



WEBINARS ON DEMAND

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SO WHAT DO PEOPLE ACTUALLY DO? DR. IMMANUEL BARSHI

It is often said that to err is human. It's true that failures can be traced to human limitation, but what's more important is that all successes, all safe operations are the result of human capabilities. This talk highlights the resilience people bring to aviation operations and discusses ways to change the common narrative that people are the creators of safety rather than only the source of error and failure.

DR. IMMANUEL BARSHI is a Senior Principal Investigator in the Human Systems Integration Division at NASA Ames Research Center. His current research addresses cognitive issues involved in the skilled performance of astronauts and pilots, as well as mission controllers and air traffic controllers, their ability to manage challenging situations, and their vulnerability to error. Dr. Barshi holds PhDs in Linguistics and in Cognitive Psychology.

<https://skybrary.aero/webinars/so-what-do-people-actually-do>

SUPPORTING HUMAN-AI TEAMING: TRANSPARENCY, EXPLAINABILITY, AND SITUATION AWARENESS DR. MICA ENDSLEY

System autonomy and AI are being developed for a wide variety of applications where they will likely work in tandem with people, forming human-AI teams (HAT). Situation awareness (SA) of autonomous systems and AI has been established as critical for effective interaction and oversight of these systems. As AI capabilities grow, and more effective teaming behaviours are expected of AI systems, there will also be an increased need for shared SA between the human and AI teammates. Methods for supporting team SA within HAT are discussed in terms of team SA requirements, team SA mechanisms, team SA displays and team SA processes. A framework for understanding the types of information that needs to be shared within HAT is provided, including a focus on taskwork SA, agent SA, and teamwork SA. AI based on learning systems creates new challenges for the development of good SA and mental models. AI transparency and explainability are discussed in terms of their separate roles for supporting SA and mental models in HAT. The SA Oriented Design (SAOD) process is described as a systematic methodology for developing transparent AI displays for HAT and an example of its application to automated driving in a Tesla is provided. Situation awareness (SA) is critical for effective interaction with AI systems.

DR. MICA ENDSLEY is president of SA Technologies and a former Chief Scientist of the U.S. Air Force. She has also held the positions of Visiting Associate Professor at MIT in the Department of Aeronautics and Astronautics and Associate Professor of Industrial Engineering at Texas Tech University. Dr. Endsley is a recognised world leader in the design, development and evaluation of systems to support human situation awareness (SA) and decision-making, as well as methods for improving SA through training of individuals and teams.

A LIFE IN PICTURES: BRINGING BREAKTHROUGHS IN SAFETY PERFORMANCE GRETCHEN HASKINS

This webinar series delves into the lives and careers of inspirational people who have made a significant difference to the safety and performance of safety-critical industries. Our second guest was Gretchen Haskins, who reflected on ten pictures to tell the story of her life. Hosted by Steven Shorrock.

GRETCHEN HASKINS is a board director for HeliOffshore Ltd. and the Flight Safety Foundation. Both organisations are dedicated to global aviation safety. She is an aviation industry leader in safety performance improvement and an internationally-recognised expert in human factors. Previous roles include CEO of HeliOffshore, and Group Director of Safety at the UK Civil Aviation Authority, Group Director of Safety at the UK air traffic company NATS.

<https://skybrary.aero/webinars/life-pictures-gretchen-haskins-bringing-breakthroughs-safety-performance>

MENTAL UNDERLOAD... WHAT IT IS AND WHAT IT ISN'T PROF. MARK YOUNG

This webinar offered an insight into the concept of mental underload – what it is (as far as we are able to define it), what it isn't, how it compares to related concepts (such as boredom or vigilance), what causes it, how and why it affects performance, how to measure it (as far as we are able to), and how to guard against it. Transport case studies were given as examples of where underload has been implicated in accidents.

PROF. MARK YOUNG is a Professor of Human Factors in Transport within the Transportation Research Group at the University of Southampton. Mark has nearly 30 years of experience working in human factors across transport modes in both academia and industry. Before joining the University of Southampton in June 2023, Mark spent 11 years working as an Inspector at the Rail Accident Investigation Branch, applying his human factors expertise to the investigation of railway incidents and accidents. Mark has written over 70 peer-reviewed journal papers and five books.

<https://skybrary.aero/webinars/mental-underload-what-it-is-and-what-it-isnt>

A LIFE IN PICTURES: SAFETY AND LEADERSHIP TONY LICU

This webinar series delves into the lives and careers of inspirational people who have made a significant difference to the safety and performance of safety-critical industries. The series kicked off with Tony Licu, who reflected on ten pictures to tell the story of his life. Hosted by Steven Shorrock.

TONY LICU has recently been appointed as the acting Head of the Network Manager Directorate Technology Division at EUROCONTROL. Prior to this, Tony has been the Head of Operational Safety, SQS and Integrated Risk Management Unit & the Head of Digital Transformation Office within Network Management Directorate of EUROCONTROL. He leads the support of safety management and human factors deployment programmes of EUROCONTROL as well as the digital transformation of the Network Manager

<https://skybrary.aero/webinars/life-pictures-tony-licu-safety-leadership>

USE OF OPERATIONAL BREAKS

This webinar aimed to provide a multi-perspective view on the use of operational breaks in the aviation domain. The five presenters gave insights derived from operational experience, empirical observations, analysis of neuropsychological implications, guidance on fatigue management, and behaviour change frameworks. The webinar provided useful information on prevailing practices, concerns, and good practices in relation to rest breaks in aviation. The webinar is also relevant to other high-tempo domains where breaks are critical for human performance and wellbeing. The webinar featured five short talks from different speakers, followed by a Q&A session.

- **Eric Carter** – Safety Analyst and former ATCO (FAA)
- **Marinella Leone** – Advanced Learning Team Leader (EUROCONTROL)
- **Adriana-Dana Schmitz** – Human Factors Expert (EUROCONTROL)
- **Antonio Licu** – Acting Head of the Network Manager Directorate Technology Division (EUROCONTROL)
- **Steven Shorrock** – Senior Team Leader – Human Factors (EUROCONTROL)

<https://skybrary.aero/webinars/use-operational-breaks>

FROM COMPLIANCE TO DILIGENCE: A MARITIME SAFETY PERSPECTIVE

DR ANTONIO DI LIETO

This webinar aimed to provide a general overview of maritime safety with a focus on how the legal concept of due diligence and academic principles on safety leadership can co-exist. A catastrophic accident which caused loss of nine lives, with criminal convictions of shipboard officers and the collapse of the port control tower, were used as a case study. In the event of a large-scale accident, in order to deal with the increasing level of scrutiny by the courts and by an increasingly intolerant public opinion, both management and operators at the sharp end must be able to demonstrate that they have done everything possible to prevent it, by shifting the emphasis from compliance to diligence.

DR ANTONIO DI LIETO is a former ship master and hydrographer who has been working with maritime simulations since 2011. He matured such experience in Australia, where he facilitated ship manoeuvring studies and marine pilot training. At present, he manages simulations studies carried out at CSMART, Carnival Corporation training centre in The Netherlands. He has been lucky enough to meet and work together with some of the experts who have spearheaded progress within the maritime industry over the last few decades and holds PhDs in Linguistics and in Cognitive Psychology.

<https://skybrary.aero/webinars/compliance-diligence-maritime-safety-perspective>

MANAGING SURPRISE IN HEALTHCARE

DR NEIL SPENCELEY

Dr Neil Spenceley, clinical director for paediatric intensive care and anaesthetics in Glasgow, explored the challenges of managing surprise in healthcare, particularly in complex and high-pressure environments such as intensive care. He argued that traditional patient safety approaches, often focused on preventing errors and imposing constraints to reduce variation, can reduce adaptability and create fear and anxiety. Dr Spenceley addressed issues such as second victim phenomenon, incivility, fear of admitting fault, and defensive medicine. He advocates a more holistic approach including understanding work-as-done, embracing 'muddling through', open communication, and learning from successes as well as failures. He emphasised the importance of understanding and appreciating the contributions of all healthcare professionals, including those in seemingly less prominent roles. He stressed the need to build a culture of psychological safety, where individuals feel empowered to speak up and share information, and learning from other industries.

DR NEIL SPENCELEY is the Director of Paediatric Intensive Care and Anaesthetics in Glasgow and the former Scottish Patient Safety Lead for Paediatrics. He is originally from The Highlands, trained in Edinburgh but soon defected West to start his somewhat bumpy career at Glasgow Children's. After living in Tauranga, Sydney and Vancouver he bizarrely returned to Glasgow where the weather is terrible but the people are positive and funny. His physiological interests include oxygen delivery, this and that but mostly that.

<https://skybrary.aero/webinars/managing-surprise-healthcare>

WORKING IN TEAMS IN AIR TRAFFIC CONTROL – A SHORT STORY OF HARRY HOUDINI AND THE WORLD

AIR TRAFFIC CONTROLLERS LIVE IN SEBASTIAN DAEUNERT

What does Harry Houdini, the once famous magician and Air Traffic Controllers have in common? It initially sounds incredible, comparing a sometimes dubious showman with well trained and experienced Air Traffic Controllers handling thousands of lives every day. But looking closer you will experience a driven magician bending rules and taking risks to satisfy an all-time increasing amount of expectations (on one hand). And then, there are ATCOs under pressure by traffic numbers, punctuality and stressful situations, coupled with the desire to deliver the best possible performance inside their closely linked team structure. Experience what the pressure of integration into a team really implies, the expectations a controller feels and wants to satisfy on his level of work.

This webinar is about Team Resource Management and shows some problems and solutions on how to handle everyday life in teamwork, in an occasionally humorous but mostly thoughtful way.

SEBASTIAN DAEUNERT is a retired ATCO and Safety Manager, Just Culture expert. Sebastian worked as an active TWR/APP controller for 15 years before getting into safety management and human factors. He was the Safety Manager of Frankfurt Tower until regular early retirement in 2021. He held several lectures at Human Factors Conferences in Brussels, Amsterdam, Madrid and Lisbon. He now works in the EUROCONTROL/ IFATCA prosecutor expert scheme and holds presentations at EUROCONTROL Just Culture Committee and the Safety Human Performance Sub-Group.

<https://skybrary.aero/webinars/working-teams-air-traffic-control-short-story-harry-houdini-and-world-air-traffic>