

Recruitment and Retention of Talent for ANSPs

(Presented by CANSO)

The Civil Air Navigation Services Organisation (CANSO) is the global voice of air traffic management. Its Members are Air Navigation Service Providers (ANSPs) and leading providers of technology and services to the industry. The paper below, prepared by CANSO, examines issues and factors affecting the recruitment and retention of employee talent for ANSPs.

Introduction

Air Navigation Service Providers (ANSPs) provide services and infrastructure that remain essential to the aviation industry and the safety of our skies. Employees remain at the core of the ANSP as it is through them that service is delivered, safety is maintained, and efficiency is achieved.

The recruitment and retention of employees in ANSPs in general and air traffic control (ATC) functions in particular can be challenging, as this profession requires specific skills, knowledge, and a high level of responsibility. In this paper, we will explore the challenges of recruiting and retaining employees for ANSPs, as well as the strategies that can help overcome these challenges.

Air Traffic Controllers in Operations (ATCOs) form a significant percentage of the employee base of ANSPs. The exact proportion depends on several factors, including the full scope of responsibility of the ANSP, which can vary by country. On average ATCOs made up approximately 40 percent of staff employed by ANSPs and form the largest single employment category. For that reason and some unique characteristics relevant to their recruitment and retention they are explored separately in the paper that follows.

Recruitment of Air Traffic Controllers

There are approximately 80,000 licenced air traffic controllers globally, making it a small career relative to others. Given traffic growth projections, ICAO projects that demand for air traffic controllers will rise by 88 percent between now and 2037 with a significant amount of that new demand coming in the Asia Pacific region.

As a career it is stable, with high rates of pay and good working conditions. In most cases training is paid for by the employer, with many instances of trainees being paid a training salary while completing their training. Yet, there continue to be challenges with ATC recruitment. Some of the main challenges of recruiting employees in ATC functions are:

1. Limited pool of candidates: Except in narrow examples of recruitment of experienced controllers ANSPs in most circumstances are not so much hiring air traffic controllers as making air traffic controllers (i.e. taking someone who is not an ATC and training them). In most countries it is not something one studies at post-secondary school. Awareness of the career remains limited and therefore the number of individuals who are interested in pursuing a career in ATC is small. Youth that want to join aviation as a career often think of more public facing jobs such as pilot. ATC is not a career many youth consider unless they personally know someone in the job. Additionally ATC must meet certain medical and security criteria.

2. **Work environment:** There is a perception that ATC work is stressful. It is true that ATCOs are required to make decisions with critical safety consequences, but the training programme prepares candidates well for this. However the perception of a stressful work environment is a disincentive for some potential candidates.
3. **Work schedule:** Air traffic control functions are provided 24/7/365 necessitating that ATCOs work shift work. This can make it challenging to recruit individuals who are prioritising work-life balance or who have parental responsibilities that may make shift work challenging.
4. **Rigorous training:** ATC professionals are responsible for ensuring the safety of all flights within their jurisdiction. This requires a high level of attention to detail, focus, and situational awareness. Candidates who do not have the required skills and abilities may not pass the training process. Failure rates range from 5 percent, to as high as 60 percent in complex airspace, with the average failure rate across ANSPs at 18.8 percent. Additionally the training process can take two to four years, depending on the complexity and location of the airspace. During this time, trainees may face uncertainty, pressure and attrition.
5. **Technical knowledge:** ATC professionals must have a deep understanding of aviation regulations, procedures, and technologies. Candidates who lack technical knowledge and the ability to memorize large amounts of information may not pass the training process.
6. **Limitations of the training pipeline:** Most ANSPs are constrained in the number of new ATC students they can intake per year due to limitations in the training stream (e.g. instructors, simulator capacity, on the job training limitations). Even those facing staff shortages are often challenged to ramp up training capacity in a meaningful way.

Retention in Air Traffic Control

Retention is equally important as recruitment in ATC functions, particularly given the high cost and large amounts of time invested in training an ab initio student to the point at which they obtain an ATC license.

Thankfully retention rates remain remarkably high. Very few employees leave the career prior to retirement. Some do pursue opportunities within ANSP management, largely motivated by opportunities for career growth and in some cases more consistent work hours.

As ANSPs are generally monopolies in their own countries, being an air traffic controller usually means staying with the same employer. There is some limited movement of air traffic controllers between countries, with experienced controllers being recruited, or seeking to relocate. Unlike retirement related turnover, this can be difficult to plan for and its occurrence in other than isolated cases can put some ANSPs in short staffing situations.

Other Factors and Opportunities

Increased automation is providing controller decision support tools that is enabling safe increases in productivity. Global productivity as measured by IFR flight hours per ATCO hour has risen by 20 percent in the decade between 2009 and 2019. Air traffic control positions will continue to see evolution in the nature of the position with automation enabling new opportunities.

Automation and improved simulation may also deliver benefits to the training stream, reducing failure rates.

Changes to training and licencing that permits flexible deployment of resources in line with traffic will enable technical advances like virtual centres to reach their maximum benefit. There is variability in the existence of mandatory retirement ages across jurisdictions. As with the review of pilot retirement ages, it may be appropriate to review ATCO retirement ages as well.

Other ANSP Careers

ANSPs have a range of careers other than air traffic control. Many of these are still operational in nature and require specialized training (e.g. instrument procedure designers, pilots, air traffic safety electronics personnel). While others are professional careers common to other industries and therefore ones in which ANSPs may compete with other industries to be attractive to potential candidates (e.g. lawyers, human resources personnel, engineers, computer programmers). Retention in these positions is more challenging because the monopoly nature of the ANSP does not ensure retention of employees in these job categories and there is therefore a higher likelihood that employees may change employers or even industries during their career.

The factors that make employers attractive and workplaces supportive environments can help to attract and retain employees in the diverse careers that ANSPs employ.

Strategies for Attracting and Keeping Future Talent

Organizations can implement various strategies to ensure the continued attractiveness of our industry and our individual companies to future talent. These strategies include:

1. **Getting it right on sustainability:** Surveys continue to show that youth are looking to work for organizations that align with their values. Demonstrating that aviation has a robust and ambitious plan to decarbonize its activities and is making meaningful progress in that regard is critical to our ability to attract the skills to our industry to help us make the transition.
2. **Embracing diversity and inclusion:** Organizations must promote a culture of respect and acceptance and remove barriers in order to ensure a healthy workplace for diverse employees and diverse views. This can help attract individuals from different backgrounds and experiences and improve employee morale. The industry continues to have challenges in addressing gender parity issues, particularly in key operational positions like pilots, maintenance engineers and ATCOs where the percentage of female employees remains small.
3. **Fostering a positive work environment:** Organizations can foster a positive work environment by promoting teamwork, communication, and recognition. This can help reduce stress levels and improve employee morale.
4. **Offering competitive compensation and benefits:** To attract and retain talent, organizations must offer competitive compensation and benefits packages. Pay and benefits should be reviewed regularly to ensure they remains in line with market pressures.
5. **Targeted recruitment:** Targeting recruitment efforts to individuals who have the required skills and have demonstrated an interest in aviation can be a very successful strategy. This can be done by partnering with universities, technical schools, and aviation organizations or youth cadets programmes.
6. **Providing training and development:** The aviation industry in general provides significant training focused on the successful completion of employees existing jobs. New technology, new procedures all must be trained for prior to implementation. Organizations must look at how they incorporate development opportunities to help employees grow and develop their skills.
7. **Implementing employee supports:** Organizations can implement mental health and other employee support programs, including formal peer support programmes. This can include counseling services, support groups, and stress management programs.
8. **Offering flexible work arrangements:** Aviation is currently limited in the extent to which it can offer flexible work arrangements, as many jobs must be performed on site. However employers can look at programs that provide flexibility for employees needing to balance

their work and personal lives. This can be especially beneficial for employees with young children or elderly parents.

9. Providing career opportunities: Organizations can provide career opportunities to help employees feel that their career is advancing. This need not always be promotions and can include lateral moves, special project assignments, or a role in training new employees.

Conclusion

Aviation's forecasted growth means that the recruitment and retention of employees will remain critically important. New skills in AI, cybersecurity and other areas will continue to grow in importance as the industry advances with automation of certain tasks and becomes more connected in its networks and systems in order to unlock efficiencies.

Challenges remain with awareness of careers and demands for flexible work arrangements and opportunities for advancement that may be more challenging for the industry to deliver to all employment categories.

By implementing targeted recruitment, offering competitive compensation and benefits, providing training and development opportunities, and fostering a positive work environment with employee support programmes, organizations can overcome these challenges and build a strong workforce. The industry must take particular care to bolster its environmental reputation in order to remain attractive to a generation of employees looking for employers who align with their values.

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