

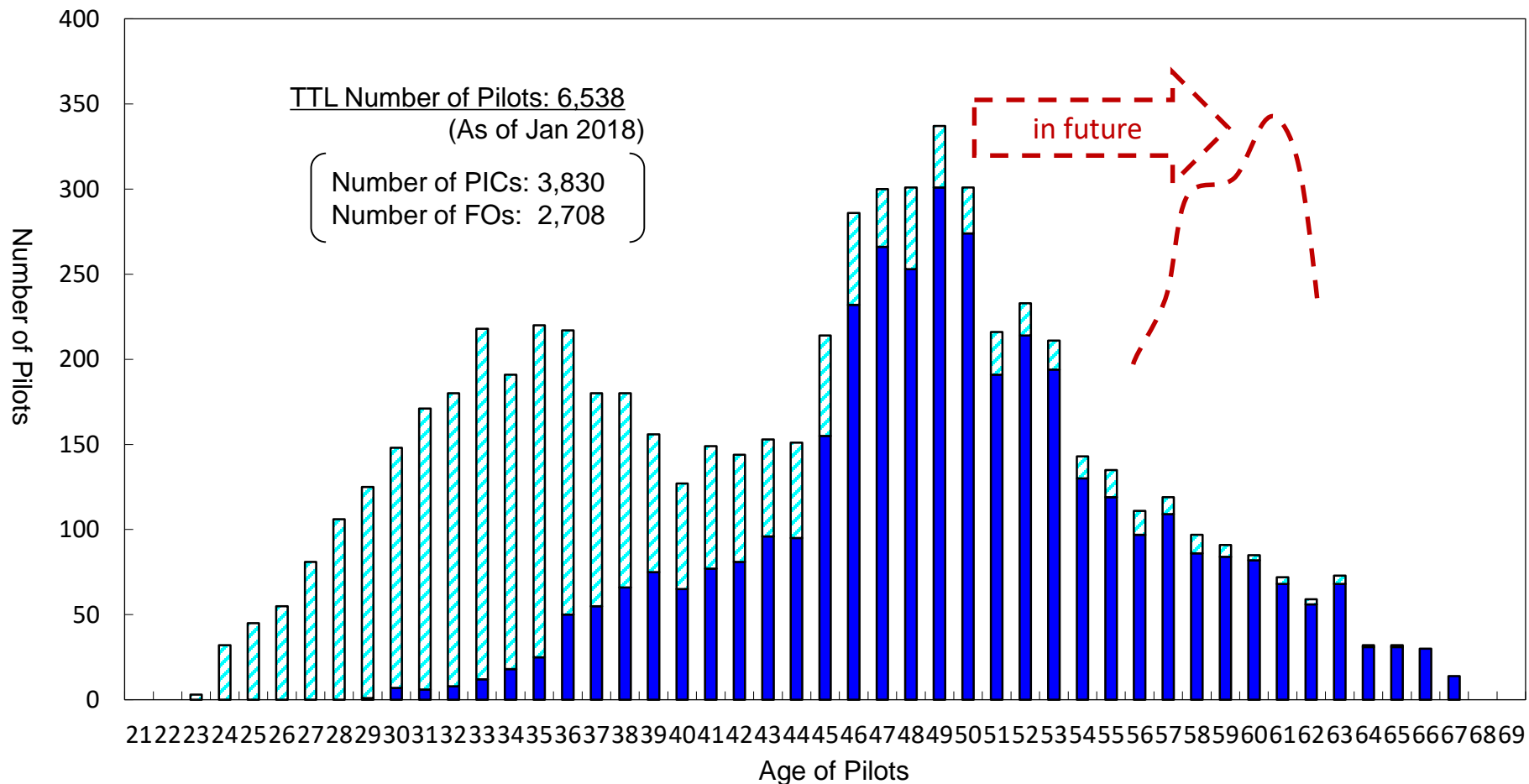
The mandatory retirement age for pilots in Japan

EASA Pilot Age Limits Workshop

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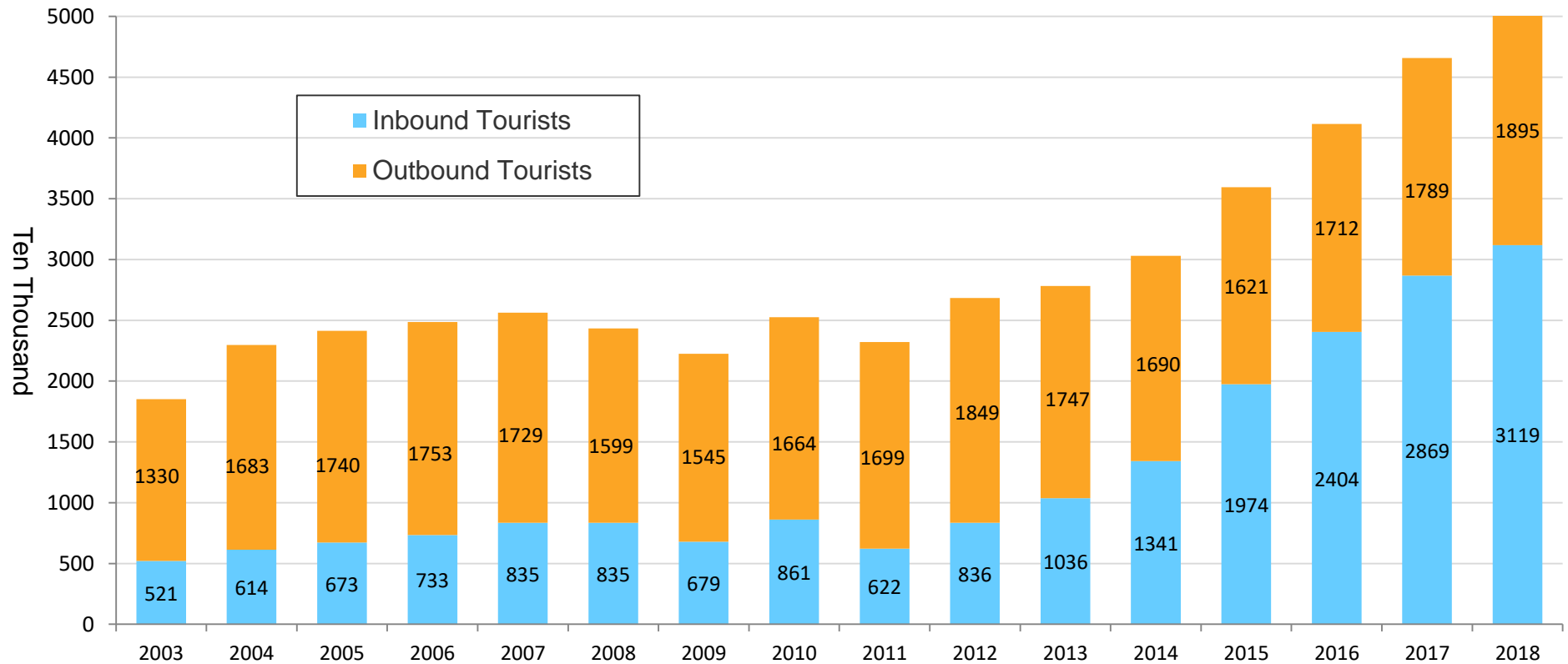
Pilot age composition of Japanese air operators

- The total number of pilots working for Japanese 18 major air operators including five LCCs is 6,538 as of January 2018.
- The age composition shows a big peak at the ages between late 40s and early 50s, and over 300 pilots would retire every year in the foreseeable future.



Rapid growth in inbound tourists

- The number of inbound travelers is rapidly increasing in recent years, and also the number of fleets operated by Japanese operators is increasing after the launch of LCCs in 2012.
- The Government of Japan has set the targets of 40million (for 2020) and 60million (for 2030) in terms of the number of inbound tourists.



Source: JNTO (Japan National Tourism Organization)

Measures to address the pilot shortage

- Japan Civil Aviation Bureau (JCAB) has taken various measures to address the pilot shortage since 2014.
- Revising the maximum retirement age for pilots in scheduled flights was one of the items under this policy package.
- JCAB has raised the mandatory retirement age to 68 in March 2015. (i.e. mandating the retirement when the pilot attains his/her 68th birthday.)

Short-term measures

- ◆ Relaxation of the requirements for foreign pilots for granting residential status in Japan
- ◆ Application of CBTA (competency-based training and assessment) program for pilot training
- ◆ Raising the mandatory retirement age of airline pilots (Changed the regulation to mandate the retirement when attaining his/her age of 68)

Long-term measures

- Increased the capacity of Civil Aviation College (CAC) by one and a half times. (CAC is the government-subsidized training facility)
- Established a scholarship for university students in pilot training course to cover its tuition
- Expansion of civil training airspace

- Japan Civil Aviation Bureau (JCAB) revised the mandatory retirement age by step-by-step approach after the careful discussion at the dedicated medical board taking into account both medical and flight skill aspects of senior pilots.
- JCAB has been revising the regulation ahead of ICAO SARPs amendment.

Japan

- 1991
Raised from 60 to 63 for non-revenue flights
- 1996
Raised from 60 to 63 for all flights
- 2004
Raised from 63 to 65 for all flights
- 2012
Accepted the flight crew comprised of two senior pilots both over 60
- 2015
Raised from 65 to 68 for all flights



ICAO

Age limit of 60 for international commercial flight



- 2006
Raised from 60 to 65 for international commercial flights
- 2014
Removed the provision forbidding the flight crew comprised of two senior pilots over 60.

Air operators

- Apply tighter duty-time limitation for senior pilot over the age of 65. (i.e. 80% of the normal duty-time limitation)
- Senior pilot over the age of 65 shall fly with the pilot under 60 who undergoes the annual training on managing the incapacitation of the other pilot.
- All pilot over 63 is subject to the additional annual training to keep the satisfactory competency in situation awareness.

Designated Medical Examiner

- Carry out the special medical assessment for pilots at their age of 60 and 65 as well as the following periodical medical examination of some particular items.

JCAB

- Continuously monitor the pilot flight skill and medical condition over the age of 60 to ensure the age68-retirement rule doesn't affect the safe operation.
- Initiate the remedial action as necessary.

Special medical assessment for pilots over 60

- JCAB requires the special medical examination for senior pilots at the ages of 60 and 65 to ensure the safe operation up to 68. The special examination comprises additional examination items listed below.
- Special medical examination could identify the unknown physical disorders of senior pilots, and that would be reported to JCAB for the final evaluation at the medical review board.

Special medical assessment at the age of 60

Screening Test

- ☐ Medical interview by medical examiner*
- ☐ Blood pressure
- ☐ Rest electrocardiogram (ECG)*
- ☐ Serum lipid test (TC, TG, LDL, HDL)*

Additional Medical Examination

(Only for cases where ME identifies medical risk after the screening test)

- ☐ Holter ECG
- ☐ Echocardiography
- ☐ Treadmill exercise ECG
- ☐ Brain MRI

*Periodical examination (every 6M or 1Y) after passing the special assessment is also required.

Special medical assessment at the age of 65

(Applicable to all pilot at the age of 65)

- | | |
|---|--|
| <input type="checkbox"/> Holter ECG | <input type="checkbox"/> Electroencephalogram (EEG) |
| <input type="checkbox"/> Echocardiography | <input type="checkbox"/> Coronary artery CT (if necessary) |
| <input type="checkbox"/> Treadmill exercise ECG | |
| <input type="checkbox"/> Brain MRI | |

- After the amendment of the mandatory retirement age rule in 2015, the number of senior pilots over 65 is steadily increasing.
- JCAB has been carefully monitoring the medical examination data as well as biannual pilot proficiency check data of senior pilots over 60 to ensure that the 68 retirement rule doesn't harm the safe operation, in accordance with the direction of the dedicated expert committees which endorsed the new retirement rule.
- JCAB's observation for recent four years on the medical condition and piloting skill revealed;
 - The pass rate of the special medical assessment are 97% (at 60) and 86% (at 65).
 - Low-rating/ unsatisfactory flight skills in the proficiency check appear more frequently in items like "engine failure during take-off", "circling approach", "missed approach" for pilots over 60, but no particular problem is identified.

Age	60	61	62	63	64	65	66	67	TTL
2015	64	74	71	88	106	10	0	0	413(10)
2016	91	67	67	67	88	44	15	2	441(61)
2017	86	84	66	63	68	32	43	11	453(86)
2018	77	86	85	61	60	36	38	34	477(108)

- Along with the 68-retirement rule, JCAB requires air operators to establish and implement the healthcare program to keep the good medical compliances of pilots.
- The healthcare program of each air operator shall include;
 - Posting the doctor(s), i.e. “Pilot healthcare doctors”, at its medical service section who has completed the training program provided by JCAB and became well-informed on aviation medical assessment requirements. These doctors are subject to the recurrent JCAB training every three years.
 - Making a contract with ONE particular hospital to compile all medical assessment records of its pilots to facilitate the effective interaction between DMEs in the hospital and Pilot healthcare doctors in the operator. This should include exchanging the essential medical information with the permission of its pilots.
 - Ensuring that each pilot makes an appropriate self-declaration on his/her medical history and medication by checking the application form for each medical assessment.
 - Establishing the system that co-workers report to the medical service section on the pilot who seems to have a remarkable medical problem.
 - Offering its pilots a carefree in-house system that facilitates the consultation with the Pilot healthcare doctors on his/her medication, physical and mental health.
- The healthcare program is also recommended to include;
 - Providing the support system for pilots who has been suspended his/her flight, and also clarify them the road to return to flight.
 - Establishing the peer support system for pilots who have the common personal distress.

