Shem Malmquist

Instructor | College of Aeronautics at Florida Tech
Melbourne, FL, US

Shem Malmquist is an international Boeing 777 captain and experienced accident and safety investigator.

About

Capt. Shem Malmquist is a visiting instructor at Florida Tech and an active B-777 captain operating predominantly international routes. In addition to being an international pilot for three decades, he has taught aerobatics and instructed in both general aviation and transport aircraft. Capt. Malmquist has published numerous technical and academic articles stemming from his work on flight safety and accident investigation. He is the co-author, with Roger Rapoport, of the books ?Angle of Attack? on the Air France 447 accident and its implications on aviation safety, and ?Grounded? regarding safety issues surrounding the Boeing Max. His most recent work has involved approaches to risk analysis and accident prevention utilizing MIT?s System Theoretic Accident Models and Processes (STAMP) and facilitating the integration of these methods on behalf of several organizations. Capt. Malmquist's past work includes serving as automation and human factors lead for the Commercial Aviation Safety Team?s Joint Safety Implementation Team, Loss of Control working group, as well as the Aircraft State Awareness working group and the Joint Implementation Measurement and Data Analysis Team. He also has either led or been deeply involved in several major aircraft accident investigations, performing operations, human factors, systems and aircraft performance analyses. Capt. Malmquist?s education includes a Masters (MSc) degree in Human Factors in Aeronautics through the Florida Institute of Technology, a Bachelor of Science (BSc) from Embry-Riddle Aeronautical University, and an Associate of Science (ASc) through Mt. San Antonio College. He is an elected Fellow of the Royal Aeronautical Society and a member of the RAS Flight Operations Group. He is a full member of the International Society of Air Safety Investigators (ISASI) and a member of the Resilience Engineering Association, AIAA, the Human Factors and Ergonomics Society, IEEE, the Flight Safety Foundation and SAE, where he also serves as a voting member of the Flight Deck and Handling Quality Standards for Transport Aircraft committee. (On that committee, he is currently leading a project to establish standards for aircraft designed after 2030.) He is a member of the Aerospace Behavior Engineering Technology, Modeling, Simulation and Training for Emerging AV and the Aircraft and System Development and Safety Assessment Committee and the Lithium Battery Packaging Performance Committees.

Areas of Expertise

Aircraft Operations, Accident Investigation, System Safety Engineering, Safety Analysis

Affiliations

Royal Aeronautical Society : Fellow, ISASI : Member, Resilience Engineering Association : Member, AIAA : Member, Human Factors and Ergonomics Society : Member, IEEE : Member, Flight Safety Foundation : Member, SAE : Flight Deck and Handling Quality Standards for Transport Aircraft committee

Event Appearances

Technical Panelist
Nuclear Regulatory Commission

ISASI
The Hague

Education

Embry-Riddle Aeronautical University
B.S. Aeronautical Science

Florida Institute of Technology
M.Sc. Human Factors in Aeronautics

Mt. San Antonio College
A.A.S. Commercial Flight
