

**59<sup>th</sup> CONFERENCE OF  
DIRECTORS GENERAL OF CIVIL AVIATION  
ASIA AND PACIFIC REGIONS**

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**AGENDA ITEM 3: AVIATION SAFETY**

**EFFORTS TO SECURE AND UTILIZE HUMAN RESOURCES  
FOR AIRCRAFT MECHANICS AND PILOTS IN JAPAN**

(Presented by JAPAN)

**SUMMARY**

Japan has set a government goal of increasing the number of foreign visitors to Japan to 60 million by 2030, and while a significant increase in aviation demand is expected in the future, securing and utilizing human resources of aircraft mechanics and pilots required to achieve this goal has become an issue. Japan Civil Aviation Bureau (JCAB) established a study group to address this issue, held a series of discussions, and compiled a specific direction in June this year.

JCAB is of the view that the securing and utilizing of aircraft mechanics and pilots is a major issue not only in Japan but also worldwide, and this paper is intended to share the information compiled by the study group.

## EFFORTS TO SECURE AND UTILIZE HUMAN RESOURCES FOR AIRCRAFT MECHANICS AND PILOTS IN JAPAN

### 1. INTRODUCTION

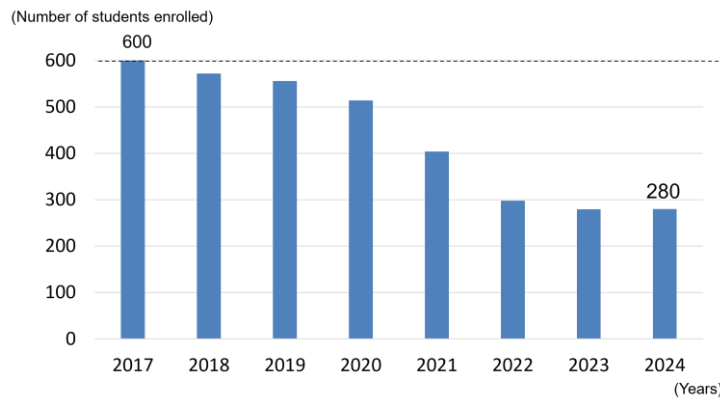
1.1 In Japan, the government has set a goal of increasing the number of foreign visitors to Japan to 60 million by 2030 in order to promote economic growth and realize Japan as a tourism-oriented country, and aviation demand is expected to increase further as a result. In February of this year, JCAB established a study group to discuss how to secure and utilize sufficient aircraft mechanics and pilots, and published an interim report in this June.

1.2 The following challenges exist regarding aircraft mechanics and pilots in Japan, and the emerging challenge is to ensure a system sufficient to support future increases in aviation demand.

#### Aircraft mechanics

- Since the COVID-19 pandemic, enrollment in aviation technical schools, the main training institutions for aircraft mechanics, has continued to decline, and the number of students enrolled in 2024 is half that of five years ago.

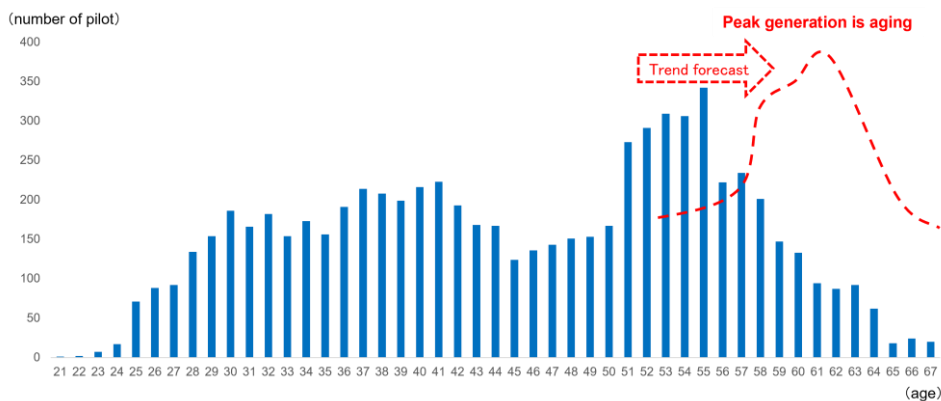
Enrolment trends in aviation technical schools in Japan



#### Pilots

- With the coming era of mass retirement and increasing global demand for aviation, it is expected that the demand for pilots will increase and competition for securing pilots will intensify.

Number and age composition of pilots in Japan



### 2. DISCUSSION

2.1 In the interim report compiled by the study group in this June, eight themes in the field of aircraft mechanics and seven themes in the field of pilots, which are expected to be relatively effective from the following three perspectives in order to secure and train sufficient aircraft mechanics and pilots, were selected and positioned as priority themes to set the direction.

**Perspective 1: Effective use of resources**

**Perspective 2: Improving training and operational efficiency**

**Perspective 3: Expansion of the base**

2.2 The eight priority themes related to aircraft mechanics are as follows.

**Theme 1: Expansion of the scope of work of aircraft line maintenance technicians (related to Perspective 1)**

- The scope of work of “aircraft line maintenance technicians”, whose training period is relatively short, will be expanded (currently around 60% of the work is covered), and the regulation will be reviewed so that the daily inspection work between flights (line maintenance) can be carried out by aircraft line maintenance technicians more effectively than at present.

**Theme 2: Commonization of type-specific licenses (related to Perspective 1)**

- With the standardization of maintenance and the enhancement of manuals in conjunction with the computerization of aircraft systems, type-specific licenses will no longer be required for minor tasks such as daily in-flight inspections (review of the regulation in conjunction with Theme 1).

**Theme 3: From time-based education to competence-based education (related to Perspective 2)**

- In addition to standardized training hours, training facilities for aircraft mechanics should be able to offer competency-based education, thereby improving both the quality and efficiency of education.

**Theme 4: Renewal of test items based on recent aircraft maintenance technology (related to Perspective 2)**

- Practical test items (e.g., metal parts, hose assembly) based on conventional airframe maintenance techniques will be updated based on recent airframe maintenance techniques (e.g., composite materials, software updates).

**Theme 5: Promotion of maintenance using digital technologies (related to Perspective 2)**

- Examine the feasibility of using remote technology and other technologies in maintenance work and revise the notifications required for the use of digital technologies.

**Theme 6: Strategic public awareness activities (related to Perspective 3)**

- Establish a joint public-private consultative body that will play a central role in effectively communicating the attractiveness of aircraft mechanics to a wide range of people, including younger students, women and people in other industries, and promote strategic activities using social media and other means.

**Theme 7: Promoting the use of Japan Self-Defense Force mechanics (related to Perspective 3)**

- Work with the Ministry of Defense to facilitate the acquisition of civilian mechanic licenses to enable retired Self-Defense Force mechanics to work in the civil aviation industry.

**Theme 8: Expansion of the acceptance of foreign aircraft mechanics (related to Perspective 3)**

- Proactively promote the acceptance of foreign nationals with specific skills (“Specified Skilled Workers”), in cooperation with the companies that accept them, by formulating a plan specifying the target countries for expansion of acceptance, timing, etc.

2.3 The seven priority themes related to pilots are as follows.

**Theme 1: Facilitating the acceptance of foreign pilots (related to Perspective 1)**

- Expedite the process for converting foreign pilots' licenses to Japanese licenses by digitizing the procedures.
- Compile the measures to improve the environment to make it easier to obtain a Japanese license, such as reviewing the procedural flow and providing information on converting to a Japanese license on the website for foreign nationals.

**Theme 2: Promoting utilization of senior talent and other experienced personnel (related to Perspective 1)**

- Establish a study group to accelerate discussions from medical perspectives, including a review of additional physical examinations for senior pilots.
- Review the system to facilitate the use of experienced pilots who can no longer obtain physical examination certificates as simulator-based skill examiners and training instructors.

**Theme 3: Fundamental reform of the Civil Aviation College (Japan's independent administrative institution) for stable training (related to Perspective 2)**

- In order to ensure the continuous and stable training of 100 students per school year, measures to strengthen the system, improve training efficiency, expand airspace, and improve income and expenditure, will be compiled in cooperation with experts from airlines and management and reflected in the next management plan, as well as facility expansion including the replacement of aged facilities.

**Theme 4: Expedite training of pilots in command (related to Perspective 2)**

- Expand the scope of pilot in command certification that can be conducted within airlines to improve the efficiency of internal operations and accelerate pilot in command training.

**Theme 5: Strategic public awareness activities (related to Perspective 3)**

- Establish a joint public-private consultative body that will play a central role in effectively communicating the attractiveness of aircraft mechanics to a wide range of people, including younger students, women and people in other industries, and promote strategic activities using social media and other means.

**Theme 6: Promote utilization of private universities (related to Perspective 3)**

- In cooperation with private universities with pilot training courses that continue to have enrolment numbers below their capacity, and airline companies, conduct interviews with high school students to clarify career paths from admission to becoming a pilot, as well as to study issues to increase enrolment and improve the level of training.

**Theme 7: Expanding the number of female pilots (related to Perspective 3)**

- In order to improve the low ratio of female pilots in Japan (1.7%), efforts are being made to improve women's dormitory at the Civil Aviation College, and we will conduct a fact-finding survey in 2024 to identify current disincentives and other factors, and implement necessary measures.

2.4 JCAB plans to re-launch the study group and finalize the summary in the spring of next year and will continue to actively promote the study in cooperation with the public and private sectors, and then promote necessary system reforms and the establishment of a cooperation framework.

**3. ACTION BY THE CONFERENCE**

3.1 The Conference is invited to:

- a) Note the content provided in this paper;
- b) Encourage States to actively participate in sharing their own experiences.

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