



ASSEMBLY — 41ST SESSION

EXECUTIVE COMMITTEE

Agenda Item 26: ICAO Civil Aviation Training and Capacity Building

RESTORING AND ENHANCING THE GLOBAL 21ST CENTURY WORKFORCE

(Presented by Royal Aeronautical Society)

EXECUTIVE SUMMARY

Owing to adversities arising from the global COVID-19 pandemic and other causes, aviation experienced widespread loss of highly skilled workforces and, concurrently, opportunities for intergenerational transfer of knowledge among license and certificate holders (e.g., pilots, maintenance personnel, cabin staff, air traffic controllers, etc.). Aviation's sustainable recovery depends on meeting future workforce needs more expeditiously and effectively. This paper proposes a roadmap to assess the efficacy of competency-based training, its ability to meet current and future demands, and its capabilities in assuring that aviation is staffed in compliance with ICAO Standards and Recommended Practices (SARPs).

Action: The Assembly is invited to request ICAO to establish a mechanism by which industry, professional bodies, and other qualified stakeholders can provide input to:

- a) survey the global need for identified aviation skills;
- b) report forecasted skill gaps especially those affecting emerging technologies and sustainable aviation, and those needed to bridge job losses consequential to the global pandemic;
- c) collate and present best-practice examples from Member States, International Organizations, and industry which encourage entry into aviation and aerospace, upskilling science, technology, engineering, and mathematics (STEM) education; and
- d) convene a conference in 2023/4 where these findings can be presented, discussed, and future actions decided.

<i>Strategic Objectives:</i>	This working paper relates to all Strategic Objectives.
<i>Financial implications:</i>	The cost of processing the new standards and guidance materials that would be delivered by industry to ICAO.
<i>References:</i>	A39-WP/33 EX/18 The ICAO Next Generation of Aviation Professionals (NGAP) Programme (Presented by the Council of ICAO) Doc 9868, <i>Procedures for Air Navigation Services – Training (PANS-TRG)</i> Doc 9941, <i>ICAO Training Development Guide, Competency-based Training Methodology</i>

¹ English, Arabic, Chinese, French, Russian and Spanish versions provided by Royal Aeronautical Society.

1. INTRODUCTION

1.1 In 2019, aviation supported 65.5 million jobs worldwide.² Since then, despite numerous State-supported schemes around the globe to retain people, thousands lost their jobs. In many parts of the world, the aviation industry is now challenged to rebuild the workforce on short turnaround to meet rising demand for skilled labour.

1.2 Climate change also impacts recruitment of young people, who perceive the sector to be a significant global emitter of greenhouse gases, despite significant technological advancements in evidence. Clearly, young people now take personal climate impact into account when choosing a career. Redundancies in the aviation and aerospace sectors due to the pandemic also act as a significant deterrent to industry entry when compared with other sectors which avoided the same impact.³

1.3 In this context, long-term planning is now vital for the resilience of the sector, together with its immediate recovery. Ensuring the sector has the right skills, is diverse and inclusive, and is focused on future technology will play a vital role in supporting essential jobs throughout the world.

1.4 Several cross-industry and collaborative efforts exist to promote aviation careers to new and next generations. However, there is a need to better understand the impact of the last three years on the skills gaps currently affecting industry recovery and their effect on the attractiveness of aviation as a career opportunity.

1.5 Greater understanding of longer-term trends and identification of structural issues which may result in future skills gaps is also needed.

2. ROADMAP DEVELOPMENT MILESTONES

2.1 A long-term strategy is needed to ensure the industry can both weather future workforce challenges and encourage young people to engage in delivering sustainability targets for the aviation sector.

2.2 Organizations using data driven decision-making will respond with agility and speed to short-term skills shortages and other future threats.

2.3 Many young people are not exposed to the aviation and aerospace industries at an age young enough to influence their career plans and their later educational choices, denying industries of their talent until far later in their careers, if at all. Data driven strategic planning and marketing by industry would encourage young people's involvement in cutting edge technological development and operation of next generation aircraft.

3. CONCLUSION

3.1 Aviation faces shortages in critical skills needed across a wide spectrum of complex operations. Moreover, needed skills are rapidly evolving giving rise to new requirements. It is vital that global strategies be formulated to attract, recruited, train, and retain an aviation workforce stimulated to meet the exciting, world-changing challenges of today and all the tomorrows which follow.

— END —

² <https://www.icao.int/sustainability/Documents/AVIATION-BENEFITS-2019-web.pdf>

³ See for example this study conducted by the UK Department for Transport: *Aviation and maritime careers: young people's perceptions*, <https://www.gov.uk/government/publications/aviation-and-maritime-careers-young-peoples-perceptions>