agree with the criticisms of the Golaszewski study made by the authors of the Hilton report. At the same time, I agree with the criticisms of the Hilton methodology made by Dr Billings and Mr Golaszewski. To my mind it was a strange decision to select as a surrogate for airline pilots that group of pilots, Class III medical certificate holders, that was most unlike airline pilots, who must hold Class I certificates. There were surely better ways to obtain meaningful information. One possible course would have been to discard all airline flight hours in the under-60 numerator and compare what remained throughout all age groups, up to age 70. Such an exercise would not have directly revealed anything about airline safety; but it would have compared like with like, in the sense that the mix of types of operations was the same for the under sixties as those over 60. And it would have included holders of all three types of medical certificates. As a variant on this, it would have been possible to focus on the accident rate only of Class I medical certificate holders, in operations other than scheduled airlines. In order to avoid any effect of diminishing recent flight experience with age, it would have been possible to concentrate attention on those pilots in the pool (whether all pilots or only Class I pilots) with high recent flying time and high total hours; thus approximating the experience level of airline pilots. Another possibility would have been to consider the accident records at various ages of pilots flying Part 135 operations, concentrating on those with high recent flying hours and high

total hours. This methodology would have given some guidance as to whether there was any link between increasing age and the frequency of accidents amongst that group of pilots whose operations were most like Part 121 operations.

So far as I can see, the nearest that anyone has come to carrying out any of these exercises is the Hilton group's brief analysis of the relationship between age and recent flight time for Class II pilots. These pilots were not necessarily flying passenger operations. We do not know the details but their hours almost certainly included a mix of operations, including freight services, industrial and agricultural activities and private flying. We do know that the hours did not include airline operations, at any age, because Class II medical certificate holders may not pilot Part 121 flights. This means that the figures are not distorted by the application of the Age 60 rule. With all the reservations required by the wide mix of operations they include, these statistics seem to provide the best guidance so far available. In that context, it is interesting to note that they show a decline in the accident rate per 100,000 hours after age 60.

Individual pilot assessment

The applicants did not content themselves with attacking the statistical material relied on by Dr Billings in support of his opinion that Qantas should retain its existing

policy. They accepted that, although physical and medical deterioration on account of age occurs at different times with different people, and at different rates, it does occur. They also accepted that the proportion of people in any particular age group that suffer cardiovascular diseases increases with age, and that cardiovascular diseases are potentially incapacitating and, therefore, relevant to concerns about air safety. So they put a positive case, arguing that, whatever might have been the position in 1981 at the time of the NIA report, used in 1990 by OTA for its conclusion about the unpredictability of medical conditions that might affect pilot performance, tests are now available to detect incipient problems with a high level of confidence. In that connection they relied on the evidence of their two expert witnesses, Dr Zentner and Dr Liddell.

Dr Zentner graduated in Medicine in 1973 and has practised since then. He has been involved in aviation medicine for many years. In 1986 he was awarded a Diploma in Aviation Medicine by the Royal College of Physicians, London. He worked as a Medical Officer for the Australian Department of Aviation between 1983 and 1988. After two years with Air New Zealand he became Manager, Medical and Safety Services, for Australian Airlines in 1989. He held that position until 1993. Dr Zentner has lectured in aviation medicine at various tertiary institutions and currently holds a part-time Lectureship at Monash University, Melbourne. He has been a designated Aviation Medical Examiner since 1988 and is a


member of several organisations concerned with Aviation Medicine.

In a statement tendered in evidence, Dr Zentner explained that high levels of aviation safety are achieved by the adoption of a "fail safe" philosophy. This philosophy accepts "that any component of the aviation system, including the human component on the flight deck, can, and at some stage will, fail" and ensures that, when a failure occurs, any adverse effects are contained to a degree sufficient to ensure a safe outcome of the flight. He said that, on the flight deck, this is achieved in a number of ways. He itemised eight:

- ** multiple crew members
- * crew incapacitation recognition training
- * Crew Resource Management (CRM) Training
- * Line Oriented Flight Training/Simulation (LOFT/LOS)
- * automated flight control/monitoring systems
- * Standard Operating Procedures (SOPs)
- * technical proficiency checks
- * CRM proficiency checks"

Dr Zentner accepted Dr Billings' observation that "as people get older they are more likely to suffer an incapacitating illness and hence licence denials increase with age". But he commented that Dr Billings had not developed an argument "to justify the application of population based statistics to assessment of the fitness of any individual". He pointed out that aviation regulatory authorities "operate on the basis of assessing the fitness of each individual pilot

and there is no argument presented that would justify any different approach being adopted by an airline". Dr Zentner referred to Dr Billings' doubts about the ability of medical assessment systems to define risk levels. He commented:



"The view quoted dates to 1981, some 13 years ago. Since that time, cardiovascular risk assessment in aviation has achieved wide acceptance in the airline industry. Airline pilots are being returned to duty regularly on the basis of such assessments after heart attacks and/or coronary artery bypass grafting. Further, concepts of risk assessment developed for heart disease are being successfully applied to assessment of risk for other medical conditions. Airline pilots are returning to duty after alcoholism, minor cerebrovascular accidents and loss of an eye. Pilots beyond age 60 years are currently being granted ATPL licences in Australia, and many other countries whose regulatory authorities are quite prepared to accept the validity and predictive value of their medical risk assessment systems."

The letters "ATPL" stand for Airline Transport Pilot Licence, a licence issued by the CAA after a medical examination conducted by an Aviation Medical Examiner. It is common ground that, there being no legal impediment to over 60 year old pilots flying aircraft in Australia, Qantas' main competitor, Ansett Airlines, no longer requires its pilots to retire at 60. They may continue to fly after that age, but only on Australian domestic routes. Apparently, Ansett does not require any special medical examination. It is enough that the pilot has passed the standard tests needed for licence renewal.

In relation to the last sentence in the quoted passage, the evidence shows that Annex 1 ("Personnel Licensing") to the Convention on International Civil Aviation, adopted by ICAO, contains a clause (cl. 2.1.10.1) requiring that a Contracting State that issues a pilot licence "shall not permit the holders thereof to act as pilot-in-command of an aircraft engaged in scheduled international air services or non-scheduled international air transport operations for remuneration or hire if the licence holders have attained their 60th birthday". A Recommendation (cl. 2.1.10.2) extends this prohibition to licence holders acting as co-pilots.

Despite the mandatory language of these clauses, the Personnel Licensing standards are not binding. Contracting States are free to disregard them; but, if they do, the licence must be endorsed with a note of the particulars in respect of which the licence holder does not satisfy the conditions: see Article 37 of the Convention. Personnel having their licences so endorsed are not permitted to "participate in international navigation, except with the permission of the State or States whose territory is entered": see Article 40. It appears that about half the members of ICAO license over 60 pilots to fly scheduled air services and permit over 60 pilots licensed elsewhere to enter their territories. Some countries fix an age limit, most commonly 65. Others, including Australia, have no fixed age limit. The standard stipulated by cl. 2.1.10.1 is currently under review.

After a discussion in his statement about the predictive accuracy of medical tests and noting "Qantas' excellent safety record", Dr Zentner expressed the opinion "that enabling appropriately assessed captains aged 60 years and beyond to continue to fly as captains will not have an adverse input on this enviable record". He went on:

"Whilst testing cannot identify all persons, of whatever age group, who may become incapacitated, procedures are certainly adequate to detect those 'most likely' to become incapacitated. This is the basis of all medical assessment systems operated by regulatory authorities. It should also be noted with respect to medical incapacitation that its commonest cause in operating flight crews is acute gastroenteritis. The incidence of this condition, which accounts for almost 60% of in flight incapacitation incidents in some studies, is not affected by age.

With respect to the assessment of skilled performance, there are many psychological and computer generated tests of psychomotor function and decision making skills. Whilst there is no currently accepted objective test battery in use by airlines, such a battery has been developed and undergone preliminary validation.

Whilst a specific test battery is not currently in use, it is nevertheless possible to accurately assess psychomotor and judgement skills. Pilots are returned to flight duty after head injury and after recovery from alcoholism on the basis of such assessments in conjunction with their medical evaluation. I do not consider a 60 year old pilot to be more likely to suffer cognitive impairment than such pilots. All warrant individual assessment."

During cross-examination Dr Zentner confirmed that his position was that "whether or not someone retires on the

grounds that he or she has grown to an age where the safe operation of an aircraft can no longer be assured should be dealt with on a case by case basis". Dr Zentner said he would take that position whatever the person's age, that "screenings would be adequate, both operational as well as medical, neuropsychological, to be able to detect those people who are most at risk". He said he had in mind something more than the screening presently used for under-60 pilots, something like the screening suggested in the 1990 OTA report. But Dr Zentner said that he would favour a more intensive neuropsychological evaluation than that recommended by OTA. He added that he would want the examiner to have access to the pilot's personal medical records. He thought this presented no difficulty:

"So you would in effect make it a condition of service beyond 60 that pilots should be forthcoming with all those personal medical records?---Yes and subject to a medical and neuro-psychological assessment that would be arranged at the behest of the airline.

Of course at present the medical examinations are not done at the behest of the airline, are they?---They may be on occasion. I believe that the airline will request on occasion medical examinations on pilots but in the routine examination, no, they are a CAA requirement.

Still with the approach that you would take, Dr Zentner, I take it that then after having conducted the tests that you suggest and having provided the information that you suggest, pilots would either pass in which case they would continue to fly or they would fail in which case they would have to be retired?---That's correct.

And if they did pass, when would the next test be conducted?---The legal requirement for

assessment is every 12 months. If one wished to proceed with more abundant caution, one could suggest perhaps a time interval of six months, if one was really concerned about any element that was determined in these tests. Simulator performance is assessed on a more regular basis as we heard yesterday, and line checks are conducted, so in the absence of any abnormality showing up in any of those areas, then I would be content for a pilot aged 60 through to, for example, 65 to undergo this sort of assessment on an annual basis."

Dr Zentner was asked about psychological tests. He said that the examiner would have to assume that the pilot "could be subject to any potential infirmity or impairment of cognitive function". He said he was not aware that a collection of suitable tests for asymptomatic individuals had yet been put together on a routine basis, but he added "that does not mean that such batteries of tests have not been applied". His evidence proceeded:

"Are you aware of them having been applied?--- I am aware of the cases which I referred and received responses to, and in my view that extent of testing would be adequate with respect to assessing cognitive function of an asymptomatic 60 year old pilot.

Did you say the case to which you had referred?---The cases that I personally referred whilst in the regulatory authority and in the airline, and in my view the nature of the tests and - nobody will come back with an answer on one test. You get these results to a series of tests which assess psychological and neuropsychological function.

Have you referred any pilot for all of the tests that you would now suggest should be conducted for those over 60?---I have referred pilots for testing by psychologists who have returned to me results of a battery of tests, upon which basis I made a decision as to their suitability to continue flying.

Yes, in any of those cases, are those tests co-incident with the ones that you consider ought to be applied to the asymptomatic pilot who is 60 years or more?---I consider that those tests would be appropriate.

So there is an instance, at least one, is there not, in which you have had returned to you reports from a test - - -?---From tests.

From tests?---A battery of tests.

Yes, in a particular case, which covers the whole field?---Which covers to my satisfaction the assessment of cognitive risk, yes."

Dr Liddell has been a licensed pilot since 1970. He graduated in Medicine in 1971 and has been involved in aviation medicine since 1976, working as an airline Medical Director for some years. Since 1988 he has been Director of Aviation Medicine at CAA. In that capacity he is responsible for the standards applied in Australian pilot medical examinations and the certification of examiners. Dr Liddell has written extensively on topics relevant to aviation medicine and safety.

Dr Liddell said in his statement that the Australian Civil Aviation Regulations do not stipulate an age beyond which an individual may not hold a particular class of licence. For an Australian Aircrew Licence to be valid, it must be accompanied by a valid Aviation Medical Certificate. The holder of a professional pilot's licence must meet the Class I medical standard. Dr Liddell went on:

5. A medical examination for a Civil Aviation Medical Certificate is conducted for two reasons. The first is to ensure that the applicant has sufficient dexterity and physical senses to safely perform the function of Pilot in an aircraft. The second is to ensure that an individuals risk of an incapacitating event affecting ability to safely operate an Aircraft meets a risk level that is consistent with the internationally accepted risk of .1 percent per year for single Pilot operations and 1 percent per year for multicrew operations.
6. Cognitive functional ability and operative skills have traditionally been left to the flight operations inspectors and airline trainers and standards supervisors to examine. These individuals determine whether a licence holder meets the required standard either during a simulator or operational check ride and/or by constant computer surveillance during routine line operations.
7. There is no logic or scientific data which allows the medical profession to make the assumption that when an individual turns 60 years of age the individual immediately fails to meet either the operational standard or medical standard required for Class 1 medical certification. The very fact that the medical surveillance system operating through routine pilot aircrew medicals and self referral identifies individuals who fail to meet the medical standard before the 60th birthday resulting in denial of medical certification testifies to the fact that age alone is an unreliable indicator as to an individuals ability to meet the required standard.
8. There comes a point in every individuals life at which that individual will fail to meet either the cognitive requirements, the physical requirements, or the incapacitation risk level for Class 1 medical certification. This point in time will be dependent on many variables including hereditary factors, lifestyle, intercurrent illness and disease and the protective effect of

constant medical surveillance over an individuals professional career. The indeterminate point at which an individual fails to meet the requirements for medical certification lies somewhere between birth and death. Experience shows that for the majority of the population this point lies closer to the death point than the birth point. There is however no evidence to suggest that at upon obtaining the age of 60 years that all individuals who have met the required standard up to that point will suddenly cease to meet the medical requirements for certification.

9. Assuming that an individual continued to meet the cognitive and physical requirements for Class 1 certification (an increased frequency of testing for these attributes would be appropriate) then at some point between the age of 60 and 70 the risk of sudden incapacitation taken on a population basis would exceed the .1 percent per year risk target for single pilot operations and at a later age would exceed the 1 percent per year incapacitation risk target for multicrew operations. The use of population figures for incidence of incapacitation is also misleading as these figures include the total population of that age, many of whom would never meet the requirements for Class 1 certification and who have significant illness. If the population under consideration is restricted to individuals who hold Class 1 certification and who have been medically followed throughout their career, as is the case with licence holders, then the age at which the incidence of sudden incapacitation exceeds the target risk level would be expected to move up into the eighth decade of life. Further modification of the age at which an individual would represent an unacceptable risk of sudden incapacitation could be achieved by a higher frequency of and more rigorous medical testing."

Dr Liddell revealed that there was a recommendation currently before the Joint Aviation Authorities in Europe for

cessation of airline transport pilots' licences at age 63 and that the United Kingdom Civil Aviation Authority has recently moved to 65 years. He concluded:

"14. To have a specific age for retirement of an Airline Transport Pilot is understandable from an Administrative perspective as it allows for planning and training for replacement aircrew. To attempt to invoke a medical cause for an aged requirement for retirement is totally unreasonable to the individual who continues to meet the medical standard and is not a scientifically valid reason for terminating that individuals employment."

During the course of cross-examination, Dr Liddell stated that, over the last three years, he had taken a special interest in the question whether pilots should be permitted to fly passenger services after turning 60 years of age. He had attended ICAO medical group meetings at which the issue had been discussed. As CAA Medical Director he had been involved in individual cases of pilots over 60 who had sought medical certificates, and was therefore aware of the issues involved in relation to this age group. Dr Liddell said that he believed "that there is an age somewhere over 70 where people should not fly a passenger aircraft" but the statistics of that sub-population are not yet available:

"In the same way that 20 years ago we didn't have statistics for the 55 to 60 age group, of which we do now and we find it totally acceptable now. We don't have the statistics for the next age group because people haven't been there. All we can do is approximate by looking at groups such as Hilton's done that might be a reasonable surrogate for that

population but we would expect to see if there was going to be a problem in the ensuing period, we would expect to see a rise now in the people say, 58, 59 and 60 as the trend into the next say, whatever time period you're going to use, let's take five years, as the trend changes, we would expect to see some evidence in the 59, 60 year olds and we're not seeing that."

Counsel asked Dr Liddell about the Costello-Branko paper. He replied that he had attended the meeting where it was presented and commented:

"Dr Costello-Branko's study was done, first of all, the thrust of his study was to show that you could continue to employ pilots over 60 years of age, that was the point of his paper. He did show that there was an increased level of people failing to meet the medical standard but these people did not suffer acute incapacitations. These people were no different to the 50 year olds, the 45 year olds or the 35 year olds that we now remove certification from because they have a medical problem which shows up and they fail to meet the standard."

Counsel read Dr Costello-Branko's conclusion, quoted above. Dr Liddell responded: "Yes, his point being that it's readily discernible and you could cease certifying those people when the illness became apparent."

Dr Billings disputed reliance on individual assessment. He said that, if gross pathology was present in a licence renewal applicant, "it might well be picked up, but by that time I would expect it to be symptomatic". He said: "The aviation medical examination, the screening examination,

is unlikely to pick up subtle signs of neurological disorder or neuropsychiatric disorders", some of which are age-related. He said he would be more concerned about cognitive skills and intellectual decision making than "stick and rudder skills" and that he knew of "no test battery, no psychological test battery at this time that has been sufficiently validated with respect to the comparability of the functions tested to those involved in flying to be anything I would care to apply to pilots on a routine basis to try to pick out those who are going to have difficulty from those who are not".

Conclusions about the medical issue

Although they did not go so far as to abandon reliance on the studies cited by Dr Billings, counsel for the respondents said in their final submissions that they do not suggest that "any (of them) is perfect". And they did not put the studies at the forefront of their case. The main thrust of their submissions was that, in an uncertain world, it was better to play safe; the course advocated by Dr Zentner and Dr Liddell was too risky. They summarised their submissions in four points:

- "a. The physical and mental powers of pilots decline at an increasing rate with age, ultimately to a point where they can no longer safely fly an aircraft.
- b. There are presently no tests that can reliably identify individual pilots who are likely to experience incapacitating medical disorders.

- c. There are presently no tests that can reliably identify individual pilots whose cognitive functions decline to the point where they cannot safely fly an aircraft.
- d. Given the first three propositions, there must be an age beyond which no responsible airline - concerned, as Qantas is, to maintain the highest possible levels of safety - could be satisfied that no risk to passengers or crew arose from the fact of the age of the pilot of the aircraft in question."

Counsel elaborated the first proposition, with references to the evidence. It is not necessary for me to refer to it. The proposition is obviously correct. The second and third propositions are more controversial. Counsel supported those propositions by referring to Dr Billings' evidence about the lack of an appropriate battery of routine tests and the similar statement in the 1981 NIA report. They also emphasised the OTA 1990 comment that the procedures and technologies it recommended "are not sufficient to ensure that current levels of pilot performance would be maintained if the age rule were abolished". They said that Qantas "will not accept the introduction of a new, and as yet unquantifiable, risk factor into its flying operations".

However, in considering this submission, it is important to note that Dr Zentner and Dr Liddell do not suggest reliance on routine tests. They propose a system of individual evaluation of pilots approaching their 60th birthday who wish to continue flying and regular individual evaluation thereafter. Both Dr Zentner and Dr Liddell say it

would be possible to prescribe for each pilot a series of suitable tests. Dr Zentner gave evidence, which was not challenged, that, whilst he was with Australian Airlines, he arranged individually-designed psychological tests on several occasions. The type of testing program Dr Zentner and Dr Liddell have in mind is more extensive than what Dr Billings called "the screen examination" currently used for licence renewals in both Australia and the United States. Dr Billings said that a more extensive, individually designed, test would be expensive. OTA estimated that the enhanced medical screening procedures and technologies it listed would more than triple the average annual costs for Class I medical exams; but only to about \$US1,000 per annum per pilot. This does not seem an excessive cost burden, having regard to the small number of airline pilots still flying when they reach their 60th birthday and the experience and skills that will be retained if they are kept on.

To the extent that Dr Billings dealt with individually-designed tests, I prefer the evidence of Dr Zentner and Dr Liddell. I have already noted Dr Billings' sincerity. I found him a likeable, and generally impressive, person. But he has long been a staunch advocate of the Age 60 rule; to the point where it must be very difficult for him to give open-minded consideration to an alternative approach. I am not persuaded that he has been able to do this. In contrast, Dr Zentner and Dr Liddell bring no intellectual baggage to the problem. The only baggage they bear is Dr

Liddell's responsibility for aviation medical safety in Australia, a responsibility that would incline him towards caution rather than the reverse.

Acceptance of the approach advocated by Dr Zentner and Dr Liddell is facilitated by two other considerations. First, the main safety concern associated with physical degeneration on account of age is sudden pilot incapacitation. Yet there are only two recorded instances where pilot incapacitation has been even a contributing factor in a fatal airline accident. This is not because sudden incapacitation is rare. On the contrary, as Dr Billings made clear, it is comparatively common. It almost always arises out of a temporary indisposition such as gastro-enteritis; a malady that is indifferent to age. The reason why these incapacitations have not created a safety problem was spelt out in the OTA report, quoting the Institute of Medicine report: "sudden incapacitations, when they occur, are not likely to cause accidents because the co-pilot or flight engineer can take over the controls". The evidence shows that early recognition of, and reaction to, pilot incapacitation is a standard part of Qantas' pilot training.

Secondly, the clinical assessment of pilots is supplemented by regular simulator and on-line proficiency tests. Mr Allman deposed that, during his employment with Australian Airlines, he underwent four simulator tests each year, one every three months or so, and one on-line check by a

check captain flying a leg of a normal commercial route, whose sole task it was to observe his performance. This is a standard situation, in respect of all Qantas operations. The company carries out these tests both for its own benefit and, by arrangement with the CAA, in partial satisfaction of CAA pilot licensing requirements. Witnesses for the respondents pointed out that simulator tests are designed to evaluate the performance of the whole flight crew, acting as a team. I accept this, but I note that Captain Heiniger conceded that the person conducting a simulator test is required to give each flight crew member an individual rating. A pilot cannot easily be shielded by his or her colleagues. Captain Heiniger said that, because of the number of persons involved, it would be highly likely that a particular pilot would each time undergo a simulator test with a different co-pilot.

Only one pilot is subjected to an on-line route check on any particular flight or leg, so this is an individual examination leading to an individual rating. An error or omission of the tested crew member would probably be noticed by the checker. If the error or omission was one of a serious nature, indicating a cognitive deficiency, or was repeated, this would lead to an investigation of the crew member's problem. There was some debate during the hearing whether or not these tests would reveal cognitive difficulties. But Captain Heiniger said that the certificate signed by the checking officer, in a route check, extends to cognitive skills, that "the whole range of skills required and

abilities required by the pilot are under constant check by the check captain" and that the check captain must "check that person's cognitive as well as performance skills".

In addition to the safeguard provided by checks, there is an established procedure whereby crew members may report confidentially any observation they make concerning the performance of a colleague. In some occupations, perhaps, one employee might be reluctant to report the failings of another; but it is reasonable to assume little reluctance where lives are involved.

Counsel for the respondents submit that their clients acted reasonably in terminating the employment of the applicants at age 60, rather than at some later age. They advance several reasons for that submission, mainly related to historical standards and international practice. | However, it seems to me that the submission misstates the critical question. The issue is not whether Qantas acted reasonably, but whether the terminations were based on an inherent requirement of the particular position. In other words, independently of general practice and the policy of the particular employer, but looking at the question in a practical, commonsense way, is it a necessary qualification for the particular position that an incumbent be less than 60 years old? So far as the medical issue is concerned, this question must be answered in the negative. | The studies relied on by Dr Billings, and the respondents, for that conclusion

are unpersuasive. And the evidence of Dr Zentner and Dr Liddell positively satisfies me that there is a better alternative to mandatory retirement at age 60, an alternative that need not compromise Qantas' high safety standards.

It follows from this conclusion that the defence under s.170DF(2) raised by Australian Airlines against Mr Allman's claim, which is based solely on the medical issue, fails. Mr Allman's employment should not have been terminated. He is entitled to be returned to the position he held before his termination on 7 August 1994. He is also entitled to an order under s.170EE(1)(b) of the Industrial Relations Act that Australian Airlines treat him, for all purposes, as having been continuously employed from the date of his termination until the date of his reinstatement and that it pay him the remuneration he lost because of the termination. Of course, whether or not Mr Allman should be rostered for flying duties must depend upon his current fitness and licence situation. Before rostering him for flying duties, Australian Airlines is entitled to require Mr Allman to undertake, and pass, appropriate medical, psychological and simulator tests and to inspect a current pilots licence. If Mr Allman is unable to comply with these requirements within a reasonable time, there will be a valid reason for his fresh termination, connected with the operational requirements of the employer's undertaking; so a fresh termination would be permissible; see s.170DE(1) of the Act.

The operational issue

The operational issue only arises in relation to Mr Christie's claim, and only because he was employed by Qantas as an international pilot. He flew B747-400 aircraft, the largest jumbo jets. Whatever the medical justification for the Age 60 rule, many countries apply the rule. They apply it to both their own pilots and pilots using their airports or, even, overflying their territories. If Mr Christie's employment had not been terminated, unless special arrangements had been negotiated, he would not have been able to fly aeroplanes travelling to, or over, those countries.

The countries that apply the Age 60 rule to visiting pilots include the United States, so a problem would have arisen for Mr Christie in relation to flights to Los Angeles, Qantas' only north American destination, and Hawaii. At the present time, Qantas does not operate B747-400 aircraft on the Japan route. According to Mr J E Becquet, Head of Aircrew Operations at Qantas, it may do so in the future. Apparently, Japan would not object to flights piloted by an over-60 year old, but flights to Japan pass through or near the United States Territory of Guam, within which United States' regulations apply. Moreover, Guam is a prime alternate for Japan flights, to be used in the event of an emergency on an Australia-Japan flight.

The position concerning Hong Kong has proved somewhat obscure. Both Mr Christie and Qantas have been in contact with the Hong Kong authorities. They received ambiguous, perhaps conflicting, responses. However, by letter dated 4 April 1995, the Chief of Flight Standards of the Hong Kong Civil Aviation Department notified Captain Heiniger that the Department had now declared its policy; namely, "to require compliance with current Hong Kong legislation which in turn complies with the Standards of ICAO Annex 1". He added: "Therefore any request by a foreign licensed pilot over 60 years of age to act as pilot-in-command of an aircraft for the purpose of public transport while in Hong Kong airspace will be denied". This response seems to leave open the possibility of an over-60 year old person acting as co-pilot of an aeroplane landing in Hong Kong; but plainly there would be a difficulty in using Mr Christie as Captain of a Hong Kong flight whilst the Hong Kong authorities adhere to this policy and the current ICAO Standard remains.

There appears to be no difficulty about an aeroplane piloted by an over-60 year old landing at most, if not all, Qantas' current European destinations, including London. There may be an over-flying and alternate problem in relation to some European countries. But the major difficulty is that all Qantas' European flights land en route at either Singapore or Bangkok. The governments of Singapore and Thailand both strictly apply the Age 60 rule. Whilst Qantas adheres to these routes, and there appears to be no proposal

for change, and those governments adhere to their present policies, it would be impracticable to use Mr Christie on European flights.

The result of these restrictions is that the only international flights on which Qantas could use Mr Christie, if he were reinstated and as things stand, are flights to and from New Zealand, Denpasar in Bali (Indonesia) and Fiji. Under current aircrew planning methods, there may be a problem about Fiji because crews are often asked to go on from Fiji to the United States. However, it might be possible to make special arrangements. There is no problem about Denpasar or New Zealand, as such, and there would be sufficient flights to these destinations to occupy Mr Christie's standard work hours. But the allocation of so many of these flights to Mr Christie would cause a problem in respect of other aircrew.

The situation was explained by Mr Becquet. He said that the first step in planning Qantas' operations is to determine routes and flights and allocate aircraft to those flights; efficient utilisation of aircraft is critical because of the cost of purchasing, leasing and operating them. Once flight schedules are determined, crews are allocated. This is done by a bidding system. An electronic copy of the flight schedule is prepared and put through a computer optimiser which, "taking into account all statutory and award requirements affecting the operation of aircrew", produces

slip patterns. Each slip pattern represents one trip. Mr Becquet explained that:

"A trip may vary in length from four hours (for example, Sydney/Melbourne/Sydney) to a 12 day trip (for example, from Sydney/Singapore/Bangkok; Bangkok/Frankfurt; Frankfurt/Paris; Paris/Frankfurt; Frankfurt/Bangkok; Bangkok/Singapore/Sydney);"

The slip patterns are then combined to form a bid package which covers a period of eight weeks. The bid package sets out for each aircraft type (for example, B747-400) and for each rank (for example, Captain, First Officer and Second Officer) all available trips for the bid period. Slip patterns vary from one bid period to another depending upon flight scheduling. Mr Becquet said they are sometimes altered at short notice. After slip patterns are published crew submit their bids for specific slip patterns. Mr Becquet said:

"There are limits on slip patterns that may be selected by pilots. Thus, for example, a pilot cannot bid for any more than two one-day trips in an eight week bid period (to ensure that enough of these trips are available for all pilots to construct full and efficient bid lines) and each pilot must fly approximately 170 hours in a bid period;"

He went on to explain that bids are "strictly determined according to pilots' seniority, so that the most senior pilot will always prevail over other pilots bidding for

the same slip pattern", subject to the limitation just mentioned. Once bids have closed, a computer program is used to allocate slip patterns and duty-free days. The results of the allocation are published and distributed to each pilot. Mr Becquet explained that short flights, such as those to New Zealand and Denpasar, are used by crew to round off their required number of hours in a bid package. If a substantial proportion of these flights were allocated to Mr Christie, Qantas would be unable to fully use all its other B747-400 Captains. Mr Christie would be being paid for doing work that others would have done without extra cost to Qantas.

In these circumstances, counsel for the respondents argue that, from an operational point of view and under existing international restrictions, being less than 60 years of age is an inherent requirement of a position as Captain of a B747-400 aircraft. They point out that the International Pilots' Agreement, 1986 under which Mr Christie was employed, provided by section 5(e) that pilots shall serve the Company (Qantas) "in any part of the world where the Company may from time to time be operating". This is in fact necessary, say counsel, if they are to be used effectively.

Counsel for Mr Christie say that the problem of rostering is not one that goes to the inherent requirements of the position; it is no more than a matter of administrative convenience or tidiness. They say that Qantas' approach confuses the inherent requirements of a position with the

operational requirements of the employer and this involves a
misconstruction of s.170DF(2):

"Matters of mere administrative convenience and even of expense can not seriously stand in the way of the proper enjoyment of the important new rights given by the Act, as amended last year. Thankfully, community acceptance of such rights has travelled a reasonable distance in Australia since similar laws were introduced in the late 1970s. No longer would an employer seek to justify non-employment of women on the ground that the employers' establishment did not possess toilet facilities specifically designated for women. However, properly considered, the submissions by Qantas in this regard really parallel that outmoded kind of thinking, and should not be taken any more seriously. The fact that Qantas may have to make some administrative adjustment and might be subject to some administrative inconvenience cannot stand against the important rights provided to Captain Christie by s.170D(1)(f)."

Counsel go on to refer to the "limited formal basis" of the present rostering system, noting that it is not provided for in any award, that the restriction on a pilot bidding for more than two one-day trips in an eight week period is a restriction imposed by Qantas itself, Mr Christie's seniority at the time of his termination (number 25 on the long haul seniority list and number 18 out of 113 B747-400 line captains) and the fact that there was more than enough work, on flights that occasioned no problem, to keep him occupied. Even if other over-60 pilots had to be similarly accommodated, they say, this would not cause a problem, at least for the moment. Mr Christie gave evidence, which was not challenged, that he was the only long haul

Qantas pilot retired at age 60 in 1994. He said that two were due to retire at age 60 in 1995, of whom only one was a Captain. Counsel point out that, so anxious is their client to fly, that he would be prepared to work as a First Officer on a B747-400 or as a Captain on Qantas domestic services, where there would be no problem at all. He is also prepared to work part-time. Qantas has a part-time work policy, though this has not yet been applied to pilots.

I have considerable sympathy for Mr Christie's position. As I have already indicated, I think that the Age 60 rule is not defensible on medical or safety grounds. Having regard to recent improvements in diagnostic techniques, it is outmoded as a method of weeding out high risk pilots. But the rule is still embodied in the ICAO Standards. It still influences the policies of many governments, including the governments of the countries most visited by Qantas. Whatever the justification for the rule itself, while those policies stand Qantas would not be able to use Mr Christie in the way he was used in the past. He could not bid in the normal way; he would have to pick and choose amongst the available slip patterns. In order to make up his hours, he would need to use a large proportion of Qantas' short flights, flights that would otherwise be used to make up the hours of other B747-400 Captains. I do not agree with counsel for Mr Christie that this is merely a matter of administrative convenience; it goes to the heart of the system of aircrew scheduling. And that system is not an idiosyncratic fad of

this employer. It seems to be the only way of ensuring fairness between employees. Even if it were changed in its details, there would remain a need to use the short flights to even out the hours worked by employees. I do not think that the situation can be likened to an employer justifying the non-employment of women on the ground that its establishment does not have women's toilets. Unlike that example, the present problem is not one within Qantas' control. If it were so minded, Qantas might be able to influence the result of the current reconsideration of the ICAO Standard, or the attitude to that standard of individual governments. But a change is unlikely to occur in the immediate future; anyway, counsel for the respondents is correct in arguing that the relevant date for determination of the question whether the termination was based on an inherent requirement of the position is the date of termination, not the time when an unlawful termination claim goes to court. Whatever the future may bring, the evidence shows that Mr Christie's continuation in employment after 21 September 1994 would have occasioned Qantas serious practical difficulties. If, as I believe, s.170DF(2) is to be applied in a practical, commonsense way, it must be concluded that, at that time, being under 60 years of age was an inherent requirement of a position as a B747-400 Captain.

In relation to this conclusion, it should be remembered that availability to fly anywhere in the world was not only a term of the International Air Pilots Agreement 1986, under which Mr Christie worked at the time of his

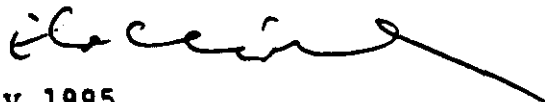
termination, but was a term of his contract of employment, negotiated when he joined the company in 1964.

I do not think it is any answer for Mr Christie to volunteer to fly as a First Officer, or on domestic routes in a different type of aircraft or on a part-time basis. These are practical suggestions in relation to a pilot approaching his or her 60th birthday that might attract an employer in the position of Qantas, if that employer was minded to find a way of keeping the pilot's services. But the adoption of any of these suggestions would involve Mr Christie being employed in a different position than that which he occupied immediately prior to 21 September 1994. The s.170DF(2) defence would nevertheless be made out. If it were not, so that the termination was unlawful, the Court's power to order reinstatement would not cover an order requiring Qantas to place Mr Christie in any of those situations.

As I say, I have sympathy for Mr Christie. He succeeds on the main issue in the case, the medical issue, but is defeated on the operational issue. This issue will soon disappear, but too late for Mr Christie. His application must be dismissed.

I hereby certify that the preceding eighty-nine (89) pages is a true copy of the Reasons for Judgment of his Honour, Chief Justice Wilcox.

Associate:



Dated: 12 May 1995

APPEARANCES

No. NI.879 of 1994

Counsel for the Applicant: F L Wright QC and S Winters
Solicitor for the Applicant: Jones Staff & Co
Counsel for the Respondent: Dr C N Jessup QC and I M Neil
Solicitor for the Respondent: Blake Dawson Waldron
Dates of hearing: 12 December 1994, 1-3 February
1995 and 17 February 1995

No. NI.664 of 1994

Counsel for the Applicant: R Reitano
Solicitor for the Applicant: Geoffrey Edwards & Co
Counsel for the Respondent: Dr C N Jessup QC and I M Neil
Solicitor for the Respondent: Blake Dawson Waldron
Dates of hearing: 1-3 February 1995 and 17
February 1995

SAINT VINCENT HOSPITAL, INC.



University of Massachusetts
Medical School



David H. Spodick, M.D.,
Professor of Medicine

June 10, 1986

E. Y. I.
With Compliments of
DR. D.

Federal Aviation Administration
Department of Transportation
Dockets Section AGC-204
800 Independence Avenue, SW
Washington, DC 20591

Re: In the Matter of the Petition of Melvin M. Aman et al for
Exemption from the Age 60 Rule

To Whom It May Concern:

I was shocked to learn that the FAA is persisting with a mandatory age restriction for pilots at age 60 years. As a scientist who also practices cardiology it is unbelievable that the distinction cannot be made between chronological age and disease processes---particularly for individuals who are repeatedly and meticulously evaluated by competent physicians. Indeed, age 60 is totally arbitrary. There are some individuals who are "old" at 50 years of age (and less) and others who are totally healthy and in possession of all their mental faculties at 70 and more. As a very frequent flyer both within this country and elsewhere in this world I am also concerned with my personal safety and realize that the mature judgement of a more experienced (and medically checked) pilot is irreplaceable. I pointed this out, as Keynote Speaker at the Eighth Bethesda Conference on aviation safety, where I also noted that with two or three trained individuals in the cabin of a commercial airplane it is very unlikely that all could be medically disabled at once. This is published in the American Journal of Cardiology 1975;36:592-596: "Cardiovascular Problems Associated With Aviation Safety" 8th Bethesda Conference of the American College of Cardiology, Washington, D.C.

The medical/neuropsychologic protocol for evaluating individual pilots' physiologic and psychologic status was developed among some of the outstanding physician-scientists active in the appropriate fields. This should be sufficient to establish the true

Enclosure

PETITIONER'S
EXHIBIT

93

Tel. (617) 798-6162

Mailing Address: Cardiology Division, Saint Vincent Hospital, Inc., Worcester, MA 01604

"age" in biologic terms of individuals age 60 and over who can be shown to have fitness for piloting equal or even superior to some of those who are chronologically younger.

I sincerely hope that the Federal Aviation Administration will reconsider its stand on this point in consideration of establishing the best standards for performance and safety in its purview.

Yours sincerely,

David H. Spodick, M.D.,D.Sc.
Professor of Medicine

DHS/med

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June 13, 1986

25008

Federal Aviation Administration
Department of Transportation
Dockets Section AGC-204
800 Independence Ave., SW
Washington, DC 29591

18 ALL: 17

RE: In the matter of the
petition of Melvin M.
Aman, et al., for
exemption from the Age-60
Rule.

Dear Sirs:

I am writing in strong support of the petition of Melvin Aman and his co-petitioners for exemption from the age-60 rule.

However well-intended, the age-60 rule is predicated on false premises. For it makes group or categorical standards the basis for predicting individual performance. In an area of significant public safety, the errors of this view are tremendously consequential. It not only labels those 60+ as incompetent, but also regards those under 60 as competent. Both by classification. These assumptions are often wrong in individual cases. Some pilots over 60 are still eminently qualified to fly safely, and with consummate skill and experience. Similarly, other pilots in their fifties or even forties are no longer qualified, whether from burnout or other deficits. Clearly pilot qualification depends on individual performance, not categorical assumptions. Only in accepting this fact can public safety be assured. For (unlike insurance companies) we are not concerned with statistical probabilities --- the misconception underlying the Challenger launch and explosion --- but rather with faultless performance and no error. Once recognized, this principle is so obvious that its elaboration becomes embarrassing.

The remaining issue is whether or not a assessment of individuals is feasible and adequate. The answer here is emphatically affirmative. Physiological and psychological assessments are available and are used routinely by the FAA in monitoring and periodic review of active pilots. Insofar as these are based on age-less criteria of qualification (performance and attributes of individuals), they should

PETITIONER'S
EXHIBIT

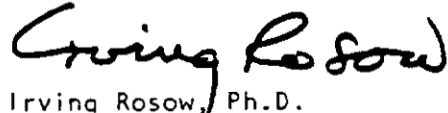
94

Federal Aviation Administration
June 13, 1986
Page 2

logically and economically be extended to all pilots, to weed out the incompetent and marginal and to conserve and utilize those who demonstrate qualification. Regardless of age. Anybody who fails the judgment-performance tests should be grounded regardless of age; similarly, anybody who meets all the standards of a top notch pilot should fly regardless of age. And the same standards apply to everybody regardless of age.

The tests are familiar and available, the criteria objective and valid. Let us by all means use them and not squander a valuable resource of skilled experienced pilots who are still effective.

Sincerely,

A handwritten signature in black ink that reads "Irving Rosow". The signature is written in a cursive style with a large, prominent "I" and "R".

Irving Rosow, Ph.D.
Director and Professor
Human Development and Aging

IR/ld

BAYLOR COLLEGE OF MEDICINE
1200 MOURMUND AVENUE
HOUSTON, TEXAS 77030

25002

OFFICE OF THE CHANCELLOR

18 June 1986

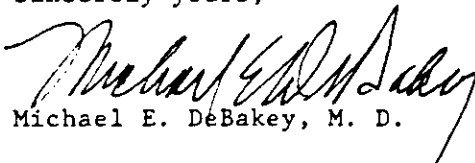
Federal Aviation Administration
Department of Transportation
Dockets Section AGC-204
800 Independence Avenue, S. W.
Washington, D. c. 20591

Re: In the matter of the Petition of Melvin M. Aman et al.,
from Exemption from the Age 60 Rule.

Gentlemen:

I am writing this letter in support of the petition of Melvin M. Aman et al., from Exemption from the Age 60 Rule. I have found no convincing medical evidence to support the basis of the age 60, or any other specific age, for mandatory pilot retirement. As long as an individual's capabilities are normal and he or she is in good health at age 60, there is no sound medical reason that a highly qualified pilot should retire simply because he or she has reached 60 years of age.

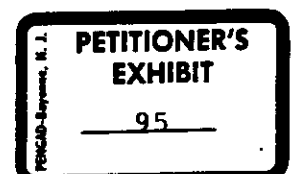
Sincerely yours,


Michael E. DeBakey, M. D.

MED:jk

cc: Alan M. Serwer, Esquire
Haley, Bader and Potts

25 JUN 1986





4-5008

UNIVERSITY OF MEDICINE AND DENTISTRY OF NEW JERSEY
RUTGERS MEDICAL SCHOOL

Academic Health Science Center

CN 19

New Brunswick, New Jersey 08903

Department of Medicine

June 20, 1986

Federal Aviation Administration
Department of Transportation
Dockets Section AGC-204
800 Independence Avenue, S.W.
Washington, D.C. 20591

Dear Sir/Madam:

In May 1982 I stated my support for a means of individualized medical consideration so that qualified airline pilots could continue their profession after age 60. Since age is not the sole determinant of physiological function.

I heartily support the statement of Age 60 Examination Panel's recommendation that exemption from provision of 14 CFR S 121.383 (c) be granted for the individuals named on attachment A.

Sincerely yours,

Peter T. Kuo, M.D.
John G. Detwiler Professor of Cardiology
Director of Atherosclerosis Research

PTK:pr

cc: Alan M. Serwer
Haley, Bader & Potts

49:57



Bethany Medical Center

June 24, 1986

Federal Aviation Administration
Department of Transportation
Dockets Section AGC-204
800 Independence Avenue, S.W.
Washington, D.C. 20591

RE: In the Matter of the Petition of Melvin M. Aman et al.,
for Exemption from the Age 60 Rule

Gentlemen:



I am writing to support the report of the physicians of the "Age 60 Exemption Panel" recommended to the Federal Aviation Administration, U.S. Department of Transportation dated April, 1986 and signed by Drs. Robert Bruce, D. Owen Coons, Samuel M. Fox, Earl T. Carter, Robert W. Elliott and Stanley R. Mohler.

51 North 12th Street
Kansas City, Kansas 66102
Telephone 913/281-8400

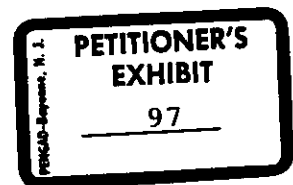
Very truly yours,

Hughes W. Day, M.D.
Emeritus Director of Cardiology
Bethany Medical Center
51 N. 12th
Kansas City, Kansas 66102

HWD ama

51:3d 08/12/86
P 3:15

1301200



Hartford Hospital

25008

June 25, 1986

Federal Aviation Administration
Department of Transportation Dockets Section AGC - 204
800 Independence Avenue, SW
Washington, DC 20591

86 JUL 1 11:42

OFFICE OF THE ATTORNEY GENERAL

Re: In the Matter of the Petition of Melvin M. Aman, et. al.,
for Exemption from the Age 60 Rule

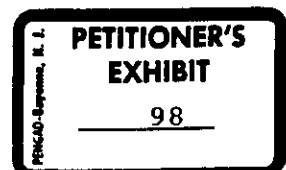
To Whom it May Concern:

I am amazed and appalled about FAA refusal to revise an arbitrary restriction for pilots at 60 - the lack of permission to hold a commercial air transport rating and fly in command of aircraft after age 60! During July 1980, an expert panel was convened, at the request of the Congress of the United States, amongst members of the National Academy of Sciences - Institute of Medicine. I testified as an expert medical witness before the panel, offering evidence from the "1000 Aviator" study of the U.S. Navy, showing that active individuals in their early 60's were capable of high levels of performance, including actual control of aircraft.

At the Annual Scientific Session of the Aerospace Medical Association, held in San Antonio, TX, during May 1981, a resolution was proposed and approved by a majority of the members, at the business meeting, in favor of allowing selected commercial airline pilots to maintain command of aircraft after age 60, and fly in their designated rating.

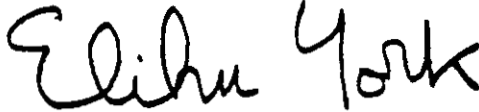
Enclosed is a photocopy of a report, based upon my studies of aging, cardiovascular risk, and health, conducted on the "1000 aviator" population of former naval pilots. Many active alert and capable individuals, after age 60 are capable of flying as commercial pilots, with no great risk to the public. There are many available techniques for physicians, psychologists, engineers and managers to assure that individual pilots after age 60 can fly safely as commercial pilots.

I hope that the administrator of the Federal Aviation Administration will listen to the comments of others, as well as mine, in addition to Frank H. Austin, Jr., M.D., the current Federal air surgeon who has publicly testified a few months ago, that some selected senior pilots,



above age 60, could conceivably fly safely exercising their commercial pilots' rating.

Respectfully,

A handwritten signature in black ink that reads "Elihu York". The signature is written in a cursive, slightly slanted style.

Elihu York, M.D., MPH, FAOC, FACP, FACPrevMed., Director,
Occupational Medicine/Employee Health Services
Captain, MC, USNR - R (Flight Surgeon)

EY:mb



STANFORD UNIVERSITY MEDICAL CENTER

STANFORD, CALIFORNIA 94305

STANFORD UNIVERSITY SCHOOL OF MEDICINE
Department of Medicine
Division of Immunology

June 27, 1986

Federal Aviation Administration
Department of Transportation
Dockets Section AGC-204
800 Independence Avenue, S.W.
Washington, D.C. 20591

Re: In the Matter of the Petition of Melvin M. Aman et al,
for Exemption from the Age 60 Rule

Gentlemen:

As a professor, investigator, and student of the effects of aging upon performance, I would like to firmly indicate that arbitrary age-based regulations are not appropriate to the question of who should pilot a commercial aircraft.

Assuming that there is not a major alcohol problem, that no debilitating illnesses are present, and that the pilot has not had a history of accumulating incident reports, then mere passage of an age marker should not be used as a criterion.

Indeed, if the FAA is interested in improving pilot performance and minimizing incapacity, it may do so far more effectively by utilizing strict physiologic criteria for performance.

I appreciate your attention to these important matters.

Sincerely,

James F. Fries, M.D.
Associate Professor of Medicine

JFF:rlp

49:64 87P10

100-111-111





THE MOUNT SINAI MEDICAL CENTER

ONE GUSTAVE L. LEVY PLACE • NEW YORK, N.Y. 10029

Mount Sinai School of Medicine • The Mount Sinai Hospital



Robert N. Butler, M.D.
Brookdale Professor of Geriatrics and Adult Development
Chairman, Gerald and May Ellen Ritter
Department of Geriatrics and Adult Development

(212) 650-5561

July 9, 1986

The Federal Aviation Administration
Department of Transportation
Docket Section AGC-204
800 Independence Avenue South, S.W.
Washington, D.C. 20591

Re: In the matter of the petition of Melvin M. Aman, et al, from Exemption
from the Aged 60 Rule

I am writing this letter in support of the petition of Melvin M. Aman et al
from exemption from the age 60 Rule. In my tenure as Director of the National
Institute on Aging, we did a study as part of the Experienced Pilots Act which
made obvious the fact that mandated pilot retirement should be replaced, as
science permits, by flexible evaluation. The study proposed the inauguration
of a special longitudinal study. I think the "Age 60 Exemption Protocol" would
be a valuable approach.

Sincerely yours,

Robert N. Butler
Robert N. Butler, M.D.

RNB/ph.

00 : 01W 12 00 86

OFFICE OF CHIEF COUNSEL
JUL 12 1986





DUKE UNIVERSITY MEDICAL CENTER

Respiratory Care Services

July 7, 1986

Federal Aviation Administration
Department of Transportation
Dockets Section AGC-204
800 Independence Avenue, SW
Washington, DC 29591

Re: In the matter of the petition of Melvin M. Aman et al for exemption
from the age 60 rule

Gentlemen:

I am writing this letter in strong support of the petition of Melvin M. Aman et al for exemption from the age 60 rule. I had the unique opportunity to coordinate the U.S. Navy's 1000 Aviator Project from 1975 to 1978, and during that time was able to analyze and publish extensive data on the aging process in aviation personnel. My specific interests were the risk factors in development of cardiovascular disease, pulmonary disease, cerebrovascular disease, and other common forms of debilitating illnesses. There is no question from these data and others that: 1) Pilots appear to have a lower risk for a variety of disease processes; and 2) Medical testing in the 1980's is clearly able to identify that subgroup which is at high risk. I feel that maintenance of this archaic and arbitrary rule is both unfair to individual pilots and robbing the commercial airlines of valuable experienced pilots. I strongly concur with the Age 60 exemption panel and their recommendations for testing.

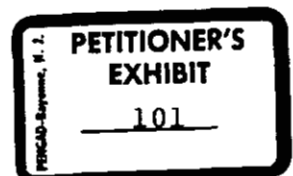
I sincerely hope that the Federal Aviation Administration will reconsider its stand on this point in view of the overwhelming medical data and techniques available.

Sincerely,

Neil R. MacIntyre, M.D.
Assistant Professor of Medicine
Duke University Medical Center

68 JUL 14 9:56

OFFICE OF THE
CLERK OF THE
COURT



BOISE HEART CLINIC, PROFESSIONAL ASSOCIATION

287 WEST JEFFERSON STREET
BOISE, IDAHO 83702-6045
(208) 343-7940

JAMES W. SMITH, M.D.
Diplomate, American Board Internal Medicine
Fellow, American College of Cardiology

MARSHALL F. PRIEST, M.D.
Diplomate, American Board Internal Medicine
Fellow, American College of Cardiology

July 7, 1986

CHARLES E. EIRIKSSON, JR., M.D.
Diplomate, American Board Internal Medicine
Fellow, American College of Cardiology

FREDERICK R. BADKE, M.D.
Diplomate, American Board Internal Medicine
Fellow, American College of Cardiology

Federal Aviation Administration
Department of Transportation
Dockets Section AGC-204
800 Independence Avenue, S.W.
Washington, D.C. 20591

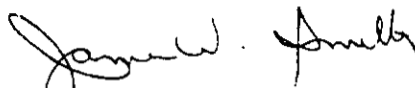
Re: In the Matter of the Petition of Melvin M. Aman, et al.
for exemptions from §121.383 (c) of the Federal Aviation
Regulations

Gentleman:

I have reviewed the Petition for Exemption filed on behalf of Melvin M. Aman et al. I am a fully trained, board certified cardiologist who, in the past, has functioned as a flight surgeon in the U.S. Navy and subsequently have maintained some interest in flying.

It is clear that the current medical science has the ability to carefully test individuals who are requesting waiver of flight rules for their cardiovascular fitness. It is my opinion that it is most appropriate and quite safe for airmen over the age of 60, after individual clearance from a medical, psychological, and operational standpoint, to be allowed to fly as requested in the aforementioned petition.

Sincerely,


James W. Smith, M.D.

JWS/plb

cc: Alan M. Serwer
Haley, Bader & Potts
11 South LaSalle Street
Suite 1600
Chicago, Illinois 60603



MILWAUKEE HEART SURGERY ASSOCIATES, S.C.
2315 NORTH LAKE DRIVE
SUITE 1007
MILWAUKEE, WISCONSIN 53211
414/271-8400

W. Dudley Johnson, M.D.
Jerold B. Brenowitz, M.D.
Saad F. Saedi, M.D.
Cardiovascular and Thoracic Surgery

July 28, 1986

Federal Aviation Administration
Department of Transportation
Dockets Section AGC-204
800 Independence Avenue, S.W.
Washington, D.C. 20591

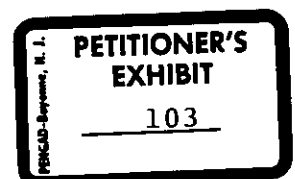
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ALL: 44

Re: In the matter of the Petition
of Melvin M. Aman et al. for
Exemption from the Age 60 Rule,
Public Docket No. 25008

Dear Sirs:

It is my understanding that there is consideration of a rule limiting the function of airline pilots over the age of 60. It is my opinion that the age of 60 is clearly irrelevant to mental or physical function, and is also relatively irrelevant to the possibility of sudden death, assuming that appropriate evaluation has taken place.

I cannot comment in regards to all areas of medicine. I am a cardiovascular surgeon. We have maintained about 98 percent followup of every patient operated with bypass surgery on our service since 1968. The evaluation of these patients indicates that, after bypass surgery, most of the patients have normal, or better than normal, life expectancy. The older the patients are when they have bypass surgery, the more their life expectancy exceeds the life expectancy of the general population of that age. The younger patients obviously have somewhat more accelerated disease. We have compared survival of patients after bypass surgery and compared it to sex and age matched groups of the entire US population reported by the National Center for Health Statistics. In the first five years following surgery, male subjects from age 50 through 70 have demonstrated a lower mortality than the US population. The ten year postoperative survival of patients 60 to 70 exceeds the US population. These statements apply to all patients with bypass surgery who have relatively normal ventricular function at the time of their operation. It does not



Federal Aviation Administration
Department of Transportation
Dockets Section AGC-204
Page 2
July 28, 1986

Re: Public Docket No. 25008

apply to patients who have suffered severe heart damage from previous myocardial infarctions. Furthermore, we have accepted 100 percent of patients presenting to us for bypass surgery who have normal ventricular function, so that this data includes every patient with coronary disease. Any effort to restrict the activity of these patients after bypass surgery because of their age, and the fact that they had bypass surgery, is clearly wrong.

While the life expectancy overall of the older patients is considerably better than that of the general population, this could certainly be refined further. If patients were recatheterized, and their bypass grafts were all functioning, and there was no evidence of coronary ischemia in any area, and there was no rhythm problem, the probability of these patients dying from coronary disease would be remote. If I were a passenger in an airplane, I would much prefer to have a pilot who had bypass surgery, and in whom it had been demonstrated that all of the bypass grafts were functioning well. The probability of him having a sudden episode of difficulty is much less than in a pilot under the age of 60 who has not been catheterized and in whom the coronary status is uncertain.

Clearly, careful medical evaluation should be required, and it is my understanding that that has been carefully documented by the pilots who wish to have the Age 60 Rule removed. There is certainly no restriction on physicians or surgeons over the age of 60 who are routinely doing delicate work. There should be no arbitrary 60 year old restrictions on pilots who have been carefully evaluated and are found to be totally safe to perform pilot duties. The presence of heart disease is absolutely not a contraindication to the safe functioning of a pilot, particularly when the disease has been carefully documented and the results of therapy have been carefully confirmed.

Federal Aviation Administration
Department of Transportation
Dockets Section AGC-204
Page 3
July 28, 1986

Re: Public Docket No. 25008

I would be more than happy to submit specific details concerning survival of people following bypass surgery, or answer any other questions concerning patients who have had, or need, coronary bypass surgery, in terms of the affect of this on their longevity.

Sincerely,

A handwritten signature in cursive script that reads "W. Dudley Johnson". The signature is written in dark ink and is positioned above the printed name.

W. Dudley Johnson, M.D.

WDJ/vas

THE PENNSYLVANIA STATE UNIVERSITY

COLLEGE OF HUMAN DEVELOPMENT
UNIVERSITY PARK, PENNSYLVANIA 16802

Department of Individual and Family Studies
S-110 Henderson Human Development Building

Area Code 814
865-1447

August 6, 1986

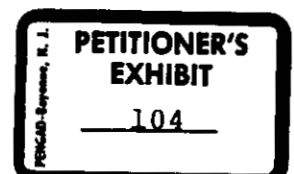
In the matter of the Petition of Melvin
M. Aman et al. for Exemption from the
Age 60 Rule, Public Docket No. 25008
FEDERAL AVIATION ADMINISTRATION
Department of Transportation
Dockets Section AGC-204
800 Independence Avenue, S.W.
Washington, D.C. 20591

Dear Sirs:

The purpose of this letter is to encourage the FAA to take advantage of the above-captioned petition to take some positive steps to reverse its long history of intransigent and irresponsible handling of the commercial airline pilot retirement issue.

As a member of the 1980 National Institute on Aging Panel on the Experienced Pilots Study, I have been particularly concerned that the FAA has thus far refused to come to terms with our conclusions that age 60 is not a particularly useful age for mandatory retirement of pilots, but that data need to be gathered that would permit determining a more reasonable retirement policy. Our recommendation to retain age 60, was based solely on the recognition that there was no adequate data base on pilots beyond that age. The FAA has consistently aborted attempts to collect such data.

In view of the present shortage of experienced pilots, there appears to be a tendency to waiver younger pilots for health and other reasons that are of far greater concern to air safety, than would be a waiver for age in an otherwise healthy and competent pilot. In addition, new commercial airline pilot recruits appear to have far less flying experience than has been true in the past. It appears therefore that perpetuation of the FAA stance to refuse waiver of the age requirement is likely to lead to an increase in the proportion of relatively inexperienced pilots flying commercial aircraft, with resultant increase in threats to flight safety.



As further described in the attached copy of my comments prepared last year at the request of Congressman Roybal, it is clearly possible at the present state-of-the-art to develop adequate screening programs that allow waiving individual pilots who have an acceptable health and performance record at age 60. The procedures included in the petition under review, in my opinion, represent an acceptable example of such a screening program.

Sincerely yours,



K. Warner Schaie
Professor of Human Development
and Psychology

Attachment



U.S. EQUAL EMPLOYMENT OPPORTUNITY COMMISSION
Washington, D.C. 20507

AUG 12 1965

Donald P. Byrne
Acting Assistant Chief Counsel
Federal Aviation Administration
Office of the Chief Counsel
800 Independence Ave., S.W.
Washington, D.C. 20591

Attention: Rules Docket (AGC-204)

Dear Mr. Byrne:

The enclosed letter from Clarence Thomas, Chairman of the Equal Employment Opportunity Commission (EEOC), to Donald D. Engen, Administrator of the Federal Aviation Administration (FAA), contains Chairman Thomas' comments on the Petition for Exemptions filed on behalf of Melvin M. Aman and 38 other petitioners. Please include it with the above numbered docket.

Sincerely,

A handwritten signature in cursive script, reading "Elizabeth M. Thornton".

Elizabeth M. Thornton
Associate Legal Counsel
Coordination and Guidance Services
Office of the Legal Counsel

Enclosure





OFFICE OF
THE CHAIRMAN

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION
WASHINGTON, D.C. 20507

AUG 12 1986

Honorable Donald D. Engen
Administrator
Federal Aviation Administration
400 7th Street, S.W.
Washington, D.C. 20591

Dear Mr. Engen:

I am writing to you in response to a notice published in the Federal Register, 51 Fed. Reg. 26622 (July 24, 1986), which solicited comment on a petition for exemptions filed by 39 current and former commercial pilots. These pilots seek exemption from the FAA's age 60 rule, which requires all commercial airlines to cease using a person as a pilot or co-pilot on any airplane engaged in commercial operations after that person reaches his or her 60th birthday and forbids persons 60 years or older to pilot commercial aircraft. The EEOC, because it enforces the Age Discrimination in Employment Act of 1967 (ADEA), has for some time been concerned about the impact of the age 60 rule on commercial pilots and by additional efforts to extend the rule to the flight engineer position and privately employed pilots. I therefore welcome the opportunity to comment on this petition and to urge the FAA to grant it.

The ADEA was enacted to promote the employment of older persons based on their ability and prohibit arbitrary age discrimination against individuals with the ability or potential for effective job performance. 29 U.S.C. §621. In its enforcement efforts, the Commission closely scrutinizes age related restrictions maintained by private and public employers and reviews Federal regulations which impact on persons in the ADEA's protected population (aged 40-70). Under the ADEA, an employer is prohibited from placing a maximum age limitation on its employees unless it can establish that the age limitation is a bona fide occupational qualification (BFOQ) reasonably necessary to the normal operation of the business. The rights of older workers are thus balanced against the needs of the employer and the public interest. EEOC interpretations of the ADEA establish the test that an employer must meet to establish a BFOQ:

An employer asserting the BFOQ defense has the burden of proving that (1) the age limit is reasonably necessary to the essence of the business, and either (2) that all or substantially all individuals excluded from the job involved are in fact disqualified, or (3) that some of the individuals so excluded possess a disqualifying trait that cannot be ascertained except by reference to age. If the employer's objective in asserting a BFOQ is the goal of public safety, the employer must prove that the challenged practice does indeed effectuate that goal and that there is no acceptable alternative which would better advance it or equally advance it with less discriminatory impact. 29 CFR §1625.6(b)

8/12/86 P 4:19

While the Commission's interpretation applies to employers and not to the FAA, I believe that the principles that underlie the interpretation should direct the FAA.


As you know, in 1979, the Congress instructed the Director of the National Institutes of Health (NIH), in consultation with the Secretary of Transportation, to undertake a study to determine whether the age 60 limitation on commercial pilots was medically warranted and whether FAA medical regulations were adequate to determine an individual's physical condition in light of the current technology. (P.L. 96-171.) The Director of NIH assigned primary responsibility for this study to the National Institute on Aging (NIA).

A panel of the NIA concluded that it could not attach any special medical significance to age 60 as a mandatory retirement age for airline pilots, but recommended that the current age 60 requirement be retained until the FAA could "engage in a systematic program to collect the medical and performance data necessary to consider relaxation of the current age 60 rule" The panel recommended that the age 60 rule be reviewed by a program of selected exemptions.

This petition by 39 pilots offers the FAA the opportunity to undertake the controlled study recommended by the NIA. The petitioners have passed a rigorous medical protocol. The petition and the protocol are supported by leading medical experts in the fields of cardiology, space medicine and preventive medicine. I urge the FAA to give its most serious consideration to the petition, to grant exemptions to the 39 petitioners and to undertake the study envisioned by the NIA panel so that questions surrounding the necessity and continued advisability of the age 60 rule as it applies to commercial airline pilots can be resolved.

If you have any questions, please do not hesitate to call me or have the appropriate member of your staff contact Stuart Frisch, Assistant Legal Counsel for Coordination, at 634-7581.

Sincerely,



Clarence Thomas
Chairman



University of Massachusetts Medical School
worchester, massachusetts 01605

DAVID A. DRACHMAN, M.D.
Professor and Chairman
Department of Neurology
(617) 856-3081

August 1, 1986

Federal Aviation Administration
Department of Transportation
Dockets Section AGC-204
800 Independence Avenue, S.W.
Washington, D.C. 20591

RE: Petition of Melvin M. Aman, et al
Exemption from the Age 60 Rule
Public Docket No. 25008

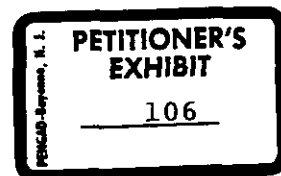
Dear Sirs::

I would like to express the view that the Age 60 Rule for pilots is a regulation that clearly requires revision by the allowance of exceptions based on specific testing of individuals.

The Age 60 Rule categorically preventing pilots over age 60 from serving as Captains on airliners is now three decades old. It fails to take into account the pronounced variability in health and performance capabilities of individuals reaching age 60, and the fact that some individuals over age 60 will be able to perform all the duties of an airliner pilot well within the level of competence and safety required.

From the standpoint of air crew health and performance, four considerations apply:

1. Does a specific disease process threaten the sudden development of incapacitation?
2. Does a specific disease process produce a degree of constant impairment in performance that would interfere with safe aircraft operation under ordinary circumstances?



12 AUG: 05

3. Does a non-disease, age related decline in performance interfere with the pilot's ability to operate an aircraft safely under ordinary or circumstances?
4. Does age over 60 in the absence of detectable disease, threaten the sudden occurrence of incapacitation?

In the past, the FAA, with the collaboration of AMA panels has reviewed and identified specific disease processes that threaten sudden incapacitation or produce disability. The presence of such disorders in individual captains of any age disqualifies them from flying commercial airliners, because of the unpredictability of sudden incapacitation, or a degree of disability that would interfere with the normal capability of handling the aircraft. These rules apply to pilots of any age; yet, as noted in the submitted petition, exceptions have been granted to pilots with these otherwise disqualifying disease states.

While the probability of incurring specific diseases increases with advancing age, a group of healthy, normal individuals can be identified who are disease-free over the age of 60. Their probability of sudden incapacitation is, therefore minimal. The final issue regarding pilots over age 60 is the specific performance capacity of each individual.

A neurological, neuropsychological or medical examination can detect incapacity due to disease, cognitive impairment, or loss of motor function, coordination or normal sensation. However, the ultimate determination of capability to operate an aircraft safely must be established by individual testing, using the most sophisticated flight simulators available. Since these devices can accurately simulate a wide variety of normal and abnormal flight conditions, the capability of any individual at a specific point in time to operate such an aircraft safely should be determined by such direct testing.

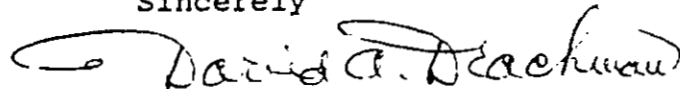
It is important to understand that modification of the over age 60 FAA rule, does not contradict the observation that, on the average, some cognitive, memory and response-time declines may take place with advancing age. This is especially true in advanced old age (over age 75), but may occur to a lesser extent at younger ages. Despite this average decline, the Age 60 Rule is inappropriate because:

1. Many individuals at age 60 and above retain the capability of performing as pilots without any handicap;

2. Even in the most demanding reaction time performance tests, practice can improve the performance of older subjects to equal or exceed that of younger subjects;
3. The experience and skill of older pilots may more than compensate for any other aging changes that may occur;
4. Individual variability is such that those individuals who retain the capacity to function effectively should be identified and permitted to operate aircraft.

In reviewing the petition of Aman, et al it is my opinion that a qualifying physical, neurological and neuropsychological examination, as well as demonstrated competence in a flight simulator, would be sufficient to distinguish those captains over age 60 capable of continuing their professional activity from those who could not. Further, it would be reasonable to require repeated demonstration of normal health and competence at increased frequency in older captains. Finally, it is to be expected that only a fraction of pilots would qualify to continue in the capacity of captains over the age of 60; and that the fraction would likely decrease with advancing age, yet would be accurately determinable by testing such as is proposed.

Sincerely



David A. Drachman, M.D.
Professor and Chairman
Department of Neurology
University of Massachusetts
Medical Center
Chairman,
Medical & Scientific Advisory
Board - ADRDA

DAD/nal



UNIVERSITY OF MASSACHUSETTS
AT AMHERST

School of Engineering
114 Marsion Hall
Amherst, MA 01003
(413) 545-2851

Department of Industrial Engineering
and Operations Research

FEDERAL AVIATION ADMINISTRATION
Office of the Chief Counsel
ATTN: Rules Docket (AGC-204)
800 Independence Avenue, S.W.
Washington, D.C. 20591

10 August 1986

10:09:01

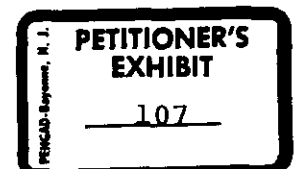
Re: In the Matter of the Petition of Melvin M. Aman et al., for Exemption
from the Age 60 Rule, Public Docket No. 25008

Gentlemen:

As a professor and researcher in the field of human factors with expertise in the areas of aviation psychology, human performance measurement, and flight training systems, I am writing this letter in strong support of the petition of Melvin M. Aman, et al. for exemption from the Age 60 Rule.

With the current technologies at our disposal it is possible to obtain very reliable measures of pilot performance in line with the guidelines set forth by the FAA to determine who can or cannot perform the tasks of piloting commercial aircraft. To use age as the determiner of when a person must "step down" from piloting obviates the need to have good reliable flight examiners or objective performance measurement techniques and also the difficult task of management telling a person when he or she can no longer meet the performance standards and must retire.

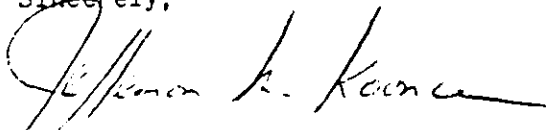
The arbitrary Age 60 Rule is not valid in the sense of insuring the utmost in flying safety; good thorough flight examinations and flight physicals could do more in insuring safety. To insure safety, the question should be competency and not age. The flying public assumes that the FAA uses measures of pilot competency to insure their safety and applies those measures to all pilots equally. The Age 60 Rule is little more than a convenient economic cut-off point for management to retire persons without having to determine whether or not they can actually perform the tasks to which they are assigned.



The exemption of Melvin M. Aman and the other petitioners would give the FAA and the commercial airline industry an opportunity to demonstrate that they are truly interested in flying safety by evaluating pilots on the basis of competency instead of age.

I sincerely urge you to reconsider your stand regarding the petition of Melvin M. Aman, et al. for exemption from the Age 60 Rule.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jefferson M. Koonce". The signature is written in dark ink and is positioned above the typed name.

Jefferson M. Koonce, Ph.D.
Professor

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DIRECTOR OF RESEARCH

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BILL KALAMANDARIS
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CONSULTANTS

(202) 226-3381

U.S. House of Representatives

SELECT COMMITTEE ON AGING

SUBCOMMITTEE ON HEALTH AND LONG-TERM CARE

377 HOUSE OFFICE BUILDING ANNEX 2

Washington, DC 20515

August 13, 1986

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MAKÉ BENEDICT, J.D.
MINORITY STAFF DIRECTOR

LEON LIGHTFOOT
ASSISTANT STAFF DIRECTOR
(202) 226-3383

58

To whom it may concern:

You may know that I have a long-standing interest in the issue of mandatory retirement.

In 1978, at the White House signing ceremony for the anti-mandatory retirement bill, I said that that day was a day of exhilaration for many millions of our fellow Americans. From that day forward, they would be assured that the dawn of their 65th birthday would not mean the death of their working life.

Less than six months later, the House Select Committee on Aging, which I then chaired, met to review one of the more notable exceptions to this liberalized policy -- the Federal Aviation Administration's mandatory retirement at age 60 rule for pilots. The Committee found at that time that commercial pilots were routinely ejected from the pilot's seat at age 60 without showing any incapacity.

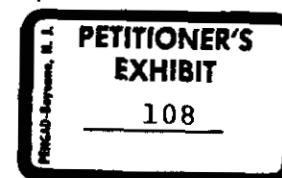
In the course of our hearing, the Committee learned that the FAA had established this arbitrary age limit without a formal hearing process in 1959 and in the absence of any just cause. No evidence was presented establishing or implying a connection between a pilot's age in general or the age of 60 in particular and his or her ability to fly an airplane.

These hearings in 1979 led to the enactment of P.L. 96-171, which mandated a one-year study of the FAA's policy by the National Institutes of Health. Unfortunately, the results of that study were inconclusive. While the NIH reported there was no evidence to support the age 60 rule, general concerns for potential problems led them to suggest maintaining the rule until the issue could be scientifically resolved. The NIH suggested that that process be initiated with the accumulation of necessary data.

In 1982, again without gathering the data recommended by the NIH, the FAA published its intent to extend the age 60 rule to flight engineers.

We still do not have the data the NIH recommended be collected. There still is no justification for the age 60 rule. All available evidence supports the contention that a pilot or flight engineer's 60th birthday does not in and of itself constitute a safety factor.

At a March 12, 1986 hearing on mandatory retirement by the Subcommittee on Health and Long-Term Care, which I chair, several experts expressed their views on mandatory retirement on the basis of age.



Comments to FAA
Petition Docket #25008
August 13, 1986
Page 2

Dr. T. Franklin Williams, Director of the National Institute on Aging, National Institutes of Health, presented numerous exhibits that proved ill health is not correlated with age. He also pointed out that "recent advances in medical technology and in scientific research on aging provide us with considerably more knowledge and understanding about health and effective functioning in later years, into the seventies and eighties, than we had even a few years ago. Such new research demonstrates that, in the absence of disease conditions, functioning in the various organ systems can be maintained at high levels into these later years."

I write to urge strongly that the 39 airline pilots and flight engineers seeking exemptions from the FAA's age 60 rule be permitted to do so, provided they pass the "Age 60 Exemption Protocol" and all other requirements for airline work.

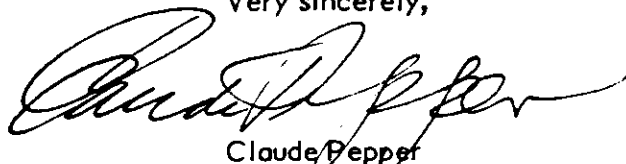
No one will deny that passenger safety is a dominant concern of the airlines. I know that each of the petitioning workers believes that to be so.

However, passenger safety should not be used to sanction discrimination on the basis of age. If a man or woman can show to the satisfaction of medical experts that he or she is physically and mentally up to the task of working as a pilot or flight engineer, that person should be given the chance.

I look forward to the outcome of this petition process. Thank you for your consideration of my views.

With kindest regards,

Very sincerely,



Claude Pepper
Chairman

Federal Aviation Administration
Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
Petition Docket #25008
800 Independence Avenue, S.W.
Washington, DC 20591

JOHN HEINZ, PENNSYLVANIA, CHAIRMAN

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United States Senate

SPECIAL COMMITTEE ON AGING
WASHINGTON, DC 20510

August 12, 1986

Federal Aviation Administration
Docket Section AGC-204
800 Independence Avenue, S.W.
Washington, D.C. 20591

RE: In the Matter of the Petition of Melvin M. Aman,
et al. for exemptions from sec. 121.383 (c) of
Federal Aviation Regulations

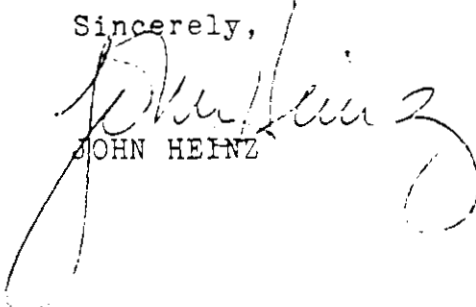
Gentlemen:

I am writing in support of the recommendation made by the "Age 60 Exemption Panel" for the petition submitted on behalf of Mr. Melvin M. Aman et al. This panel includes such eminent physicians as Dr. Earl Carter of the Mayo Clinic, Dr. Robert Bruce of the Seattle Heart Watch, Dr. Sam Fox of Georgetown University, Dr. Stanley Mohler of Wright State University, Dr. Robert Elliot, neuropsychologist and Dr. Owen Coons, federally authorized Aviation Medical Examiner.

This panel developed an extensive examination protocol which is much more comprehensive than the examination the Federal Aviation Administration (FAA) requires of other pilots including airline pilots under age 60. Each of the thirty-nine pilots submitted to this examination and their test results were evaluated by this panel of experts.

In view of this, I urge you to grant exemptions to these pilots and to future pilots who submit to and pass this examination protocol.

Sincerely,


JOHN HEINZ

PETITIONER'S
EXHIBIT

109



1. AOPA, Inc., 1000 Airport Blvd., Frederick, MD 21701. Telephone: (301) 696-2000. Telex: 570141.

August 13, 1986

Federal Aviation Administration
Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
800 Independence Avenue, SW
Washington, DC 20591

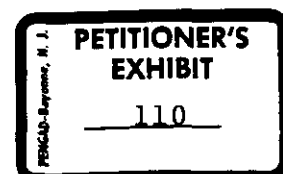
RE: Docket No. 25008-Petition for exemptions from
FAR Part 121.383; "the Age 60 Rule."

Gentlemen:

AOPA supports the petitioner's request for exemption from FAR Part 121.383 based on the proposed protocol developed by aviation medical experts. AOPA represents 260,000 aircraft owners and pilots, with 45,000 of those members age 60 or over.

AOPA, along with numerous other aviation interests, has opposed the "Age 60 Rule" since its inception in 1959. Scarcely a year has gone by without the industry's demonstrating that sufficient testing could be accomplished to ensure existing safety levels with over age 60 pilots. Each time the FAA has been confronted with the evidence and procedures to overturn the arbitrary age rule, it has generated a new set of objections to abolishing the discriminatory rule and essentially "moved the goalpost downfield a few more yards," based on conjecture or hypothesis.

We have consistently maintained that the age 60 rule is arbitrary and grossly discriminatory. In fact, it is virtually the sole remaining age-related employment discrimination that is permitted in the United States. As such, we believe it is the final vestige of an earlier era when standards were set based on intuition without substantial documentation or evidence as a foundation. Clearly, it is now feasible to finally recognize the "individuality of health and performance" as well as to permit continued exercise of Part 121 pilot privileges based on individual testing and continued competence under a set of objective standards. The petitioner has offered a protocol of objective standards which, coupled with current Part 121 training requirements, will assure existing levels of air safety regardless of pilot age.



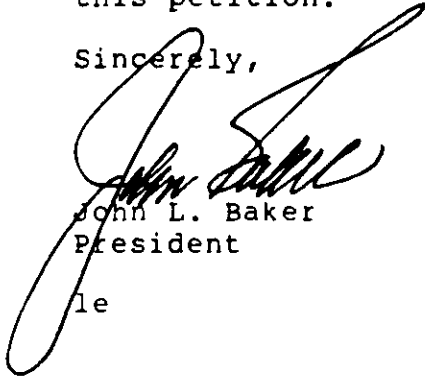
Federal Aviation Administration
August 13, 1986
Page Two

Numerous scientific studies have shown there is no medical or performance data to justify a general rule based on age alone. This petition for exemption is accompanied by a medical examination protocol which can establish an individual airline pilot's qualifications to continue flying. An experienced pilot who remains medically qualified and meets recurrent training requirements should be allowed to continue flying until becoming incapable of meeting a set of objective, reasonable, and measurable standards.

The FAA, by assigning a token twenty-day comment period on this petition, has once again given the public and the aviation industry an indication of closed-mindedness on an issue which has a high level of interest. It is well known and commonly accepted that a 90-day comment period is the minimum required to allow all interested parties an opportunity to comment on significant rulemaking actions.

Therefore, we request that the FAA immediately reopen this docket for 90 days to permit public notification and comment on this petition.

Sincerely,



John L. Baker
President

le



EXPERIMENTAL AIRCRAFT ASSOCIATION

WITTMAN AIRFIELD, OSHKOSH, WI 54903-3086
PHONE: 414/426-4800

August 11, 1986

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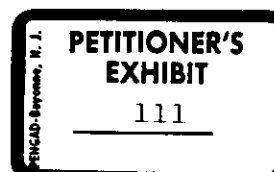
Federal Aviation Administration
Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
800 Independence Avenue, S.W.
Washington, D.C. 20591

RE: In the Matter of the Petition of Melvin M. Aman et al., for Exemption
from the Age 60 Rule, Public Docket No. 25008

Dear Sir:

On behalf of the Experimental Aircraft Association (EAA), I would like to take this opportunity to offer our support of the petition of Melvin M. Aman et al., for exemption from the Age 60 Rule, Public Docket No. 25008. EAA is an organization of over 107,000 members. Our membership is made up of pilots and aviation enthusiasts from all walks of life who have a sincere interest in promoting aviation and aviation safety. Our pilot members represent all phases of aviation including the military, airline, corporate aviation and sport and recreational aviation. Each year, EAA and its sister organization, the non-profit EAA Aviation Foundation, sponsor the world's largest and most significant aviation event...the annual EAA International Fly-In Convention and Sport Aviation Exhibition. Based upon the role we play in the aviation community, EAA is obviously very interested in Public Docket No. 25008 and fully supports the petition of Captain Aman and the other 38 senior airline pilots who seek to be evaluated based on their merit rather than their age.

Forcing an airline pilot to retire as he reaches his peak earning years is unjustified if the retirement is based solely on an arbitrarily selected age. In fact, the National Institute of Health reported, during the House Select Committee on Aging Hearing under the chairmanship of Representative Edward R. Roybal (D of California), that there is no basis for grounding a pilot just because of his age. The NIH report also stated that FAA can avail itself of new medical tests for judging the health of pilots. One of the key witnesses at the hearing was EAA member Brigadier General Charles "Chuck" Yeager who is 62 and who told the committee that "if a person passes the medical test, there is no reason why he or she cannot fly."



Federal Aviation Administration
August 13, 1986
Page Two

EAA has carefully reviewed and considered the petition of Melvin M. Aman et al., and believes that the petition is in the best interests of all airline pilots and general aviation pilots. We were particularly impressed with the panel of nationally recognized medical/neuropsychologic experts, who have evaluated the "Age 60 Exemption Protocol" for use in evaluating airline pilots over sixty years of age.


The protocol under which the petitioners were examined was developed by Stanley R. Mohler, M.D., Samuel M. Fox, M.D., Robert A. Bruce, M.D., Earl T. Carter, M.D., D. Owen Coons, M.D., and Robert W. Elliot, Ph.D.

According to the Age 60 Exemption panel, "From a medical/psychologic/-operational standpoint, the medical community has the capability of evaluating pilots over sixty years of age on an individual basis. New information, techniques, lifestyle changes, and understanding of the aging process as separate and distinct from disease indicate that there are many airline pilots who are well qualified to continue in their productive careers beyond the arbitrary age of sixty." We at EAA heartily agree.

In the light of modern medical science, many experts view the Age 60 Rule as an archaic remnant of the past. Unfortunately, some courts have even extended the Age 60 Rule beyond airline pilots to pilots in general aviation as well, concluding that since FAA has, "found an age (60) limitation was necessary for safety," other corporations, organizations and air transport operations are entitled or even under a duty to apply an equivalent rule to pilots not technically affected by the Age 60 Rule. This represents a real threat to the careers and aviation activities of all pilots in both commercial and general aviation.

EAA sincerely hopes that the Federal Aviation Administration and the Department of Transportation will carefully consider the matter of the petition of Melvin M. Aman et al., for exemption from the Age 60 Rule. EAA firmly believes that pilots should be evaluated based upon their ability rather than age. The current Age 60 Rule, which may be applied in an arbitrary and inflexible manner, does not acknowledge or recognize the remarkable advancements made by medical science in the past two decades. The petition of Captain Melvin M. Aman and 38 other senior airline pilots provides FAA with the opportunity to be responsive to the needs of individual pilots and to take advantage of recent medical advancements while promoting and maintaining aviation safety.

Sincerely,
EXPERIMENTAL AIRCRAFT ASSOCIATION


Paul H. Poberezny
President

rjm

TowerAir^{inc.}

Hanger 8
JFK International Airport
Jamaica, New York 11430

August 13, 1986

Federal Aviation Administration
Department of Transportation
Dockets Section AGC-204
800 Independence Avenue SW
Washington, D.C. 20591

Reference: Petition of Melvin M. Aman, et al, for exemption from the Age 60 Rule, Docket No. 25008; statement of Captain T.C. Ritchie, Chief Pilot, Tower Air Inc., in support of referenced petition.


Tower Air, Inc. is a U.S. Scheduled Flag Air Carrier, operating three Boeing 747's on its scheduled route from New York to Brussels and Tel Aviv, plus tourist and military charters world wide. We have been in operation since Nov. 1, 1983.

I was among the first pilots hired; have been Chief Pilot since February 1985. I reached age 60 October 31, 1985, and since that time have been flying ferry and training flights, including three engine ferry flights, for the company, and also on revenue flights as a flight engineer. I also administer line and proficiency checks with FAA approval.

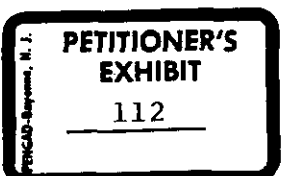
Two other experienced captains, employed at about the same time as I was, reached age 60 in April 1985 and so we have lost their valued service. Another will reach age 60 in February.

As a new airline, the age 60 rule hits doubly hard: No retirement program has been established, and the airline loses the services of extremely capable captains just as they and the company are hitting the stride in our new operation. Yet, with so much at stake there was no thought of employing younger men as captains. Their experience and maturity were, and are, vital to our success. We have, of course, upgraded younger men to captain based on their qualifications and experience with our company. Nevertheless, we would welcome those over 60 who have been forced to leave back to our cockpits should they qualify in any exemption process.

Sincerely yours,



Thomas C. Ritchie
Chief Pilot



UCLA

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO

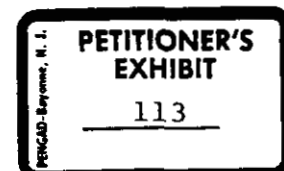


SANTA BARBARA • SANTA CRUZ

NEUROPSYCHIATRIC INSTITUTE AND HOSPITAL
CENTER FOR THE HEALTH SCIENCES
760 WESTWOOD PLAZA
LOS ANGELES, CALIFORNIA 90024

000000

cc: Alan M. Serwer, Esq.
Haley, Bader & Potts
Suite 1600
11 South LaSalle St.
Chicago, Illinois 60603



**FEDERAL
EXPRESS**

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Julie H. Ellis
Senior Attorney
Managing Director
Regulatory Affairs

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Federal Express Corporation
2990 Airways Boulevard
Memphis, Tennessee 38116
901 922-4622

Mail:

Box 727
Memphis, Tennessee 38194-1842

August 13, 1986

Federal Aviation Administration
Department of Transportation
Dockets Section AGC - 204
800 Independence Avenue, SW
Washington, D.C. 20591

RE: In the Matter of the Petition of Melvin
M. Aman, et.al., for Exemption from the
Age 60 Rule

Dear Sirs:

Federal Express has consistently supported the Federal Aviation Administration's (FAA's) application of modern medical science to its rulings which have permitted airmen to continue flying with various medical problems. Our company endorses the development of an Age Sixty Exemption Protocol, such as the type suggested in the referenced Petition. Such protocol would provide supportive medical evidence on which the FAA could base a decision on any individual exemption filed. We are of the opinion that the FAA must actively pursue advancements available in medical diagnosis and treatment areas, just as it has in the use of simulators in the training, checking, and certification of flight deck crew members.

Federal Express urges the FAA to devote its significant level of expertise to reviewing the medical protocol

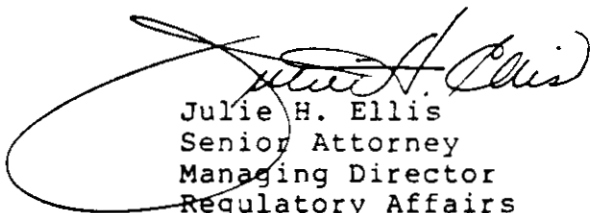


Federal Aviation Administration
August 13, 1986
Page Two

suggested in the subject Petition and appropriately report its findings as to whether from a medical/psychological/operational standpoint the medical community has the capability of evaluating pilots over sixty years of age on an individual basis. We support the efforts of our pilots, Captain Chadick and Captain Deming, as they seek to have the FAA develop an Age Sixty Exemption Protocol.

Sincerely,

FEDERAL EXPRESS CORPORATION



Julie H. Ellis
Senior Attorney
Managing Director
Regulatory Affairs

JHE/js
2897

cc: Captain John W. Chadick
Captain Charles H. Deming
Raymond C. Fay, Esquire
Frederick W. Smith
James L. Barksdale
Byron H. Hogue
Frank R. Fato
A. Doyle Cloud, Jr.
Elizabeth A. McKanna

Edward W. Saucier
17647 Mayer
Cerritos CA. 90701
Aviation Cert. No.
1036184

Aug 14, 1986

F.A.A.

Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
800 Independence Ave. S.W.
Wash. D.C. 20591

RE: In the matter of Petition of Melvin
M. Aman et al, for exemption from
the age 60 rule, Public Docket No. 25008

Sir:

On Sept. 30, 1986 I turn 60.

On Sept 28, 1986 I will participate in a 100
mile bicycle race

In Feb. I will run in my 29th marathon.

I run 6 plus miles daily

I ride approx 700 miles per week (bicycle)

I find it hard to believe that, in 6 weeks

I turn to ash, become an unsafe pilot
and will be medically unfit to fly.

Ed Saucier

I have been flying for 43 years. 25 years with
Rockwell International. - In six weeks I get
grounded because of the age 60 rule.



ROBERT K. DORNAN
38TH DISTRICT, CALIFORNIA

FOREIGN AFFAIRS

SUBCOMMITTEES
ARMS CONTROL
INTERNATIONAL SECURITY
AND SCIENCE

AFRICA

EUROPE, SOVIET UNION
AND THE MIDDLE EAST

HOUSE TASK FORCE ON
MISSING IN ACTION

PERMANENT OBSERVER TO
GENEVA ARMS TALKS



Congress of the United States
House of Representatives

August 13, 1986

WASHINGTON, DC OFFICE
301 CANNON HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
(202) 225-2985

DISTRICT OFFICE
12387 LEWIS STREET, #203
GARDEN GROVE, CA 92640
(714) 971-9292

HISPANIC CAUCUS

TRADE AND TOURISM CAUCUS

TASK FORCE ON ECONOMIC POLICY

TASK FORCE ON CRIME AND NARCOTICS

Federal Aviation Administration
Department of Transportation
Dockets Section AGC-204
800 Independence Ave. SW
Washington, DC 20591

Re: 2500B

Gentlemen:

I am writing this letter in support of the petition submitted on behalf of Mr. Melvin Amam et. al for exemptions from the Federal Aviation Administration Age 60 Rule, 14 CFR 121.383(c).

In view of recent and substantial advances made by medical science, it is clear that the ability to adequately test individuals is available to determine which persons can perform piloting duties after age 60. The "Age 60 Exemption Panel" has made a significant contribution in this respect.

Because of the excellent results achieved by these pilots during their examination under the protocol developed by this impressive panel of doctors, a positive decision on this petition would provide a level of safety equal to or greater than that provided by present Age 60 Rule.

Best regards,


Robert K. Dornan
U.S. Congressman

PETITIONER'S
EXHIBIT

116

The
University
of Akron

Institute for (216) 375-7243
Life-Span Development and Gerontology
Akron OH 44325

August 13, 1986

Federal Aviation Administration
Department of Transportation
Dockets Section AGC-204
800 Independence Avenue, S.W.
Washington, D.C. 20591

RE: Petition of Melvin M. Aman, et.al.
Exemption from the Age 60 Rule
Public Docket No. 25008

Dear Sirs:

The above petition for exemption from 121.383 represents a significant opportunity for the FAA to extent its current waiver procedures which it has been successfully using with individuals with serious disorders and diseases to healthy individuals over the age of 60.


As a member of the 1981 National Academy of Sciences, Institute of Medicine Airline Pilot Age, Health and Performance panel, I wish to emphasize that a major outcome of the study was that age 60 does not mark the beginning of a special risk or increase in risk.

"In its assessment of relevant biomedical and behavioral research, the committee found that variability within an age group is often nearly as great as variability among age groups and that usually no single age emerges as as a point of sharp decline in function."(p. 144)

The approach offered with this exemption is an important step in individualized assessment irrespective of age. In my opinion it is essential to use such screening procedures that would allow waivering individual pilots age 60 and over who have acceptable levels of health and performance.

The time has come for the FAA to begin to take advantage of current scientific knowledge and to initiate equitable approaches to capable commercial airline pilots who happen to be over the age of 60.

Yours truly,



Harvey L. Sterns, Ph.D.
Associate Professor of Psychology
Director, Institute for Life-Span
Development and Gerontology
THE UNIVERSITY OF AKRON
Research Associate Professor of
Gerontology
NORTHEASTERN OHIO UNIVERSITIES
COLLEGE OF MEDICINE



112

FEDERAL AVIATION ADMINISTRATION
U.S. DEPARTMENT OF TRANSPORTATION

In the matter of the petition of)	Comments of
Melvin M. Aman, <u>et al.</u> ,)	THE AMERICAN ASSOCIATION
for exemptions from Sec. 121.383(c))	OF RETIRED PERSONS
of the Federal Aviation Regulations)	August 1986

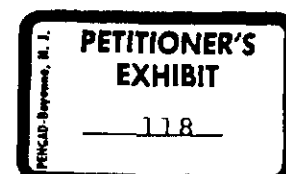
DOCKET #25008

I. STATEMENT OF INTEREST

AARP, with a membership of more than 23 million persons over the age of 50, is the largest membership organization in the United States. AARP is devoted to enhancing the quality of life for older persons by promoting the vitality, independence and dignity of such Americans. The American Association of Retired Persons (the "Association" or "AARP") strongly supports the petition of Melvin M. Aman, et al., requesting exemptions from the rule requiring commercial airline pilots to retire at age 60 ("the age 60 rule") 14 C.F.R. Sec. 121.383(c). The Association urges the Federal Aviation Administration ("FAA") to grant the petition of these pilots to continue flying, because they have demonstrated their superior physical and mental fitness and their competency to fly safely.

The Association further urges the FAA to rescind the age 60 rule in its entirety. Instead, the FAA should determine on an individual basis the fitness and competency of all pilots, including those over the age of 60, to safely fly commercial aircraft.

Age discrimination in the workplace is a particular concern of



the Association. Older Americans, like all Americans, must not be arbitrarily denied the opportunity to remain productive members of society. Thus, AARP has taken an active interest in the employment problems faced by older Americans. For example, AARP's Worker Equity Initiative counsels and assists AARP members with employment problems relating to age discrimination. The Association has filed numerous lawsuits (as a named party, an intervener, as amicus curiae, and on behalf of individual members) against employers and federal agencies who are violating the Age Discrimination in Employment Act ("ADEA") or failing to enforce it, respectively. For example, AARP filed an amicus brief on behalf of the respondent in Western Air Lines v. Criswell, 105 S.Ct. 2749 (1985), in which the U.S. Supreme Court affirmed the right of commercial flight engineers to continue working past age 60. Finally, AARP advocates legislation to expand the scope and increase the effectiveness of the ADEA. In October 1985, United Airlines Second Officer Leroy Shaver, a commercial pilot with 40 years experience, testified before Congress on AARP's behalf on the issue of the FAA's age 60 rule for pilots.

In this case, age discrimination with regard to the employment of commercial airline pilots is robbing the nation of valuable and experienced persons who have consistently performed a job of importance with great ability and competence.

II. COMMENTS

In addition to the comments provided herein, AARP adopts the arguments made in and evidence supporting the Petition of Aman, et al., for exemptions from the age 60 rule, filed May 1986.

A. Introduction

Prior to 1959, there was no age limitation on service as a commercial airline pilot. On December 5, 1959, the FAA promulgated the age 60 rule. At the time, the FAA reasoned that medical testing could not accurately predict physical changes in older pilots. Instead, the FAA assumed that "undetectable" physiological changes caused older pilots as a group to be more susceptible to sudden incapacitating events such as heart attacks or strokes. The FAA's rationale for the age 60 rule has remained unchanged for 26 years, notwithstanding advances in medical science that undermine the validity of the FAA's rationale.

The unreasonableness of the age 60 rule, and the fallacies of the assumptions upon which it rests, are highlighted by the fact that the rule does not withstand scrutiny under the test established by the Supreme Court for determining whether age is a "bona fide occupational qualification" for a job. See Western Air Lines v. Criswell, 105 S.Ct. 2749 (1985). The age 60 rule cannot be justified as being reasonably necessary for safety and thus does not qualify as an exception to the Age Discrimination in Employment Act.

B. "Bona Fide Occupational Qualification" as a standard for determining the validity of the age 60 rule.

The FAA has made a blanket determination that under the ADEA, "age is a bona fide occupational qualification (BFOQ) reasonably necessary to the normal operation of the particular business" of safe airline transportation. 29 U.S.C. sec. 623(f)(1). The basis for this determination is the FAA's assumption that older pilots are, as a

group, not healthy enough to fly safely. A closer look at the FAA's rationale - and record - for this rule reveals that this "BFOQ" meets none of the standards established by the U.S. Supreme Court under the ADEA. Regardless of whether the FAA is obligated as a matter of law to satisfy the Court's BFOQ test^{<1>}, the FAA should as a matter of policy look to those standards to determine whether the age 60 rule is valid.

In Johnson v. Mayor and City of Baltimore, 105 S.Ct. 2717 (1985), the Supreme Court held that chronological age alone may not be used as a criterion for precluding persons from employment in "dangerous" jobs or "safety" occupations, such as firefighting. Thus, the FAA cannot rely upon its blanket assumption that a pilot's age has a direct bearing upon safety and that older pilots are therefore inherently unsafe. The Supreme Court, rejecting application of the age 60 rule to flight engineers in Western Air Lines, Inc. v. Criswell, 105 S.Ct. 2749, 2756 (1985), further held that in order to satisfy the BFOQ exception and require mandatory retirement before age 70:

1. The employer must factually demonstrate that all or practically all employees over the age in question would be unable to perform safely and efficiently the duties of the job; or
2. The employer must prove that it is impossible or highly impractical for the employer to determine the fitness of older employees on an individualized basis.

<1> This issue is not addressed in these comments, but see Petition of Aman, et al., at pp. 67-73.

See also Usery v. Tamiami Trail Tours, Inc., 531 F.2d 224, 235-36 (5th Cir. 1976).

The FAA's rationale for the age 60 rule fails both prongs of the Court's BFOQ test. First, the FAA has failed to create a record that demonstrates the inability of persons older than 60 to be competent and safe pilots (See Petition of Aman, et al., at pp. 17-37) and has failed to refute the substantial body of evidence indicating that age is not a valid indicator of competency or fitness. See Petition of Aman et al., at pp. 42-66. At most, the FAA has created a record that supports only the conclusion that any person who cannot satisfy certain fitness standards should not be a pilot, regardless of age. The agency refuses to acknowledge that medical science no longer supports the outdated assumption that persons older than age 60 have a higher probability of suffering an incapacitating event than younger persons. Indeed, younger pilots who have been reinstated after suffering an incapacitating illness, e.g., heart disease or drug dependency, may have a higher probability of having a sudden incapacitating event in the future than do older pilots who have never been so incapacitated.

Second, FAA responsiveness to medical advances in other areas, and the evidence supplied by Petitioners (See Petition of Aman, et al. at pp. 28-37), demonstrate that it is neither impossible nor impractical to determine pilot fitness on an individual basis after age 60. The FAA already alters the nature, sophistication and

frequency of medical examinations for each pilot based upon his or her age. Current medical evidence makes clear that the agency is simply erroneous in its assumption that the same cannot be done for pilots older than age 60.

Revising medical requirements and tests in response to scientific advances is not unprecedented by the FAA. Indeed, in areas other than the age 60 rule, the FAA's response to medical advances has been quite dynamic. For example, through the use of increasingly sophisticated medical testing techniques and more frequent monitoring, Federal Air Surgeons now certify a large number of pilots who have been treated for conditions that previously would have grounded them regardless of treatment, e.g. heart disease, stroke, drug dependence, etc. However, the FAA refuses to recognize equally compelling medical evidence that it is possible to test pilots at all ages, including those over 60, for fitness and competency (See Petition of Aman, at pp. 42-67).

III. CONCLUSION

Although aging is a universal process, it is also a uniquely individual phenomenon. See Report of the Secretary of Labor, The Older American Worker: Age Discrimination in Employment 9 (1965), quoted in Western Airlines at text accompanying note 11. The physiological changes accompanying aging affect different individuals in different ways and at varying times in their lives. Greater understanding of the aging process has increasingly allowed physicians to assess health at every age. By requiring appropriate examinations, the FAA can ensure that older pilots are as fit as their younger colleagues . . . or more fit. Advancing medical technology has highlighted the invalidity of the age 60 rule. The rule stands only

as evidence of arbitrary and unfounded age discrimination. It should be rescinded.

RESPECTFULLY SUBMITTED,

AMERICAN ASSOCIATION OF RETIRED PERSONS

1909 K Street, N.W.

Washington, DC 20049

(202) 728-4730

by: Michele Pollak

Sana F. Shtasel, Esq., Director

Michele Pollak, Esq.

Federal Affairs



The
University of Oklahoma

Oklahoma City Campus-Health Sciences Center

DEPARTMENT OF MEDICINE
College of Medicine
Cardiovascular Section

August 15, 1986

Federal Aviation Administration
Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
800 Independence Avenue, S.W.
Washington, D.C. 20591

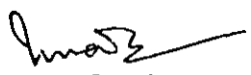
RE: In the Matter of the Petition of Melvin M. Aman et al, for
Exemption from the Age 60 Rule, Public Docket No. 25008

Dear Sirs:

I am writing this letter in support of Melvin M. Aman et al from exemption from the Age 60 Rule. I feel that present technology permits one to evaluate patients aged 60 and above to define whether they have underlying coronary artery disease or not. Therefore, I would seriously recommend that arbitrary age-base regulations are inappropriate to the question of who should pilot a commercial aircraft. Many physiological tests are available to critically evaluate the performance of pilots and these should be utilized in improving the pilot performance.

I sincerely hope that the Federal Aviation Administration will reconsider it's stand on this point.

Sincerely,


Udho Thadani, MBBS, MRCP, FRCP(C), FACC
Professor of Medicine
Director of Clinical Cardiology
Vice Chief, Cardiology Section

UT/bl



21
OCTOBER 1, 1986

DEAR SIR,

I AM WRITING TO COMMENT IN THE MATTER OF
THE PETITION OF MELVIN M. ADAN ET AL, FOR
THE EXEMPTION FROM THE AGE 60 RULE, PUBLIC DOCKET
NO. 25008.

I FEEL THE AGE 60 RULE SHOULD BE CHANGED
TO SOME HIGHER AGE. THE CURRENT RULE MAY
HAVE SERVED WELL IN THE PAST BUT TODAY IS
OBSOLETE. WITH THE ADVANCES MADE BY CHECKING
PROFICIENCY, CHECKING MEDICAL CONDITION AND
WITH THE BACKUP CREWMEMBER(S) IN THE COCKPIT
I CAN'T SEE ANY COMPROMISE WITH SAFETY.

I ALSO BELIEVE THAT THE PILOT HIMSELF
KNOWS WHEN IT IS TIME TO RETIRE AND THERE
ARE SOME TODAY THAT DO THAT BEFORE AGE 60.

THANK YOU FOR RECORDING MY OPINION. FOR THE
RECORD I AM AN AIRLINE PILOT.

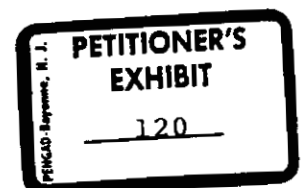
SINCERELY,

J. E. Kelsey

J. E. KELSEY

2815 N. WOODED LN.

MCHENRY, ILLINOIS 60050





**STECK
AVIATION, INC.**

5 October 1986
Ref: 86-89

Federal Aviation Administration
Office of the Chief Council
Attn: Rules Docket (AGC-205)
800 Independence Avenue, S.W.
Washington, D.C. 20591

110 p. 1.
Re: On the matter of the
Petition of Melvin M.
Aman, et al., for
Exemption from the Age
60 Rule, Public Docket
No. 25008.

Gentlemen:

I hereby submit comments in the referenced matter, and emphasize my support
for the Exemption.

Steck Aviation was founded in 1973, upon my retirement from active Naval
Service as Naval Aviator. As a general aviation FBO our activities include
flight training and air taxi operations.

We have employed pilots of a wide range of ages, and have found the most
reliable professional pilots are the more senior. Specifically, three
senior pilots are in my employ. One has been with me since 1976 and is
now 66 years of age. A second is a retired corporate pilot who joined
us in 1984 and is now 63 years of age. The third is a retired United Air-
lines Captain, age 65, who earned his CFI less than a year ago and instructs
for us regularly. Age has not been a detractor in these cases.

I recognize the potential for health problems with advancing age, but the
true professional is one who cares for himself through exercise and avoid-
ing exposure to alcohol, smoking and drugs.

The continued use of qualified 60+ pilots should be carefully considered.
Perhaps more stringent medical testing is indicated, or the requirements
of a captain qualified co-pilot under certain conditions would be war-
ranted.

To me, old (even though not always bold) pilots have served me well, and I
will continue to use them in my operation. I hope the FAA sees fit to
modify its regulations to allow the same in this matter.

Sincerely,

T.C. Steckbauer

T.C. STECKBAUER

President

PETITIONER'S
EXHIBIT

121

PERKINS-Bayonne, N. J.



EXPERIMENTAL AIRCRAFT ASSOCIATION

WITTMAN AIRFIELD, OSHKOSH, WI 54903-3086
PHONE 414/426-4800

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1086795000
11151170000

September 26, 1986

Admiral Donald D. Engen, Administrator
Federal Aviation Administration
800 Independence Avenue, S. W.
Washington, DC 20591

Dear Don:

Thanks very much for your letter of September 18th. I appreciate being brought up-to-date on the status of the primary category aircraft, recreational pilot certification and ultralight certification, registration, and markings, etc. I'll now be in a position to answer the many queries, from both members and non-members of our organization, concerning to these subjects.

Relative to the Age 60 rule, I note your comments. I'm sure you're aware that our organization is not in favor of the Age 60 rule, and we have been asked, from time to time over the past thirteen years by many of our members who are airline pilots, for assistance in getting relief from this rule. We've also given help to other pilots whose companies have adopted the Age 60 rule, as well as some test pilots. Before your term as Administrator, and even before Lynn Helms', I had heard the comment at FAA Headquarters that possibly all who hold commercial certificates should also be covered by this Age 60 rule. It's no wonder that we out in the field at times wonder about the trust that we can put in FAA and various employees' remarks. These remarks that are made over periods of years, and with the change of Administrators, still are in the minds of people and are carried on from one Administrator to another.

Many ask the question (as an airline pilot), when one gets to the top of his earning potential in his occupation, why, then, should he lose this opportunity that, in their minds and many others, has no justification. I can remember in one of my editorials some ten years ago, when I wrote about the subject, hearing from a number of our EAA members who were airline pilots and in the age bracket of the 40s or 45s at that time, who were not supportive of any change (naturally, wanting to move up and into the left seat sooner). Now, some of these same people who are 55-58 years old, have changed their tune.

PETITIONER'S
EXHIBIT

122

2-5

Donald D. Engen
September 26, 1986
Page 2

It's quite challenging at this office, and I certainly recognize your challenges. However, EAA covers a vast area of aviation, and with the many interests of its members, makes it even more challenging. My very best to you.

Sincerely,

EXPERIMENTAL AIRCRAFT ASSOCIATION

Paul H. Poberezny
President

iw



421 Aviation Way, Frederick Municipal Airport, Frederick, MD 21701, Telephone (301) 695-2000 Telex 89-1115

October 28, 1986

Federal Aviation Administration
Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
800 Independence Avenue, S.W.
Washington, D.C. 20591

RE: Docket No. 25008-Petition for Exemptions from
FAR Part 121.383; "the Age 60 Rule."

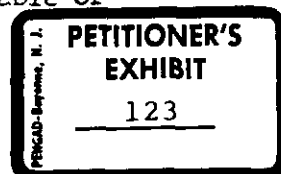
Gentlemen:

The Aircraft Owners and Pilots Association (AOPA) supports the petitioner's request for exemption from FAR Part 121.383 based on the proposed protocol developed by aviation medical experts. AOPA represents 260,000 aircraft owners and pilots, with 45,000 of those members age 60 or over.

AOPA, along with numerous other aviation interests, has opposed the "Age 60 Rule" since its inception in 1959. Scarcely a year has gone by without the industry's demonstrating that sufficient testing could be accomplished to ensure existing safety levels with over-age-60 pilots. Each time the FAA has been confronted with the evidence and procedures to overturn the arbitrary age rule, it has generated a new set of objections to abolishing the discriminatory rule and essentially "moved the goal post downfield a few more yards," based on conjecture or hypothesis.

We have consistently maintained that the "Age 60 Rule" is arbitrary and grossly discriminatory. In fact, it is virtually the sole remaining age-related employment discrimination that is permitted in the United States. As such, we believe it is based on intuition without substantial documentation or evidence as a foundation. Clearly, it is now feasible to finally recognize the "individuality of health and performance" as well as to permit continued exercise of Part 121 pilot privileges based on individual testing and continued competence under a set of objective standards. The petitioner has offered a protocol of objective standards which, coupled with current Part 121 training requirements, will assure existing levels of air safety regardless of pilot age.

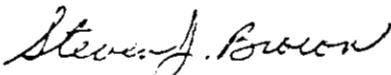
Numerous scientific studies have shown there is not medical or performance data to justify a general rule based on age alone. This petition for exemption is accompanied by a medical examination protocol which can establish an individual airline pilot's qualifications to continue flying. An experienced pilot who remains medically qualified and meets recurrent training requirements should be allowed to continue flying until becoming incapable of meeting a set of objective, reasonable, and measurable standards.



After AOPA's request for a 90-day extension of the comment period, FAA reopened the docket to permit additional public comments. Unfortunately, the inadequate 30-day extension to the original 20-day comment period once again demonstrates that allowing reasonable time for public notification and response is not the FAA's goal on this issue. It is a commonly accepted fact that 90 days is the minimum time required for public notification through industry periodicals and subsequent individual response to a rulemaking docket.

We have notified our 260,000 members of the comment extension in our latest publications. Many of those comments will arrive at FAA after the end of the 30-day comment extension. We believe the FAA should consider all comments received.

Sincerely,



Steven J. Brown
Vice President
Office of Aviation Policy

kb

1440 N Street, NW
Suite 911W
Washington, DC 20005

October 28, 1986

Federal Aviation Administration
Office of the Chief Counsel
Attention: Rules Docket (AGC-204)
800 Independence Avenue, SW
Washington, DC 20591

RE: Docket 25008 - Petition of Melvin M. Aman, et al, for exemptions from 14 CFR 121.383(c), the Age 60 Rule.

Gentlemen:

This letter is intended as support for the petition of Melvin M. Aman, et al. Docket 25008, for exemptions from 14 CFR 121.383(c), the Federal Aviation Administration (FAA) Age 60 Rule. The following information is submitted for consideration:

- o The prohibition of a person over age 59 from serving as a pilot in Part 121 of the Federal Air Regulations was initially promulgated in 1959.

- o In 1959, the FAA revised Part 67 (the medical standards for airmen) of the regulations. These revisions included nine "absolutely disqualifying" conditions which permanently grounded airmen afflicted by these conditions.

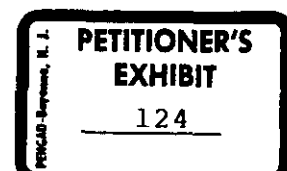
- o These disqualifying conditions included, alcoholism, drug dependence, psychoses, myocardial infarction, diabetes, loss of consciousness with out explanation, personality disorders, etc.

- o Since 1959, medical science has made remarkable progress in the detection of debilitating diseases and in monitoring persons in whom such conditions have been detected.

- o Some of these procedures have been developed within the past decade and many in the past five years. Such procedures are readily available and easily administered in most hospitals, clinics and even in a doctors office throughout the United States.

- o Using newly developed technology, the FAA has been able to recertify hundreds of pilots who have suffered disqualifying conditions, including all of the nine "absolutely disqualifying" conditions.

- o From January 1961 through December 1980, the FAA granted 463 exemptions from the medical rules to pilots of all ages; 74 were for myocardial infarctions, 12 for coronary artery by-pass surgery, 335 for alcoholism and 42 for miscellaneous medical conditions.



Page Two
Comments on Docket 25008
October 28, 1986

- o From January 1982 through July 1985, 414 exemptions from the medical rules were granted; 20 were for myocardial infarction, 50 for coronary artery by-pass surgery, 18 for neurological conditions, 14 for psychiatric conditions, 17 for other cardiovascular conditions, 293 for alcoholism and 2 for miscellaneous medical conditions.

- o From August 1985 through March 1986, 199 more exemptions were granted from the medical rules. 38 were for myocardial infarctions, 55 for coronary artery by-pass surgery, 77 for alcoholism, 19 for other cardiovascular conditions and 10 for miscellaneous medical conditions.

- o The relapse rate or failure rate among those persons granted such exemptions is, on average, 20%.

- o In 1975, at the request of the FAA, the Eighth Bethesda Conference was called to review the FAA's medical standards for airmen. The conference recommended certain changes in those standards.

- o In 1978, at the request of the FAA, the American Medical Association (AMA) selected a panel of experts to review the FAA's medical standards for airmen. The panel recommended certain changes in those standards.

- o In 1979, the United States Congress mandated a study by the National Institutes of Health of mandatory retirement for commercial airline pilots and a review of the medical standards for those airmen. The study was assigned to the National Institute on Aging (NIA), and the initial research was conducted by the National Academy of Sciences, Institutes of Medicine (NAS,IOM). As a result of that study, both the NIA and the NAS,IOM made certain and specific recommendations for up-dating the FAA's medical standards for airmen.

- o In 1983-84, at the request of the FAA, the AMA convened another panel of experts to review the FAA's medical standards for airmen. This AMA panel made certain recommendations for modernization of the FAA's medical standards.

- o In spite of these studies and the recommendations for up-dating its medical standards for airmen, the FAA has failed to update its system for monitoring asymptomatic pilots by utilizing newly developed technology.

- o In its report to Congress in 1981, the NIA stated that there was no medical or scientific evidence to support age 60 or any other specific age for the retirement of airline pilots.

Page Three
Comments on Docket 25008
October 28, 1986

- o In that same report, the NIA suggested that the Age 60 Rule be retained, but made a recommendation for a method for relaxing the rule. The FAA continually states that the panel suggested the rule be retained, but it has failed to act on the suggestion to relax the rule.

- o During a hearing held by the House of Representatives Select Committee on Aging on October 17, 1986, Mr. Matthew Rinaldo, the ranking minority member of the Committee, suggested that Dr. T. Franklin Williams, Director of the National Institute on Aging, and two of his colleagues develop a series of tests to determine which persons could continue performing piloting duties after reaching age 60 without jeopardizing safety.

- o That examination protocol was developed and submitted to the Committee and the FAA in December 1985.

- o During this same period, a similar examination protocol was developed by Dr. Earl Carter of the Mayo Clinic (long an opponent of granting exemptions from the Age 60 Rule) and six of his colleagues. Mr. Aman and thirty-eight other petitioners took this examination. The test results of each petitioner were reviewed by this panel of doctors, and the panel unanimously recommended that the thirty-nine pilots be granted exemptions from the rule.

- o These pilots then filed a petition for exemptions from the rule, Docket 25008.

- o As a matter of record, this petition has the support of an impressive list of experts known throughout the world for their expertise in their particular fields. The credentials of these experts cannot be denied and their support for the petitioners is unequivocal.

- o These experts include many of those who served on the various panels and/or as members of the study groups mentioned above. Many were members of the NIA and/or the NAS, IOM panels that conducted the Congressionally mandated study in 1980-81.

- o Many of these experts have testified either in court or before the United States Congress. They have stated that recent developments in evaluating individuals and in monitoring those individuals in whom debilitating diseases are detected make it possible to reliably identify those persons over age 60 who could be permitted to fly after that age. The FAA has accepted these new techniques in its program of granting exemptions from the medical rules to pilots of all ages, but it steadfastly refuses to accept that this technology makes it possible to assess healthy individuals.

Page Four
Comments on Docket 25008
October 28, 1986

o Experts chosen by those opposed to modification of the Age 60 Rule have testified during court actions. In 1985, in two cases involving a similar question of health and ability in persons over age 60, the United States Supreme Court unanimously ruled that there was no reason for denying healthy pilots the right to continue flying as flight engineers. As a result of this and other similar lower court decrees, there are over 500 pilots who have reached age 60 who are continuing to fly as flight engineers without incident. These persons continue to take the same FAA required medical examination given to captains and first officers.

o In view of the longitudinal history of more than semi-annual FAA and company required examinations, the examination taken by these pilots is highly predictive. Any pilot who who has reached age 60 is competent and relatively disease free, otherwise, he would not still be flying with a first-class medical certificate without waivers. This examination, taken by these thirty-nine pilots, which requires an evaluation of blood lipids and other critical blood chemistries reveals the degree to which a person is disease free. An exercise tolerance test indicates how a person's heart will react under stress and is highly predictive.

o It must be noted that the FAA does not require a blood screening test nor an exercise tolerance test of asymptomatic pilots. Therefore, the FAA does not know the levels of certain critical causal factors of potentially incapacitating conditions within a pilot.

THIS IS NOT A QUESTION OF SAFETY

o The FAA has recertified hundreds of pilots of all ages after they have suffered serious disqualifying conditions such as heart attacks, coronary artery bypass surgery, psychoses, mytral valve replacement, loss of an eye, serious hearing loss, alcoholism, drug dependence, psychoses, stroke with considerable residual damage, diabetes and other cardiovascular and psychological conditions.

o They have also permitted nearly 2,000 pilots of all ages to return to full flight deck duty after they have completed a demonstration of ability to perform with such conditions as, amputations, muscle problems, malignancy, deficiencies in hearing and vision, bone and joint diseases, glaucoma, ear, nose and throat diseases and others.

o According to a number of studies, persons who have suffered the first disqualifying condition (heart attack, stroke, alcoholism, etc) have from three to ten times the chance of having a second event than does a person who has not had the first episode.

Page Five
Comments on Docket 25008
October 28, 1986

- o There is evidence to indicate that a person in his/her fifties, who has been identified as an alcoholic, has an organ reserve equal to that of a person seventy-five years of age who is without that condition.

- o In the early 1980's, Delta Airlines took the FAA to court to prohibit the FAA from issuing waivers or special issuance certificates with restrictions specifying in which cockpit position the recipient could serve, to pilots who had suffered disqualifying conditions.

- o There is no requirement for an airline to assign cockpit positions to airmen based on the health of that or other crewmembers.

- o With this information in mind, the airlines petitioned the FAA for permission to fly certain aircraft (the DC-9-80, the B-757 and the B-767) with a two person crew.

- o A presidential fact-finding panel, fully cognizant of this information on crew disposition and health criteria, found that this new generation of aircraft could be safely flown by a two person crew. Boeing and Douglas then retrofitted these aircraft for the two crew positions and the airlines have been flying them with such crew compliment.

- o Certain airlines, fully aware of the health and recertification situation petitioned the FAA for permission to fly certain two engine aircraft with a two person crew over the north Atlantic. The FAA granted this permission and these aircraft with two person crews are being used in these extended over-water operations.

- o According to the United States Air Force Aeromedical Center in San Antonio, Texas, a resting EKG is only half as predictive as a Master's Two-Step and only one tenth as predictive as an exercise tolerance test. The FAA only requires an annual resting EKG in pilots over age 40.

- o The American Heart Association (AHA) considers blood pressure of more than 120 systolic over 80 diastolic as definite hypertension. The FAA permits pilots to have blood pressure ranging from 140 to 160 systolic and 90 to 98 diastolic.

- o The AHA states that a person who smokes, has a high level of cholesterol and who suffers from hypertension has ten time more chance of having an incapacitating event than a person who has none of these conditions. The AHA has also stated that blood type has is a significant risk factor in coronary heart disease. The FAA does not require an Aviation Medical Examiner to evaluate blood lipids nor consider blood type in asymptomatic pilots.

Page Six
Comments on Docket 25008
October 28, 1986

- o For the first time since the Age 60 Rule was promulgated, the industry now has an examination protocol which could be used as a substitute for the rule. This examination was developed and/or is supported by some of the worlds top experts in this area.

- o The airline industry is facing the most critical shortage of qualified pilots in its history. Many airlines have lowered their standards for newly hired pilots. There is much evidence to indicate that many of these new-hires are below the previous standards for education, experience and health requirements. There is further evidence to indicate that many of this new generation of pilots have experimented with drugs and alcohol and this is resulting in a serious problem.

- o Between now and the year 2000, over 19,000 airline pilots will be forced to retire because they have reached age 60.

- o Granting exemptions from the rule would not cause any problem within the industry. This is borne out in the fact that when the Age Discrimination in Employment Act (ADEA) of 1969 was modified in 1978, Department of Labor studies showed that there has been no disruption of any industry. The recent elimination of mandatory retirement by the Congress indicates the changing attitude of the public toward the employment of older persons. The establishment of an examination protocol makes it possible to permit pilots to continue flying after they reach age sixty, if they so desire.

- o To grant exemptions from the rule to healthy, competent and highly motivated persons who will submit to the Carter examination, or a similar examination, and whose test results are reviewed by a special panel which will recommend which individuals should be granted such exemptions would provide a level of safety greater than that provided by the rule, itself. It is expected that the applicant will pay for his examination and the evaluation of the test results.

Respectfully submitted,

Jack H. Young

DON YOUNG
CONGRESSMAN FOR ALL ALASKA

WASHINGTON OFFICE
2331 RAYBURN BUILDING
TELEPHONE 202/225-5765

COMMITTEES:
INTERIOR AND INSULAR
AFFAIRS
MERCHANT MARINE AND
FISHERIES

Congress of the United States
House of Representatives
Washington, D.C. 20515

October 27, 1986

#14
DISTRICT OFFICES
FEDERAL BUILDING AND
U.S. COURT HOUSE
701 C STREET, BOX 3
ANCHORAGE, ALASKA 99513
TELEPHONE 907/271-5978
BOX 10, 101 12TH AVENUE
FAIRBANKS, ALASKA 99701
TELEPHONE 907/456-0210
401 FEDERAL BUILDING
P.O. BOX 1247
JUNEAU, ALASKA 99802
RT. 1, BOX 1805
KENAI, ALASKA 99611
BOX 177
KODIAK, ALASKA 99615
501 FEDERAL BUILDING
KETCHIKAN, ALASKA 99902

Federal Aviation Administration
Office of the General Counsel
Attention: Rules Docket (AGC-204)
800 Independence Avenue, SW
Washington, D.C. 20591

RE: The Petition of Melvin M. Aman, et al, Docket 25008

Gentlemen:

This letter is intended as support for the petition of Mr. Melvin M. Aman, et al, Docket 25008, for exemptions from 14 CFR 121.383(c), the Federal Aviation Administration (FAA) "Age 60 rule".

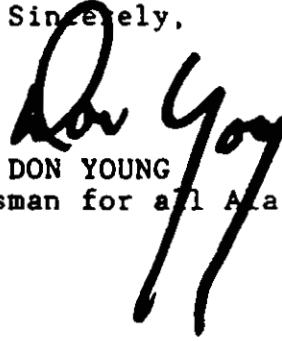
In view of the high quality of the experts who developed the examination taken by these petitioners, I strongly urge your agency to grant these petitioners exemptions from the rule.

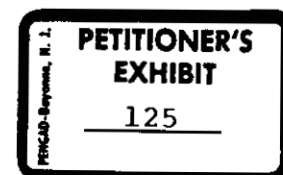
The airline industry is facing the worst shortage of qualified pilots in its history. So much so that they are reducing their standards for education experience and physical condition for newly hired pilots. If we continue to force the most experienced and healthy pilots to retire, we will only face a deterioration in the safety of the traveling public.

To grant exemptions to these and other petitioners who submit to the examination developed by Dr. Carter and his colleagues and whose test results are evaluated by the panel of doctors will assure a level of safety equal to or better than that provided by the rule, itself.

I urge you to act on this petition without further delay, and to keep these and other deserving pilots employed.

Sincerely,


DON YOUNG
Congressman for all Alaska



October 27, 1986

Federal Aviation Administration
Office of Chief Counsel
800 Independence Avenue
Washington, D.C. 20591

Subject: Rules Docket #25008

Dear Sirs,

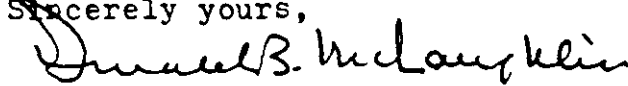
I am writing this letter to inform you of my concern that your agency seems bent on keeping general aviation - all aspects of it - off balance.

Last year it was your NPRM Docket #24695 totally changing a request for simplification of certification of recreational pilots.

This year it has been Docket #23190 which concerns simplification of medical requirements for recreational pilots, wherein you spent almost \$700,000.00 of the taxpayers money contracting with - of ALL organizations - the American Medical Association (talk about putting the fox in the henyard to protect the chickens) which created a massive report recommending effectively impossible restrictions on general aviation pilots.

With the above in mind, it makes me wonder what will come of the current request for certain exemptions to the Age 60 Rule, presently requiring airline pilots to retire at that age. It seems to me that in this period of our history when people are going to great effort to stay healthier longer, such a requirement works to counter-purpose. (For instance, we now see industry adhering to a mandated age 70 requirement for retirement instead of the historic age 65.)

It certainly would be like a breath of fresh air if the FAA would consider a compromise such as extending (for a period of years) retirement of air line pilots as a function of their ability to pass certain specified physical and mental examinations.

Sincerely yours,

Donald B. McLaughlin
15 Elliott Street
Hampton, N.H. 03842

Southern Flyer, Inc.



Complete DC Service • Passenger & Air Freight

October 27th, 1986

Federal Aviation Administration
Department of Transportation
Room 915-G - Docket 25008
800 Independence Avenue
South West, Washington D.C. 20591

Gentlemen:

FAR 121.383 (c) (Age 60 Rule) Has been a violation of the Civil Rights of pilots too long.

The Federal Air Surgeon has determined that all pilots over 60 could be a hazard to the health of the flying public. The Airline Pilots Association has switched horses and is now against change. The Air Transport Association has used its influence to prevent change. Neither ALPA or ATA represent the majority of airline pilots or air carriers.

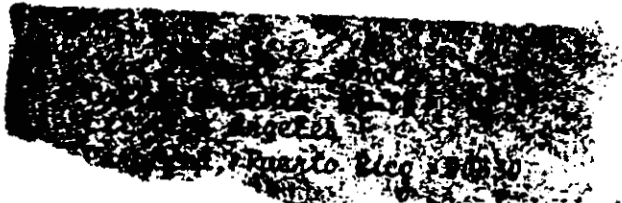
Everyone against change including FAA references "in the interest of Safety". Operational Safety is Operational Safety, whether conducted under FAR 121, 135.2, or other FARs. To say that FAR 121 safety standards are higher than other FAR is sick. No operation regulation should or does allow safety to be compromised.

The truth has surfaced for many years but the words economics or promotion seem to be profane and are clouded by "operational safety".

Not all pilots are employed by carriers that existed in the 60's. Many of the companies of the 60's are no longer in existence. Some of us pilots with no retirement need to work for a living. With deregulation some of the remaining giants will not be with us in the next few years.

Some pilots working now will not reach airline retirement age, before their present employers go out of business.

There are now opportunities for better or worse business persons to exist in a very hostile and ever changing industry. The airlines have for years been guilty of age discrimination. It is time for management of air carriers to correct this practice and speak out against the age 60 rule.



Main Base of Operation:

115 22 24th Avenue, Fort Lauderdale, Florida 33304 (305) 751-7700



Southern Flyer, Inc.



Complete DC Service • Passenger & Air Freight

..... Cont (2)

I run a small air carrier certificated under FAR 135.2 flying DC-3's Southern Flyer Inc, operates under FAR 121 rules. My development plans for Southern Flyer Inc. requires the future use of large aircraft. I have not been able to replace myself as a pilot. I have a Class 1 Medical, ATP rating, and have been a military or civilian pilot since 1943.

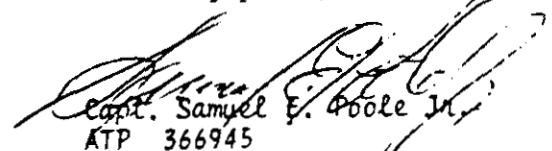
I will be 62 in December 1986, and have been denied my Civil Rights since my 60th birthday on 1984. I am the company Check Airman, Flight Instructor, required to take 6 months proficiency checks, and I cannot fly one pound of cargo or passenger in my own carrier.

If I change my certificate from FAR 135.2 to FAR 135 I am no longer a threat to safety and I can fly again. This rationalization is sick. I think my veteran status plus my DFC and four air medals should be given some consideration as a pilot as long as I pass my physical and proficiency checks.

I was 19 years old when I left England and the Eight Air Force, November 30th, 1944. I piloted and commanded a B-17 on 35 Combat Mission and was probably one of the youngest pilots in the military service in the World War II.

I would like to end my airline career as one of the oldest pilot in air carrier operations. I believe my physical condition should be controlled by God and not by the Federal Aviation Administration regulation FAR 121.383 Sub Paragraph (c).

Sincerely yours,



Capt. Samuel E. Poole Jr.

ATP 366945

Ground Instructor 1319771

Flight Instructor 366945 CFI

Mechanic A & P 1301012

President - S.F.I.

Main Base of Operation:

1000 1000 1000 1000 1000 1000 1000 1000 1000 1000

#18

MEMO/ R. V. HEMPHILL

R. V. Hemphill
6112 North Mesa, #112
El Paso, TX 79912

November 9, 1986

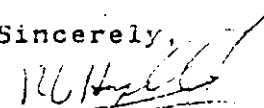
FAA Office of Chief Counsel
Atten: Rules Docket(AGC-204) Far 121:383
Mandatory Retirement at Age 60
Washington, D.C.

Gentlemen:

I wish to be placed on record as opposed to the FAR 121:383, which mandates retirement at age 60. This regulation does not recognize individual differences and is grossly discriminatory.

An experienced pilot who remains medically qualified and meets training requirements should be allowed to continue flying until becoming incapable of meeting a set of objective, reasonable and measurable set of standards.

Sincerely,


R.V. Hemphill
ATP 1351253

P.S. Copies Congressman Ron Coleman
& other Area Senators & Congressman

PETITIONER'S
EXHIBIT

128

#19
NOVEMBER 09, 1986

Wayne C. Nash
902 North Rivershire Drive
Conroe, Texas 77304

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
OFFICE of the CHIEF COUNSEL
ATTN: Rules Docket - Docket Number (AGC-204)
Room 916, 400 Independence AVE, S. W.
Washington, D. C. 20591

Dear Sir:

I am an airline pilot for Continental Airlines and I am very much opposed to Federal Aviation Regulation 121.383, which mandates retirement at age 60. I am opposed to this rule because it is arbitrary and "grossly discriminatory". The rule does not recognize individual differences in health and performance.

I feel an experienced pilot who remains medically qualified and meets recurrent training requirements should be allowed to continue flying until becoming incapable of meeting a set of objective, reasonable and measurable standards.

Respectfully

Wayne C. Nash
Wayne C. Nash

PETITIONER'S
EXHIBIT

129

Telephone
603-432-3351

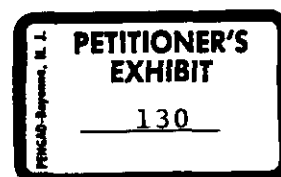
Attorneys at Law

November 14, 1986

Gentlemen:

The problem of mandatory retirement of workers has been of great interest to me. In 1980, I was forced to retire as Judge of the Derry District Court because of a constitutional provision that "no judge or sheriff shall serve after attaining the age of 70 years." Although I had no desire to continue as judge, which position I had enjoyed for thirty years, I felt constrained to bring an action in the courts to find the provision of the constitution in this respect unconstitutional as discriminatory, arbitrary and without basis in fact. Additionally, in many instances these provisions shortchange the public and force some of our best public servants or workers to leave a business for no reason. In 1981, this provision forced Chief Justice William A. Grimes, one of our better judges out of office. Judge Grimes has continued to serve the country and the judiciary in an able manner as a professor in a California law school. This year, the same thing happened to Chief Justice John W. King, an able jurist and at least twice governor of this state.

In respect to age and flying, the number one consideration has to be that hardly ever is an aviation accident traced to the physical disability of the pilot. We all know of the occasional and very rare occurrences, as they are highlighted by TV and other news media. Secondly, there is no statistical evidence of disabilities that start at 60, 70 or 80. In respect to age, I must use myself as one example. I will be 76 in December, and have flown all over this country, the Bahamas to Alaska, since retiring, and this year have owned and flown not just simple airplanes but a Cessna 180 float plane, a late model Cessna 185 amphibian, besides owning and flying a Cessna 172 and a 182. I expect to fly at least 180 hours this year besides being active



Grinnell & Bureau

- 2 -

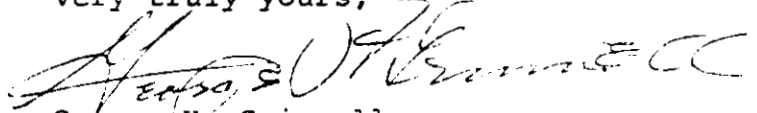
FAA

November 14, 1986

in the law practice and in the insurance industry.

It would be appreciated if the facts outlined by me would be considered in your rulemaking and that you would not make rules that are arbitrary and without justification by the facts of the situation.

Very truly yours,


George H. Grinnell

GHG:po

Copy to AOPA

" " Harold Buker, Director of Aeronautics
" " New Hampshire Law Weekly

THEODORE T OSINSKI #21
67 BLACKMOOR RD
AVON, CT. 06001

FEDERAL AVIATION ADMINISTRATION
OFFICE OF THE CHIEF COUNSEL
800 INDEPENDENCE AVE. S.W.
WASHINGTON, D.C. 20591

RE: RULES DOCKET AGE 204, # 25008. AGE CRITERIA FOR REDUCTION IN
PILOT CERTIFICATE PRIVILEGES.

I BELIEVE THAT THE FAA'S ARBITRARY AGE 60 RETIREMENT RULE IS
NOT JUSTIFIED BY MEDICAL OR PERFORMANCE DATA, NOTWITHSTANDING
ITS DISCRIMINATORY ASPECTS.

STANDARDS BASED ON EXISTING MEDICAL, TRAINING, AND CURRENT
REQUIREMENTS WILL ASSURE AIR SAFETY REGARDLESS OF AGE.

I CAN WELL REMEMBER MANY SITUATIONS AS A YOUNG AGGRESSIVE
PILOT BEING FRUSTRATED BY MY PERCEPTION OF LACK OF AGGRESSION,
BECAUSE SOME "OLD SALT" CAPTAIN USED HIS EXPERIENCE TO TEMPER,
SHOW DOWN, OR EVEN STOP OPERATIONS, WHEN POTENTIALLYUnsafe
CONDITIONS PRESENTED THEMSELVES.

I NOW FIND MYSELF BEING THE CONSERVATIVE RESTRAINING ELEMENT
WHEN THESE SAME POTENTIALLY SAFETY RELATED OPERATIONS PRESENT
THEMSELVES.

Sincerely,



THEODORE T. OSINSKI



#22

November, 14, 1986

10 24:05

Gentlemen,

Rule docket no. 25008 can be best discribed as the only age-related illegal discrimination still existing in the United States today.

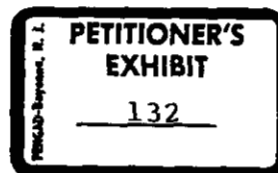
After 30 years of professional flying in the corporate field, I took a job with a supplemental carrier in my area. I have been delighted with the fair treatment I have recieved as a result of 121 rules and regulations. After one year with the company we are now upgrading to DC-8 aircraft. However I am now also 56 years of age and concerned that the 60 year rule will not only affect the companies plans for me but cause me to relinquish a career that is looking very promising for a change.

The AOPA'S request for an exemption for pilots who do not wish to retire or be forced to give up a livelihood that they are dependent upon should be granted. The age 60 rule should be dropped completely by the FAA through an act of congress so the agency can show that it acts on behalf of the people for which it was initiated to serve and not aganist them.

Sincerely,

James F. Clark

1319903



Mr. & Mrs. James Clark
895 Harcourt
Grosse Pointe Park
Michigan 48230

7-12

#24

HH - Attn: Rules Section AGC-204, 2503F

Please be advised the undersigned, a experienced
high time pilot, believes the "age" restriction
rule should be abandoned/eliminated.

Criteria for continuing to license pilot privileges
must be based on physical and flight check
criteria - not on a "age" criteria.

Richard W. Luchan

114 Woodlake Dr.

Marshall's Island S.C. 29576

18 P 4:07

cc "93 PA Stats Dept"

PETITIONER'S
EXHIBIT

133

Rt 1 Commonwealth Ave #25
Massapequa N.Y. 11758
12 November 1986

FAA, Office of The Chief Counsel
Attn: Rules Docket (AGC-204)

Docket No. 25008

800 Independence Ave S.W.

Washington, D.C. 20591

18 NOV 1986
18 14:07

Dear FAA:

My objections to The Age 60 rule for ATP's
are as follows:

1. The flying public, and I, feel much safer
with a qualified 60+ year old Captain or
Copilot than we do with younger men because
we know they are well screened and they have
experienced more than their younger counterparts.
2. The predicted future pilot shortage will be
aggravated by the demeritization of the experience
pool if this unnecessary Age 60 Rule is instituted.
The FAA, of all entities, should know that there is
no substitute for experience when it comes to flying.

Very truly yours,

John M Sadler





THE GOLDEN NUGGET

WEST BEACH ROAD PLAZA
3401 BONITA BEACH ROAD
BONITA SPRINGS, FL 33923
(813) 992-6100

GENTLEMEN:

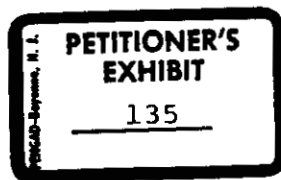
REF: AGE 60 DOCKET

THE YEAR OR DAY YOU ACCEPT AGE
60 FOR SOCIAL SECURITY BENEFITS IN
FULL IS THE TIME I WOULD ACCEPT
YOUR RETIREMENT AT AGE 60 FOR
A PILOT - WHO IS TOTALLY QUALIFIED

ED CLEMENTE

COMMERCIAL, MULTI-INST

Ed Clemente AGE 61



14 Nov 86

I AM OPPOSED TO THE FAA'S IMPOSED
AGE 60 RULE.

I KNOW AND YOU KNOW THAT THERE
IS NO REAL FOUNDATION FOR THIS RULE.

AS LONG AS A PERSON CAN MEET THE
MEDICAL & FLIGHT STANDARDS THERE IS NOT
ONE VALID REASON NOT TO ALLOW HIM/HER
TO ENJOY A PRODUCTIVE LIFE.

THE IDEA ON ONE HAND OF A GOVERNMENT
AGENCY MAKING ME RETIRE AT AGE 60 &
ANOTHER NOT ALLOWING ME TO DRAW MY
SOCIAL SECURITY, BECAUSE I AM TOO YOUNG
IS NOTHING LESS THAN ABSURD.

Thank you,
J.R. COETER
5629 High Harbor PT
GAINESVILLE GA
30501



22

John C. O'Donnell, Sr.
Attorney at Law
1325 Johnson Ferry Road, N.E.
Marietta, Georgia 30067

977-8227

12 November 1986

FAA, Office of the Chief
Counsel
Attention: Rules Docket
(AGC-204), Docket No.
25008
800 Independence Ave, S.W.
Washington, DC 20291

Re: AOPA Newsletter, Nov. '86
Short Shrift for Pilot Age
Proposal

Dear Sir:

I am an active pilot and have been so for over 46 years-- since June of 1940. I may not be the best pilot or, in fact, the safest pilot; however, I do not feel that I have become a poorer pilot or a more dangerous one due to my age.

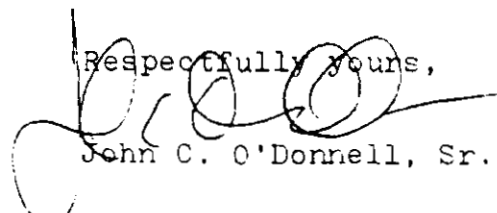
AOPA's article sounds reasonable to me. I know that sometime I will have to give up active participation in flying; however, I do not feel that time has arrived as yet. I am certain that a reasonable physical-- one that everyone should take-- can determine whether I should continue flying.

Quite frankly, some people are old at 50- physically and mentally- and others are not old at 74 (Look at our President). My father, for instance, lived to 103. He was not a pilot but, I am certain if he had been, he would have safely flown into his 80's.

The easiest thing to do is to establish arbitrary rules and regulations (the 60 year rule, for instance); the hardest thing to do is to establish rules and regulations based upon observable facts (Pilot qualifications to be determined by how a person performs in a physical, regardless of age, for instance).

I sincerely hope that this letter will go a short way in giving a short shift to your proposal.

Respectfully yours,


John C. O'Donnell, Sr.

Copy to AOPA

PETITIONER'S
EXHIBIT

137

2.22

W Grant Fields

11/10/86
#29

FAA Office of the Chief Counsel
Rules Docket (AGC-204) Docket No. 25008
800 Independence Ave., S.W.
Washington, D.C. 20591

Please be informed that I am against
the mandatory retirement age of 60.

Sincerely,

Capt. W. J. Fields
Eastern Airlines

W. GRANT FIELDS
4533 PAPER MILL ROAD
MARIETTA, GEORGIA 30067

11/10/86 8:11 AM

11/10/86 8:11 AM

NOV 1986 AOPA NEWSLETTER

PETITIONER'S
EXHIBIT

138

230

HERBERT A. JOHNSON, JR.
8343 STAVENGER COVE
CORDOVA, TN 38018
NOVEMBER 11, 1986

FEDERAL AVIATION ADMINISTRATION
OFFICE OF THE CHIEF COUNSEL
800 INDEPENDENCE AVE. S.W.
WASHINGTON, DC 20591

RE: RULES DOCKET (AGC-204)
DOCKET No. 25008

21
p. 3:


GENTLEMEN:

AGE ALONE should not be the criteria to force a professional pilot to retire from flying or reduce his privileges. It is gross AGE DISCRIMINATION (Especially when he can't get Social Security until age 62 or 65.)

An experienced pilot who remains medically qualified and meets recurrent training requirements should be allowed to continue flying past the age of sixty (60).

PLEASE END THIS AGE-RELATED EMPLOYMENT DISCRIMINATION by extending a pilots privileges to at least age 65.

Sincerely,



Herbert A. Johnson, Jr.



230

George H. Grinnell
Edward D. Bureau
Robert E. Carr
Roland E. Morneau, Jr.
Jonathan E. Coughlan

Telephone
603-432-3351

Grinnell & Bureau

Attorneys at Law

~~XXXXXX~~ 18 Crystal Avenue
Derry, New Hampshire 03038

November 17, 1986

FAA
Office of the Chief Counsel
Attn: Rules Docket (AGC-204), Docket No. 25008
800 Independence Avenue S.W.
Washington, DC 20591

Gentlemen:

This letter is a follow-up of my letter of November 14th, a copy of which is enclosed.

In the November 14th letter relative to the retirement age of air transport pilots for airlines, I neglected to state one of the more important elements of the situation. In addition to the relatively few cases of pilot incapacity, the main factor is that if the captain has a physical problem, there is redundancy with a co-pilot that should be equally competent as the captain to manage the aircraft. Enclosed is a photocopy of an article in today's paper, in which it describes an incident where the pilot of a Cessna 150 was totally incapacitated and a legally blind passenger landed the aircraft safely. It is obvious that most co-pilots have good eyesight and would probably not be incapacitated at the same time that the captain has a physical problem.

At this time, I might add that in respect to proposed rule changes in which the FAA plans to require extensive physical exams, rumored to cost up to \$500.00, that this is a bureaucratic maneuver that is unnecessary. As I understand it, the recommendations came from a civilian doctors' group that made the study that this proposed change is based upon. We all appreciate the good work that doctors have done, and I would have been dead long ago without them. On the other hand, without meaning to be too severe on the doctors, I don't think they know what they are talking about and there is a possibility of them being overly cautious in this respect, plus the ever present financial gain to them.

Everyone in this country over 16 years old, with few exceptions, drives an automobile. I have not even heard a faint rumor from the DOT that drivers of automobiles should



Grinnell & Bureau

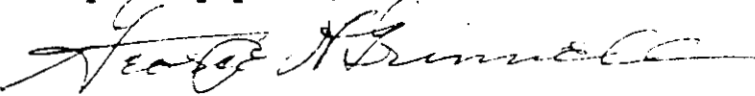
- 2 -

FAA

November 17, 1986

be physically examined like pilots. I have over 6000 hours of flying in my own aircraft, and it is a pretty simple proposition to fly an airplane as compared to driving an automobile in the presentday traffic. My comments above, I believe, indicate rather strongly that unnecessary bureaucratic supervision is not good for the country and is not necessarily doing anything for safety.

Very truly yours,



George H. Grinnell

GHG:po

encs.

Copy to AOPA

" " Harold Buker, Director of Aeronautics

32

November 17, 1986
55 Adobe Trail
Sedona, Ariz 86336

FAA, Office of Chief Counsel
Attn: Rules Docket (AGC-204) Docket No. 8600P
900 Independence Ave S.W.
Washington, D.C. 20591

Age should not be the criteria for determining a reduction in pilot privileges. In April of 1980 I passed an FAA Class I physical, an United Airlines pilot physical, and a semi-annual hood check, all with no problems nor restrictions. I was forced to retire May 1, 1980 by the age 60 Rule. The Age 60 Rule must be dropped. Comprehensive physicals and testing should determine a pilot's right to continue working, not his age.

R. C. Courtney

R. C. Courtney
MA Capt., Retired

CC: AOPA standards department



1.32

#33

Bob Jackson

P. O. BOX 174
PUEBLO, COLORADO 81002

11/19/86

Age 60 Docket
FAA, Office of Chief Counsel
Attn: Rules Docket AGC 204
Docket No 25008

800 Independence Ave SW
Washington, D. C. 20591

To those making the decision on this matter;

As one who is about to turn 60, in good health, in possession of mental and physical faculties, I would urge your consideration of removing the age proscription on pilots.

If anything in this society has been fought for, it is the right to be an individual. We do not all fit in the computer holes- nor should we. There are teen age people who are not fit to drive, much less fly. Conversely, there are folks well over 60 who should bring the priceless experience and judgement they have accumulated to the job of flying.

Let the call of who should fly and who shouldn't be made on the basis of the individual and his or her abilities and condition- at any age.

Bob Jackson

NOV 21 1986 13:49

OFFICE OF CHIEF COUNSEL
FAA
WASHINGTON, D.C.

PETITIONER'S
EXHIBIT

142

#34

November 19, 1986

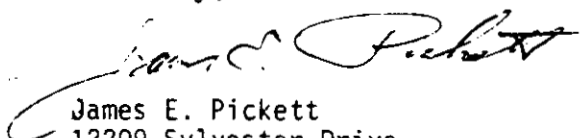
FAA, Office of the Chief Counsel
800 Independence Ave. S.W.
Washington, D.C. 20591

Dear Sir or Madam:

I am writing to express my interest in the "age 60" rule,
(Rules Docket AGC-204, Docket No. 25008).

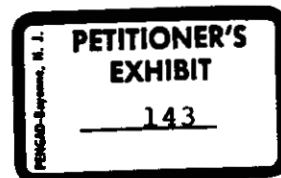
I am opposed to mandatory retirement at any age, especially
when so many safeguards are already in place. I am speaking of
regulations, training and even construction of aircraft that are
designed to protect the passengers from pilot incapacitation.

Sincerely,



James E. Pickett
12209 Sylvester Drive
Oklahoma City, Ok 73132

21
P3:52



John Sloop
Route 2, Box 24A
Ballwin, MO 63011
November 19, 1986

Federal Aviation Administration
Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
Docket No. 25008
800 Independence Ave. S.W.
Washington, D.C. 20591

Gentlemen:

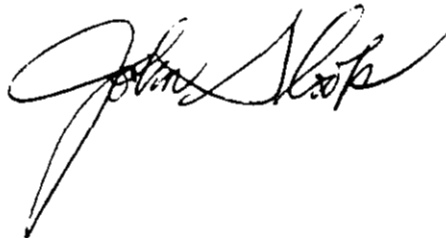
In this enlightened day of recognizing the ability, competence, and performance of people beyond 60 years old and society's and government's initiative to ban all forms of discrimination please eliminate the mandatory retirement age of 60 for pilots.

Numerous scientific studies have shown there is no medical or performance data to justify a general rule based on age. An experienced pilot who remains medically qualified and meets recurrent training requirements should be allowed to continue flying until becoming incapable of meeting a set of objective, reasonable and measurable standards. I believe current medical criteria for the various classes of medicals is adequate and as a frequent traveler feel comfortable with a pilot of any age who meets the current medical guidelines.

The time has come to update the FAA medical standards to the reasonableness rules which apply to the rest of society. After all if a pilot, young or old becomes incapacitated or dies at the controls there are copilots and flight engineers who are prepared, ready, and able to handle the situation.

Thank you for your consideration.

Sincerely,



#36

S. J. Devine
706 Casa Bonita Ct.
Los Altos, CA 94022
November 20, 1986

RECEIVED FAA
OFFICE OF
THE CHIEF COUNSEL
NOV 21 9 29 PM '86

FAA, Office of Chief Counsel
Attn: Rules Docket (AGC-204), Docket No. 25008
800 Independence Ave., S. W.
Washington, D. C. 20591

Dear Sir/Ms:

I strongly urge the elimination or modification of FAR 121.383 (c).

To apply the standards of 1959 to the year 1986 is antediluvian.

It is unbelievable that the FAA still applies the antequated theory that flying is a young man's game....and the younger apparently being the better.

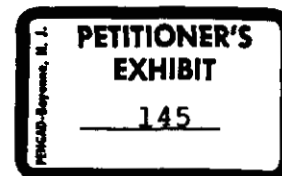
Please consider the accomplishments of the medical profession over the last 25 years together with the sophisticated training and checking methods available today.

I ask you to eliminate this last vestige of age discrimination and further ask: What has age got to do with it?

Very sincerely yours,

S. J. Devine

S. J. Devine
Member, AOPA
Member, ALPA (Active)
Flight Engineer (Active)



Phone 998-1900



Leonetti's BAKERY

*Specializing in Italian Pastries
Wedding, Birthday & Rum Cream Cakes*

600 Kirkwood Highway

Elsmere, DE 19805

AGE 60

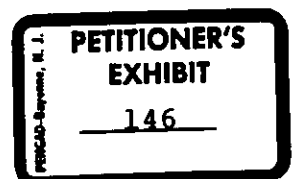
This has to be one of the most ridiculous rules ever imposed on a Pilot.

We are continually instructed and tested before certification, not to mention physically examined. If one can meet these requirements he should then be permitted to take to the skies !

If these lawmakers insist on imposing this age 60 requirement on us, for what they view as safety reasons, then the same should pertain to them for the same safety reasons because their decision will effect an entire country not just a single aircraft.


Al Leonetti

AOPA 746003



1720

TED SORENSEN & ASSOCIATES, INC.
AVIATION CONSULTING SERVICES
5734 HARVEY AVENUE, LAGRANGE, IL 60525
(312) 246-2328

Technical
Sensible
Aviation
Information

Airline
Business
Military
Private

If worked for the USAF as a major General for two years after you cut me off of AA. Did you sleep well with a 62 yr old general there? Their physical for General is better than yours.

Office of The Chief Counsel
Attn: Rules Docket AGC-204, Docket No. 25008
800 Independence Avenue, S.W.
Washington, D.C. 20591

15 Nov 86

Dear Chief Counsel:

This letter is an objection to the age-60 rule.

I am a retired American Airlines pilot, retired in 1980 at the age of 60, by your decree. Flight Surgeon stated that my blood chemistry and general health were much better than that of most of the younger pilots.

The AA Flight Training Center were still touting me as their best cookie. I was actively engaged in operational training and flight operations in general. My technical knowledge of our airplanes at American was such that I was serving as the special assistant to the Chairman of the Board, Al Casey.

On October 26th, 1980 I flew a trip on a DC-10, which was to continue on into October the 27th. Impossible dream, that was my 60th birthday. By your decree, I was removed from the plane.

I have had my own personal twin Cessna 310 for 15 years now and I am still flying it and making those tight approaches. I still maintain my ATP First Class Physical, just to prove to you that I can still do it SIX YEARS LATER! Yes, I'd be more than willing to go to Fort Worth and take their toughest type rating today, and breeze thru it to-boot.

As an EXPERT ON THE DC-10, and running my own Corporation, it is routine for me to charge \$800/day for counsel. My current client is the U.S. Justice Department. Second case for them. I saved them 150-MILLION DOLLARS on the last one. My clients are not negative about me being 66 years old. I still fly and am definitely not senile, even if the FAA thinks I should be.

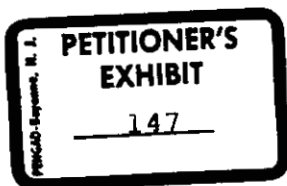
It is time to use the tools available, medical and training, to determine the "MENTAL AGE" of a pilot and stop cutting them out of the pattern, just because they turn "60". Get your courage up and face up to it. Cowardice won't get you anywhere.-

Respectfully, (In spite of actions)

Ted W. Sorensen
TED W. SORENSEN, Captain, retired, AA
Maj.Gen. USAF, Retired also.

Copy to AOPA

40 YEARS EXPERIENCE IN AVIATION



#40

4218 Delphi Circle
Huntington Beach, CA 92649

Federal Aviation Administration
Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
Docket No. 25008
800 Independence Ave., S.W.
Washington, D.C. 20591

Dear Gentlemen:

As a captain on Continental Airlines with over 35 years of aviation experience, I am writing to express support for the petition for exemption from the Age 60 Rule, Docket No. 25008.

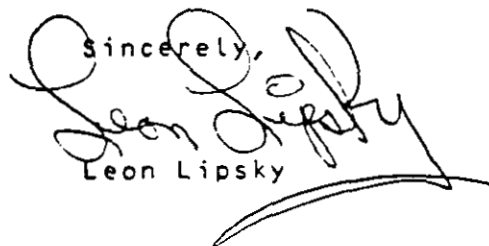
On August 20, 1986, I wrote to Mr. Francisco A. Lorenzo, Chairman of Continental Airlines, requesting his views on the Age 60 Rule and the petition for exemption from the rule. Mr. Lorenzo was provided comprehensive medical "protocol" which was followed by the pilots seeking exemption, as well as other materials filed in the docket.

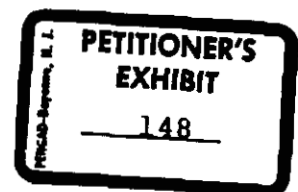
By letter dated September 11, 1986, Mr. Lorenzo wrote to me stating:

The present rule appears antiquated and out of touch with reality. We, as a corporation, will do what we can to urge change of this rule.

I am attaching a copy of Mr. Lorenzo's letter to me. This demonstrates the increasing support of the airlines (Continental, Texas Air, People Express, Eastern) for exemptions from the Age 60 Rule for qualified pilots.

Sincerely,


Leon Lipsky





CONTINENTAL AIRLINES

FRANCISCO A. LORENZO
CHAIRMAN

P.O. BOX 4607
HOUSTON, TEXAS 77210
PHONE (AREA 713) 630-5002

September 11, 1986

Captain Lee Lipsky
Flight Operations
Continental Airlines
HNL

Dear Lee:

I have received your August 20, 1986, letter and accompanying material addressing the petition to change the "FAA Age 60 Rule." I have forwarded the information to Clark Onstad, Vice President of Governmental Affairs, for his review.

The present rule appears antiquated and out of touch with reality. We, as a corporation, will do what we can to urge change of this rule.

I appreciate your input and fine professional service to our Company.

Sincerely,

FAL/clt

cc: Clark Onstad w/attach.

ACC 200

LAW OFFICES OF
CHARLES E. THOMPSON
A PROFESSIONAL CORPORATION
116 WEST HIRAM STREET
POST OFFICE BOX 1046
ATLANTA, TEXAS 75551-1046
(214) 796-4481

November 18, 1986

Federal Aviation Administration
Office of the Chief Counsel
800 Independence Avenue Southwest
Washington, D.C. 20591

Attn: Rules Docket
(AGC-204) Docket #25008

Dear Sir:

I am writing to protest any reduction in flight ability because a pilot has reached age 60.

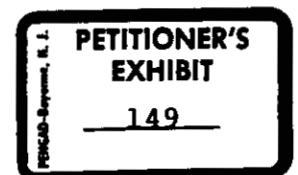
An experienced pilot who remains medically qualified and meets recurrent training requirements should be allowed to continue flying until becoming incapable of meeting a set of objective reasonable and measurable standards.

This rule is arbitrary and grossly discriminatory, and probably unconstitutional if the pilot is in good health. There are no scientific studies and no medical or performance data to justify a general rule such as this, based upon age.

Yours sincerely,

Charles E. Thompson
Charles E. Thompson

CET:jat



AGC 200 #42

November 19, 1986

NOV 24 1986

Robert J. Hawkins
4626 N. Carlin Springs Rd.
Arlington, VA 22203

Federal Aviation Agency
Office of Chief Counsel
800 Independence Ave. S.W.
Washington, D.C. 20591

Attn: Rules Docket (AGC-204)
Docket No. 25008

22:22
22:22

Gentlemen;

Over the last twenty years it has been my pleasure to deal with the many F.A.A. controllers, briefers, and inspectors. I think I can comfortably say that I have never encountered one that wasn't pleasant, competent, and helpful. The only times I have ever experienced arbitrary or high-handed methods has been within the administration of F.A.A..

The most recent and blatant example of this is demonstrated by the methods employed by the F.A.A. that effectively controlled public comment on the "age 60 rule". Allowing only 20 days for public comment on an issue that has enjoyed considerable debate in the past is a totalitarian approach. The magnanimous gesture of extending this to 30 days, after pressure from A.O.P.A., was an obvious attempt to "keep the dogs quiet".

While it was commendable of the F.A.A. to reopen this issue, it was equally obvious that they really didn't want to hear anything other than their own opinion.

An effective, open, public discussion allows sufficient time for interested parties to respond and it is implicit that the governing body (the F.A.A. in this case) pay attention to the information presented. Ours is an open society dedicated to the principle that the government is of, by, and for the people. The F.A.A. is acting as if it is the sole authority responsible only to itself, not to the people it serves.



F.A.A.
Office of Chief Counsel
November 19, 1986
Page 2

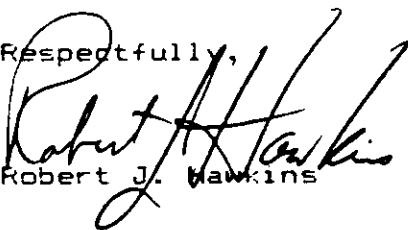
The F.A.A. is apparently not interested in hearing new evidence regarding the health of individuals or their capacity to function effectively past the age of 60. They have made up their mind as to what is best and therefore comments are not necessary! I beg to differ.

The F.A.A. has a responsibility to the people that it serves. That responsibility is first and foremost. The F.A.A. should exonerate itself and reopen this entire issue for the standard 90 day comment period. Furthermore, it should hold public hearings on this issue and listen to the information presented, NOT close its collective mind to the facts.

Beyond the dictatorial methods employed by the F.A.A. there is the issue of mandatory retirement at age 60. This, in and of itself, may be unconstitutional and is certainly based on old concepts. The rule needs to be reconsidered and I for one do not believe it is reasonable. Some responsible medical standard can be established that will address the safety requirements and other issues relating to the "age 60 rule".

The F.A.A. needs to serve the public interest not itself. Our society respects those that are willing to be big enough to say "you have a valid point". The F.A.A. is presented with that opportunity, more importantly you have the ability and capacity to do something about it.

Respectfully,


Robert J. Hawkins



#43

CONDOR AVIATION, INCORPORATED
890 ELLICOTT CREEK ROAD · TONOWANDA, NEW YORK 14150 · (716) 297-7074 · (716) 693-6646

FAA
Office of Chief Counsel
800 Independence Ave. S.W.
Washington, D.C. 20591

11/15/86



ATTN: Rules Docket NO. 25008:

I would like to express my disappointment in the manner which the FAA has handled the Age 60 rule.

The FAA, again, demonstrates an almost sinister scheme to ignore what is known to everyone regarding age. As an agency, your responsibility should include remaining open minded and willing to listen to the validity of arguments presented.

The advantages and advances in diagnosis of illness which incapacitate are well known and accepted. Why does your



CONDOR AVIATION, INCORPORATED

890 ELLICOTT CREEK ROAD · TONOWANDA, NEW YORK 14150 · (716) 297-7074 · (716) 693-6646

agency refuse to acknowledge the advances
and rule in ~~workbook~~. I have been a member
of the aviation community for many ^{years} and I
regret to say that this attitude is consistent
with some past issues.

Your obligations are ~~deficient~~ for not
treating the age 60 rule with honesty
and fairness.

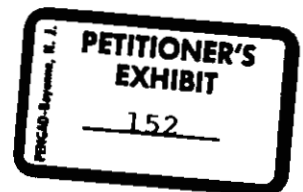
Sincerely,

Donald W. Spencer

REEDMOND WA 98052
19 NOV 1986

AGE 60 DOCKET AT:
FAA, OFFICE OF CHIEF COUNSEL,
ATTN: RULES DOCKET (AGC-204)
DOCKET NO. 25008,
800 INDEPENDENCE AVE SW
WASHINGTON DC 20591

800 25 ALL: 36



GENTLEMEN:

BE ADVISED THAT I VIGOROUSLY
OPPOSE THE SHORTENING OF YOUR
ARBITRARY 20 DAY COMMENT PERIOD IN
REGARD TO THE AIRLINE PILOTS PETITION
FOR EXEMPTION FROM THE AGE 60 RULE,

THIS UNJUST REGULATION HAS ALREADY
CREPT INTO CORPORATE AVIATION AND I CAN
SO TESTIFY TO THIS FACT BY THE BOEING
COMPANY ~~HAVING~~ ARBITRARILY DISCRIMINATED
AGAINST MYSELF AND AT LEAST 16 OTHER
PILOTS BECAUSE OF THIS UNNECESSARY AND
UNFAIR RULE.

WE (THIS GROUP) HAVE BEEN AND STILL
ARE, IN LITIGATION WITH BOEING AS

OUR CONTENTION IS IN LINE WITH THE
ADPA NEWSLETTER DATED NOV. 86 AND
IS IN EFFECT SAYING:

"AN EXPERIENCED PILOT WHO REMAINS
MEDICALLY QUALIFIED AND MEETS
RECURRENT TRAINING REQUIREMENT
SHOULD BE ALLOWED TO CONTINUE
FLYING UNTIL BECOMING UNABLE
OR INCAPABLE OF MEETING ANY
SET OF OBJECTIVE, REASONABLE,
AND MEASURABLE STANDARDS."

WE NOT ONLY BELIEVE IN THE CRUX
OF THE AIRLINE PILOTS PETITION BUT ARE
FIGHTING FOR THE RIGHTS OF ALL PILOTS,
(MILITARY, GENERAL AVIATION, CORPORATE
AVIATION AND COMMERCIAL AVIATION, TO
PURSUE THEIR CHOSEN PROFESSION FOR AS
LONG AS THEY CAN SO DO, WITHOUT ANY
AGE DISCRIMINATION POLICY UNDER THE
FEDERAL (AGE 70) LAW. WE ARE ALSO
ACCUSING THE BOEING COMPANY OF NOT
PROVIDING A REASONABLE ALTERNATIVE
FOR FORCING OUR RETIREMENT AT AGE 60.

SINCERELY,

Edward F. Hartz
EDWARD F. HARTZ
5-211TH PLACE SE

11/21/86

FAA, OFFICE THE CHIEF COUNCIL
ATTN: Rules Docket (AGC-204)
DOCKET #25008.
800 Independence Ave., S. W.
Washington, D. C. 20591.

25
ALL:

This letter is in response to the re-opened hearing time for comments concerning the mandatory retirement of pilots reaching the age of 60 years.

Be advised that the writer files notice AGAINST the proposed rule. This position AGAINST the rule is based, in part, on the following reasons:

1. The "AGE 60" rule is archaic, based on some idea in history that once a person reaches the age of 60 he can no longer function physically and ought to "lay down and die".

2. There is no medical basis for the blanket rule that ALL pilots reaching the age of 60 can no longer physically function well enough to act as commander of an aircraft.

3. The basic physical examinations for first, second and third class physicals no longer has any factual foundations. (re: the recent removal of the color blindness test for pilots was based on an archaic situation).

4. The physical exams for pilots (for ALL classes of physicals) needs re-vamping and re-alignment bringing them into realistic values reflecting the health qualifications of todays' American pilot.

5. The present rule is grossly discriminatory and arbitrary: the U. S. Government has struck down all other retirement requirements based on age alone. THE FAA IS IN VIOLATION OF THE FEDERAL LAWS AS THEY STAND TODAY.

6. It has been proven repeatedly that overwhelming numbers of persons can and do function physically quite well substantially beyond the 60's and 70's age bracket; FOR EXAMPLE: THE PRESIDENT OF THESE UNITED STATES HAS AN OUTSTANDING PHYSICAL CAPABILITY AT AGE 76!!

PETITIONER'S
EXHIBIT

153

7. There is a very large number of people in the United States that conduct physical activities, on a daily basis, far more strenuous than those required of ANY pilot in ANY cockpit environment. Again, the current rule is based on FICTION, not FACT.

8. Numerous scientific studies have shown there is no medical or performance data to justify nor support the current rule of retirement at age 60.

Thank you for considering my input to this proposed rule making.

R. W. Runnels

R. W. Runnels
528 Greene Rd..
Martinsville, OH.. 45146 .

Age 60 Docket

Nov 18 1986

#46

FAA
Chief Counsel
Rules Docket (AGT 204)
Docket No. 25008

25 ALL: 36 -

Dear Sir:

Regarding the age 60 rule for Pilots, I would like to suggest that the Captain (left seat) age limit be increased to 65 - at which time he could retire or move to the right seat (Co-Pilot) and fly to age 70 and then move if he wished to the Flight Engineer Position and fly to age 75 - all this would depend on passing the First class Physical every six months.

Sincerely,
Hal J. Styles

FAA
Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
Docket No. 25008, 800
Independence Ave. S.W.
Washington D. C. 20591

18 Nov. 86

ARBITRARY is that correct word for the initial action in the matter of age 60 retirement for command pilots.

The evidence to strike down this ruling is overwhelming and I find it one of the mysteries of the aviation world that the action was taken in the first place - to say nothing of the fact that the rule has stayed in place for so long a time.

I strongly support the proper medical testing of pilots including the stress test type of EKG for command pilots. (A view not shared by many other pilots - but one that has some real value) Of course the action and review process would need some revision before implementation.

I read somewhere that "the Age 60 rule was arbitrary and grossly discriminatory" and that says it all - it is time to rewrite this rule in light of facts.

Sincerely

Wm F. Smith

Wm F. Smith
19339 Linden Ave. N.
Seattle, Wa. 98133

8671-G S.W. 97th St.
Ocala, Fl. 32676

November 19, 1986

Federal Aviation Administration
Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
Docket No. 25008
800 Independence Ave. S.W.
Washington, D.C. 20591

Dear Sir:

I wish to express my feelings against the FAA rule that arbitrarily requires airline pilots to retire at age 60.

The public comment period was too short and unfair.

The age 60 rule is grossly discriminatory and is virtually the only remaining age-related employment discrimination allowed in this country.

Dec. 3, 1985, I was forced to retire by this rule despite my ability to pass proficiency checks and was and still am in excellent health.

I beleive this rule should be revoked.

Sincerely yours,

John W. Schauf

John W. Schauf

J.W. Schauf
8671-G S.W. 97th St.
Ocala, Fl. 32676

PETITIONER'S
EXHIBIT

156

1

#49

JOHN F. DOUGHERTY
1456 N. WINTON ROAD
ROCHESTER, N. Y. 14609

20 November 1986

Age 60 Docket
FAA
Office of Chief Counsel
Rules Docket (AGC-204)
Docket No. 25008
800 Independence Ave. S.W.
Washington, D.C. 20591

25
All: 36

Subject: Docket No. 25008

Gentlemen:

I take extreme exception to any age limitation or restriction regarding pilot certification as being currently proposed.

If a man is qualified physically, mentally, and professionally there is no reason for limitation. Experience does not show the need for such a proposal.

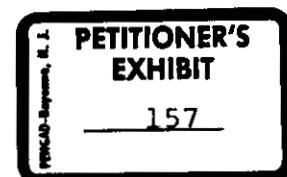
I speak as an active flight instructor.

Very truly yours,

John F. Dougherty

John F. Dougherty

CC:Aopa



#50

JOHN F. LYNCH
20 CLOVER HILL LANE
LAGUNA HILLS, CALIFORNIA 92653

(714) 831-6144

November 18, 1986

Federal Aviation Agency
Office of The Chief Counsel
Attn: Rules Docket (AGC-204) Docket No. 25008
800 Independence Ave. S. W.
Washington, DC 20591

Gentlemen:

There is no medical or performance data to justify a general rule barring airline pilot duties because of age. An experienced pilot who remains medically qualified and meets recurrent training requirements should be allowed to continue flying until becoming incapable of meeting a set of objective, reasonable and measurable standards.

This is virtually the sole remaining age-related employment discrimination allowed in this country. It is especially cruel in that full social security retirement benefits are not available until age 65.

To arbitrarily throw away the safety advantages of a person with years of experience is not in the best interest of the travelling public. I urge you to set reasonable health and proficiency standards for airline pilot retirement and eliminate the age 60 rule.

Sincerely,


JOHN F. LYNCH



3506 Vista Haven Road
Sherman Oaks, California 91403
November 20, 1986

FAA
Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
Docket No. 25008
800 Independence Avenue S.W.
Washington, DC 20591

Dear Sir:

I would like to express my feelings about the Age 60 retirement rule.

This summer I received my instrument rating as a private pilot. I was fortunate to have as one of my instructors a recently retired (age 60) airline captain.

While I benefited greatly from my instructor's experience, I feel that both the airlines and the commercially flying public are the losers.

Here is a highly trained man at the peak of his experience stopped short by a ruling that can only be considered arbitrary today. Heath, training and currency requirements make much more sense than a number.

It would also make economical sense to the airlines I would think, to keep their most experienced pilots flying longer. When I fly commercially, I sure feel comfortable knowing the guy up front has seen enough to handle the situation. And the longer he's seen it, the better I feel.

The sad side of putting somebody out to pasture before his time is that he generally does go to seed. That's really a shame and we shouldn't do that to anybody.

I do hope you will consider changing the Age 60 rule. We need our experienced pilots. Sixty just isn't that old any more.

Thank you.

Sincerely,

Robert L. Coburn
Robert L. Coburn

cc: AOPA

20
All: 36



HENRY DREYER
PROFESSIONAL PILOT AND AVIATION CONSULTANT

1369 CRESTLINE DR.
SANTA BARBARA CA 93105

(805) 682-1373

Henry Dreyer
1369 Crestline Drive
Santa Barbara, CA 93105

November 21, 1986

Age 60 Docket
FAA Office of Chief Council
Attn: Rules Docket (AGC-204)
Docket No. 25008, 800
Independence Ave. S.W.
Washington, D.C. 20591

20 All: 36

Dear Sir/Madam:

In regards to the merits of forced retirement of pilots reaching age 60.

In 1973 while flying for Western Airlines; on the 19th of February, I became 60 years old, for that reason and that reason alone, Western Airlines was forced to retire me, and no airline operating under FAA 121 was allowed to hire me as a pilot.

This made it necessary for me to find employment in the less developed countries, where living and working conditions were not the best.

In 1974 I flew in South and Central America.
In 1975 I flew in Africa and Egypt
In 1976 I flew in Egypt, Africa, Thailand and Japan
In 1977 I flew in Egypt
In 1978 I flew in Indonesia
From 1979 to 1984 I flew light airplanes out of Santa Barbara. At this time I fly only enough to maintain my pilot's license.

I am now 73½ years old and pass my first class physical, and also my flight proficiency checks.

There is no logic in retiring a pilot based only on age.

Respectfully,

Henry Dreyer
HENRY DREYER

cc: AOPA Aviation
Standards Department

PETITIONER'S
EXHIBIT

160

#52

52

- - ALBERT L. WALONICK, M.D.
1631 MEDICAL ARTS BUILDING
MINNEAPOLIS, MN 55402

REC 08 1986

1986 NOV 24 AM 11:31

spo?

November 18, 1986

AGE 60 Docket (AGC-204)
Docket No. 25008
800 Independence Ave. S.W.
Washington, D.C. 20591

Gentlemen:

I am disappointed at the stand taken by the F A A thus far on the AGE 60 rule. If a pilot is medically qualified to fly and meets all the first class medical requirements, then the AGE 60 rule is blatantly discriminatory and has a baseless foundation in our society that says that it is illegal to terminate an employee based solely on age.

Therefore, I strongly urge the FAA to reconsider the petition of the airline pilots and rule fairly and thus, favorably.

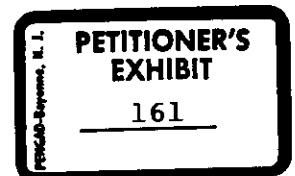
Sincerely,

Albert L. Walonick

Albert L. Walonick, M.D.

AME 15469-9

ALW/co



11-18-86

Chief Counsel,
F.A.A.
800 Independence Ave S.W.
Washington D.C.

RE: Age 60 docket

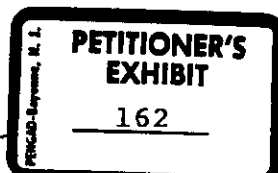
Dear Sir;

Please do not allow forced retirement by age only. Age has different effects on different folks. The only means for retirement should come from medically qualifying and maintaining current training. There is no place for employment discrimination by our government agencies in America.

Thanks for your consideration.

940 Magellan
Costa Mesa, Ca.
92626

Best regards
Dan Thrasher
Private Pilot:





Golden Sun Feeds®, Inc.

General Offices: P.O. Box 517, Highway 4 South, Estherville, Iowa 51334

Telephone: (712) 362-3551

November 17, 1986

FAA Office of Chief Counsel
Attention: Rules Docket
AGC-204
Docket No. 25008
800 Independence Ave. S.W.
Washington, DC 20591

Re: Age 60 Docket

Dear Sir:

I have long been opposed to the age limit criteria set on Pilot Certificate privileges.

Career limits based on something as meaningless as age alone is absolute discrimination.

Your abolition of this Age 60 Limit would be wildly applauded by me.

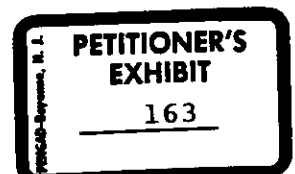
Sincerely,

GOLDEN SUN FEEDS, INC.

William D. Ambrose
Pilot

ms

25
ALL: 36



510 Mission Hill Road
Boynton Beach, Fl. 33435
November 21, 1986

FAA, Office of the Chief Counsel
Attn.: Rules Docket (AGC-204)
Docket No. 25008
800 Independence Ave., SW
Washington, DC 20591

Dear Sirs:

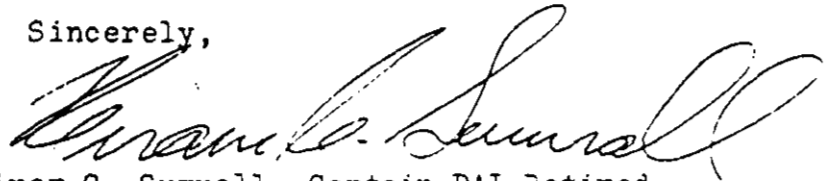
I was forced to retire from Delta Air Lines April, 9, 1977 because of the "Age 60" rule. After almost 10 years I still have a First Class medical certificate, still fly my own airplane and feel that I am still fully capable of performing as an Airline Captain.

In order to prove the point, I would be glad to volunteer to be trained and tested on any of the last three airplanes I was qualified on (DC-8, DC-10, L-1011).

I realize that this would not be in order for me to attempt to return to my former job but simply to prove that I was still capable at age 70 and to prove that the age 60 rule should be changed.

Please advise me if I can be of service to this end.

Sincerely,



Hiram C. Sumrall, Captain DAL Retired
Airline Transport Pilot Cert. #314607



Flexi-Van Corporation

333 Market Street
Suite 3150
San Francisco, California 94105
415/543-2304

November 21, 1986

Federal Aviation Administration
Office of the Chief Counsel
800 Independence Avenue, S.W.
Washington, D.C. 20591

ATTN: Rules Docket (AGC-204)
Docket No. 25008.

25
ALL: 36

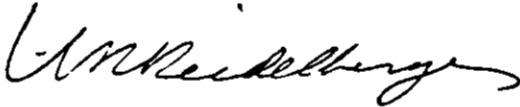
Gentlemen:

I would like to comment on the subject docket concerning exemptions from the age 60 limitation requirement for airline pilots.

In my opinion, this is an arbitrary requirement which never had validity. The real test should be a pilot's physical condition which could be bad at 55 in one case and excellent at 70 in another. Since the requirements for physical testing screen out the unfit, the age requirement is totally unnecessary. Additionally, people are in better physical condition and stay that way longer than ever before.

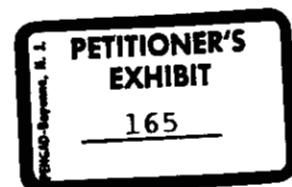
I strongly urge you to amend the rules to eliminate the age requirement for airline pilots.

Sincerely,



W. R. Reidelberger

WRR:mtap



Federal Aviation Administration
General Counsels Office
800 Independence Ave. S.W.
Washington, D.C. 20591

11/19/86

Reference: Docket # 25008 Age 60 Rule - 14 FAR 121.383C

G.R. Hartigan
Captain - Continental Airlines
20803 Stuebner Airline #22
Spring, Texas 77379

Gentleman;

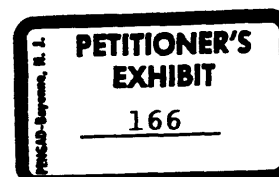
I understand you are soliciting comments on the Age 60 Rule FAR 121.383C. I would like to express my comments for the record. I believe the Rule came into effect in 1959. I never have understood why this Rule was ever adopted in the first place, it is arbitrary and "grossly discriminatory," given the FAA requirements to FAA Physicals and Proficiency Checks under Part 121 Aircarriers. The rule does not recognize individual differences in health and performance. An experienced pilot who remains medically qualified and meets recurrent training requirements should be allowed to continue flying until becoming incapable of meeting a set of objective, reasonable and measurable standards.

Please make note of the above comments for your meeting. Thank you for your time in this matter, from a Captain of 20 years seniority with Continental Airlines.

Sincerely

G.R. Hartigan
Capt. G.R. Hartigan

HARTIGAN
20803 STUEBNER AIRLINE #22
SPRING, TX. 77379





CONGRESS OF THE UNITED STATES
HOUSE OF REPRESENTATIVES
WASHINGTON, D.C. 20515

ROBERT J. MRAZEK
3RD DISTRICT NEW YORK

COMMITTEE ON
APPROPRIATIONS
WHIP AT LARGE

A861103018

October 27, 1986

The Honorable Donald Engen
Administrator
Federal Aviation Administration
800 Independence Avenue, S.W.
Washington, D.C. 20591

Dear Mr. Engen:

I am writing in support of Melvin M. Aman et al., and their Petition for Exemption from Federal Aviation Regulation 121.383(c), the Age 60 Rule. This petition is currently before the Federal Aviation Administration (FAA).

The invocation of the Age 60 Rule in the Aman case requires re-examination. Mr. Aman et al. have submitted significant medical evidence attesting that they continue to be qualified to serve as pilots. In addition, many highly regarded medical experts question the continued validity of such an across the board exclusion. Certainly, there is technology available that can determine an airline pilot's physical condition and capability--whether he is still qualified to fly--after age 60. Those pilots who can prove through a reliable medical examination that they are fit to remain as pilots, should be allowed to do so.

Mr. Aman and the other petitioners in this case have supplied sufficient medical evidence to warrant their exemption from the Age 60 Rule. I support them in this effort.

Sincerely,

Robert J. Mrazek
Member of Congress

RJM:dac

10:01A 6 NOV 86



ORRIN G. HATCH, UTAH, CHAIRMAN

ROBERT T. STAFFORD, VERMONT
DAN QUAYLE, INDIANA
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HAYDEN G. BRYAN, STAFF DIRECTOR
THOMAS M. ROLLINS, MINORITY STAFF DIRECTOR/CHIEF COUNSEL

United States Senate

COMMITTEE ON LABOR AND
HUMAN RESOURCES

WASHINGTON, DC 20510

October 24, 1986

APG 11 38042

Federal Aviation Administration
Docket Section AGC-204
800 Independence Avenue, S.W.
Washington, D.C. 20591

Gentlemen:


I am writing in regards to the petition of Melvin M. Aman, et al. for exemptions from sec. 121.383 (c) of the Federal Aviation Regulations.

It has come to my attention that a well qualified panel of doctors developed an extensive examination of which the thirty-nine pilots mentioned in the petition underwent. This panel of doctors, which included such eminent physicians as Dr. Earl Carter of the Mayo Clinic, Dr. Stanley Mohler of Wright State University, Dr. Robert Burce of the Seattle Heart Watch, Dr. Sam Fox of Georgetown University, Dr. Owen Coons, a federally authorized Aviation Medical Examiner and Dr. Robert Elliott, a neuropsychologist, recommended that the pilots be granted exemptions from sec. 121.383 of the Federal Aviation Regulations.

I support this recommendation and ask that you grant such exemptions to these thirty-nine pilots and to future pilots who pass this examination.

Thank you for your time and attention to this matter of importance.

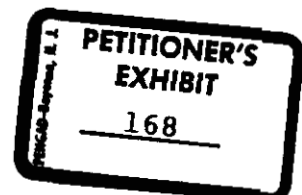
Sincerely,



Paula Hawkins
United States Senator

PH:mkh

15:6V 8210088



#63

REC 250

NOV 26 1986

G. R. Hartigan
Captain, Continental Airlines
20803 Stuebner Airline #22
Spring, Texas 77379

November 21, 1986

Federal Aviation Administration
General Counsel's Office
800 Independence Ave., S.W.
Washington, D. C. 20591

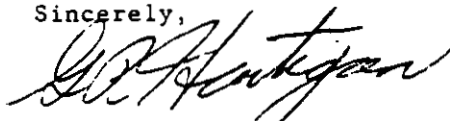
Re: Docket #25008 Age 60 Rule - 14 FAR 121.383C

Gentlemen:

I understand you are soliciting comments on the Age 60 Rule FAR 121.383C. I would like to express my comments for the record. I believe the Rule came into effect in 1959. I never have understood why this Rule was ever adopted in the first place. It is arbitrary and "grossly discriminatory", given the FAA requirements for FAA Physicals and Proficiency Checks under Part 121 Aircarriers. The rule does not recognize individual differences in health and performance. An experienced pilot who remains medically qualified and meets recurrent training requirements should be allowed to continue flying until becoming incapable of meeting a set of objective, reasonable and measurable standards.

Please make note of the above comments for your meeting. Thank you for your time in this matter, from a Captain of 20 years' seniority with Continental Airlines.

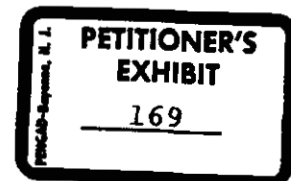
Sincerely,



Captain G. R. Hartigan

GRH/edk

cc: Mr. Frank Lorenzo - President, Continental Airlines
Congressman W. R. "Bill" Archer
Department of Labor



WYLIE H. MULLEN JR. M. D.
1003 BLACK ROAD
JOLIET, ILLINOIS 60435

PHONE (815) 722-8822

November 21, 1986

Age Sixty Docket

FAA

Office of the Chief Council

Attention: Rules Docket (AGC-204), Docket No. 25008

800 Independence Avenue SW

Washington, DC 20591

Gentlemen:

I strongly oppose an Arbitrary Retirement of Age 60 or any other age for the licensure of Pilots.


I have been a Pilot for forty-five years and a Physician for over forty years. Chronologic and physiologic age are two entirely different things.

There is no proof that reaching a chronologic age of sixty makes one a lesser Pilot. In fact, an individual of this age, having no known medical disabilities and capable of passing current FAA physical examination standards, may be a safer Pilot because of better judgement which goes with maturity.

Consider what would happen to our Congress, our Supreme Court and even our Commander-In-Chief if these individuals were forced into retirement by an arbitrary figure rather than on their actual ability to work and serve.

I repeat, based on my long experience both as a Physician and Pilot, there should be no mandatory retirement age for Pilot's either in the Airline Industry or in General Aviation.

Respectfully submitted,


Wylie H. Mullen, Jr., M.D.

WHM/ch

CC: AOPA

421 Aviation Way

Frederick, MD 21701

PETITIONER'S
EXHIBIT

170

November 21, 1986

FAA Chief Counsel

Dear Sir:

As a physician, I have the opportunity to see rather intimately people of all age groups. There is no correlation between age and health, or ~~between~~ age and ability to do certain tasks.

The 60 year old retirement rule for commercial pilots is an anachronism. There are sufficient tests available to determine if the pilot is capable and these objective standards should be independent of age.

However, as a transitional while getting "real world" data, it would be worthwhile to require those commercial pilots over "normal" retirement age of 65 to be tested three times a year.

Speaking strictly from the emotional viewpoint, when I am on a commercial flight, particularly in bad weather or going into National, I feel a lot more comfortable when I see a lot of grey hair in the left seat.

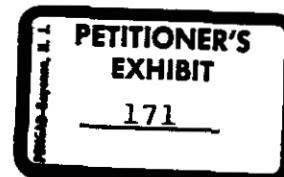
Thank you for the opportunity to express my opinion on this matter.

Sincerely,


James A. Gunn, M.D.

JAG/baf

BLODGETT PROFESSIONAL BUILDING RADIOLOGISTS
1900 Wealthy St., S.E., Suite 250
Grand Rapids, Michigan 49506



2-65

28 P 2: 48

Members who are concerned about age being the criteria for a reduction in pilot certificate privileges may write the Age 60 docket at: FAA, Office of the Chief Counsel, Attn: Rules Docket (AGC-204), Docket No. 25008, 800 Independence Ave. S.W., Washington, DC 20591.

Please send copies to AOPA's aviation standards department.



Mr. Simon Greenberg
234 High St
Randolph MA 02368

*Please send update on
latest rules regs
on this matter.*

*I prefer older - healthy -
capable Pilots -
Than young abusive of their
health pilots - or over bold
or over enthusiastic*



2-66
XC

Nov-17, 1986

#67

FAA, Office of Chief Counsel
Rules Docket (A/C 204) # 25008
800 Independence Ave SW
Washington DC 20591

Gentlemen:

First, let me strongly object to the short notice for this issue. I only received notification of the age 60 rule today. According to that notice, the comment period has already closed, which I consider grossly unfair.

Second, since it is possible that you have extended the deadline, I wish to add my comments to those of other interested parties:

There is no basis for an arbitrary rule discriminating against pilots based only on age. There is certainly a basis to disqualify pilots who, due to age or illness or other factors, can no longer maintain the physical and mental skills required to safely fly an airplane: the medical certification exam, and to a lesser extent, the currency and training requirements associated with each pilot classification.

Thank you for considering my comments. I
am convinced that enough people will consider
this issue important enough that you will discontinue
plans for the proposed rule change

Yours truly

William Bruce Borden

2332 Basewood

Justin, CA 92680

Office of Chief Counsel
Age 60 docket

Sir

I'm an AOPA member
and an airline pilot.
I have been a pilot for
40 years and have seen
many fit and alert pilots
forced to retire. In reference
to the recently passed right
to work rules (by Congress)
why can not a person
work if he is physically
fit. Why must he be
forced to retire due
to an arbitrary imposed

age limitation

Sincerely

A stylized, cursive handwritten signature, possibly reading "J. H. [unclear]", with a horizontal line extending from the end of the signature.

P.O. Box 950
Lindsay, Calif. 93247
November 25, 1986

86 NOV 28 P 2: 41

with
11/25/86

FAA
OFFICE of the Chief Counsel,
800 Independence Ave., S. W.
Washington, D. C. 20591

Attention: Rules Docket (AGC-204)
Docket No. 25008

Gentlemen:

As an airline pilot, I was retired at age 60, because of
the arbitrary FAA rule.

In August 1986 I passed my semi-annual ATR physical. My
medical examiner has from time to time stated that it was
his opinion that I should not have had to retire at age 60.

Currently I fly my own Bellanca Viking, for my own purposes.
I had just reached a nice level of earnings, when I was
forced to retire. Consequently I found my pension drastically
reduced.

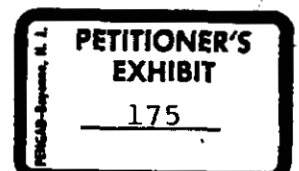
Inasmuch as I reached my 61st birthday this past September,
any change will not benefit me. Therefore I wish to register
my protest on behalf of the many airline pilots being discrim-
inated against.

Thanking you for your attention in this matter, I remain

Yours truly,

Fred W. Wahl

fw/m



~~Michael Slaughter~~

1153 Barcelona Drive
Pacifica, CA 94044
November 23, 1986

FAA
Office of the Chief Counsel
800 Independence Avenue S.W.
Washington, DC 20591

Attn: Rules Docket (AGC-204)

Good people:

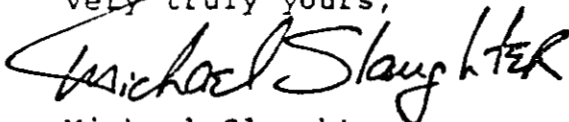
A pilot who is fifty-nine years and three hundred sixty-four days old twenty-four hours later has become unfit for service -- a relic, a has-been, an old codger tottering into senility, fit only for rocking-chair reminiscences.

How? Not by any known performance standard, not by any medical infirmity, not by any empirical basis at all. A fifty-nine year old pilot who lives one day too many is marched out of the cockpit sciegly by ukase!

This practice is age discrimination at its ugliest. Imagine going to your doctor only to hear: "I'm sorry, you're twenty-four hours too late! Today I'm too old to practice, you know." If the import of the rule were not so serious, the arbitrariness of the Age 60 rule would be laughable. As it is, it is merely absurd.

Unless some scientific basis can be demonstrated for the utility of the Age 60 rule, it has no more reason to exist than regulations based on a Ouija board, random number generation, or haruspicy.

Very truly yours,



Michael Slaughter

Michael Slaughter
1153 Barcelona Drive
Pacifica, CA 94044

PETITIONER'S
EXHIBIT

176

November 20, 1986

AGE 60 DOCKET

Officer of the Chief Counsel

Rules Docket (AGC-204)

Public Comment

I am one of those pilots who will be effected by the age 60 rule requiring airline pilots to retire on their 60th birthday. As I approach this time I find the age 60 rule more and more discriminatory with respect to the recent age discrimination laws enacted by the 1986 Congress. Scientific studies, medical studies and longevity data indicate that retirement at age 59 (you cannot fly at 0001 on your birthday) is not justified by a 26 year old rule.

I support the petition brought by a group of Airline Pilots and would join them in requesting the criteria for Airline Pilots age limits be rescinded or changed.

I fully understand a line must be drawn somewhere but not at age 59.

I would propose an extension to retire during a pilot's 60th year as a step toward a reasonable retirement date.

Sincerely,

CC/3

Representative Rostenkowski
AOPA
FAA

T.R. LEEDER
1469 SUNAIR CIRCLE
LAS VEGAS, NEVADA 89110

Theodore R. Leeder
Theodore R. Leeder
Captain
American Airlines
Pilot Cert. 1142972

86:28 82

RECEIVED 11-23-86 10:11:10

PETITIONER'S
EXHIBIT

177

C.D. SEGARS
211 CLUB DR
SAN CARLOS, CA 94070

FAA.
Chief Counsel

86 28 P 8 43

OFFICE OF THE CHIEF COUNSEL
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, D.C. 20591

DEAR Sir,

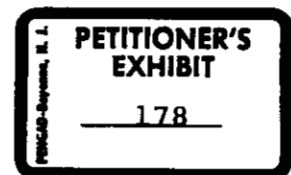
I AM WRITING IN REGARDS TO
THE AGE 60 Rule.

AS LONG AS AN EXPERIENCED PILOT
CAN MAINTAIN HIS MEDICAL QUALIFICATIONS
AND MEET HIS RECURRENT TRAINING
REQUIREMENTS, I FEEL HE SHOULD BE
ABLE TO CONTINUE IN HIS PROFESSION.

WE ARE MAINTAINING OUR MINDS/BOODY
AND LIVING LONGER WITH BETTER HEALTH
CARE.

THANK YOU

C.D. Segars



ESLEY M. WALKER
J. D. TODD JR.
FLETCHER C. MANN
JOHNNIE M. WALTERS
JAMES H. WATSON
R. FRANK PLACCO
J. BRANTLEY PHILLIPS JR.
JOHN E. JOHNSTON JR.
HARVEY G. SANDERS JR.
DAVID A. CLATTEBAUM III
O. DOYLE MARTIN
ALBERT O. TAYLOR JR.
JOSEPH C. MAJOR
DURE K. MCCALL JR.
O. JACK TAYLOR JR.
CARLE G. PREVOST
J. RICHARD KELL
A. MARVIN QUATTLEBAUM
CARL G. FERGUSON
JACK H. TEDARDS JR.

F. MARION HUGH
MICHAEL J. GIES
MARK R. HOLMES
WILLIAM L. DENNIS
STEPHEN E. LEHMAN
BRADFORD NEAL
NATALMA M. MCY
ROBERT A. DEMCO
RICHARD L. FEW JR.
GEORGE H. PRETTY III
KENNETH E. YOUNG
THOMAS L. STEPHENSON
GWENDOLYN G. EMBLER
STEVEN E. FARRAR
NANCY HYDER ROBINSON
ROBERT O. INGUS
HARVEY G. SANDERS III
SAMUEL W. COTTEN
WILLIAM T. ALBERT

ATTORNEYS AT LAW
217 EAST COFFEE STREET
POST OFFICE BOX 87
GREENVILLE, S. C. 29602
TWX: 810-281-2330
FAX: (803) 233-8461
ZAPNET: (803) 242-3046
TELEPHONE: (803) 242-6440

SPARTANBURG OFFICE
SUITE 302, SPARTAN CENTRE
101 WEST ST. JOHN STREET
POST OFFICE BOX 4409
SPARTANBURG, S. C. 29305-4409
TELEX: 752184
FAX: (803) 585-9874
TELEPHONE: (803) 585-5020

November 24, 1986

A PROFESSIONAL ASSOCIATION

O & LEATHERWOOD
COUNSEL

Federal Aviation Administration
Office of the Chief Counsel
ATTENTION: Rules Docket (AGC-204),
Docket No. 25008
800 Independence Avenue, S.W.
Washington, D.C. 20591

28
P 2: 43

Gentlemen:

This letter is to protest age being the criteria for reduction in pilot certificate privileges. I have just learned a group of airline pilots have petitioned the F.A.A. to gain exemption from a F.A.A. rule that arbitrarily requires them to retire at age 60.

There can be absolutely no justification for requiring an experienced pilot who remains medically qualified to be denied his pilot certificate privileges based on age alone. Any such age rule would be obviously arbitrary and grossly discriminatory and be just as unjustified in aviation as in any other aspect of business.

Countless qualified airline pilots who have more qualifications and experience perform with greater reliability at age 60 than persons who have less qualifications and experience other than their younger age. Age is obviously no substitute for competence in the cockpit. Competence and experience undeniably come about as a result of years of flying, which ironically creates a threat to pilots on age alone. This is clearly unfair.

I urge the F.A.A. to remove any 60-year age restriction upon pilot certificate privileges!

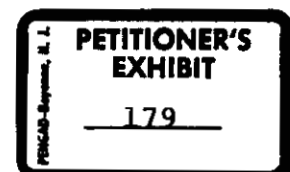
Sincerely,

J. Brantley Phillips, Jr.

J. Brantley Phillips, Jr.

JBPjr:sg

cc: AOPA Aviations Standards Dept.



5509 FAIRHILL RD.
Woodbridge, VA. 22192

Federal Aviation Administration
Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
Docket No. 25008

198

02

To Whom It May Concern,


I wish to express my opposition to the pilot age limit currently imposed on Airline Transport Pilots. The mandatory retirement of pilots at age 60 is a waste of a national asset and is especially ill-founded in light of the current pilot shortage.

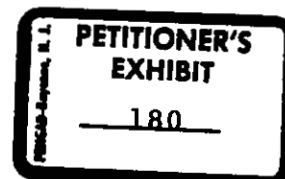
There have been numerous scientific studies that have categorically shown that there is no medical or performance data to justify a general rule based on age. Insurance companies have long known that people are living longer and healthier lives now as evidenced by longer periods of allowable insurability.

I am currently pursuing employment as an airline pilot and the fact that I'm 42 years old is working against me because the airlines see only 17 1/2 years of available productivity instead of 20 to 25 years.

I take personal exception to a general rule that lumps all pilots together. I work hard to stay in shape and healthy and it has paid-off. My life style is such that I feel sure that I can be a productive pilot as long as I am able to remain medically qualified and meet all recurrent training requirements; if and when I can't meet existing medical/training requirements then I agree those persons should not be the pilot-in-command.

Sincerely


Barry P. Gauch





Nov 25 86

FAA
Office of the Chief Counsel

Rules Docket (AGC-204)

Docket No. 25008

Age 60 rule

As a 59 year old pilot with a ^{3rd} Class ⁴⁵ medical, I am concerned that federal age rules follow a course of logic rather than some arbitrary (hence easy for the rulemaker) age-based theory.

My doctor says I'll live to be 100. Altho I don't now plan to fly til then, I want to fly until a proper medical procedure determines it is unsafe in my case, not when some "average" pilot statistically becomes infirm. That's not fair. That is discrimination.

Sincerely,

PETITIONER'S EXHIBIT
181

25 November 1986

FAA
Office of the Chief Counsel
Attn: Rules Docket (AGC-204), Docket No. 25008
800 Independence Ave. S.W.
Washington D.C. 20591

Dear Sirs;


According to the AOPA Newsletter for November, the FAA is accepting comments on the regulation retiring airline pilots at the age of 60.

As I recall, this regulation was enacted while General Quesada was head of the FAA. With many other military pilots, General Quesada was not an admirer of ALPA or the airline pilots, and this regulation affected only airline pilots. Since there was no medical proof that all pilots deteriorated significantly after sixty years of living, the reason given was "in the interest of safety": an irrefutable argument when no facts are available.

"In the interest of safety", this ancient pilot was a hazard when operating an elaborately equipped, late-model aircraft; with the assistance of a qualified co-pilot and, in many instances, a pilot-qualified flight engineer; but was legally safe to strap on, say, a twin-Beech, minimally equipped for all-weather operation and without another qualified pilot aboard; load in up to 8 or 10 trusting passengers, and launch into the wild blue. Since he was not operating under scheduled airline rules he was required to take a medical examination only once a year instead of every six months and, at that time, was not required to take any proficiency checks. This does not seem very logical, but logic is not a prerequisite for writing regulations.

During 46 years as a professional pilot, over 31,000 hours military and civilian, domestic and foreign airlines, and with much experience as instructor and check pilot; I have encountered pilots in their twenties who had peaked professionally and were deteriorating and pilots in the late seventies who were still competent in heavy four-engine aircraft. It's strictly an individual matter, not a subject for arbitrary regulation. If there is serious concern that a hazardous deterioration sets in at a certain age, increase the required physical and/or flight checks; ground those who are approaching the point of no return; but permit those who are young in-and-of heart to continue their chosen work.

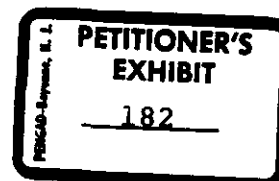
Sincerely,



Benjamin F. Dew
1603 N. Valrico Rd.
Valrico, Fla. 33594
(ATR # 54526)

54:2d 82 93

cc AOPA Aviation Standards Dept.



11/24/86

FAA

Rules Docket # 25008

I HAVE FELT THE 60 AGE LIMIT FOR
ATP RETIREMENT IS UNREASONABLE
IN THIS ERA OF BETTER HEALTH. NOT ONLY
THAT, BUT NATIONAL POLICY SAYS (JUST
PASSED BY CONGRESS) THAT YOU CAN'T BE
FORCED TO RETIRE BECAUSE OF AGE.

IT IS TIME THAT RETIREMENT IS
BASED ON MEDICAL STANDARDS AND PILOT
ABILITY. THE FAA NEEDS TO ADOPT
THIS POLICY

SENCELELY

John C. Kershner
JOHN C. KERSHNER

86.11.28 P 2:45



ADVANCE MACHINE COMPANY
SPRING PARK, MINNESOTA 55384

ROBERT J. POND
PRESIDENT

November 24, 1986

861113 AG:40

OFFICE OF THE ATTORNEY GENERAL
MINNESOTA

FAA
Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
Docket No. 25008
800 Independence Avenue S.W.
Washington, D.C. 20591

I am very concerned about age being the criteria for a reduction in pilot certificate privileges. Already the insurance underwriters are making arbitrary restrictions due to age rather than experience and ability which is a gross injustice.

I personally have ten type ratings, keep current in everything from World War II aircraft to a Sabreliner and a Jetstar, and am in excellent physical condition which is verified by both my personal physician as well as my annual flight physical given by another physician. I am sixty-two. To think that a person would be required to retire or have restrictions put on him by the FAA without consideration of factors other than age is ridiculous - what next if this is allowed - ground all pilots at age 60?

There must be other criteria. We take biennials with FAA personnel, so perhaps a program in conjunction with this after age 60 would be more fitting. Yes, it takes a little more time and effort, but it can be done. In the State of Minnesota when a person is at an advanced age with perhaps some physical limitations, a State agent comes out and drives with the elderly person in his automobile to evaluate the individual's performance, not make him stop

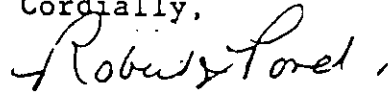


Page Two

November 25, 1986

driving because he might be 90. The FAA could certainly have a discriminatory program rather than arbitrary. Let's start giving the benefit of the doubt to our senior citizens who have taken care of themselves over the years in order to have the quality and fullness of life that they so richly deserve.

Cordially,

A handwritten signature in cursive script, appearing to read "Robert J. Pond".

Robert J. Pond

RJP/pd

2 copies sent
Succasunna, NJ 07876

FAA
Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
Docket No. 25008.
800 Independence Ave. S.W.
Washington, DC 20591

Nov 26, 1986

OFFICE OF CHIEF COUNSEL
AGC-204
NOV 26 3 41

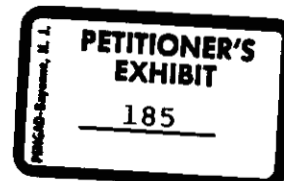
Dear Sir:

Although the comment period is already closed, on the petition for exemption from the mandatory retirement of Airline Pilots at age 60, I feel strongly enough about this arbitrary discrimination against pilots that I must comment anyway!

In the first place, had the comment period been reopened for 90 days, as requested by the AOPA, my comments would not be late, but timely.

In the second place, much of the private aviation industry uses the FAA standard for airline pilots as a guideline (excuse) for setting their own mandatory retirement age for pilots - my employer included.

Now for the basic issue itself, there is no ~~no~~ well documented medical or performance data that I am aware of, on which to base such a general



2-79

rule. Conversely, in this era fitness and improved health, even in the general population, are certainly improving. I strongly suspect a thorough, unbiased, scientific study would show that it is even better among the pilot population.

It seems to me that in this age of civil rights and anti-discrimination, that pilots are getting short changed with the only remaining age-related employment discrimination allowed in this country.

I certainly support the concept of flight safety, as evidenced by my almost 24 years of flying, both military and civilian, with no accidents or rule violations. I would have no problem with an objective set of fair standards, which must be met by pilots of all ages, in order to continue flying.

I hope that the last word has not been said, and that we will not let bureaucracy and prejudice continue this travesty of justice.

Yours truly,
Thomas H. Friedman

Dear Mr. [unclear] - [unclear]

N: RULES DOCKET (AGC-204) 5008

WASHINGTON D.C. 20591

OFFICE OF THE
COUNSEL
8611 3 AG: 411

Gentlemen,

I am very concerned about the "AGE 60" rule that has been imposed by the F.A.A. I am hoping that the F.A.A. will re evaluate this matter and delete this early retirement ruling.

In view of all the new medical evidence that has come about in recent years, I consider the "AGE 60 retirement" ruling outdated and discriminatory.

I have been collecting all sort of data on this matter and feel very strongly that the retirement age for FAA 121 Pilots should be extended.

This ruling has extended to corporate aviation and other types of flying and has set some very unfair precedents.

I would appreciate your consideration and any information on this matter.

Yours truly,
Joseph Strubilo

ATP #1182084

PETITIONER'S
EXHIBIT

186

Ontario, California 91761
Private Pilot Cert. # 201484956
ADPA # 793431

November 28, 1986

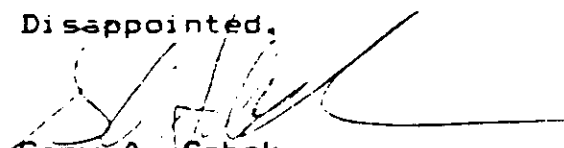
FAA, Office of the Chief Counsel
Attn: Rules Docket (AGC-204), Docket No. 25008
800 Independence Avenue S. W.
Washington, DC 20591

3
A9:39

I am very hurt to find out that OUR Government that was set up to serve US, does not allow sufficient time for us to comment on proposed rulemaking. It is also quite alarming to find out that our Government which opposed discrimination, practices it by requiring pilots to retire at age 60. The purpose of the 1st Class Medical that ATP are required to hold, would prevent any unqualified individual from flying when unqualified. What facts justify that those over 60 should retire? This rule is purely arbitrary and grossly discriminatory since it is the only remaining age related employment discrimination allowed in the country.

If you believe that only those who are up in years are the only ones who oppose this, you are wrong. I am 29 and believe this rule harms all of us.

Disappointed,


Gary A. Sobek

cc: ADPA
Congressman George E. Brown, Jr.



23

OFFICE OF CHIEF COUNCIL
ATTN: RULES DOCKET AGC-204
DOCKET NO. 25008
800 INDEPENDENCE AVE. S.W.
WASHINGTON, D.C. 20591

REC-3
AG:38
11/11/88

DEAR SIR:

THE "AGE 60" RULE SEEMS TO ME TO BE ARBITRARY AND GROSSLY DISCRIMINATORY, AND THEREFORE ILLEGAL. THE 20-DAY PUBLIC COMMENT PERIOD ALLOWED BY THE FAA ON THE PETITION TO CHANGE THE RULE CASTS FURTHER ASPERSIONS ON AN AGENCY REplete WITH PROBLEMS SO GREAT THAT ITS OVERALL EFFECTIVENESS MUST BE SERIOUSLY QUESTIONED. THE CALLOUS AND RATHER DECEITFUL MANNER IN WHICH THE INADEQUATE PUBLIC COMMENT PERIOD WAS PUBLICIZED SUGGESTS THE TYPE OF GOVERNMENT OPERATION FOREIGN TO DEMOCRACY.

PLEASE REOPEN THE ISSUE SO THAT A FAIR REPRESENTATION OF LEGITIMATE INTERESTS MAY BE SOLICITED.

THANK YOU,



J. F. GILBERT JR.
429 POINCIANA ISLE, NO. MIAMI BEACH, FL. 33160



15450 Cedarwood Lane #101
Naples, FL 33963

FAA, Office of Chief Counsel
800 Independence Ave. S.W.
Washington, DC 20591

Sirs:

Rules Docket (AGC-204)
Docket No. 25008

The Nov. issue of the AOPA Newsletter arrived just recently. In this letter was mentioned the arbitrary retirement age of airline pilots which is 60 years.

I retired from a very active practice of Pathology, including many years of hospital pathology and also working with the Coroner's Office for 30 years. This work included large numbers of careful autopsies of hospital cases and forensic cases.

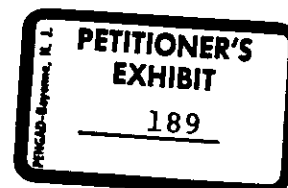
With considerable frequency, I observed coronary arteries of individuals which had an amazingly normal appearance and the heart muscle revealed no evidence of a previous "heart attack" even though the individual was over 70 years of age. Also, there were numerous instances of individuals whose hearts had coronary arteries revealing much sclerosis even though the individuals were under 50 years of age. Many of these revealed muscle scarring. Thus, there were many cases in which the chronologic age and physiologic age showed great discrepancy.

When I am a passenger in an airliner, I do not want to have a captain whose physiologic condition indicates a problem, regardless of his chronologic age, even if less than 60 or even 50 years of age. If his physiologic age is compatible with being a competent pilot, I am not worried if he is 35 or over.

At this time I believe that the pilots must have physical evaluations every 6 months, regardless of age, up to age 60.

A possible solution to the ongoing problem is this:

After age 60, the pilot must have a complete, appropriate examination and proficiency check every 4 months until age 62. After age 62, the pilot is examined every 3 months until age 65. If retirement would then be mandatory, the pilot could still qualify as Flight Engineer, with examinations continuing every 3 or 4 months until age 70.



both the medical examinations as well as flight proficiency checks. I am only increasing the frequency from every 6 months to every 4 months and then every 3 months. I believe that transport pilots would welcome an opportunity to prove that they meet the physical, mental and flight check standards when they are over 60 years of age. (The pilot in good condition and with good abilities might even be willing to finance the examinations if that were a necessity.)

Age discrimination has been determined to be illegal. However, the public must have assurance that the individuals in the cockpit are healthy and competent. Also, the pilot does not wish to be the victim of age discrimination. Making a requirement for increased frequency of examinations after age 60 and also requiring increased frequency of examinations under 60, when indicated, would accomplish the goals of:

1. Reassuring the public.
2. Give pilots a fair opportunity to prove fitness..
3. Avoid discrimination.
4. Give the FAA a completely safe alternative.

Respectfully submitted, I remain,

Sincerely,



James E. Habedeen, M. D. (retired, July 1984)

P.S. I hold private ratings for SEL, SES and Gliders and have a commercial rating for hot air balloons.



TO:

Federal Aviation Administration
Office of the Chief Counsel
800 Independence Avenue, S.W.
Washington, DC 20591

24 November 1986

FROM:

Thomas W. Mayer
Captain, American Airlines
A.O.P.A. Member No. 112574

RE: Rules Docket (AGC-204), Docket No. 25008

Dear Sirs/Madames:

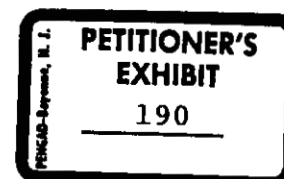
I am a professional pilot with over 16000 hours, the holder of ATPC No. 1265794, five type ratings, commercial and Flight Instructor privileges in Airplanes and Instruments (M.E. and S.E. L and S); and operate my own light twin. In short, flying is essentially my life and a great part of my identity. Each year since 1953 I have had the continuous training plus physical and competency exams required to demonstrate my ability to retain and exercise these privileges.

I have had, since its arbitrary institution by former Administrator Quesada, deep concern over the "age sixty rule" which has caused the unjustified and premature retirement of numerous totally qualified people with invaluable levels of experience. As you recall, Mr. Quesada proposed retiring all "jet pilots" at fifty-five!

The system has always had - and presumably used - the machinery to eliminate those whose competency or health failed to meet the rigid standards applicable to all. It is therefore difficult to imagine such a continual and unreasonable denial of rights to a certain group of American citizens to their fair share of "justice for all" (not to mention the denial of Social Security at this involuntary point!), and to earn a living according to their choice and ability.

One must also be deeply concerned over the logical extension of this discriminatory age-limit to general aviation pilots,...and indeed to operators of automobiles and other such potentially dangerous machinery, regardless of demonstrable fitness.

Powerful evidence exists to show that denial of the right to be a productive member of society precipitates loss of self-esteem, mental depression, deterioration of health, and decreased longevity. A cruel and inhumane penalty merely for reaching the numerical age of sixty.



286

Consider too, that the right to voluntary retirement remains intact in any case, thus preserving the freedom of choice for everyone involved. I sincerely look forward with trepidation to age sixty not only for myself and my fellow pilots, but for all American citizens under such a present mandate.

We really must take a hard look at the motivation of those who oppose the reversal of this rule if a just decision is to be reached. Beyond the wisdom of those who presume to decide the imminence of sudden incapacitation to be based on a fixed chronological age, the resistance to reversal of this rule seems to stem from two main sources. First, from employers who quite understandably would like to see the elimination of this higher cost segment of the payroll; and second, from so many youthful pilots who are so very anxious to reach the top, yet lack the foresight to see themselves at sixty.

I ask you therefore to eliminate this unfair and yes, socially dangerous precedent, to restore with confidence the "right to work" for all Americans, and to relegate all future decisions on retirement age to elected representatives or labor contracts where they rightfully belong.

Most sincerely yours,

Thomas W. Mayer
Thomas W. Mayer
(Age 55)

cc: AOPA, Avia. Stds.

FAA Office of the Chief Counsel
Attn Rules Docket AGC 204
Docket No 25008
800 Independence Ave SW
Washington DC 20591

AG:34

Dear Sir:

I have been observing pilots in general for over 30 years. I was raised initially on a Naval Air Base, due to my father being a PBY pilot who was highly recommended for saving an aircraft under unusual circumstances. He was an extremely good pilot who was in his thirties at that time. Had he survived Korea, I am sure that he would still be flying and would also be one of the best in the world.

Since his death, I have lived on or near military bases most of my life. I have personally noticed that people who fly, gain with experience, which is ordinarily something that goes with the amount of time you spend on learning or using what you have learned.

People who fly, do so because they not only enjoy it, but it is an occurring experience. No one ever learns everything when it comes to flying. The only way you learn is by getting out there and experiencing events in real life every day happenings. The more you fly, the more you learn. Every time you go up, you learn something you did not know yesterday.

The age of a pilot has nothing to do with his/her qualifications. Just because a person is 60, does that mean he is going to have a heart attack tomorrow? My dentist died of a massive heart attack at night and he was only 32. He did not wait until the magic age of 60 to die. Medical. Most people 60 and over that are still flying are in better shape than you average executive type person. Pilots try very hard to stay in shape more so than the normal person because they do not want to lose their medical which would prevent them from flying. A person who is 60 has better reaction timing in relationship to an emergency than a person who is 40, due to more experience and an almost automatic reflex to an emergency.

Some of the best pilots I know who are still teaching aviation are in their 70's and 80's. They fly so good it makes you want to cry. They have become one with their airplane. You can't tell when one starts and the other takes over. It is highly insulting for us to be told that when we are 60 we should be required to quit flying. As long as the medical and practical flight tests can be passed, I see no reason why pilots should be discriminated against in this derogatory manner. I feel that you have made a grievous error in this decision, one that should be promptly reversed.

It is well known that when the ATC people were fired, we lost the voice of experience in several cases. This is something that cannot be regained. I do not look forward to flying in a 737 with a downy faced youngster on board. As a matter of fact I probably would not. Age inspires confidence



Next, you will try and tell us that we cannot drive automobiles after the age of 60. Herein lies the same forethought. If you can pass an eye test, and a driving test, along with a written test, then a practical test of ability should determine if you still have it to drive.

A pilot takes a lot more into consideration when they meet requirements for flying. Age is not considered, and it should not be. The only things required must be met or one cannot fly. This is mandatory for all pilots.

You need to reconsider your comments, remarks and recommendations. They are not based on the real facts of life.

Please let me hear from you and set this situation to rights.

Sincerely



Donna Jean Jobe
891406
5501 S Staples
Corpus Christi TX 78411
512-991-7701

November 28, 1986

Age 60 Docket
FAA, Office of the Chief Counsel
Att : Rules Docket (AGC-204)
Docket No. 25008
800 Independence Ave. S.W.,
Washington, D.C. 20591

Sirs:

Altho beyond the 20 day public comment period for the petition, I've decided to write anyway and go on record, because of the public and congressional interest. As I understand it I had until 29 October to make comments. As usual however, this information was late in being disseminated or-at least-I was late in knowing about it.

I am 64 and just recently finished obtaining my CFII after laying off flying for over 10 years. I am a retired Navy Captain and was trained as a Naval Aviator in the early WWII days. At that time (ie: during the mid forties) the average age for the Naval Aviator combat off our Aircraft Carriers was about 22 yrs of age. A person who had reached the age of 20 to 28 was considered an old man for combat. About the time I retired (ie: 1970) and certainly during the Vietnam war the average age had gone up considerably and by this time (even tho aircraft were far more complex and quite a lot faster) a person at age 40 was considered pretty old for combat flying.

Presumably, the airlines were retiring pilots (ie: Captains) when they reached age sixty and yet most were still capable of carrying out successful and complicated passenger carrying activities.

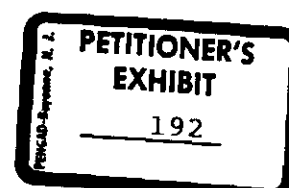
There has been absolutely no proof whatsoever that a person's reaction time slows down with age. It depends entirely upon an individual and in fact, many people in their Seventies have better reaction time than some in their Forties.

I submit that youth is not a time of life - - it is a state of mind. It is not a matter of ripe cheeks, red lips and supple knees; it is a temper of the will, a quality of the imagination, a vigor of the emotions; it is a freshness of the deep springs of life. Youth means a temperamental predominance of courage over timidity, of appetite of adventure over love of ease and certainly a person of 70 or maybe more may have these qualities. We are as young as our faith, as old as our doubts and so the list goes on.

I rest my case.

Sincerely,
Floyd H. Brown
Floyd H. Brown

s: I teach motorcycle rider safety both off and on road and also give flight instruction. I own my own aircraft (A cessna 170b) and will put my ability up with the youngest for comparison.



Mission Viejo, CA 92691

November 26, 1986

Federal Aviation Administration
Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
Docket No. 25008
800 Independence Avenue, S. W.
Washington, D. C. 20591

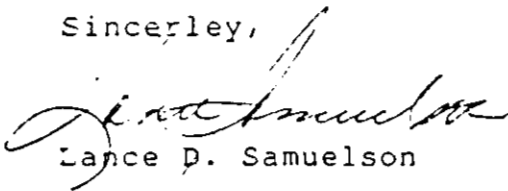
Gentlemen:

I would like to express my deep concern and absolute opposition about the current debate of age being the criteria for a reduction in pilot certificate privileges.

There are medical reports too numerous to list stating that there is no medical justification or performance data to justify a general rule arbitrarily using a specific age as a threshold for medical certificate reductions.

An experienced pilot who remains medically qualified and meets recurrent training requirements should be allowed to continue flying until becoming incapable of meeting a set of objectives established by current medical standards, not standards that were originated or incorporated in the late 1950's or early 60's.

Sincerely,


Lance D. Samuelson

LDS/jd



WESTGATE ORTHOPAEDICS, LTD.
THE BRACKETT BUILDING
1125 WESTGATE
OAK PARK, ILLINOIS 60301

BOONE BRACKETT, M.D.
THOMAS G. COLMEY, M.D.
FRANK MINARDI, D.O.
ORTHOPAEDIC SURGERY
(312) 848-7700
(312) 848-7820

PAT HUEBNER
BUSINESS MANAGER
—
MARY McMILLEN
OFFICE MANAGER
—
JACKIE BRAUTIGAM
CLINIC MANAGER

December 1, 1986

F.A.A.
Office of Chief Council
Attention: Rules Docket
AGC 204
Docket # 25008
800 Independence Avenue Southwest
Washington, D.C. 20591

4
11:22

Dear Sirs:

It is my opinion that an experienced pilot who remains medically qualified, who meets current training requirements should be allowed to continue flying until becoming incapable of meeting a set of objective, reasonable and measureable standards. It appears to me that the age 60 rule is arbitrary and grossly discriminatory.

Yours very truly,

Boone Brackett, M.D.

Boone Brackett, M.D.

BB mm
Dictated not read





PARK LANE HOTEL

HOSPITALITY

December 1, 1986

F.A.A.

Office of the Chief Counsel

Attn: Rules Locket (AGC-204)

Locket # 25008

800 Independence Ave, S.W.

Washington, DC 20591

10 AIO: 01

It is time for the FAA to stop being arbitrary and listen to the public. It is a agency to have to be affected with such an organization that supposedly makes it clear that an unprofessional pilot must follow.

In the last decade the FAA has turned away from the basic needs and desires of the pilot groups to enhance safety, training and efficiency.

It is time for the FAA to listen to the people involved and leave the politics to the politicians and open the legal question to the public in an open and fair manner.



PARK LANE HOTEL
HONG KONG

It has been demonstrated in many ways and documented the arbitrary age of 60 does nothing to improve air safety.

Since the age 60 issue became law I could never see any reason for such a law and am still against this ridiculous ruling.

As a former airline captain I have been unjustly forced to stop flying as a pilot on Part 121 aircraft and feel I was discriminated against solely on my age and not my ability.

Sincerely,

R.E. Clinton

Red Box 2561

MENLO PARK, CA 94026

CAPT. C. W. STARR

7123 WILLOWBRIDGE CIRCLE
HOUSTON, TEXAS 77095
(713) 859-9599

November 25, 1986

Re: Docket # 25008
Age 60 Rule - 14 FAR 121.383C

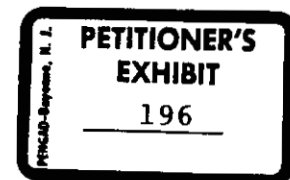
Federal Aviation Administration
General Counsels Office
800 Independence Ave. S.W.
Washington, D.C. 20591

Gentlemen:

I understand you are soliciting comments on the Age 60 Rule - FAR 121.383C. For the record I would like to express my views on this most important subject.

This rule came into effect in 1959 and was, in my opinion, grossly unfair, arbitrary, and discriminatory, without any sound basis in fact. All other sectors of industry, as well as the Federal Government, have abolished such discriminatory rules; and in fact Federal Law now prohibits such mandatory retirements based solely on being age "60". Pilots of any age are required to pass exacting physical testing every six months when serving as pilot in command of Part 121 aircraft. These standards are the same whether the pilot is age thirty one or age sixty one. As long as the pilot is able to pass these exacting standards, and maintains his proficiency, it makes little or no sense to deny an individual the right to employment based solely on age. Indeed, it denies the public the experience and abilities such a person brings to the air transport industry. Such thinking would deny a trial lawyer, a doctor, or a government official the right to bring their experience and expertise to the public; and to force their retirement at an early age. As we all know, this is most certainly not the case in professions other than commercial aviation.


It is my view that this mandatory retirement law was thrust upon the industry by a group of persons wishing to advance in their profession at the expense of those who have preceded them. I can find no sound reason why a pilot, who



maintains the same physical and proficiency standards (set forth in the applicable regulations) as a younger pilot, should not be allowed to continue his professional duties. To deny this right is, in my view, unfair, highly discriminatory, and not serving of the public's interest.

As a pilot of a Part 121 airline for over thirty years, and with over five years still left in my career, I offer these comments for your consideration.

Respectfully,



Capt. C.W. Starr
ATK # 1156177



CIVIL AVIATION MEDICAL ASSOCIATION

#97

(Headquarters)
775 Bank Lane
Lake Forest, Illinois 60045
312/234-6330

December 1, 1986

DEC 1 1986

Docket FAA
Office of Chief Counsel
Attn: Rules Docket (AGC-204) Docket 25008
800 Independence Ave. S.W.
Washington, D.C. 20591

Dear Sirs:

In reference to the "Age 60 Rule", the Civil Aviation Medical Association finds no medical or performance data to justify restriction of airman privileges on the basis of age alone.

Sincerely,

John H. Boyd, D.O.
President
P.O. Drawer W
Eden, Texas 76837

JHB/bn



FREMONT, CA
DEC 3, 1986

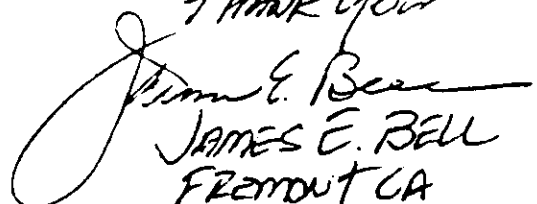
CHIEF COUNSEL
OVER 60 DOCKET

DEAR SIR,

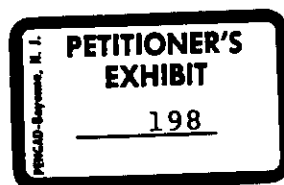
10
A 9:55
SPEAKING AS A GENERAL AVIATION PILOT OVER 60 I URGE
THIS RULE NOT BE MADE MANDATORY AS LONG AS
THE INDIVIDUAL CAN CONTINUE TO QUALIFY UNDER
EXISTING MEDICAL STANDARDS. I DO FEEL HOWEVER
SOME AGE LIMIT OR MEDICAL STANDARD SHOULD BE
REQUIRED OF ALL PILOTS OVER AGE 65. COMMERCIAL
OR PRIVATE. THESE STANDARDS SHOULD INCLUDE SOME
HIGHER STANDARD THAN EXISTING 3RD CLASS MEDICALS.

MODERN MEDICAL SCIENCE HAS MADE CONSIDERABLE PROGRESS
IN OFFERING MEDICATIONS WHICH CONTROL VARIOUS TYPES
OF HEART CONDITIONS ASSOCIATED WITH AGE. THESE SHOULD
NOT BE OVERLOOKED AS EFFECTIVE CONTROLS.

THANK YOU


JAMES E. BELL
FREMONT CA

LICENSE NO 11634958 SE



JOHN W. HERBERT

Post Office Box 479

KETCHUM, IDAHO 83340

208-726-9448

Federal Aviation Administration
Office of the Chief Council
ATTN: Rules Docket (AGC-204)
Docket No. 25008
800 Independence Avenue
South West Washington DC 20591

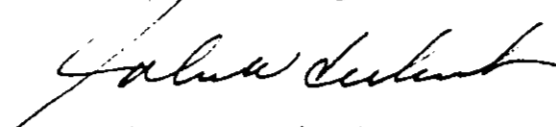
Dear Sirs,

Although I am not an airline pilot, I am over 60, and I do believe that a forced retirement at the age of 60 wastes a great deal of skill and knowledge.

I believe a person should be tested on their competency and with the simulators available today it is an easy matter to assess that competency.

There are many factors involved in being a good safe pilot, some of those factors definitely are built only through experience. I would support the continued employment of any airline crew member who is capable of passing proper medical and proficiency checks.

Most Sincerely,



John W. Herbert

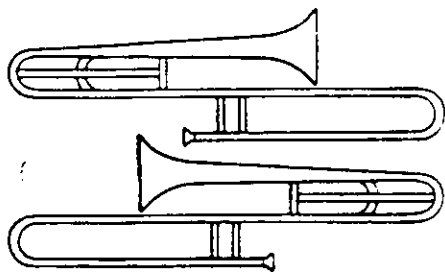
SEL+S, MEL, Cmcl, Inst.
CFI Airplane, S+M, Inst., Glider
CGI Advanced & Instrument

cc/AOPA Aviation Standards Dept.

12-3-86

JWH/cl





MUSICAL MINISTRIES

P.O. BOX 5524 • GREENVILLE SC 29606 • PHONE (803) 242-6722

December 4, 1986

CO
10
AIO: 01

Federal Aviation Administration
Office of the Chief Counsel
ATTN: Rules Docket (AGC-204)
Docket No. 25008
800 Independence Avenue, S.W.
Washington, DC 20591

Dear Sir:

As a 56-year-old, 3,000-hour pilot who is in excellent health, I would like to suggest that any pilot who can meet a given set of standards, no matter what his age, should be allowed to keep flying.

I hope you will do all you can to ensure that capable pilots are not discriminated against because of age.

Thank you for your consideration.

Sincerely yours,

Frank Garlock

Frank Garlock

bs

Signed in Dr. Garlock's absence



I WILL SING UNTO THE LORD AS LONG AS I LIVE
I WILL SING PRAISE TO MY GOD WHILE I HAVE MY BEING
PS 104:33

Honeywell

December 4, 1986

Federal Aviation Administration
Office of Chief Counsel
Rules Docket (AGC-204)
800 Independence Avenue S.W.
Washington, D.C. 20591

REF: AMAN ET. AL., EXPEMPTION FROM AGE 60 RULE
PUBLIC DOCKET NO. 25008

The Minnesota Business Aircraft Association is comprised of the leading corporations in the state of Minnesota. The purpose of the Association is to keep the members informed on matters relating to aviation and to represent the members with one strong voice.

The Association would like to speak with that voice now on the age 60 rule for airline pilots. We polled our membership on this question and 65% were in favor of abolishing the rule. Of the 35% that opposed it, many of them are young pilots who would like to see the older pilots leave, thereby opening up captain seats.

Since most of our member companies operate under FAR 91 they are not bound by the age 60 rule. However, lacking any guidance, some companies require their pilots to retire at age 60 while others require it at 65, and some go to 70. Among our pilot group, we have quite a few who are over 60 and fly high performance jet aircraft. These pilots routinely pass their Class I physical and go to recurrent training and pass their check rides. Their companies view their vast experience as a high safety factor and not their age as a detriment.

Our experience has shown that the age 60 rule is arbitrary and should be abolished.

Sincerely,



Richard R. Severson
Minnesota Business Aircraft Assoc.

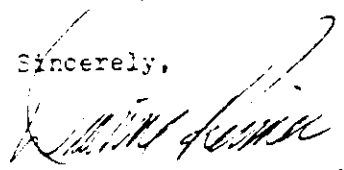
#103

12-3-86

Rules Docket (AGC-204)
Docket #25008

Besides all of the obvious reasons we object to this discriminatory age restriction, all of us women who had to wait for the men to get their flying careers going after Viet Nam, will have rather abbreviated careers, if we stop at 60, having only begun at 40.

Thanks for changing the rule. You'll do social security a favor and us, by letting us fly until health prevents us from competing with the 20 year olds.

Sincerely,

Dianne Reimer, ATF 565546459

*Dianne Reimer
12520 Rd. 34 1/2
Madrona, Ca. 93658*

December 10, 1986

Federal Aviation Administration
Office of General Counsel
ATTN: Rules Docket (AGC-204)
Docket No. 25008
800 Independence Avenue, S.W.
Washington, D.C 20591

Gentlemen:

As an Airline Pilot, I would like to comment on the petition (Docket No. 25008) for exemption to the Age 60 Rule.

I have thoroughly read this petition and the published data from the Congressional Hearing of October 17, 1986 and find it inconceivable to believe that this exemption would not be approved.

The voluminous, reliable, authoritative and expert documentation supporting these exemptions from an obviously arbitrary rule can leave no question as to the credibility of the petition. Since SAFETY is the primary consideration in the matter, the documentation clearly establishes that pilots who would fly under the protocol of these waivers would be far safer than pilots under sixty who are flying under the present 1st class medical requirements. In addition, it would allow the more experienced pilots to continue in a field where experience is established as a factor of safety.

A secondary, but no less important, consideration is the unfair restraint put on 'older' pilots to continue their career. This arbitrary rule forces mandatory retirement on people very capable of continuing their profession and essentially removes their means of livelihood.

It would seem a travesty of our entire form of government, a prejudicial and superstitious continuation of arbitrary rule making and a blatant disregard of modern medical science if this petition is denied.

As an airline pilot approaching age 60, as we all are sooner or later, I urge you to thoroughly consider the factual information presented and allow this exemption.

Yours very truly,

CAPT. JOHN J. MILES
1182 LUCINDA WAY
TUSTIN, CA 92680

John J. Miles
John J. Miles
Captain, AirCal Airlines



75-5781 Elena Place
Kailua-Kona, Hawaii 96740
December 10, 1986

FAA. Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
Docket No. 25008
800 Independence Avenue, S.W.
Washington, D.C. 20591

Gentlemen:

The arbitrary and discriminatory Age 60 retirement rule for pilots has another effect that has seldom been addressed. It discriminates against far younger individuals as effectively as if they were already Age 60. The following true example illustrates my point:

Royal Hawaiian Air Service, an old and trusted commuter line, recently went out of business due to the effects of deregulation. My husband, a Senior Captain with 15,000 hours, virtually every rating in the book, experience as an examiner and former Chief Pilot, has been unable to get the airlines locally to even interview him. Why? Because he is 49 years of age, and if they hire him they can only get 11 years of service out of him. Therefore they decline to hire him, even though he has openly been told that he is highly recommended, well liked and respected, and would be perfect for their flight departments. Although age discrimination is supposed to be illegal, it is rampant within the industry, largely due to the Age 60 rule.

I, too, am a professional pilot and informed on such matters. Yet in all the articles and legal arguments put forth today, the painful and permanent injustice to pilots in their forties has never been discussed. I think it's about time the matter was brought out into the open, and the Age 60 retirement rule itself be retired!

Yours very truly,

Sally S. Nannestad

Sally S. Nannestad
CFI-I 36432463

Gold Seal

F.A.A. Written Examiner



copy to Mr. Donald Engen

#128

ADVANCE MACHINE COMPANY
SPRING FANGLER, MINNESOTA

ROBERT J. POND
DIRECTOR

0000015 All: 44

November 24, 1986

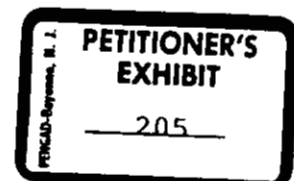
ASLT 1215060

FAA
Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
Docket No. 25008
800 Independence Avenue S.W.
Washington, D.C. 20591

I am very concerned about age being the criteria for a reduction in pilot certificate privileges. Already the insurance underwriters are making arbitrary restrictions due to age rather than experience and ability which is a gross injustice.

I personally have ten type ratings, keep current in everything from World War II aircraft to a Sabreliner and a Jetstar, and am in excellent physical condition which is verified by both my personal physician as well as my annual flight physical given by another physician. I am sixty-two. To think that a person would be required to retire or have restrictions put on him by the FAA without consideration of factors other than age is ridiculous - what next if this is allowed - ground all pilots at age 60?

There must be other criteria. We take biennials with FAA personnel, so perhaps a program in conjunction with this after age 60 would be more fitting. Yes, it takes a little more time and effort, but it can be done. In the State of Minnesota when a person is at an advanced age with perhaps some physical limitations, a State agent comes out and drives with the elderly person in his automobile to evaluate the individual's performance, not make him stop



Page Two

November 25, 1986

driving because he might be 90. The FAA could certainly have a discriminatory program rather than arbitrary. Let's start giving the benefit of the doubt to our senior citizens who have taken care of themselves over the years in order to have the quality and fullness of life that they so richly deserve.

Cordially,

Robert J. Pond

RJP/pd



CONTINENTAL AIRLINES

December 17, 1986

7300 WORLD WAY WEST
LOS ANGELES INTERNATIONAL AIRPORT
LOS ANGELES, CALIFORNIA 90009

PHONE (AREA 213) 646 7810
CABLE CONAIR USA
TELEX 06 74402

free
lock it

Federal Aviation Administration
Office Of The Chief Counsel
Attn: Rules Docket (AGC-204)
800 Independence Avenue, S.W.
Washington, D.C. 20591

Re: Docket No. 25008 - Petition for exemption from FAR part 121.383; "the age 60 rule."

Gentlemen:

It occurred to me that your committee might appreciate a comment from someone who has no interest in the final outcome of this petition - nothing to gain, nothing to lose.

For the past thirty two years I have been a Flight Crew Ground School Instructor for Continental Airlines. It has been my privilege and, occasionally, my agony to teach some of the finest Airline Pilots in the world. During this period of time I have reached the conclusion that age is not always a reflection of mental agility or functional skill. Instead, it seems to me that it's an individual matter; youngster or elderly, training is tough for some, easy for others. To be quite honest, I can't tell you why some pilots wash out while others breeze through. The only thing I'm sure of is that age is not the determining factor.

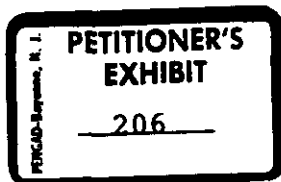
I was in this business a good many years prior to the age 60 rule, and the older Pilots of that era were no less alert or responsive than the younger people of today.

All of which leads me to the conclusion that technical knowledge and mental retention are not necessarily age - dependent. I wish it were that simple.

If you were to ask for my vote, I'd vote for the exemption to FAR 121.383.

Cordially,

Robert G. Woodhams
Senior Ground School Instructor
Continental Airlines
7300 World Way West Room T-154
Los Angeles, Ca. 90009



Andrew W. Nichols, M.D.
11750 Sunset Boulevard, #420
Los Angeles, California 90049
and
UCLA Medical Center
Division of Family Medicine
10833 LeConte Ave., Rm BH-134
Los Angeles, CA 90024

December 17, 1986

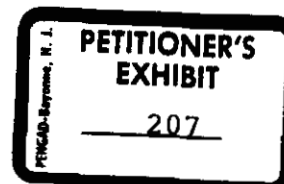
Federal Aviation Administration
Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
Docket No. 25008
800 Independence Ave. S.W.
Washington, D.C. 20591

To whom it may concern:

It has recently been called to my attention that the FAA has an "Age 60" mandatory retirement age for pilots. This arbitrary age has no scientific basis to my knowledge and I strongly support the ACPA's position of protest that the "Age 60" rule is grossly discriminatory.

I presume that a suspected increase in risk of sudden cardiac death or of acute myocardial infarction or of cerebrovascular accident, in pilots of 60 years or greater is behind the "Age 60" rule. From a medical standpoint however, it is clear that an overweight, cigarette-smoking, 42-year old male pilot, with a family history of heart disease, is at a quite significant risk of sudden cardiac death. Conversely, a 60-year old male pilot with no known medical problems, who practices good preventive health care, by not smoking, controlling his weight, exercising regularly, and consuming a good diet, would be much less of an acute health risk than the chronologically younger but much less healthy pilot presented earlier.

It is my viewpoint that it would make medical sense and additionally be less discriminatory to adopt more stringent medical standards for pilots. This would help identify the significant group of pilots aged 60 years or older who would be at very low risk of developing acute medical problems. It would also help determine which pilots in the less than 60 age group are at a relatively high risk of developing acute medical problems. Frequent medical examinations



Andrew W. Nichols, M.D.
11750 Sunset Boulevard, #420
Los Angeles, California 90049

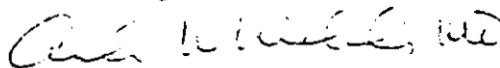
2

and testing are mandatory to help improve the overall health quality of pilots. It is not unreasonable that medical standards for older pilots would be somewhat more stringent.

I was made aware of the FAA "Age 60" rule by my stepfather, Joseph G. Vickers, a senior Captain for Pacific Southwest Airlines. As he nears the mandatory retirement age in the next few years, I find him to be the ideal example of a pilot who would be an outstanding candidate to continue flying into his sixties. My medical opinion is based upon his excellent health and level of physical fitness. Additionally, my medical practice at the UCLA Medical Center is abundant with patients well into their sixties who are in excellent health and would represent very low risks in a similar situation. Absolute age has very little to do with the overall health level of an individual, and using absolute age limits is not a medically sound approach to the issue.

Thank you in advance for your consideration of this request to reevaluate the "Age 60" mandatory retirement rule.

Sincerely,



Andrew W. Nichols, M.D.

Copies: AOPA's Aviation Standards Dept.
Captain Joseph G. Vickers

24732 Rollingwood
El Toro, California, 92630
December 18, 1986

Federal Aviation Administration
Office of General Counsel
ATTN: Rules Docket(AGC)-204
Docket No. 25008
800 Independence Avenue, S.W.
Washington, D. C. 20591

Gentlemen:

You recently received a letter from Captain John Miles, dated December 10, 1986, in which he commented on his support for the petition for exemption to the age 60 rule. As an airline pilot, I share his views along with all airline pilots to whom I have spoken.

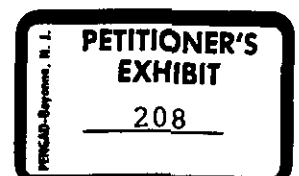
With today's emphasis on physical fitness and the advancement of medical science and their findings, I find the mandatory age 60 retirement rule not only archaic but prejudiced and destructive. It not only denies a pilot means of livelihood but removes many years of experience and safety from the cockpit.

I am 50 years of age and in top physical condition and would like to continue in my profession past age 60. I therefore ask you to consider carefully all the information presented and allow this petition for exemption.

Very Truly Yours,

Chris Guadagnino

Chris Guadagnino
Captain, Air Cal





CONTINENTAL AIRLINES

Ex
docket

POST OFFICE BOX 4887
HOUSTON, TEXAS 77210-4887

PHONE (AREA 713) 830-6000

January 7, 1987

Mr. Tazewell Ellett
Chief Counsel
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20590

Dear Mr. Ellett:

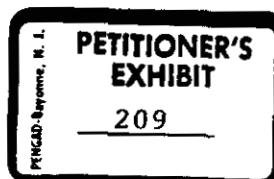
Currently pending before the Federal Aviation Administration (FAA) is the petition of Melvin M. Aman et al., Docket 25008, for an exemption to 14 C.F.R. §121.383(c) (1977), the "Age 60 Rule." During the pendency of this petition, the FAA sought public comments on the continued viability of the Rule that makes retirement mandatory at age 60 for airline pilots. Although the official comment period has expired, we trust that since the Agency has not yet ruled, it will accept our comments during its deliberation on this important matter.

At the outset, I would note that this letter is intended neither to support nor oppose the above-referenced Aman petition insofar as it only relates to named pilots. It is Continental's view that if there is adequate evidence to grant the pending exemptions, then do so.

The more important point is to establish procedures so that all medically qualified pilots may fly beyond age 60. Given the knowledge and resources available to this industry, Continental firmly believes that the time has come to end the flat ban on flying after age 60. Surely there is a more medically sound approach to this problem. Continental stands ready to assist the FAA in any such effort.

When the Rule was promulgated in 1959, the primary purpose was to protect against the risk of sudden incapacitation by a pilot in flight, thereby becoming an immediate threat to the safety of airline passengers. The age of 60 was arbitrarily chosen since, at the time, medical evidence supported the theory that physiological and psychological functions degenerated as age increased. Medical diagnostic tests could not indicate with any degree of accuracy the physical changes in airline pilots, or other individuals for that matter, over age 60.

Numerous studies have been conducted in the intervening twenty-seven years, and various approaches have been suggested to ameliorate the harshness of the Age 60 Rule. These have included the use of a protocol, or battery of tests and procedures designed to assess fitness, both neurological and cardiovascular in nature. Others have suggested eliminating the Rule in its entirety.



- Page two -

Our review indicates if the Agency has any doubts about the medical data which has already been submitted to it on this subject, a definitive, expedited study of this issue is warranted. The adverse impact on the careers of pilots is simply too important not to make every effort to resolve this issue. The study we have in mind must be conducted through utilization of a partnership between the government, medical profession, and airline industry. It is without dispute that there have been significant advancements in medical technology during the nearly three decades since the Rule was promulgated. It is clear that technology in aviation itself has obviated some of the reasoning forming the basis for the Rule. It is equally as clear that this aviation technology, when extended, for example, to our ability to create stress-type situations in the recertification process, has opened new avenues to evaluate the mental and physical fitness of an individual pilot.

After an exhaustive study of the nature suggested above, the Agency, industry and medical profession should have more than sufficient evidence to determine how the Rule may be redesigned in a manner that makes full use of available research and technological advancement. Indeed, this has occurred in the recertification process as we have become more knowledgeable — the applicable standards have been changed to reflect what we have learned.

We hope that these comments will be helpful in the Agency decision-making process.

Sincerely,



Richard J. Hillman
Vice President - Flight Operations

RJH:lca

#116

Gerald J. Benecke
2305 Westclub Terrace Court
Ellisville, Missouri 63011

Federal Aviation Administration
Office of the Chief Counsel
800 Independence Ave. S.W.
Washington, DC 20521

Attn: Rules Docket (AGC-204), Docket No. 25008
(Age 60 Docket)

Dear Counsel:

I hold Airline Transport Pilot Certificate number 1480992 and serve as a copilot for Trans World Airlines. My age will be 52 in August 1987.

The current rules under F.A.A. part 121 does not permit me to continue my services as a pilot for TWA after my 60th birthday. This restriction should be removed.

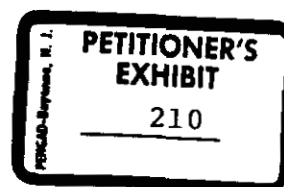
The age 60 rule is arbitrary. There is no medical data that clearly shows disqualification as a command pilot or copilot purely on the basis of age. A pilot who demonstrates physical ability through regular medical examinations, at increased frequency if needed, and who maintains his flying skills and currency, should be allowed to fly through age 70.

Also consider the monetary deterioration of most pilots' salaries since the Airline Deregulation Act of 1978 with little hope for improvement in the next decade or beyond.

A compromise position on this issue would be to allow a pilot at age 60 to continue to fly as second-in-command to age 70.

Very truly yours,

Gerald J. Benecke
Gerald J. Benecke



2116

204
#119
R.C. HULSE
18142 Vestry Circle
HUNTINGTON BEACH
CALIF. 92648

February 1, 1987

Federal Aviation Administration
800 Independence Avenue, S.W.
Washington, D.C. 20590

Attention: Mr. Tazewell Ellett
Chief Counsel

Ref: Docket #25008
The Age 60 Rule

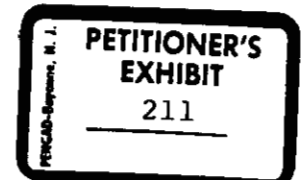
Dear Mr. Ellett:

The Age 60 rule promulgated in 1959 is out of date and needs to be modified as has been the case with other out of date rules. In the interim period, exemptions should be immediately granted to those pilots demonstrating the physical and mental qualifications set forth by F.A.A. standards to continue their flying careers. To lose the expertise of those pilots physically and mentally able to continue flying past age 60 is highly discriminatory and a travesty of justice in our "enlightened" society, and especially in view of the medical expertise that is now available.

I have had the opportunity to first hand observe the performance side of the so called "Deteriorating Pilot" (Referenced by A.T.A. and A.L.P.A.), and I can attest to their exceptional performance. As a flight standards and training pilot I have given many hundreds of proficiency checks, line checks, and initial operating experience to all ages of pilots.

I have served as Base Chief Pilot for several years in Los Angeles for Continental Airlines, managing all DC-10 International and Domestic flying, (generally flown by the most senior and older pilots). Whenever a senior pilot with exceptional ability and in good health was forced out of the cockpit by this archaic rule it seemed unfair. It is time to correct this unfairness. The proper conduct of a safe and efficient flight by the 'Senior Pilots' is seldom in question, and when a question is raised, management needs to take action. Pilots as individuals carry with them their personal reputations. A proper functioning base management and training department will weed out those individuals who at any age are unable to perform with the utmost of safety. No airline cares to expose themselves to the slightest safety risk regarding cockpit expertise and resource management.

To suggest that the Age 60 rule is correct and to deny the exemptions that are valid would indicate that all pilots are clones who at age 60 have deteriorated in their flying skills and physical abilities to the point of being unsafe and just plain physical wrecks. This is obviously not true, however the Airline Pilots Association and the A.T.A. would have you believe that this is true, and they have presented many 'post-hoc' arguments that have little bearing on reality and logic. (Ref: A.T.A. letter of Oct.28, 1986, S ALPA letter of Oct.29, 1986).



PAGE # TWO

Pilots are not clones, we all have different physical abilities, piloting skills, and life styles. We are individuals, and as such may not, or cannot perform because of mental or physical deterioration, the demands of piloting at any age, 30, 40, or 50, etc. The requirements set by F.A.A. physicals should weed out those individuals unable to perform. If these physical standards are inadequate then perhaps the physical testing system needs to be examined. The piloting skills are examined twice each year on proficiency checks, additionally with an annual operational line check, and finally with a route check, (This last check given by an F.A.A. Air Carrier Inspector). To say that these checks are inadequate is to suggest that the entire F.A.A. system of monitoring is inadequate.

I suggest that our present system of monitoring, testing and evaluating a pilots performance does an excellent job, and with this system, pilots unable to physically or mentally perform are eliminated at any age. The fair and logical conclusion would be to allow those pilots able to meet F.A.A. and Company standards to continue their flying careers past age 60. The net result could only be a safer and more efficient operation of the airlines. Perhaps this increased safety environment would result in an 'enlightened' A.T.A. and ALPA.

ALPA's letter of October 29, 1986 does not stand up to the test of accuracy, but rather presents false arguments, veiled threats, and the desire to preserve economic security to their membership. A glaring example is their discussion on simulator performance versus line operations. A close look at world wide airline operation over the past 10 years was conducted in Geneva, on July 15-18, 1986, by the International Air Transport Association Safety Committee. Boeing presented a paper on accident contributors and implications. One of the major findings concerning airline accidents around the world was that flight crews failed not because of a lack of piloting skills but rather a lack of interpersonal skills and cockpit resource management. The age of those pilots involved in domestic and world wide accidents was not demonstrated or shown to have caused any accident, in any of the reports that were presented. The 'deteriorating' pilot theory simply does not hold water. In every accident report investigated by the N.T.S.B., piloting skills by senior pilots nearing age 60 have not been a factor. Physical or mental incapacitation has never been shown to be a factor in any FAR 121 Carrier accident.

The senior pilots, (approaching retirement), that I have had the privilege to administer were, by in large, 'Street Smart' in cockpit resource management. These pilots were always able to contribute to first officer and second officer "On The Job Training". Their experience cannot be underestimated or undervalued in cockpit safety.

They may not be able to fly an F-16 as would a young 25 year old, but airline experience has shown us that the primary action we emphasize in training and line operations is to fly the aircraft first and deal with the abnormal as a secondary action after proper evaluation. Once again, basic flying skills coupled with proper cockpit resource management will ensure the safest cockpit environment.

Not all pilots have the desire to fly past age 60, however if only 10 out of every 100 had the desire to continue their careers and were able to demonstrate the physical/mental and piloting skills required, and are so motivated then they should be allowed to do so.

At what age should a pilot be required to step out of the cockpit. That is a good question, certainly it is an individual pilot question based on his/her abilities, health, and motivation. I would most strongly recommend as an immediate interim step to grant the requested exemptions, if qualified, and to modify the age 60 rule to an Age 65 Rule to be examined by facts and information gained during the next five years. Such a modification is not only fair by all degrees of measurement, it is the right thing to do.

The 'Status Quo' is not serving us well and we are unfairly discriminating against some of the best and safest pilots in the industry. Immediate action is warranted.

Thank you for the opportunity to comment on the petition, Docket #25008, The Age 60 Rule. I realize the official comment period has expired, however since the Agency has not yet ruled in this issue I hope these comments will be accepted and entered into the record.

Sincerely,



Captain Robert C. Hulse (Age 51)
Check Airman DC-10, B-727, B737.
Continental Airlines
Flight Operations Division
Los Angeles International Airport
Los Angeles, Calif. 90009

References:

"A NEW LOOK AT ACCIDENT CONTRIBUTORS AND THE IMPLICATIONS OF OPERATIONAL AND TRAINING PROCEDURES"

By Richard Sears, Product Safety Engineer, Boeing Airplane Co.

NASA TECH. MEMORANDUM #88322 CREW FACTORS IN FLIGHT OPER.

Presented at The Int'l. Air Transport Assoc. 30th. Meeting
Safety Advisory Committee
Geneva, July 15-18, 1986

MICHAEL W. KURTY

811 Pinewood Drive
San Jose, California 95129
Telephone (408) 252-7319

Jan 19, 1987

Age 60 Docket.

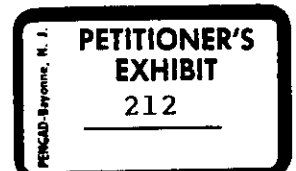
FAA, Office of Chief Counsel
Attn: Rules Docket (AOC-204)
Docket No. 25008,
800 Independence Ave. S.W.
Wash. D.C. 20591

Dear Sir,

I do not believe that age should be a criteria
for a pilot's licence being revoked. I believe
a pilot at age 60 can be a better pilot
than one at age 21.

He must, of course, still possess the physical
requirements of a pilot's licence. Please
Keep me advised of the progress of this
potential rules change.

Thanks,
M W Kurty



As per [unclear] and [unclear]

~~100~~
#122

PSC 3, Box 16348
APO SF 96432-0006
12 January 1987

FAA, Office of the Chief Counsel
Attn: Rules Docket (AGC-204)
Docket No. 25008
800 Independence Ave S.W.
Washington, DC 20591

Gentlemen:

My comments on the age 60 rule for ATP pilots will be brief. The age 60 is arbitrary. Some individuals lead very productive lives after age sixty. Some have their myocardial infarction long before age 60. These realities are well known, and are well documented by persons much more capable of doing so than I.

What strikes me as strange, indeed absolutely ludicrous, is that we have an age 60 rule when the Federal Air Surgeon is putting triple bypasses back into the cockpit. I will take my chances with the 63-year-old apparently healthy, physically active pilot as opposed to the 50-year-old bypass case. Let's eliminate age discrimination that protects no one, but is a vestige of the past, even if Congress has to take exception to ICAO regulations!

W. R. Clarke
WILLIAM R. CLARKE, M.D., M.T.M.H., F.A.C.P.M.
Diplomate, American Board of Preventive Medicine
(Aerospace Medicine)



MILTON W. GRIGGS
P. O. BOX 3213
ASPEN, COLORADO 81612

February 17, 1987

F.A.A. Office of Chief Counsel
Attn. Rules Docket (AGC-204), Docket 25008
800 Independence Avenue, S.W.
Washington, D.C. 20591

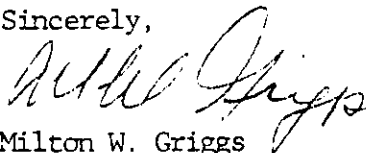
Dear Sir,

I am strongly opposed to the arbitrary age limit of sixty years imposed by the F.A.A. for automatic retirement of airline pilots.

Categorically establishing an age limit does not take into account or fairly consider the diligent pilot, who in addition to remaining current in flight training, remains in top physical condition. Rather than a categorical age limit pertaining to all airline pilots, the determination for retirement should be based upon a standardized set of physical and performance related criteria. As the rule now stands, all pilots, age sixty, are linked to the least fit and able of their numbers for whom the rule should apply. Through stricht physical and performance related standards, the unqualified would be weeded out at no detriment to those who are qualified, whether they be 55 or 65.

I live in the mountains of Colorado. With skiing, biking, hiking and other outdoor activities, I am more fit than I was fifteen years ago. In twenty years, I still intend to be in excellent condition and would resent being told I could no longer fly for the airlines when I would have no difficulty negotiating the most tortuous terrain on our ski mountains.

Sincerely,



Milton W. Griggs
Commercial Pilot #1617187

PETITIONER'S
EXHIBIT

214



pilots rights association

1440 N Street, N.W., Suite 911W, Washington, D.C. 20005 202/667-5206

25008

July 7, 1987

The Honorable Elizabeth Dole, Secretary
Department of Transportation
400 Seventh Street, SW
Washington, DC 20591

ACTION
is assigned to
FATA
CONTROL NO
870709-013
SIMS S-10

Dear Madam Secretary:

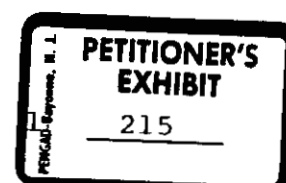
Thank you for the July 6, 1987 robo reply sent to me by Ms. Irene A. Barnett, Director, Office of Programs and Regulations Management, in response to my letter of June 15, 1987.

It is an insult to persons who have served for over forty years in the airline industry to receive such a insidious robo letter about an issue with which we have lived for over twenty-eight years.

In the first place, the petition of Melvin M. Aman, et al was not submitted on behalf of Pilots Rights Association, Inc. (PRA). At the suggestion of the House Select Committee on Aging, a panel of world known experts developed an examination protocol to determine which airline pilots could continue flying after reaching age 60.

Mr. Aman and forty-nine other airline pilots paid a separate panel of world recognized experts to develop a separate series of tests to determine their fitness to continue flying. They took the series of tests as individuals and paid for those tests individually. They arranged for and paid the panel of doctors to review their individual test results. Thirty-nine of those pilots were recommended for exemptions. They then paid a law firm to prepare and submit their petition for exemptions. This they did as individuals, not on behalf of PRA.

Ms. Barnett stated in her response to me, that the Age 60 Rule is not a retirement rule. She would have a difficult time convincing over 15,000 airline pilots who have been forced into retirement over the past twenty-eight years as a result of that rule, that it is not a retirement rule. The rule is also being interpreted by corporations and other operators as a means of forcing pilots other than airline pilots out of the cockpit. No matter how the rule is labeled, it still has the effect of forcing pilots into retirement when they should not be retired.



July 7, 1987

Ms. Barnett has displayed her lack of understanding of airlines and their requirements by stating, "An airline pilot may continue to work indefinitely for an airline in any other capacity without regard to age." When the forecast is that 60 to 70 percent of some 45,000 airline pilots will be forced out of the airlines' cockpits (retired) in the next twelve years, where would these pilots be utilized by the industry ?

Additionally, it is obvious, Ms. Barnett does not realize the airlines want to utilize lower paying persons in the positions she suggests the age 60 captains could assume.

While the Air Line Pilots Association (ALPA), despite all its euphemisms about democracy and equality for all its members, has done everything in its power to keep those over age 60 out of the cockpit, pilots have had to go through years of litigation to prove they had the right to continue flying as flight engineers after that age. Two of these cases went to the United States Supreme Court -- with the support of the current Administration -- where they received unanimous decisions from that Court.

Whether you or Ms. Barnett want to admit it or not, you must realize that the experience level in the nations' airliners is deteriorating badly. Members of our Association are in those cockpits, and we know that not only are younger, inexperienced pilots being promoted into high performance aircraft to fly as pilot-in-command, but their co-pilots have even less experience which is a formula for disaster. Those of us who lived through World War II and helped build the airline industry as it is today, recognize that the situation cannot continue without disaster. Again, we are in those cockpits. We see what is going on. Our opinions are not just theory, they are factual.

In the past some persons have pointed to the Age 60 Rule as a reason for the airlines' safety record. Those of us who have spent thirty-five years or so in airline cockpits know that the rule is now contributing to the deterioration of safety in the industry today. We realize that, just as the NTSB found that the inexperience of the crew was a contributing factor in the Air Florida Accident in 1983, recent incidents like those at Delta and others are caused by inexperience.

Page Three
Mrs. Dole

July 7, 1987

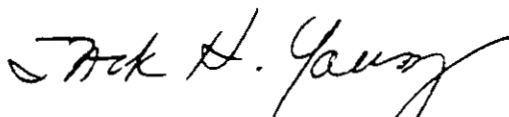
Our organization is seriously concerned that if the most experienced pilots are continually forced out of the cockpits of our nation's airliner cockpits -- and that is the result, in spite of all the pious statements that the rule is not a retirement rule -- an avoidable disaster will occur, and we will not be able to stand by while this situation develops. We believe the traveling public has the right to know the facts.

One of the most important issues Ms. Barnett avoided was the FAA's unjust delay in ruling on the petition of Melvin M. Aman, et al. This is intolerable, in light of the fact that they have ruled on at least one other petition which was filed after the Aman petition. According to letters on file, Administrator Engen had his mind made up on this matter last September, yet no decision has been made at this time. Let's call this what it really is, a bureaucratic stall.

Members of our organization have been in the Republican Party longer than anyone in the present Administration. I am sure, once this is brought to your personal attention, that you will agree that we deserve a better response than the robo letter sent by Ms. Barnett.

I thank you for a prompt reply.

Sincerely,

A handwritten signature in dark ink, appearing to read "Jack H. Young". The signature is fluid and cursive, with a large, sweeping "J" and "Y".

Captain Jack H. Young
President

MID PACIFIC AIR

August 17, 1987

Mr. Tazewell Ellet
Chief Counsel
FEDERAL AVIATION ADMINISTRATION
800 Independence Avenue, SW
Washington, DC 20590

26
A 8: 57

Dear Mr. Ellett:

Currently pending before the Federal Aviation Administration (FAA) is the petition of Melvin M. Aman et al., Docket 25008, for an exemption to 14 C.F.R. 121.383(c) (1977), the "Age 60 Rule." During the pendency of this petition, the FAA sought public comments on the continued viability of the Rule that make retirement mandatory at age 60 for airline pilots. Although the official comment period has expired, we trust that since the Agency has not yet ruled, it will accept our comments during its deliberation on this important matter.

At the outset, I would note that this letter is intended neither to support nor oppose the above-referenced Aman petition insofar as it only relates to named pilots. It is Mid Pacific Air's view that if there is adequate evidence to grant the pending exemptions, then do so.

The more important point is to establish procedures so that all medically qualified pilots may fly beyond age 60. Given the knowledge and resources available to this industry, Mid Pacific Air firmly believes that the time has come to end the flat ban on flying after age 60. Surely there is a more medically sound approach to this problem. Mid Pacific Air stands ready to assist the FAA in any such effort.

When the Rule was promulgated in 1959, the primary purpose was to protect against the risk of sudden incapacitation by a pilot in flight, thereby becoming an immediate threat to the safety of airline passengers. The age of 60 was arbitrarily chosen since, at the time, medical evidence supported the theory that physiological and psychological functions degenerated as age increased. Medical diagnostic tests could not indicate with any degree of accuracy the physical changes in airline pilots, or other individuals for that matter, over age 60.

Numerous studies have been conducted in the intervening twenty-seven years, and various approaches have been suggested to ameliorate the harshness of the Age 60 Rule. These have included the use of a protocol, or battery of tests and procedures designed to assess fitness, both neurological and cardiovascular in nature. Others have suggested eliminating the Rule in its entirety.

Page 2
Mr. Ellett
August 17, 1987

If the agency has any doubts about the medical data which has already been submitted to it on this subject, a definitive, expedited study of this issue is warranted.


The study we have in mind must be conducted through utilization of a partnership between the government, medical profession, and airline industry. It is without dispute that there have been significant advancements in medical technology during the nearly three decades since the Rule was promulgated. It is clear that technology in aviation itself has obviated some of the reasoning forming the basis for the Rule. It is equally clear that this aviation technology, when extended, for example, to our ability to create stress-type situations in the recertification process, has opened new avenues to evaluate the mental and physical fitness of an individual pilot.

After an exhaustive study of the nature suggested above, the Agency industry and medical profession should have more than sufficient evidence to determine how the Rule may be redesigned in a manner that makes full use of available research and technological advancement. Indeed, this has occurred in the recertification process as we have become more knowledgeable -- the applicable standards have been changed to reflect what we have learned.

We hope that these comments will be helpful in the Agency decision-making process.

Sincerely,

MID PACIFIC AIRLINES, INC.



Donald L. Beck
President &
Chief Executive Officer

DLB/mjs
cc: D. Straight

1212 Rio Grande Boulevard
Denton, Texas 76201

August 4, 1987

Mr. Allan McArtor, Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Dear Mr. McArtor:

There was a time down here in Texas that our justice was based on giving the guilty b----- a fair trial and then take him out and hang him. We also believed the best way to treat a woman was to keep her barefoot and keep her pregnant.

Well, that has all changed. We try to give everybody a fair trial and try not to have any previous notions about their guilt before the trial. When it comes to our women, we even let some of them run for office. As a matter of fact, when it comes right down to it, some of us might even vote for them as long as it's a secret ballot.

Now, I'm suggesting that you tell those good old boys in your new agency that they shouldn't apply that old time Texas law to airline pilots. If they are going to accuse all airline pilots of being unsafe to fly in Part 121 Operations after they reach age 60, then they ought to at least give them a chance to prove otherwise. They let pilots who had heart attacks fly. They let fellows fly who are recovering from being in their cups too long, and they let people fly who have had a lot of other things wrong, but they won't let a perfectly healthy and experienced pilot fly after he is sixty. That just doesn't make sense.

I ask you, won't you review the petition of those nice boys who are involved with that fellow Aman, and then issue a ruling without taking too much longer? They have waited over a year already, and that doesn't make sense.

Thanks, Partner,

Hal Williamson

Hal Williamson



390 Iris Street
Broomfield, CO 80020

August 4, 1987

Mr. T. Allan McArtor, Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Dear Mr. McArtor:

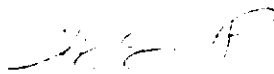
At the request of the FAA, The American Medical Association (AMA) conducted a two year study of that agency's medical standards for the medical certification of pilots. The AMA stated that age, per se, was not a risk factor in determining a pilot's health status.

The Association recommended that certain changes be made to the FAA's medical standards. One of those was for a "mini psychological test". The type suggested was the most elementary test ever devised.

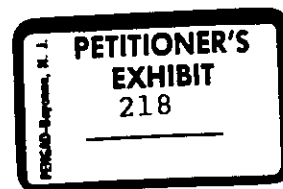
The pilots involved in the petition of Aman, et al, have taken five very stringent intelligence tests, none of which is required for medical certification of pilots.

If safety is the real issue in retaining the Age 60 Rule, the public and the airline industry would be better served by granting exemptions to pilots who pass the series of tests outlined in the Aman Petition. I ask that you issue a ruling on that petition without further delay.

Sincerely,



Captain W. E. Patterson



17647 Mapes Avenue
Cerritos, CA 90701

August 4, 1987

Mr. T. Allan McArtor, Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Dear Mr. McArtor:

There is nothing safe, just or rational about the FAA's Age 60 Rule. It is archaic and outdated, and because of it, the safety of the traveling public is being threatened.

Every day there is one incident or another in which an airliner is involved. Any one of these could have been a major disaster, but, as usual, we are lucky. We no longer have the luxury of ignoring these warnings. Sooner or later, and I predict it will be sooner, we are going to run out of luck.

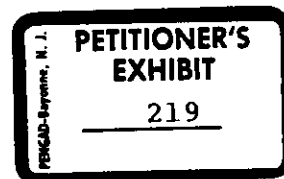
We cannot continue forcing the most experienced pilots out of the cockpit and maintain our safety record. It would make far greater sense to grant exemptions to pilots who have taken the series of tests in the petition of Melvin M. Aman, et al, rather than to keep forcing these senior men out.

I beg of you, please issue a ruling on the Aman Petition without further delay.

Sincerely,

Ed Saicoe

Ed Saicoe



599 trout Way
Napa, CA 94558

August 4, 1987

Mr. T. Allan McArtor, Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Dear Mr. McArtor:

Keep taking the most experienced pilots out of the cockpit and replacing them with pilots who have low experience in high performance aircraft. Add to that air traffic controllers with a low level of experience. Toss in unprecedented growth in the aviation industry. Stir in a desire on the part of airline officials to cut costs and mix in increased numbers of aircraft in the air.

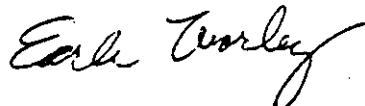
What do you have ? You have the formula for a major disaster which will make the Air Florida accident of 1983 look like a Sunday School picnic.

Those of us who have been in this industry for thirty and forty years know that such a disaster is in the making. We see a serious deterioration in the basic things on which a safety record is made. I do not like to be a soothsayer of doom and gloom, but unless the outflow of the highly experienced pilots is stemmed, we cannot avoid another Air Florida type accident.

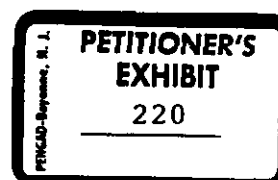
Recent incidents, which are on the increase, are only a warning, and we must heed those warnings before it is too late.

I respectfully ask that you take action on the petition of Melvin Aman, et al, without further delay.

Sincerely,



Captain Earle F. Worley



2-138

#134

Mr. T. Allan McArtor, Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 29591

In a recent television interview, it was said that you had issued a warning to pilots that you would not permit them to fly if they were not healthy. It was further stated that you said you would not tolerate those involved in drugs and/or alcohol.

There are nearly 1,000 actively flying airline pilots who are recovering alcoholics, and over 1,000 others have been recertified after having suffered disqualifying conditions. Although most experts agree that persons who have suffered debilitating diseases are at ten times the risk of having a second occurrence as are those who have never had a first episode, we believe this indicates the new technology that is available to diagnose and monitor the health of individual pilots of all ages.

Sincerely,

87 AUG 11 11:00 AM '68

SECRET

1.19

26311 143 rd Avenue, SE
Kent WA, 98052

August 4, 1987

Mr. T. Allan McArtor, Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 29591

87 AUG 11 A8:33

Dear Mr. McArtor:

In December 1941, when the Japanese bombed Pearl Harbor, I had been flying for over four years. I flew in the service for a while, then did some bush flying, some charter work, some test work, some corporate and non-sked flying and finally went to work for Alaska Airlines.

In over thirty-five years of flying for Alaska Airlines. I never took a sick day, never had an accident, and I served as a co-pilot, a captain, a check airman, an instructor and now as a flight engineer.

Now that is not to say that I have anything special except a long history of flying which has given me a record of experience which many pilots do not have. Many of us who have gone back to flight engineer at age 60 see a decline in the experience level in the cockpit which has caused us some concern.

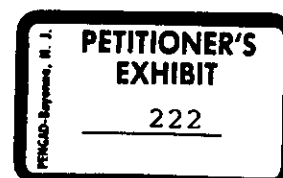
I am also one of the thirty-nine "et al's" in the petition of Melvin M. Aman, et al. We believe, and the doctors who examined us believe, that we are a perfect test group to determine which airline pilots could be permitted to fly after reaching age 60, but we can't do anything until we get a decision out of the FAA on our petition.

I urge you to look into this matter and issue a ruling without further delay.

Sincerely,

Bud Richardson

C. D. Richardson



1218 Brookhollow Drive
Irving, Texas 75061

August 4, 1987

Mr. T. Allan McArtor, Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Dear Mr. McArtor:

Doctors and scientists all over the world are involved in research which requires the use of tests to determine the physical, mental and cognitive condition of individuals. If we cannot rely on these scientists to determine the validity of such tests, then we should not continue pouring billions of dollars into the research they are conducting.

In 1985, the House Select Committee on Aging asked Dr. T. Franklin Williams, Director of the National Institute on Aging, and several equally qualified experts to develop an examination protocol to determine which airline pilots could continue flying after reaching age 60. They did so, but the FAA has refused to accept their suggestion, but has offered no proof that the series of tests is inadequate for the task.

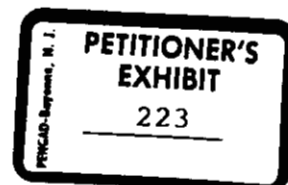
Obviously, the agency believes their advisors -- whom they have failed to identify -- are more qualified than Dr. Williams, Dr. Michael DeBakey, Dr. Robert Butler, Dr. Warner Schaie, Dr. Sam Fox, Dr. Bob Bruce, Dr. Robert Elliott, Dr. Earl Carter, Dr. David Spodick, Dr. Elihu York, and the many others who support the petition of Melvin Aman, et al.

I realize that you are faced with many problems, but the deterioration in the level of experience in the cockpit is one that must be addressed. I urge you to issue a ruling on the Aman Petition without delay.

Sincerely,

Jim Woeber

Captain James W. Woeber



792-1

#142

876-11 48:32

555 Maple Street, Apt. S
Fayetteville, AR 72701

August 3, 1987

Mr. T. Allan McArtor, Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 29591

Dear Mr., McArtor:

This letter is to urge you to make a decision on the petition of Melvin M. Aman, et al, as soon as possible.

This is a matter which has dragged on far longer than is justified. I have been advised that the FAA seldom, if ever, asks for public comments on petitions for exemptions from Federal Air Regulations, when no rule making is contemplated. They did ask for comments on this petition.

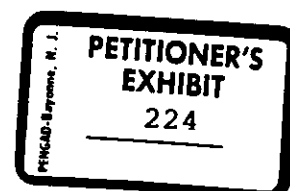
By not issuing a decision, the agency is denying others the right to a fair decision in that we cannot proceed with similar applications until a ruling is issued on the Aman Petition. By not ruling on that petition, the agency is denying those pilots the right to a fair trial, because they cannot take whatever further action is considered as appropriate until a ruling is forthcoming.

As an active line pilot, I know you are facing many challenges in your new position. The severe shortage of replacement pilots is one of those that must be addressed. Granting exemptions from the Age 60 Rule to pilots who take the series of tests outlined in the Aman Petition is a one way to resolve this problem.

Sincerely,

Ron Archer

Captain Ronald Archer



7721 Memphis-Arlington Road
Memphis, TN 38134

August 4, 1987

Mr. T. Allan McArtor, Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Dear Mr. McArtor:

P. T. Barnum once said, "You can fool all of the people some of the time, and you can fool some of the people all of the time, but you can't fool all the people all of the time."

Now, it just seems to me that some of the people are trying to fool all of the people all of the time about air safety. As I fly all over the world and talk to other pilots, I am appalled at the deterioration in the level of experience in the cockpits today. What is even more frightening is that it is getting worse. The Age 60 Rule is contributing to that, and we must face reality sooner or later.

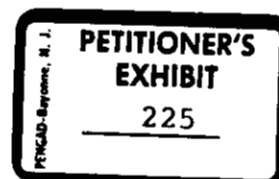
It would make far greater sense to grant exemptions to pilots who prove their health and cognitive ability the way the participants in the Aman Petition have done. It would certainly make sense to issue a ruling on that petition so those pilots and the rest of us can know what appropriate action to take.

The Age 60 Rule has never been a threat to safety, but it most certainly is now. I ask that you issue a ruling on the Aman Petition without further delay. If a decision has already been made, may I suggest that you review that decision very carefully before you sign-off on it?

Sincerely,

Niel Palmer

Captain Niel Palmer



#144
P. O. Box 862
Lake Elmo, MN 55042

August 4, 1987

Mr. Allan McArtor, Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Dear Mr. McArtor:

Granting exemptions from the Age 60 Rule, will not create any extra work or expense for the FAA or the airlines involved.

Those of us who want to continue flying after age 60 have paid for all the efforts made on our behalf, and we will continue paying for the expenses incurred in this endeavor. We have already paid for the development of tests to determine our physical and mental condition, and we have assumed all the expenses of having our test results evaluated by a panel of experts.

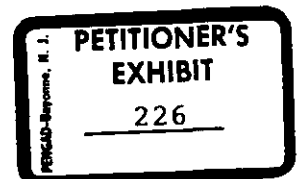
If the agency feels it is necessary, they can designate which doctors are to be used, but in our opinion, we have chosen the best available.

You must not be persuaded that this is a difficult and expensive task. It is a simple procedure into which we are putting the effort, and we are paying the costs involved. All we ask is to be given the opportunity to prove our health and cognitive ability. No special consideration, just the right to prove ourselves.

Sincerely,

E. B. Thompson

Captain E. B. Thompson



2850 N. Majorka Court
Thousand Oaks, CA 91360

August 4, 1987

Mr. T. Allan McArtor, Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Dear Mr. McArtor:

In our nation, a person is considered innocent until he is proven guilty. The FAA's Age 60 Rule isn't quite that generous. What it does is say you are not safe to fly in Part 121 Operations after reaching age 60, but the agency does not give you a chance to prove you are healthy or competent.

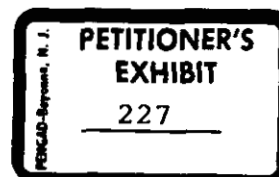
Now, they accept that you are competent and safe to fly in Part 121 Operations the day before you are 60, but not the day after. Not only that, they will permit you to fly just as big an airplane with less restrictions, and less close monitoring when you are sixty, but not in Part 121 Operations.

There are those who say the Age 60 Rule is not a retirement rule, but you would have a tough time convincing over 15,000 airline pilots who were put out to pasture because of the rule that it is not a retirement rule. We simply must call a spade a spade, and not engage in semantics.

I ask that you issue a ruling on the Aman Petition, and not continue the games the FAA has been playing.

Sincerely,

Herb Riesling
Captain Herbert A. Riesling



#146

1249 Via Romero
Palos Verdes Estates, CA 90274

August 4, 1987

Mr. T. Alan McArtor, Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Dear Mr. McArtor:

I am the Secretary of Pilots Rights Association (PRA) which has a mailing list of over 10,000 pilots. Our organization has led the effort to have the Age 60 Rule modified or to have exemptions granted from the rule.

Members of PRA have traveled extensively in seeking evidence and scientific experts to support our position. We believe that airline pilots should be allowed to continue flying as long as they pass medical and proficiency examinations with the same test results as other pilots without regard for age.

The medical and intelligence tests taken by the participants in the petition of Melvin M. Aman, et al, are a highly sophisticated series of tests which have the support of some of the world's best known experts in these areas.

The FAA has steadfastly refused to consider any modification of the rule. This seems to indicate that they consider such modification as an indication that they have been wrong about the need for an age limitation.

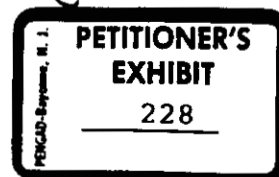
The rule, itself, has been described as a rule of administrative convenience which allows airlines to pre-plan their manpower needs and for pilots to plan their careers. It is not the purpose of the FAA to promulgate and continue rules which make it easy for airline executives to manage nor is it their purpose to guarantee one group of employees rights to promotional opportunities at the expense of others. It is, however, the purpose of the FAA to assure that safety is assured by retaining well experienced pilots who are healthy, functionally able and highly motivated. The participants in the Aman Petition are an example of such pilots who should be retained.

I urge you to issue a ruling in this case without delay.

Sincerely,



Lee F. Higman



1649 Cataluna Place
Palos Verdes Estates, CA 90274

August 4, 1987

Mr. T. Allan McArtor, Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

CF 111
A8:32

Dear Mr. McArtor:

Many of us began flying in World War II, and we have lived with the airline industry since that time. We helped build it from Ford Tri-Motors to the SST, and we know the things that make it operate and its needs.

One thing it doesn't need is a disaster caused by the deterioration of experience in the cockpit. We see it coming, and believe the warning signs are obvious in the increase of "incidents" that have occurred recently. They are happening, not to the "up-start" airlines, but to the majors.

Many industry experts believe that the traveling public would be better served by granting exemptions from the Age 60 Rule to pilots who take tests similar to those taken by the Aman Group. We can no longer tolerate forcing the most experienced pilots out of the cockpit and replacing them with unknown quantities. Safety will suffer.

I ask that you issue a ruling on the Aman Petition.

Sincerely,

John Meador

Captain John Meador

