

An International Course on

Human Factors in Flight Safety

SMS, Risk Management & Safety Investigation

BARCELONA
12-16 JUNE 2017



EAAP Human Factors Training
Kindly hosted by GTD





Human Factors in Flight Safety: SMS, Risk Management & Safety Investigation

The 25th **EAAP Human Factors in Flight Safety** course will be held in Barcelona from **12-16 June 2017**.

This year the course will be hosted by **GTD**, a system & software engineering company based in seaside Barcelona. GTD is developing an aircrew weather awareness solution for iPad and EFB. You can find more details at www.ewas.aero or in the App Store.

This popular training course has been conducted on behalf of the European Association for Aviation Psychology (EAAP) since 1999. This will be the 5th consecutive year that it has been held in Barcelona, but the first time it has been kindly hosted by GTD.

Each year the course is reviewed, modified and updated to address the human factors aspects of ongoing changes to the global aviation system. It has been well-attended by, and has consistently received very positive reviews from, personnel representing IATA member airlines, Air Navigation Service Providers, military forces, aircraft and aerospace manufacturers, aviation regulators and air safety investigation agencies. Course participants have come from many countries within Europe, the Middle East, Africa, the Asia Pacific region, and North and South America.

Course Objective

To provide participants with human factors knowledge and practical tools that can be readily applied to improve overall safety management, specific risk management processes, systemic safety occurrence investigation and reporting, and safety culture in both civil and military aviation operations.

Course Overview

In November 2013 the new ICAO Annex 19 on Safety Management was introduced. Annex 19 includes a new and more detailed international standard on safety management systems (SMS) which applies to all sectors of the civil aviation system.

A primary focus of the 2017 EAAP Human Factors in Flight Safety course will be the practical application of human factors within all of the individual ICAO SMS components and elements, together with the integration of these individual elements with each other, and the integration of the overall SMS with the business processes of the organisation.



Safety risk management is a key component of the ICAO Annex 19 SMS standard. Operational experience, systemic air safety investigation, and applied research have shown that human factors at both the individual and organisational levels constitute the greatest sources of risk in all areas of aviation operations - including flight safety, maintenance, cabin services, ground handling, and air traffic management.

The 2017 EAAP Human Factors in Flight Safety course will address critical human factors issues and challenges in achieving and sustaining effective safety management. This will include the integration of proactive risk management and reactive systemic occurrence investigation, with an emphasis on practical techniques for application in the operational and organisational environments..

Systemic air safety investigation outcomes can produce positive impacts on accident prevention programs, equipment design, operating procedures, personnel selection, training, flight standards, SMS and regulation.

Similarly, the incorporation of human factors knowledge in risk management, safety enhancement, and proactive accident prevention programs is critical to their success.

A positive safety culture is essential to effective safety management and the course addresses this topic, including practical means of developing, maintaining and enhancing safety culture within an organisation.

In summary, the revised and updated 2017 EAAP Human Factors in Flight Safety course has been designed from an integrated perspective to address the critical human factors dimensions of the ongoing challenges presented by the latest operational, regulatory, technical and commercial changes in the international aviation domain.



Course Content

Course content for the EAAP Human Factors in Flight Safety course has been continually updated and revised since its inception in 1999.

The 2017 course will include:

- *Introduction to Human Factors*
 - What is Human Factors?
 - Origins of Aviation Psychology and Human Factors
 - Human Factors in context with SMS
 - Individual and systemic approaches
- *Human Factors and Systems Safety*
- *Human Performance Considerations*
- *Understanding Human Error*
- *Why and How do we Investigate?*
 - ICAO Annex 13 - International requirements
- *Conducting an Investigation*
 - The role of the Aviation Psychologist/ Human Factors Specialist
- *Organisational Accidents*
 - Including use of Reason's 'Swiss Cheese' Model and a range of practical illustrative case studies
- *Integrated Safety Management Systems*
 - ICAO Annex 19 ~ Human factors aspects and links
- *Human Factors in Risk Management*
 - The Bow Tie method, including practical exercises, &
 - The ARMS methodology for risk assessment in aviation operations
 - The integration of proactive risk management and reactive investigation - *the relationship between the Bow Tie Methodology and the Reason Model*
- *Witness Interviewing ~ theory & practice*
- *Applying safety investigation analysis techniques*
- *Culture and Safety Management*
- *Flight Safety tools*
 - Incident reporting, safety data systems, audits, safety analysis tools
- *Various applied practical case studies*
- *Major Exercise / applied case study using the PIRATe methodology.*

Participants

While highly relevant to all aviation personnel, the course is aimed at aviation professionals and managers working in civil or military operations, including pilots, cabin crew, aviation psychologists and HF specialists, ATCOs, maintenance engineers, air safety investigators, aviation regulators and other safety professionals. Participants from other domains such as maritime, rail, nuclear power and health care are also most welcome. The course also provides newcomers with a relevant introduction to the field of applied aviation psychology.



Course Language

English.

Course Certificate & EAAP Recognition

Participants will receive a certificate on successful completion of the course, which is recognised by EAAP for contribution towards accreditation as an Aviation Psychologist or Human Factors Specialist. To receive the certificate, participants are expected to attend all sessions and actively engage in course discussions, case studies and syndicate exercises.

More information on EAAP membership and accreditation can be found on the EAAP website: www.eaap.net





The Course Team

The experienced team of Dr Rob Lee and Brent Hayward will present this applied training course. Rob and Brent have conducted EAAP HF training courses together since 1999 (previously also with colleague Kristina Pollack), and each of them has extensive practical experience and knowledge in the application of human factors concepts to enhance operational performance and safety in civil and military aviation. This includes the investigation of major aviation accidents and incidents, as well as the development and implementation of integrated safety management systems and a range of applied human factors training programs and materials for the aviation industry.

Dr Rob Lee, AO, FRAeS

- Rob is an international consultant on human factors, safety investigation, risk management and systems safety in aviation, rail, nuclear power and health care. He is based in Canberra, Australia.
- In 1977 Rob became the first Royal Australian Air Force (RAAF) psychologist to work on Australian military aircraft accident investigations. He is currently a Group Captain in the RAAF Specialist Reserve.
- Rob was the Director of the Australian Bureau of Air Safety Investigation (BASI) from 1989-1999, pioneering the application of human factors and systems safety investigation concepts.
- Since 2000, Rob has served as an analyst on major civil and military accident investigations in Asia, Europe and the Middle East.
- He works on integrated SMS development, training and implementation, and lectures widely on HF and SMS.
- He has presented and published many papers, and co-authored *Beyond Aviation Human Factors* (1995).
- Received the Second Australian Aviation Psychology Association (AAvPA) Aviation Human Factors Achievement Award, November 2000.
- Received *The Guild of Air Pilots & Air Navigators* (GAPAN) 2010 Australian Bi-Centennial Award.
- Rob was awarded an *Order of Australia* (AO) for distinguished services to aviation safety in 2012.
- Received the 6th EAAP award for *Outstanding Commitment and Achievement in Aviation Psychology*, Malta, September 2014.
- Most recently Rob received the *Specialist Gold Award* and the *Roger Green Medal* from the Royal Aeronautical Society in London "for exceptional work that has led to substantial advances in specialist disciplines in the aerospace industry", London, November 2015.

Brent Hayward

- Brent is Managing Director of Dédale Asia Pacific, an international consulting company working in aviation psychology, human factors and systems safety. He is based in Melbourne, Australia.
- He has spent more than 35 years working in applied aviation psychology, with the RAAF Psychology Service, Australian Airlines, QANTAS, and as a consultant to various airlines, ANSPs, aircraft manufacturers, airports and regulators.
- He has extensive experience in the investigation of human factors aspects of both military and civil aircraft accidents and incidents.
- Brent has developed and delivered training in aviation psychology, human factors, CRM, systemic safety investigation, and safety culture enhancement for a range of organisations in Australia, Africa, the Asia Pacific, Europe, the Middle East, North and South America.
- He also consults on a variety of human factors and safety management issues within the aviation, railway operations, maritime, health care, and nuclear power domains.
- Founding President of the Australian Aviation Psychology Association (AAvPA; 1992-2000); Member of APS, EAAP, the Human Factors and Ergonomics Society, and the International Society of Air Safety Investigators (ISASI).
- Develops and produces various aviation safety training media and films, including: *The Dryden Accident*, *Safety Culture Evolution*, and *ASSIST*.
- Author and editor of numerous HF and safety publications and conference presentations.
- Received the 3rd AAvPA Aviation Human Factors Achievement Award, Sydney, November 2003.

Essential Details

Course Dates

The course will run from **09:00** hrs on Monday 12 June through to **17:00** hrs on Friday 16 June 2017.

Course Location

The course will be hosted by **GTD** at their modern company HQ located in *El Poblenou*, a beachside area just four kilometres from the centre of Barcelona.

Hotel Accommodation

A group booking has been made by GTD at the *Eurohotel Barcelona Diagonal Port* hotel, a 4-star property conveniently located next to the GTD training venue in El Poblenou.

The *Eurohotel Barcelona Diagonal Port* is offering EAAP course participants an excellent GTD room rate of **85 EUR** per night for reservations received by **12 May 2017**. This rate is for a Double room with Single occupancy and includes breakfast, WiFi, and all taxes. Double occupancy rooms can be reserved for 95 EUR per night including taxes.

From Barcelona-El Prat airport the hotel can be reached in about 25 minutes by taxi or just over an hour by public transport. The hotel is also well connected to the city centre by public transport.

El Poblenou is an interesting inner beach suburb of Barcelona with many bars and restaurants within 5 to 10 minutes walk of GTD and the hotel.

It is recommended that non-local participants stay at the *Eurohotel Barcelona Diagonal Port* hotel.

Address and contact details are as follows:

Eurohotel Barcelona Diagonal Port
Carrer de Lope de Vega, 4, 08005 Barcelona, Spain.
Tel: +34 93 230 2000; Fax: +34 93 230 2010.

Further information is available from the hotel website: <http://www.eurohotelbarcelona.com/>

To Make Hotel Reservations

To guarantee your room reservation at the *Eurohotel Barcelona Diagonal Port* at the special GTD/EAAP Course rate, please tick the hotel accommodation box on the attached Registration Form and email it to Brent Hayward

before 12 May 2017 at:

bhayward@dedale.net

Please note:

Hotel reservations must be made by 12 May 2017 to guarantee the special GTD room rate.

Course Registration Fee

EAAP Members: 1,700 EUR. Others: 2,000 EUR.

The course registration fee covers all course materials and tuition, a *Course Welcome* function on the evening of Monday 12 June, a *Course Dinner* on Thursday 15 June, and daily refreshment breaks.

Please note: While attendance at the above evening functions is voluntary, no discount or refund can be made for those who are unable to attend.

SPECIAL NOTE: An **Early Bird discount of 200 EUR** will apply to all registrations received by **12 May 2017**.

Payment of Fees

Fee payment should be made when you register, by electronic funds transfer to the following account:

Bank: Commonwealth Bank of Australia
Branch: Albert Park
Address: 95-97 Dundas Place, Albert Park
Account name: EAAP Human Factors Training
Account no: 063-100 1031 8550
Swift code: CTBAAU2S

Please include details of the course participant's name and organisation when making payment.

Course Registration Deadline

To guarantee your position on this course, please complete and email or fax the attached *Registration Form* to Brent Hayward before **31 May 2017**.

Further Information

For further information on course registration, content, venue, fee payment, or any other administrative matters, please contact Brent Hayward: bhayward@dedale.net

EAAP

Completion of this course is recognised by the European Association for Aviation Psychology (EAAP) for the purposes of contribution towards certification as an *Aviation Psychologist* or *Human Factors Specialist*. EAAP is an international, professional, independent, non-profit organisation, dedicated to the promotion of aviation safety and efficiency through the application of aviation psychology.

For more information on EAAP membership and certification, please visit the EAAP web site: www.eaap.net



COURSE REGISTRATION FORM

“Human Factors in Flight Safety: SMS, Risk Management & Safety Investigation” 12-16 June 2017, Barcelona

Please complete and send this form ASAP to Brent Hayward
by e-mail: bhayward@dedale.net or fax: +61 3 9645 5472

Participant Details:

First name/s:	Family name:	
Title (Dr/Capt/Mr/Ms/other):	Job function / title:	
Organisation:	EAAP Membership number (if applicable):	
Postal address:		
City:	Postcode:	Country:
Telephone:	Email:	

Registration Fee to be paid: (please select one only)

Early Bird Fee * (pay by 12 May):	EAAP Member: 1,500 € <input type="checkbox"/>	Non-Member: 1,800 € <input type="checkbox"/>
Standard Fee (pay after 12 May):	EAAP Member: 1,700 € <input type="checkbox"/>	Non-Member: 2,000 € <input type="checkbox"/>

* Please note:

1. Payment of the Early Bird fee **must be made by 12 May 2017.**
2. For all Registration Fee payments please arrange electronic funds transfer to:

Bank: Commonwealth Bank of Australia
Branch/Address: Albert Park, 95-97 Dundas Place
Account name: EAAP Human Factors Training
Account no: 063-100 1031 8550
Swift code: CTBAU2S

Please provide participant's name and organisation when making electronic payment.

Hotel Accommodation:

Do you intend to stay at the <i>Eurohotel Barcelona Diagonal Port hotel?</i>	Yes , please send me the hotel reservation form <input type="checkbox"/>	No <input type="checkbox"/>
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This EAAP-recognised training course is kindly sponsored by eWAS

