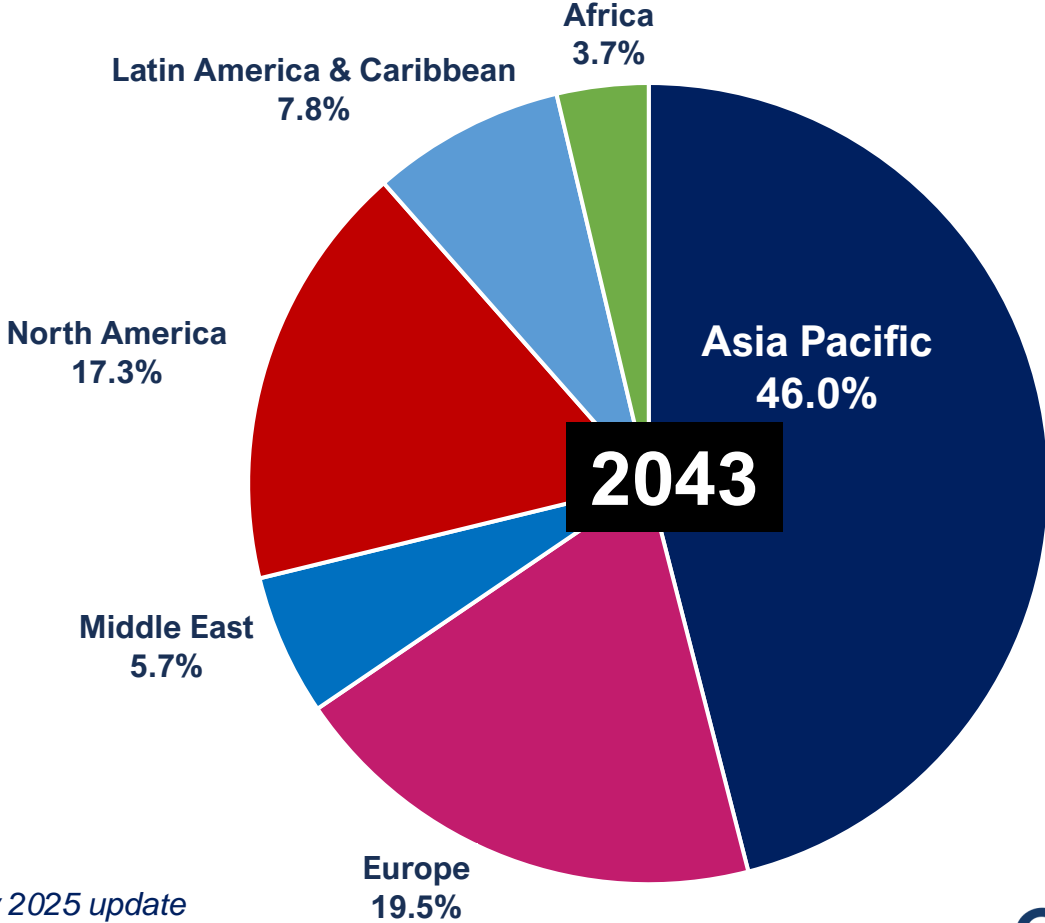
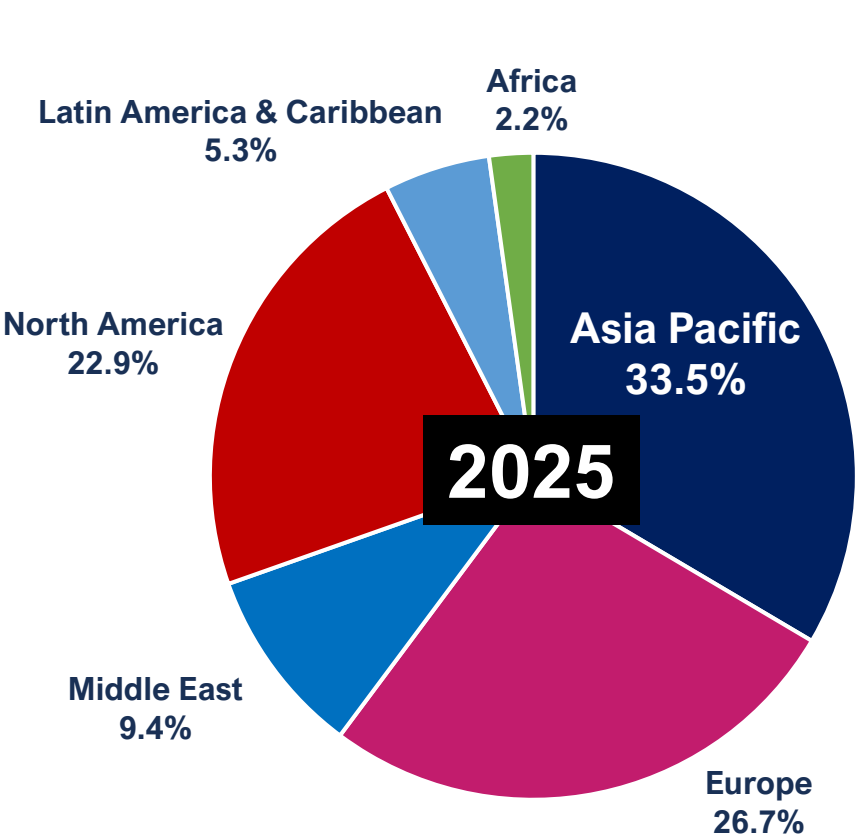


Aviation Training and Workforce Challenges Asia Pacific Region

Mr. Tay Tiang Guan
Dean, Singapore Aviation Academy
11 March 2025

Bright growth prospects for Asia Pacific region

- Global air passenger traffic projected to increase 2.1x by 2043
- Asia Pacific will grow at ~5% CAGR over the next 20 years



Source: IATA Air Passenger Forecast – February 2024 update and February 2025 update

Over the next two decades, Asia Pacific region will need over 1 million new skilled professionals

268,000

New Pilots

298,000

New Technicians

433,000

**New Cabin
Crew Members**

Source: Airbus Global Services Forecast (GSF) 2024 - 2043

As in other regions, we anticipate structural changes and workforce challenges in Asia Pacific



Labour Supply Constraints

- Aging population - By 2050, more than a quarter, or 1.3 billion people, in APAC region will be 60 years or older
- Declining birth rate – 10 per 1,000 people in 2022 down from 15 per 1,000 people in 2012



Attractiveness of Aviation as a Career

- Competition for talents from other sectors
- COVID-19 has entrenched “work from home” practices
- Rise of ‘Gig’ Economy - Rise of digital apps enables more workers to join the ‘gig’ economy



Lagging Capability Development

- Inability to recruit and train sufficient personnel to meet demand, constrains capacity growth
- Competency and experience gaps as more experienced personnel leave the sector



Demand from Emerging & New Areas

- Key trends in AI, automation, digitalization & sustainability require new job roles & process re-design to transform the skills required by our workforce

CAAS is undertaking a sector-wide manpower study to support growth & development of its aviation workforce

Phase 1



Develop A Sectoral Manpower Database

- Establish current workforce profile including key demographics

Phase 2 & 3



Quantify the Impact of Key Trends

- Identify and quantify where possible, the impact of technology, automation, sustainability, digitalization on the aviation workforce (jobs, skills and manpower numbers)



Build Manpower Projection Model

- Forecast annual manpower demand and supply over next 15 years

Phase 4



Identify Interventions at various Levels

- Identify interventions and opportunities to strengthen local workforce development, and raise the quality and attractiveness of aviation jobs

Recognising diversity in the Asia Pacific aviation landscape



- Different political and judicial systems
- Diversity in economic size and development
- Linguistically and culturally diverse
- Geographical differences – from large States to small island States
- Varying levels of aviation development

Needs Study: Varying challenges that APAC States face in meeting training needs

Training needs are not clearly identified, or training plans have not been developed

Financial and manpower challenges in sending personnel for training

Lack of qualified trainers in the region

Lack of coordination among aviation academies in training

ICAO APAC Regional Training Cooperation Framework spearheading areas of cooperation

ICAO Asia Pacific Regional Aviation Training Symposium
16 – 17 July 2025, Singapore



Regional Train-the-Trainer
Programme



Cooperation amongst training
academies



Leveraging established APAC training partners to enhance regional training cooperation



ICAO TRAINAIR Plus
Training Centre of Excellence Platinum Member

States and training academies supporting capability development for aviation professionals



Singapore-ICAO Developing Countries Training Programme (DCTP)

Singapore-ICAO Programme for Young Aviation Professionals (PYAP)

Singapore-ICAO Next Generation of Aviation Professionals (NGAP) Scholarship Programme



Federal Aviation Administration

Asia Pacific Regional Train-the-Trainer Programme



Incheon Airport

Global Aviation Professional Program (GAPP)

A7 Global Aviation Safety Certificate Program (A7 GSCP)



HONG KONG INTERNATIONAL AVIATION ACADEMY | 香港國際航空學院

Asia Pacific Regional Train-the-Trainer Programme

Asia Pacific Region Innovation & Capacity Building Symposium 2023

Regional cooperation is key in addressing aviation training and workforce challenges





Thank You