

STAYING IN THE LOOP AS YEARS PASS

Staying in the loop isn't the same experience as we go through life. Especially as we reach more mature years, new challenges prevail, as Milena Bowman explains.

There is a post on Facebook that has been shared by many air traffic controllers (ATCOs) describing why they love the work. What struck me is that many of the posts start with *"I have worked [fill the blank: 15, 20, 30] years as an air traffic controller and here is why I love it..."*. Compare this to the average tenure in all other job sectors: 10.4 years in Greece, 8.5 years in Italy, or 3.3 years in Denmark, according to the Organisation for Economic Co-operation and Development (OECD). Most ATCOs remain ATCOs for their entire work life.

That's why it is important to speak about one diversity aspect that is rarely discussed: age. How can ATCOs 'stay in the loop' for over 30 years, and how can their organisations support them?

With pension age increasing, and ever-increasing traffic demand and complexity in air traffic management (ATM), it is important to understand how we can keep the people in safety-critical positions in the loop for an extended period of time. The longer a person relies only on the initial training and updates via continuation training, the greater the risks associated with a narrow vision of what is changing, why it is important, and awareness of the wider trends and the bigger picture. For example, many of the ATCOs at the end of their career report that they use a smaller number of the existing system features compared to the newcomers. They know the features, but they are not using them to the extent intended or expected.

The first few years of an ATCO's training are very intense, with a lot of theoretical knowledge and support from instructors to build up

the knowledge needed for the job. From that point on, competency is mostly updated during yearly refresher trainings or upon introduction of a new feature in the system.

Given the chance, ATCOs could engage in the training of new controllers. Training ab-initios helps experienced ATCOs to connect with newcomers, update their knowledge, and revise their own habits on a peer-to-peer level. Simulator sessions provide a chance to step back from the roster treadmill and create a moment and an opportunity to reflect on ways of working. Other activities outside of the OPS room, such as safety case development, system validation, or procedure development, could also serve as a pit stop to 'top up the system', updating skills, knowledge of systems and procedures, and awareness of wider industry trends. These pitstops alleviate the effects of 'career tunnel vision'.

In addition, buddy or mentoring programmes can be very helpful. Companies with built-in flexibility in their rostering systems could create a buddy roster. For the ATCOs who do not have the opportunity or the interest to work outside OPS projects, this can also create a fantastic way to transfer knowledge and get answers to many system questions. I firmly believe in the power of mentoring to enhance the overall organisational climate, team and individual attitudes towards lifelong learning skills.

Finally, when we speak about age and ATCOs, we have to say a few words about menopause. With the increase of female participation, we now experience bigger waves of female ATCOs going through menopause. Menopause is a normal hormonal transition and most of the time it goes smoothly with manageable symptoms. Dietary habits, regular exercise and in some cases supplementary medicine help alleviate negative effects. However, for people on shifts, such as ATCOs, pilots, and shiftworking Air Traffic Safety Electronic Personnel (ATSEPs), it may be beneficial to look into changing individual shift patterns where possible. Companies should engage with their female employees to understand their needs and ways to support them.

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Milena Bowman

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Sadly, we lose too many women at the end of their career because of the negative impact of menopause symptoms at the workplace (Faubion, et al., 2024).

Regrettably, ageism – the well-documented bias against older people because of negative stereotypes – often robs them of the opportunity to

participate in new and exciting projects as they are overlooked in favour of young people perceived as of the ‘digital generation’. Input from older people is sometimes dismissed as over-conservative and they are often excluded from innovative projects. The reality is, though, that innovation thrives when building on both creative and experienced people to bring the innovative idea to life. There is also a need for caution in innovation in the context of a safety-critical industry, and this caution may be rooted in experience of the past.

In 2023, skyguide and HelvetiCA (the Swiss controllers’ association) commissioned a study to evaluate the psycho-cognitive effects of an increase of the retirement age for air traffic controllers (Baumgartner et al, 2024). The study conducted by a consortium involving EUROCONTROL, Ecole Nationale de l’Aviation Civile (ENAC), Institute Supérieur de L’Aéronautique et de L’Espace (ISAE) and Welbees found no effect of age itself on ATCOs’ fatigue and wellbeing, but that age had a slight effect when effects on workload were examined, and with respect to adjusting to night shifts.

The study provides three levels of recommendations to support ATCOs in working longer, safely, and sustainably. These recommendations were refined through feedback from focus groups with ATCOs and unit managers. The first is the prevention level. This level applies to all ATCOs, regardless of age, focusing on early prevention of negative effects related to work conditions. Actions include customising work schedules to fit individual preferences and enhancing predictability,

especially for older ATCOs. The second is the individual follow-up level. Starting at age 35, this level introduces regular evaluations of work’s impact on aspects like sleep quality, work stress, and cognitive functions. This follow-up aims to monitor and support cognitive and emotional well-being over the course of an ATCO’s career. The third is the end-of-career support level. Targeted at senior ATCOs (age 50+), this level offers assistance for those who may face increasing challenges in the role. It includes reinforced cognitive screening and options to adjust working conditions, such as reduced hours, fewer night shifts, or limiting the number of licenses held. These adjustments are designed to help manage workload sustainably as ATCOs approach retirement. (See SKYbrary, 2023, for a webinar on the research.)

In conclusion, ATM organisations will benefit if they are deliberate in keeping age as one of the diversity factors in their engagement, training and human factors considerations. Organisations will benefit by engaging employees in lifelong learning skills and creating pitstops for employees to reflect, update on their working habits and connect with colleagues. They will also benefit by understanding the rostering needs of their elder population as well as what kind of activities, management practices and support are needed to keep people in the loop, having a long, safe and a happy ATCO career.

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