

RMT.0287(2)(b) –age limits for pilots involved in single-pilot HEMS OPS

**Second Aviation Medical Examiner
Refresher Workshop - ICAO APAC**

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Your safety is our mission.

Pilot Age history

-  1919 -International Commission for Air Navigation (ICAN) - 45 years age limit
-  1947 -ICAO takes over from ICAN – no age limit in ICAO documentation
-  In 1962, ICAO introduced age limits based on the statistical data regarding the risk of sudden incapacitation
-  In 2006, ICAO increased the age limit to 65 for multi-crew operations subject to the second member of the flight crew to be below the age of 60
-  In 2013, ICAO proposed to abolish the ‘1 under, 1 over’ policy
-  In 2016, during the ICAO Assembly Japan submitted for consideration the intention to increase the age limit to 68 with additional mitigating measures.

Pilot Age history

- ✈ JAR-FCL 1.060 – imposed the age limit of 60 years old for pilots engaged in commercial air transport operations except as a member of a multi-pilot crew, subject to the second member of the flight crew being below the age of 60. Furthermore it imposed as hard limit for all pilots in CAT operations the age of 65.
- ✈ Some European States still maintained in their national requirements the hard limit at the age of 60 for all pilots
- ✈ Initially Part FCL took that over the wording of JAR-FCL 1
- ✈ In 2015, Commission Regulation (EU) 2015/445 amended FCL.065 by removing the ‘1 under, 1 over’ policy and increasing the age limit for commercial balloon or sailplane pilots
- ✈ Currently, although all MSs are aligned with the European requirements on pilot age limits, some MSs allow early retirement with full benefits for pilots





Background



- ✎ Relatively high number of Member States issued exemptions for HEMS operations since 2013
- ✎ February 2016 – FS 3.2 presented a paper for the consideration of EASA’s Advisory Bodies, on increasing age limit for single pilot CAT ops from 60 to 65
 - ✎ Advisory Bodies proposed further research on the subject
- ✎ April 2016 – age limit for single pilot CAT ops was discussed during the EASA Medical Expert Group (MEG) meeting
 - ✎ Medical experts considered that more discussions on the accepted risk level and mitigating measures are needed
- ✎ March 2017 – HEMS Pilots’ Age Limits Workshop held by Austrocontrol with support of EASA

Background (II)



-  Flight crew engaged in single pilot commercial air transport operations cannot exercise the privileges of their licence beyond the age of 60 in accordance with the provisions of FCL.065(a) of the Aicrew Regulation.
-  HEMS requires highly specialized properly trained pilots. Several MSs explained that there is currently as shortage of HEMS pilots.
-  The increasing retirement age in EU (65 years in most of the EU countries) and the longer life expectancy has triggered several requests for exemptions mainly in emergency medical services.
-  Since 2012 EASA have given positive recommendations to exemption notifications received from 9 MSs. These Exemptions, pertinent to the scope of this RMT, are in accordance with Article 71 'Flexibility provisions' of Regulation (EU) 2018/1139.

Age Limitations research

- This situation led EASA to launch a research study in 2017 on the appropriateness of the existing pilot age limitations for commercial pilots.
- The results recommended extending the age limit for commercial air transport (CAT) pilots flying single pilot operations from 60 years to the pilot's 65th birthday, subject to mitigating measures.
- <https://www.easa.europa.eu/en/document-library/research-reports/easarepresea20171>



The age limitations study

The study found that “the risk of the 55-64 age group is just within the margin of the acceptability limit for catastrophic system failures for single piloted CS23 aircraft with a single reciprocating engine and a seating capacity for 0-6 passengers; and therefore, there is a compelling need to reduce the medical incapacitation risk of single flying CAT pilots in the 55-64 age range and any increase of the age limitation for single pilot operations should be accompanied by additional measures to reduce the likelihood of pilot incapacitation to meet current operational accident acceptability values. ”

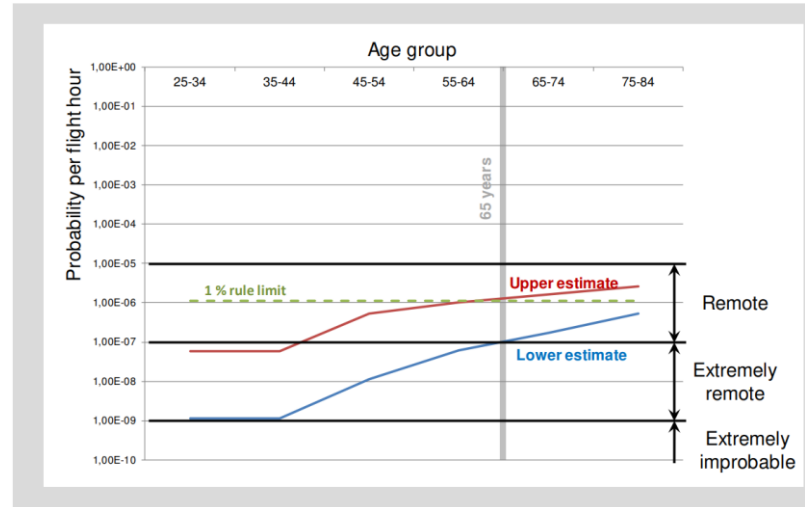


Figure 5.1 Estimated pilot incapacitation probability compared with CAT system failure severity thresholds

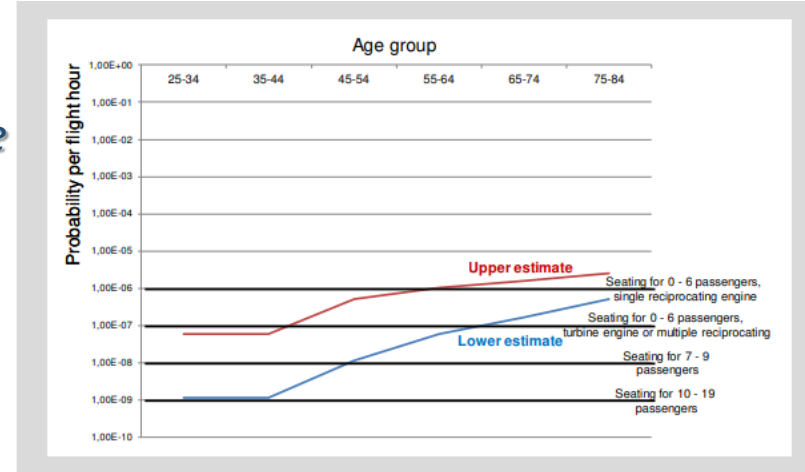


Figure 5.2 Estimated pilot incapacitation probability compared with small aircraft severity thresholds for catastrophic failures

The age limitations study - recommendations

- ✈️ Extend the age limit of CAT pilots flying single pilot operations from 60 years to the pilot's 65th birthday accompanied by additional medical and operational mitigating measures to reduce the likelihood of pilot incapacitation
- ✈️ Cardiovascular screening for all pilots above the age of 40
- ✈️ Not to further extend the pilot age limits for multi-pilot operations beyond the age of 65




Specific Objectives of Subtask 2b

- ✈️ to consider the increase of the age limit for pilots involved in single pilot HEMS operations from 60 to 65 and define the appropriate mitigating measures to ensure safety is not adversely affected
- ✈️ to allow the HEMS operations to continue safely:
 - ✈️ to ensure that all essential HEMS missions are performed
 - ✈️ to decrease the negative impact of the shortage of properly qualified pilots for this operations.
- ✈️ to ensure safety and fairness for pilots engaged in single pilot HEMS operations in relation to the increasing life expectancy and health standards.
- ✈️ to regularize the number of exemptions from the EASA MS.



ToR and group composition

ToR & CG published - 31/05/2021

-  to consider the increase of the age limit for pilots involved in single pilot HEMS operations from 60 to 65 and define the appropriate mitigating measures to ensure safety is not adversely affected.

GC – 11 members representing MSs and industry:

-  FR, SI, FI, CH, ES, DE
-  EHA, EHAC, ECA, ESAM
-  EASA

Members:	
BECKER, Stefan – RMG Chair	EHA
GERMA, Rene	DGAC FR
KAMP, Raimund	MoT, DE
KOTNIK KERBEV, Mateja	CAA SI
PALLONEN, Janne	TRAFICOM
PECO ARREGUI, Carmen	EASA/SNE AESA
REMIE, Daan	EHAC
ROGNMO-HODGE, Andrew	ECA
SIMONS, Ries	ESAM
SZE, Leon	FOCA
PANAIT, Cristian Ionut – Group Secretary	EASA

RMT.0287 (2)(b) scope

- ✈ Considering the comments received during the BIS consultation, EASA decided to take a progressive approach and explore as a first step the pilot age limits for pilots involved in single pilot HEMS operations
 - ✈ This will allow further data collection
- ✈ There is a strong demand from the rotary wing industry to extend the scope to other single pilot CAT
- ✈ EASA decided to consult again the MSs during the MAB to see if the views of the Member States expressed during previous formal consultations has changed – 09 Feb 2022
- ✈ MAB re-confirmed the approach taken by EASA based on the consultation of the BIS and ToR



RMT.0287 (2)(b) – mitigating measures

- ✈ Medical examination by the AeMCs or experienced AMEs
- ✈ Extended cardiovascular assessment at 60 and every 2 years to include at least:
 - ✈ resting ECG
 - ✈ exercise ECG
 - ✈ serum lipids
 - ✈ echocardiography
 - ✈ arterial doppler ultrasound including thoracic and abdominal aorta as well as carotid and femoral arteries
- ✈ Cardiovascular risk assessment starting after 40 years old
- ✈ Sleep apnoea screening
- ✈ Comprehensive examination of the ENT and visual system, including colour vision



RMT.0287 (2)(b) – mitigating measures(II)

- 🚁 Operational mitigating measures
 - 🚁 Fatigue risk management
 - 🚁 Cognitive assessment during LPC and OPC
- 📄 Reporting of health data for pilots above the age of 60



RMT.0287 (2)(b) – focused consultation


- ✈ Focused consultation 5th of May 2022 via virtual workshop including the MSs and industry.
 - ✈ Draft regulatory material shared with the participants 1 week in advance of the workshop
 - ✈ Allowing the workshop participants to **send written comments** 2 weeks after the workshop until **20 May 2022** to Cristianionut.panait@easa.Europa.eu and medical@easa.Europa.eu
 - ✈ 76 participants attended the workshop representing NAAs, HEMS industry as well as other representatives of the rotorcraft industry
 - ✈ Overall positive view on the proposed changes
 - ✈ Several constructive comments received during the workshop as well as in written format after the workshop


RMT.0287 (2)(b) – mitigating measures

- ✈ Medical examination by the AeMCs or experienced AMEs
- ✈ Extended cardiovascular assessment at 60 and based on assessment of CV risk factors thereafter
- ✈ Cardiovascular risk assessment starting after 40 years old
- ✈ Sleep apnoea screening
- ✈ Comprehensive examination of the ENT and visual system, including colour vision



RMT.0287 (2)(b) – mitigating measures(II)

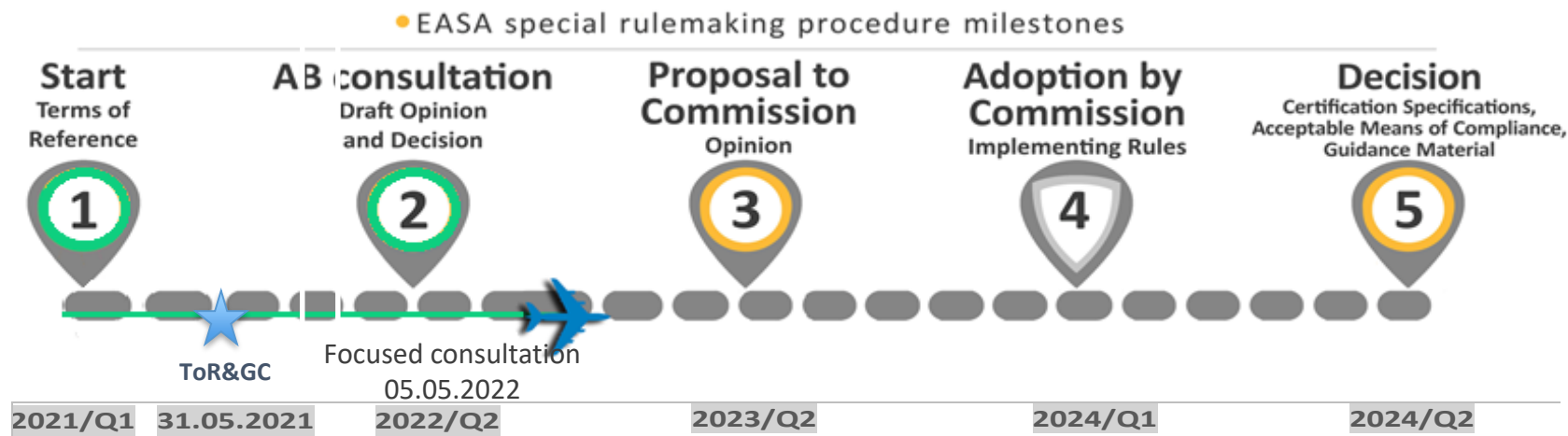
-  Operational mitigating measures
 -  Fatigue risk management
 -  Cognitive assessment during OPC using some of the observational criteria used also for the EBT

-  Reporting of health data for pilots above the age of 60



RMT timeline remains the same for HEMS

- Opinion to be merged with the resulting text of NPA 2017-22 regarding updated to ARA.MED & ORA.AeMC.
- Opinion scheduled for Q2 2023



Thank you for your attention !



Questions



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