Age-60 Rule: The End Is in Sight

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Recent implementation of the International Civil Aviation Organization (ICAO) amendment 167 to Annex 1 allows pilots from ICAO contracting states to fly until 65 yr old. In response to the new ICAO standard, the Federal Aviation Administration (FAA) commissioned an Aviation Rulemaking Committee (ARC) to make recommendations on whether the FAA should retain or amend the Age-60 Rule. Unable to reach a consensus, the ARC formed two working groups and submitted two position papers with opposing views. After reviewing the ARC's report, the FAA has decided to move toward raising the mandatory retirement age for airline pilots from 60 to 65. In this article, we provide a brief review of the ICAO's amendment to the age limit and discuss the various implications of this new international standard.

Keywords: Age-60 Rule, aviation standards, safety.

N NOVEMBER 23, 2006, the International Civil Aviation Organization (ICAO) implemented Amendment 167 to the provisions of Annex 1 to the Chicago Convention. This amendment to the international Standards and Recommended Practices included a relaxation of the controversial airline captain upper age limit of 60 yr, which has come to be known as the Age-60 Rule. The new standard, which applies to all ICAO contracting states, allows airline pilots to fly until they reach 65 yr of age, provided that they work in a multi-crew cockpit where the other pilot is under 60 yr of age (9).

The amendment not only gives ICAO contracting states the opportunity to relax their age restrictions, but also requires countries with an upper age limit less than 65 to allow pilots from contracting states who meet the ICAO conditions to fly into their airspace (7). The Federal Aviation Administration (FAA) still upholds the Age-60 Rule for airline pilots, although recent developments indicate that this long-standing policy is about to change (1,5). This article provides a brief review of ICAO's amendment to the age limit, discusses the FAA's response to the new international standard, and explores the implications for research and policy.

The ICAO Amendment

At the 1919 Paris Air Convention, the first international aviation organization came into being (the International Commission of Air Navigation), and set an upper age limit for pilots at age 45. This age limit was abolished in 1947 when the International Commission of Air Navigation became ICAO. However, after the United States implemented an age 60 limit for pilots in 1959, ICAO moved to recommend that same limit in

1963. ICAO wrote a standard 9 yr later to Annex 1 that set age 60 as a mandatory upper age limit for airline pilots-in-command, and made it applicable in 1978 (13,16,17). In 1989, ICAO's Air Navigation Commission (ANC) took on the role of investigating the standard and its validity due to requests from a contracting state regarding the limit (14). A 1994 progress report by the ANC reviewed studies concerning the subject, and commented on the European Joint Aviation Authorities' resolution to increase its upper age limit to 65 for multi-crew commercial pilots. Due to the lack of consensus among ICAO contracting states, as well as the insufficient scientific evidence available, the standard remained unchanged, but emphasis was placed on continued study of the issue as more information became available (9,10). The topic gained attention several times over the next few years as ICAO surveys were distributed to contracting states with questions relating to the issue, and results were received and reviewed by the ANC.

Additional research in 2004 concerning the safety performance of aging pilots reported that there was not sufficient evidence to support the mandatory retirement age for airline pilots (2,18,21). Other studies suggested pilots' retirement age could be safely increased by several years and that in a multi-crew environment the risk associated with incapacitation of a pilot age 60 yr or older is negligible (19,20). Also, positive experience from countries that had implemented an age limit higher than 60 reinforced the notion that increasing the age limit does not pose any significant risk to flight safety (8,22). Therefore, after surveys of ICAO contracting states showed increased support for raising the age limit, the ANC proposed an amendment to the standard (12). The ANC conducted a final survey in 2005 requesting feedback and input on precise wording of the new amendment (11). The final survey's results, in

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which most countries agreed to extend the age limit from 60 to 65, were published on September 11, 2005. On March 14, 2006, the ICAO Council adopted the amendment to Annex 1 with the understanding that the new standard and its effectiveness would be revisited in 2013 (7,17). The new age limit came into effect on November 23, 2006, for all ICAO contracting states.

FAA's Response to the New Age Limit

With ICAO's adoption of the new standard, the FAA again faced the controversy over the Age-60 Rule. Even before the amendment's implementation, foreign airline co-pilots older than 60 could fly in U.S. territory, but with the new ICAO standard in place, foreign pilots-in-command could fly as well. Pilots flying for U.S. airlines, on the other hand, could not.

In response to the ICAO's new age standard, the FAA commissioned an advisory committee (Aviation Rulemaking Committee or ARC) made up of representatives from the airline, pilot union, and aeromedical communities to provide a public forum for discussing the ICAO amendment, to assist the FAA in deciding what actions to take regarding the new standard, and to make recommendations on how to change FAA regulations, if necessary (3). As required, the ARC requested public comments concerning the ICAO standard through a forum beginning in October 2006, and received over 5000 replies expressing opinions on the issue, with a majority being in favor of raising the age limit to 65 (6). Unable to reach a consensus, the ARC formed two working groups and in its report to the FAA included two position papers with opposing views toward changing the Age-60 Rule (4). The working group that recommended for the immediate adoption of the ICAO age 65 standard presented a strong argument on the grounds of international policy harmonization, law, socioeconomics, safety, and health. Moreover, it pointed out that "labor politics and pilot surveys are not an appropriate way to determine public policy" (4). The working group that recommended for maintaining the status quo argued that the ICAO standard was developed through an "inadequate process" because no risk assessment was conducted to evaluate the effect on flight safety of extending the retirement age from 60 to 65 (4).

After reviewing the ARC's report, the FAA announced on January 30, 2007, its decision to raise the mandatory retirement age for airline pilots from 60 to 65, in concordance with the ICAO standard (5). By the end of 2007, the FAA will issue a Notice of Proposed Rulemaking, after which public comments will be heard for at least 18 mo on the issue, and finally the new rule will be published. During the time of public comment, the FAA will seek input on conditions of the new age standard, including how to deal with seniority rules and whether or not to apply the new standard to pilots already retired (23).

Implications of the ICAO Amendment

While airline pilots in some countries have long been allowed to fly beyond age 60, research on safety perfor-

mance during the process of aging is limited (2). One widely cited study conducted in Japan was based on data for 159 pilots ages 60 to 63 (22). Due to the lack of adequate empirical data for airline pilots ages 60 and older, researchers have often relied on other pilot groups, such as commuter and air taxi pilots, to whom the Age-60 Rule does not apply (19,20). With the implementation of the 167th amendment to ICAO's Annex 1, more data for airline pilots ages 60 and older may become available, allowing researchers to examine airline pilots' safety performance during the process of aging in a wider age spectrum. Ultimately, studies conducted in the coming years regarding this topic will be an integral part of the ANC's review of the upper age limit in 2013.

The ICAO amendment represents a significant development in the controversy concerning the Age-60 Rule. As the FAA moves to adopt the international standard, the end of the Age-60 Rule is in sight. The controversy about a mandatory retirement age for airline pilots, however, will continue because the new international standard merely extends the retirement age by 5 yr (15,18). Other aspects of the new age limit, such as medical standards for pilots ages 60 and older, may also face scrutiny. Future policy development will be determined in large part by the results of safety and health studies in airline pilots ages 60 and older. If conclusive evidence supporting the safety and health of aging pilots emerges, the ICAO may lean toward extending the age limit beyond 65 or eliminating any upper age limit.

Summary

For the time being, ICAO maintains its upper age limit of 65 and the FAA is in the process of changing its long-standing Age-60 Rule. In a few years, the Age-60 Rule will be replaced by the Age-65 Rule in the United States. The controversy surrounding the mandatory retirement age for airline pilots is likely to diminish in the coming years, but will not go away. Central to the controversy is the question of whether pilots' safety performance changes significantly during the process of aging. Research in the past two decades has generated much data for understanding the relationship between pilot aging and safety performance. The Aerospace Medical Association, through its aviation safety committee, leadership, and position paper (2), has played an important role in advancing the scientific discourse and facilitating policy development regarding the Age-60 Rule. It concluded that "there is insufficient medical evidence to support restriction of pilot certification based on age alone" (2). The Aerospace Medical Association should continue to champion a rational, sensible, and evidence-based approach to the age-limit controversy.

REFERENCES

- 14 Code of Federal Regulations 121.383 (c). Washington, DC: U.S. Government Printing Office; Dec. 31, 1964. Doc. No. 6258, 29 FR 19212.
- 2. Aerospace Medical Association, Aviation Safety Committee, Civil

- Aviation Subcommittee. The Age 60 Rule. Aviat Space Environ Med 2004; 75:708-15.
- 3. Federal Aviation Administration. Age 60 Aviation Rulemaking Committee. 2006; retrieved on January 2, 2007, from http://www.faa.gov/about/committees/rulemaking/media/order1110_144.pdf.
- Federal Aviation Administration. Age 60 Aviation Rulemaking Committee: report to the Federal Aviation Administration. 2006; retrieved on February 2, 2007, from http://www.faa.gov/media/Final_Age_60_ARC_Report_11_29_2006.pdf.
- Federal Aviation Administration. FAA to propose pilot retirement age change. 2007; retrieved on February 2, 2007, from http://www.faa.gov/news/press_releases/news_story.cfm? newsId=8027.
- Federal Register. Vol. 71, No. 206. Washington, DC: U.S. Government Printing Office; October 25, 2006. 62399; Docket No. FAA-2006–26139; Notice No. 06–17.
- International Civil Aviation Organization. Upper age limits for flight crew members answers and comments of States and international organizations in response to state letter AN 5/16.1-03/110. AN-WP/7982. Retrieved on January 2, 2007, from http://www.icao.int/ICDB/HTML/English/ Representative%20Bodies/Air%20Navigation%20Commission/ Working%20Papers%20by%20Year/2004/AN.2004.WP.7982. EN/AN.2004.WP.7982.APPC.EN.HTM.
- International Civil Aviation Organization. Comments of States and international organizations in response to state letter AN 5/16.1– 05/17. AN-WP/8074. Retrieved on January 2, 2007, from http:// www.icao.int/ICDB/HTML/English/Representative%20. Bodies/Air%20Navigation%20Commission/Working%20Papers %20by%20Year/2005/AN.2005.WP.8074.EN/AN.2005.WP. 8074.APPB.EN.HTM.
- International Civil Aviation Organization, Air Navigation Bureau. Personnel licensing: frequently asked questions. Age limit for flight crew. Retrieved on January 2, 2007, from http:// www.icao.int/icao/en/trivia/peltrgFAQ.htm#30.
- International Civil Aviation Organization, Air Navigation Commission. ANC task no. MED-7101: upper age limits for flight crew members, dated October 18, 1994; Montreal, Canada; retrieved on January 2, 2007, from http:// www.age60rule.com/docs/ 1994_anc_directors_report.pdf.
- International Civil Aviation Organization, Air Navigation Commission. 137th session: minutes of the twelfth meeting. Task no. MED-7101: upper age limits for flight crew members: AN-WP/6940 and corrigendum, dated November 17, 1994. Montreal, Canada; retrieved on January 2, 2007, from http://www.age60rule.com/docs/1994.ANMIN_137_12%20Corr1_.pdf.
- 12. International Civil Aviation Organization. Proposal for the amendment of Annex 1 to increase the upper age limit for

- pilots, dated February 25, 2005. Retrieved on January 2, 2007, from http://www.age60rule.com/docs/2005.SL_05_17_.pdf.
- 13. International Civil Aviation Organization. Proposed amendment to international standards and recommended practices: personnel licensing: Annex 1 to the Convention on international civil aviation. Retrieved on January 2, 2007, from http://www.icao.int/ ICDB/HTML/English/Representative%20Bodies/Air%20Navigation%20Commission/Working%20Papers%20 by%20Year/2006/AN.2006.WP.8102.EN/AN.2006.wp.8102.dcwp.appa.en.pdf.
- 14. International Civil Aviation Organization. A27-WP/80P/30. Curtailment of privileges of pilots who have attained their 60th birthday. September 13, 1989; retrieved on January 2, 2007, from http://www.icao.int/cgi/goto_m.pl?icao/en/assembl/a27/index.html.
- International Civil Aviation Organization. Air Navigation Commission 167th session: minutes of the tenth meeting on December 2, 2004. August 12, 2004; retrieved on January 2, 2007, from http://www.icao.int/ICDB/HTML/English/Representative %20Bodies/Air%20Navigation%20Commission/Minutes%20 by%20Session/167/AN.167.min.10.en/AN.167.MIN.10.EN. HTM
- 16. International Civil Aviation Organization. 2557th report to council on by the President of the Air Navigation Commission: adoption of amendment 167 to Annex 1. February 23, 2006; retrieved on January 2, 2007, from http://www.icao.int/icdb/HTML/English/Representative%20Bodies/Council/Working%20Papers %20by%20Session/177/C.177.wp.12615.en/C.177.WP.12615. EN.HTM.
- 17. International Civil Aviation Organization. Resolutions of the 60th session of the United Nations General Assembly. May 19, 2006; retrieved on January 2, 2007, from http://www.icao.int/icdb/HTML/English/Representative%20Bodies/Council/Working %20Papers%20by%20Session/178/C.178.WP.12677.EN/C.178.WP.12677.EN/HTM.
- Kay EJ, Hillman DJ, Hyland DT, Voros RS. Age 60 study: consolidated database experiments final report. Washington, DC: Office of Aviation Medicine; 1994. DOT/FAA/AM-94/22.
- Li G, Baker SP, Lamb MW, et al. Human factors in aviation crashes involving older pilots. Aviat Space Environ Med 2002; 73:134–8.
- Li G, Baker SP, Grabowski JG, et al. Age, flight experience, and risk of crash involvement in a cohort of professional pilots. Am J Epidemiol 2003; 157:874–80.
- 21. Mitchell SJ, Evans AD. Flight safety and medical incapacitation risk of airline pilots. Aviat Space Environ Med 2004; 75:260–8.
- 22. Miura Y, Shoji M, Fukumotu M, et al. Three-year evaluation of elderly flight crew over 60 to 63 years old in Japan. Aviat Space Environ Med 2000; 71:312–4.
- 23. Pasztor A. FAA set to raise retirement age for pilots to 65. Wall Street J (Eastern edition) 2006 Dec. 11; Sec. A:3.