

'TACKLING THE BIG ISSUES IN ATM -

Capacity, UTM Integration, People'

These are exciting times in air traffic management (ATM), driven not least by the continuing growth in air traffic, implementation of new technologies and the evolution of various new airspace users. There have been some very significant improvements in ATM performance in recent times yet the challenges keep growing and the pace of change continues to increase. The sense of excitement and anticipation will be prevalent at World ATM Congress 2019 where the entire ATM industry reunites at its annual hub for business, networking and discussions.

The scope for the Conference of World ATM Congress 2019 was therefore potentially very wide. However, our consultations on possible themes, topics and speakers revealed a strong desire for the Conference to address the big issues in ATM of capacity, UTM integration and people – so that is what we are delivering, but with some new approaches and new faces.

As usual, we are delighted that the Conference will be opened formally by the Minister of Development of Spain, our delightful and welcoming host country. We will then move on to our two keynote speakers to provide us with the 'Big Picture' in ATM globally.

The session on drones, UTM and the services drone operators require will start with a thought-piece on the humanitarian value of drones, followed by a panel on 'The Voice of UTM'. Four leaders in UTM will provide their unique insights into the present status, their visions for tomorrow and how to get there, and what that all means for ATM.

On the second day, the first focus will be on 'People in ATM'. We are delighted to welcome the inspirational Shaesta Waiz as the opening guest speaker. Shaesta will share experiences of her solo flight around the world but also her mission to inspire the next generation of science, technology, engineering and mathematics (STEM) professionals, especially young women. We then look at two specific people issues in ATM: recruiting and retaining enough women and millennials. Each will be approached differently but with the same objective of how ATM can best diversify through greater use of women and millennials to ensure the resources needed in future.

The final session will be a robust debate on the very topical issue of present and future airspace capacity. A strong panel will address what can be done to overcome different capacity constraints in the different regions of the world.

We hope that you will find that these very different sessions on subjects reflecting your preferences to be enlightening, topical, interesting and full of relevance and information for you to take away with you.





Tuesday 12 March

09.15 - 09.50: Brief Introductions and Opening/Welcome

- Peter F. Dumont, President and CEO, Air Traffic Control Association (ATCA)
- **Jeff Poole,** Director General, Civil Air Navigation Services Organisation (CANSO)
- José Luis Ábalos, Minister, Ministry of Development, Spain

09.50 - 10.40: Session One: The Big Picture — Keynote Speakers

- Daniel K. Elwell, Acting Administrator, Federal Aviation Administration (FAA)
- Henrik Hololei, Director-General for Mobility and Transport, European Commission

Dialogue: US-Europe relations in ATM and their impact on global ATM

10.40 - 11.10: Networking Break (Conference Lunch Area)

11.10 - 12.30: Session Two: Drones, UTM and the Services Drone Operators Require

11.10 - 11.25: Thought-Piece: Prioritising Humanitarian Needs

SPECIAL GUEST SPEAKER: Sara De La Rosa, Unmanned Aircraft Systems Coordinator, Interagency Supply Chain Group (ISG) seconded by UNICEF to ISG

Managing remotely piloted aircraft system (RPAS) programmes that aim to integrate existing and new unmanned aerial solutions into public health government systems to help alleviate some of the most complex challenges in development and humanitarian aid: routine deliveries, medical aid, disease outbreak / epidemics management and natural disaster response.

11.25 - 12.30: Panel: The Voice of UTM

The use of drones and unmanned aircraft systems (UAS) is undoubtedly one of the most significant technical, operational and social developments in the world, not just in aviation. There are already numerous projects and initiatives to develop UAS traffic management (UTM) for drones to enable complex operations for large numbers of drones with a high degree of automation in all types of operational environments, including urban areas.

Perhaps the most critical success factor will be the ability to allow drones/UAS to operate safely in controlled, integrated airspace along with manned aircraft. That in turn requires a new digital infrastructure and associated concepts of operations and rules that will ensure safe, harmonised and seamless operations for all users of airspace at any level.

It is the fastest evolving aspect of airspace — but what are the critical views from those involved in UTM today? This moderated panel will address three key issues: the status of UTM today; the vision for tomorrow and the key challenges to get there; and, from the perspective of UTM, what does all this mean for ATM?

MODERATOR: Andrew Charlton, Managing Director, Aviation Advocacy

PANEL:

- Ben Marcus, Chairman and Co-Founder, Airmap
- Richard Parker, Founder and CEO, Altitude Angel
- Marc Kegelaers, Chief Executive Officer, Unifly
- Todd Donovan, Vice President, Digital Aviation, Thales

12.30: Conference Lunch (Conference Lunch Area) and World ATM Congress Exhibition



Wednesday 13 March

09.15 - 09.45: Special Guest Speaker

Shaesta Waiz, Founder and President, Dreams Soar, Inc

Shaesta Waiz is the founder and President of the non-profit organisation Dreams Soar. Born in an Afghan refugee camp, Shaesta and her family travelled to America in 1987, when she was a young child, to escape the Soviet-Afghan war. Shaesta attended Embry-Riddle Aeronautical University and earned both Bachelor's and Master's degrees, the first in her family to do so. She holds a commercial pilot license and is the first certified civilian female pilot from Afghanistan.

The mission of Dreams Soar is to inspire the next generation of science, technology, engineering and mathematics (STEM) and aviation professionals, especially young women. Its first initiative was the "Global Flight for STEM". Shaesta flew around the world alone in a Beechcraft Bonanza A36 aircraft in 2017, becoming the youngest woman (at age 30) to circumnavigate the globe solo in a single-engine aircraft. Her goal was not just to fly around the world to set records or be in the news, but her mission was to educate communities globally about STEM and inspire young girls and boys to be brave and follow their own dreams. Shaesta flew over 24,000 nautical miles on her 145-day journey, visiting 22 countries and personally inspiring over 3,000 children and young adults through 32 outreach events in 14 countries.

09.45 - 10.45: Session Three: Investing in People as Critical Enablers: Diversity and Millennials in ATM

Human resources in ATM have never been at such a critical point. As ATM capacity struggles to keep pace with the growth in air traffic, the requirement for skilled and trained people at all levels is self-evident. Yet women represent only a small proportion of the ATM workforce and ATM no longer seems to be so attractive to young people — the 'millennial' generation. In time, technological advances, in particular automation and artificial intelligence (AI), will help to close the resource gap but will also change fundamentally the roles of humans in ATM.

This session will look at two aspects: how to increase the number and importance of women in ATM; and how to attract and retain the millennial generation. What must be the new USP (unique selling point) of ATM to diversify its human resources to meet the requirements of tomorrow?

INTRODUCTION AND MODERATOR: Michael Bell, Senior Client Partner, Civil Aviation Practice, Korn Ferry

Part 1: Soaring through the Glass Ceiling

Leading aviation industry associations, including CANSO, have launched through Korn Ferry a global study "Soaring Through the Glass Ceiling" to identify and promote means by which the aviation and aerospace industries can more effectively recruit and advance women into leadership roles. The study is scheduled for release in the second quarter of 2019 but this brief presentation will provide and discuss some early indications of the issues arising for ATM.

PRESENTER: Michael Bell, Senior Client Partner, Civil Aviation Practice, Korn Ferry



Wednesday 13 March

09.45 – 10.45: Session Three (continued):
Investing in People as Critical Enablers: Diversity and Millennials in ATM

Part 2: Attracting and Retaining Women and Millennials in ATM

Women have made great strides in many professional fields and industries but, as with aviation generally, the number of women in ATM remains low, with an even smaller percentage in leadership roles. More can and should be done to enable the advancement of women into important roles in ATM, not just as a matter of principle, but because it will support the growth and sustainability of the industry. How should we "change attitudes to gain altitude"?

The need to attract young people into industry is not unique to ATM or even aviation. A number of initiatives have been launched to encourage STEM professionals, including the ICAO Next Generation of Aviation Professionals (NGAP) initiative. Yet there remains a sense that this is nowhere near enough. Two young professionals in ATM will provide an illuminating insight into why they and their peers chose ATM, what have been their experiences to date and, most importantly, what must change if they are to remain and be followed by others.

MODERATOR: Michael Bell, Senior Client Partner, Civil Aviation Practice, Korn Ferry

PANEL:

- Kendra Kincade, Employer Brand Specialist, NAV CANADA and Founder and Board Chairman, Elevate Aviation
- Teri L. Bristol, Chief Operating Officer, Air Traffic Organization, Federal Aviation Administration (FAA)
- Anne Kathrine Jensen, Chief Executive Officer, Entry Point North
- Milena Bowman, Executive Manager ASP a.i., Maastricht Upper Area Control Centre (MUAC), EUROCONTROL
- Emma Parry, Digital Marketing Manager, NATS

10.45 - 11.15: Networking Break (Conference Lunch Area)



Wednesday 13 March

11.15 - 12.45: Session Four: The Big Crunch — Hard Talk on ATM Capacity

Prompt and decisive actions are needed now if ATM and aviation are to fulfil high expectations. Growing ATM capacity at the right pace has always been a challenge given the long-term planning required for ATM infrastructure investments and training of skilled staff in a climate of fluctuating economics, changes in traffic forecasts, and the cost constraints imposed by airlines and regulators. This surfaced dramatically in terms of delays in European ATM in the summer of 2018 with the threat of even worse to come in 2019. But ATM capacity issues are common to all regions and are forecast to become even more challenging as all face significant traffic growth.

- What are the lessons learned to date in Europe?
- What are the key ATM capacity issues in other regions?
- What scope is there for ANSPs to become more agile and flexible in capacity provision?
- What is needed for airlines, ANSPs, airports and regulators to work effectively together with consistent business plans based on agreed views of likely future developments and requirements, including rolling forecasts of traffic and required capacity?
- How will new technologies and new ATM processes and procedures help to achieve better alignment of capacity and traffic?
- Are there some obvious 'quick wins'?
- What can airlines do better in terms of self-help and predictability?

MODERATOR: David McMillan, Chair, ATM Policy Institute and Non-Executive Director, Gatwick Airport Limited PANEL:

- Thomas Reynaert, Managing Director, Airlines for Europe (A4E)
- Maurice Georges, CEO/Director, DSNA (France)
- Tinnagorn Choowong, Executive Vice President (Operations), AEROTHAI (Thailand)
- Gabriel Giannotti, President and CEO, EANA (Argentina)
- Engr. Ryyan Waddah Tarabzoni, Chief Executive Officer, Saudi Air Navigation Services (SANS) (Saudi Arabia)
- Sandile Malinga, Chief Operations Officer, ATNS (South Africa)

12.45: Conference Lunch (Conference Lunch Area) and World ATM Congress Exhibition