

# Security Culture and Human Performance – the missing link?

By Nina Smith, Head of Aviation Security Training and Human Factors at the UK Civil Aviation Authority



With ICAO's Year of Security Culture coming to an end, aviation security practitioners are turning their attention towards the learning, legacy, and evolution of the Security Culture concept. For security culture to become sustainable and fully integrated into our aviation system, it needs to remain at the forefront of our aviation security landscape and embedded similarly to safety culture - something considered commonplace in today's civil aviation.

*“Security culture is a set of norms, beliefs, values, attitudes, and assumptions that are inherent in the daily operation of an organisation and are reflected by the actions and behaviours of all entities and personnel within the organisation.”*

## Learning from aviation safety

With security culture now being adopted in civil aviation organisations far and wide, the opportunity to evolve the security culture concept and maximise its effectiveness has never been greater. When we reflect on the development of safety culture, we can draw on an important link that aviation security and security culture can hugely benefit from. Namely, ***how human performance and human factors impact our performance.***

## Human performance and human factors

With security culture reliant on everyone in the workforce actively contributing to its maintenance and robustness, organisations must now consider how we ensure all staff perform to the best of their ability and how their human performance might be impacted. Typically, human performance or human factors in aviation security has not always gained the recognition that it deserves. Consequently, our knowledge and understanding is less mature than in the aviation safety system.

*“Aviation security practitioners can learn a great deal from the large body of human factors research and resources.”*

One of the legacies of ICAO's Year of Security Culture must be to leverage the momentum built during 2021 and work to incorporate human performance and human factors as a 'mainstream' consideration in aviation security, including, but not limited to, security culture.

Aviation security practitioners can learn a great deal from the large body of human factors research and resources. Whilst today's research may not always directly originate from the security domain, its transferability and relevance are similar.



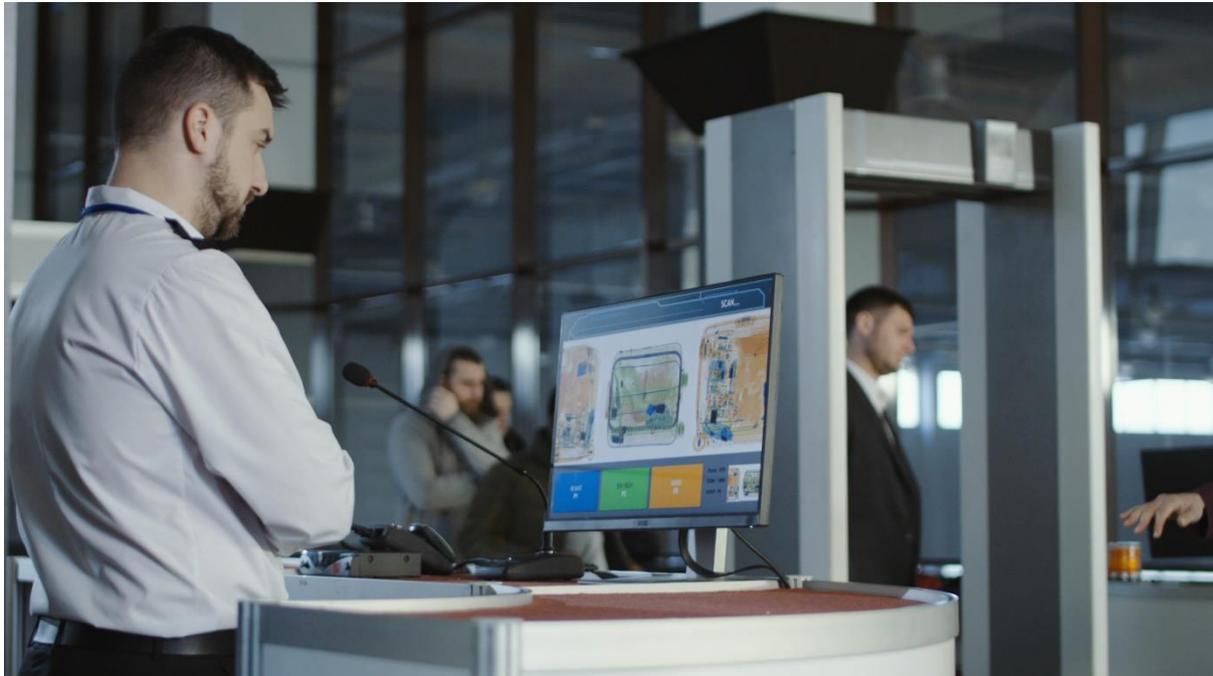
### **Understanding Human Performance in aviation security**

ICAO offer an accessible route to understanding how human factors can impact performance [through five straightforward principles](#):

1. People's performance is shaped by their capabilities and limitations.
2. People interpret situations differently and perform in ways that make sense to them.
3. People adapt to meet the demands of a complex and dynamic work environment.
4. People assess risks and make trade-offs, and
5. People's performance is influenced by working with other people, technology, and the environment.

These principles are not about limitations or negative connotations – many of our human capabilities are crucial to today's aviation security environment. We rely on humans to resolve escalated situations, interpret complex x-ray images, make reasoned judgements under pressure, and think creatively when faced with challenges. And despite significant advances

in technology, we are not at a stage where we could remove the human element from aviation security processes, such as security screening.

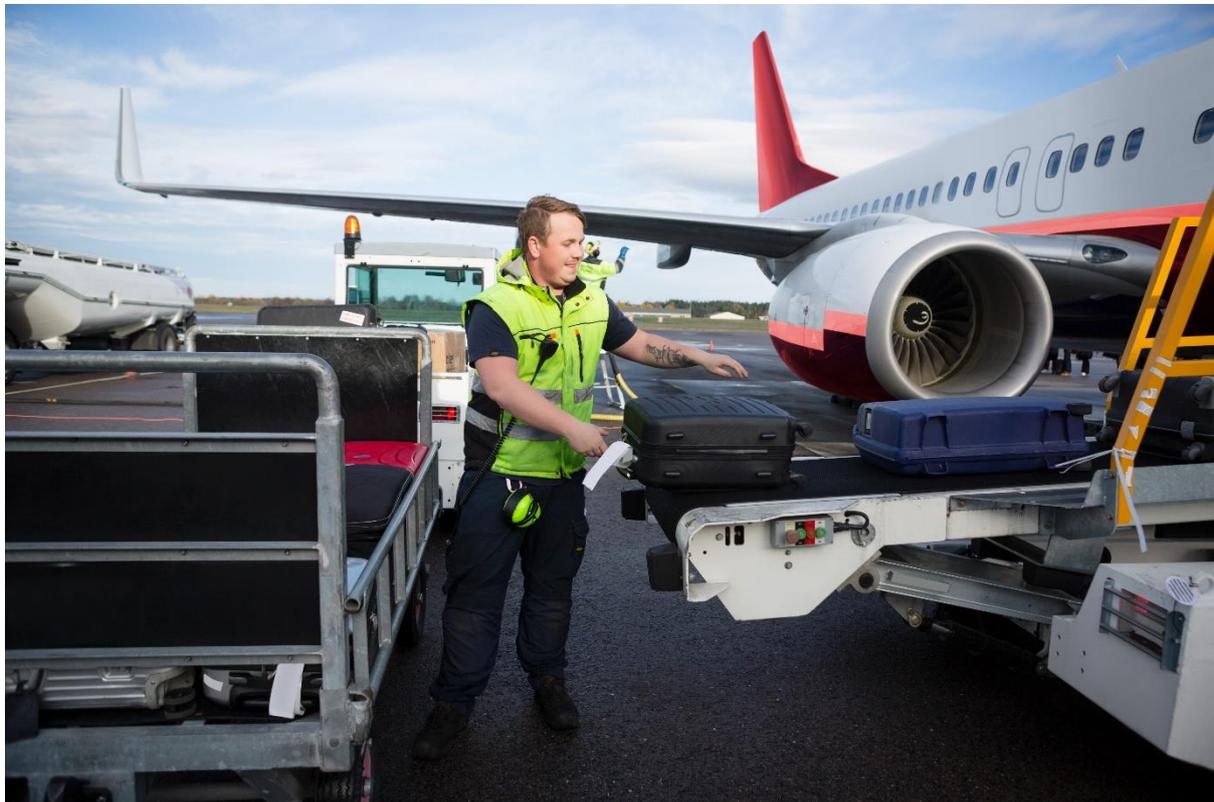


Meanwhile, these human abilities, those inherent to our aviation security system, can also be compromised by the same factors. Security staff can be fatigued, distracted, stressed, or become complacent. Staff are not machines, and humans cannot consistently act in an identical manner. The key here is for organisations, particularly aviation security managers and supervisors, to understand and embrace the concept of human factors and know how to reduce their impact on staff as much as possible. It also means that when we review staff decisions, we avoid looking for blame and endeavour to understand the basis of decisions. In many cases, individuals make a decision that made sense at that moment in time, based on their environment and knowledge. In hindsight, the situation may appear completely different.

*“We rely on our workforce’s ability to adapt quickly, rise to the challenge and think creatively.”*

Organisations strive for a workforce that is flexible, dynamic, and agile. In today’s working environment, be that in the supply chain, on-board an aircraft or in the airport terminal, we rely on our workforce’s ability to adapt quickly, rise to the challenge, and think creatively. To mitigate the impact of human factors, organisations can support staff by ensuring the job roles that they perform are designed with human factors in mind, such as task variation, autonomy

and identity, and recognition and feedback. These elements can motivate a workforce and encourage staff to perform to their best ability – and in turn, directly contribute to an effective, robust security culture.



Human factors are often viewed with a reactive mentality – a response to something that has gone wrong or an incident, often only considered when learning from past incidents or introducing measures to prevent reoccurring incidents. An effective security culture should proactively encourage organisations to avoid placing blame on an individual and instead, consider what human factors can be anticipated and planned for as part of processes and policies.

*“It does not matter what role an individual performs because, ultimately, aviation security and safety are everyone’s responsibility.”*

Human factors in aviation incidents are well researched and understood from a safety perspective. Aviation security professionals must now draw on this, from reviewing the most common precursors to security incidents to ensuring organisations implement learning and, where required, lessen their impact on human performance. This learning can place aviation security professionals in a proactive position to design targeted, relevant processes, policies,

and environments to complement human performance and enhance the security culture, making it easier for staff to do the right thing. It does not matter what role an individual performs because, ultimately, aviation security and safety are everyone's responsibility – from the ground up and top-down. In the same vein, the importance of human performance applies to our entire workforce.

As security culture evolves in civil aviation, a greater focus on the workforce, staff, and human performance will allow a fully embedded, effective security culture to flourish – not just in individual entities, but across the entire aviation system, on both a local and international level.

### **So how do we get there?**

The global aviation security community must now drive forward the momentum of ICAO's Year of Security Culture, combined with new drivers emerging from the pandemic that have naturally forced organisations to consider the need of its workforce more.

*“People are our greatest asset but can also pose our greatest risk”*

This means keeping **security culture**, **human performance**, and **human factors** at the core of our armoury of mitigations – acknowledging that our people are our greatest asset but can also pose our greatest risk in some ways. This approach should not be perceived as a task to tick off the list once every few years. Instead, it requires proactive inclusion for consideration throughout the design and implementation of change and drives change where needed.

It also requires upskilling of staff – those with responsibility at local and national level for the supervision and management of the workforce, those in leadership positions, instructing and training, mentoring and user/process design. This upskilling can be achieved through active involvement in professional training and/or Continued Professional Development (CPD), depending on the starting point and existing knowledge in this area.



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# Introduction to Human Factors in Aviation Security



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Designed and delivered by practising UK CAA aviation security regulators, our new **Introduction to Human Factors in Aviation Security** training course explores the principles of human factors and shows organisation how to exploit these practically for optimising performance and motivation within the operational environment of the aviation security system. The course also examines how human factor principles can be used to maintain a positive security culture.