



## ASSEMBLY — 42ND SESSION

### TECHNICAL COMMISSION

#### Agenda Item 24: Aviation Safety and Air Navigation Priority Initiatives

#### PROPOSAL TO RAISE THE MULTI-PILOT COMMERCIAL AIR TRANSPORT PILOT AGE LIMIT TO 67 YEARS

(Presented by the International Air Transport Association (IATA))

#### EXECUTIVE SUMMARY

In 2006 ICAO implemented Standards and Recommended Practices (SARPs) to raise the age limit from 60 to 65 for pilots undertaking multi-pilot international commercial air transport (CAT) operations. Building on the work already done by ICAO through the Medical Provisions Study Group in the past 19 years in considering the extension of age limits, this paper proposes that ICAO now considers raising the age to 67 years. This change should follow a similar approach to that which was successfully applied in 2006 and implemented within a framework of additional safety assurance measures.

**Action:** The Assembly is invited to:

- support the extension of the upper age limit for pilots engaged in multi-pilot international commercial air transport (CAT) to 67 years, provided another pilot is under age 65;
- request that ICAO establish standardised medical risk assessment and oversight systems informed by a standard set of pilot medical data to reliably assess the medical risks associated with pilot age; and
- request that States collaborate with industry and representative bodies across medical, licensing and operational domains on developing guidance materials to support States in implementation of increased age of pilots undertaking international commercial air transport (CAT) operations.

<i>Strategic Goals:</i>	This working paper relates to <i>Every Flight is Safe and Secure</i> .
<i>Financial implications:</i>	Nil
<i>References:</i>	Annex 1 — <i>Personnel Licensing</i> Annex 6 — <i>Operation of Aircraft</i> Annex 19 — <i>Safety Management</i> Doc 8984, <i>Manual of Civil Aviation Medicine</i>

<sup>1</sup> English, Arabic, Chinese, French, Russian and Spanish versions provided by IATA.

## 1. INTRODUCTION

1.1 ICAO Annex 1 — *Personnel Licensing*, Chapter 1 – *Definitions and General Rules Concerning Licenses*, provides the Standard for upper age limits for commercial pilots. For single-pilot commercial flying the limit is 60 years of age, and for multi-pilot commercial air transport (CAT) it is 65 years. Chapter 1 also sets out the provisions for competency-based training and assessment of pilots. ICAO Annex 1, Chapter 6 – *Medical Provisions for Licensing* provides Standards for the periodic examination of pilots to assess their functional medical ability and the presence or absence of diseases that might represent a safety risk of incapacitation in flight.

1.2 Throughout the first half of the 20th century the prevalence of significant diseases in the over-60-year-old population was significant enough that the use of age 60 as a proxy for disease presence, and assumption that a person aged under 60 years was likely disease-free, was a reasonable approach. Medical evidence reviewed in 2006 and subsequently show that the epidemiology of health and disease in the 21st century have a very different risk distribution, particularly with younger people experiencing less physical disease morbidity and mortality but with an increasing health burden through mental illness and substance use.

1.3 World Health Organization (WHO) health population data shows global evidence of improving population health status, particularly cardiovascular, due to socio-economic factors and advancing medical care. There has been an associated increase in life expectancy as well as reductions in population mortality and morbidity with age. Air Transport Pilots are a population subgroup who generally have significantly better health status than general populations. This remains a reasonable surrogate for incapacity risk and is supported by the decreasing rates of serious inflight medical incapacitation risk over the last 30 years. Fatal accident risks related to medical causes are rare. This reflects medical advances and risk reduction measures relating to human failures as part of testing, training and operational procedures and the high reliability of the safety management systems of CAT operations.

1.4 Informed by this modern epidemiological data, and following extensive review and consultation, in 2006 ICAO implemented the first change in upper age limits for multi-pilot CAT pilots to 65 years of age, further mitigated by a ‘one over, one under’ rule. Further, three States (Canada, Australia and New Zealand) have no upper age limits for pilots including pilots undertaking CAT operations for the past 20 to 30 years. This principally related to States legislation that prevents discrimination on the basis of age. These States have not recorded an increase in aviation safety events in pilots over the age of 65 years engaged in CAT operations.

1.5 The growth of the aviation industry worldwide is causing the demand for pilots to outstrip supply. Raising CAT pilot age limits to allow more pilots to continue to work is aligned with 15 of the 17 United Nations (UN) Sustainable Development Goals (SDGs), including the initiative of the Next Generation of Aviation Professionals (NGAP) Programme to ensure a sufficient supply, whether recruiting older candidates or retaining existing pilots, of qualified aviation professionals for the future.

1.6 Raising the age limit from 65 years to 67 years is a cautious but reasonable step that States may consider that is consistent with maintaining safety while supporting the viability of CAT operations.

## **2. SUMMARY OF KEY ISSUES**

2.1 The health and human performance of pilots is multi-dimensional including medical (wellbeing, health and disease), licensing (training and assessment), operations (safety systems, and procedures to prevent impaired performance in flight operations). Changes to pilot age limits must also consider these dimensions within legal and socio-economic contexts.

2.2 The key issues are listed below:

2.2.1 National legislation and social considerations vary considerably between States relating to whether and how a person's age can be used as a basis for discrimination for employment or risk management purposes.

2.2.2 The key tenet for ICAO of "No Country left behind" needs to be maintained and the proposed measures need to be able to be implemented by as many States who wish to do so.

2.2.3 WHO data indicates global improvements in population health, and flight crew as a sub-population are healthier in general due to increased health literacy and regular mandated medical assessments.

2.2.3.1 Functional capability and operational performance testing of pilots working in multi-pilot CAT settings is advanced, providing a strong additional safety measure in the event of medical impairment.

2.2.4 While the incidence and prevalence of disease conditions (identified at medicals and in the inter-medical period) increases overall with age, there is no evidence of increased medical safety events in datasets of in-flight pilot incapacitation events, including in States that have already raised their age limits.

2.2.5 There is no evidence of increased on-duty events medical safety in licenced air traffic controllers who are not subject to age limits, who are assessed to similar functional requirements, incapacity risk targets, and operational competence testing.

2.2.6 The two leading concerns for future risk of medical-cause fatal accidents are mental health conditions and problematic substance use (e.g., alcohol and other drugs). These potential causes of aviation related fatalities tend to present in a younger demographic.

## **3. RECOMMENDATIONS FOR MULTI-PILOT COMMERCIAL AIR TRANSPORT PILOT AGE LIMITS**

3.1 This paper recommends that ICAO consider raising the age limit for multi-pilot CAT from the current 65 years to 67 years within a framework of safety assurance measures. These include:

- a) a system of standardised data collection about the medical status and health-related performance across all pilot age groups. This data should as a minimum include the incidence of medical conditions in license-holders, medical reasons for retirement from CAT operations, reasons for voluntary non-renewal of medical certificate or loss of medical certificates through regulatory action, and inflight safety and performance data (for all events);

- b) provision of appropriate “aviation-related” health promotion material to maintain and advance pilot population health;
- c) identification of locally appropriate medical screening strategies to safeguard future health and performance, including early identification of medical conditions that require further assessment to ensure the risk of incapacity in individual and the system remains acceptable;
- d) review of guidance material for medical examinations, to ensure the safety value and impact of periodic pilot medical examinations to detect diseases; and
- e) establishment of a multidisciplinary working group with representatives from medical, licensing and operational areas to develop formal medical safety management frameworks that encompass all the dimensions of the interaction of pilot fitness, performance and operational safety, including but not limited to the age of the pilot.

#### 4. SUMMARY

4.1 The 2006 implementation of the upper age limit of 65 years in CAT operations has not compromised aviation safety and integrity. The proposed increase to age 67 years is a cautious but reasonable step consistent with safety. This paper supports ICAO initiatives to date to progress more integrated systems of medical assessment. These will ensure the safe implementation of changes to pilot age limits and reinforce the value and effectiveness of a risk-assessed, systems-based integrated approach to management of any medical condition that might affect flight safety.

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