# AMO & AIR OPERATOR HUMAN FACTORS AWARENESS TRAINING (HFAT)



## QualaTech Aero Consulting Ltd. An international aviation consultancy group, providing services in:

Safety Management Systems (SMS), Management, Training, Change Management, Fatigue Management, Hazard Ident. & Risk Assessment, Safety Case, Harbour and Water Airport/Aerodrome Procedures, Emergency Response Procedures, Airports, Flight Operations, Compliance, Audits, Aircraft Maintenance Organisations (AMO), Human Factors, Manufacturing, Quality, Training (QMS, SMS, ERP, CM, HF, Haz. & Risk. Assessment).

The services offered by QualaTech-Aero Consulting Ltd. are focused on the aviation industry. However, the principles of Human Factors, Safety, and Quality, apply equally to any industry by reducing human error leading to personal injury and loss.

Safety Management is Business Management!

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A rigorous approach to Human Factors (HF) in conjunction with adequate and appropriate training will contribute significantly in reducing errors, incidents, liability, injury and ultimately - fatality. QualaTech has provided many HFAT Courses for AMOs, Air Operators, Airports and Manufacturers, based on extensive HF knowledge, qualification and experience. QualaTech training is more than just theoretically, our Instructors are practicing 'hands-on' professionals having extensive Canadian and international aviation experience.

Although HFAT has long been mandated by Transport Canada (TC), regulation in itself, should not be the principal reason for training; rather it is all about the prevention of 'error' and 'loss'.

The Two-day HFAT course examines the common causes of human error, its effects, avoidance and consequence on safety. The course introduces "Human Factor Philosophy", enabling participants to appreciate that 'error and loss' is typically preventable and therefore, often within a person's power to control and reduce. The course has been designed to support and compliment Safety Management. Examples and case studies chosen include (when possible) incidents and HF examples that best represent your Organisation's operation, making the training relevant to your business and employees alike.

A natural human trait is to become complacent in matters that we encounter routinely; when 'Complacency' (a member of the "Dirty Dozen") is added to our natural memory limitations, a preverbal link in the 'chain of events' may be forged. HFAT will help employees integrate individual personnel skills including those individuals in related managerial support positions with basic HF knowledge: thus improving communication and the effectiveness of all safety programs in the workplace. To summarize, the HFAT Workshop is specific to reducing human error and operational loss, via 'awareness' training and education; thus ultimately improving performance while enhancing safety and profitability in the process.

Human Performance in Aviation Maintenance is mandatory for personnel engaged in aviation technical and mechanical/maintenance specific work (note: this includes personnel engaged in 'Elementary Maintenance' tasks / work i.e. pilots). Although it is recognised by TC that the intent of HFAT is not aimed at personnel whose functions are limited to management, it is nevertheless a best practice to include all personnel as HFAT can also be a viable means of 'supporting' the SMS and the Safety Culture. However, the primary reason for providing HFAT remains the same – to prevent and reduce 'Error and Loss'. The QualaTech Aero Consulting two-day HF Initial / Recurrent Training Course can also be applied to Corrective Actions arising out of an Audit Finding and subsequent Corrective Action Plan (CAP).

#### Initial HFAT Training for AMOs, AMEs and Air Operators consists of:

- Two day initial HFAT course.
- → HFAT Manual and Certificate of Training.

#### Completion of a HFAT Course will provide a practicable working knowledge of the following:

- Principles of HF, SMS and their interface;
- → HF and SMS as a foundation to a 'Safety Culture';
- Awareness of how HFAT and SMS principles affect Human Performance;
- Understanding how HFAT principles can promote a safe and error free workplace;
- How the human role in operations/duties affects the 'chain of events';
- How HFAT techniques and skills help people interact with others, reducing stress and promoting safety and quality.

#### The Course Objectives include but are not limited to:

- → Recognizing and identifying HF elements;
- Understanding human error and recognizing contributing causes;
- Hentifying the chain of events in an incident / accident;
- Developing safety nets or 'link busters';
- Identifying and recognizing the most common causes of human error;
  - Being aware of individual differences and behavioural styles;
- Understanding that error and loss can be avoided;
- Being aware of how communication can reduce human error;
- Developing effective communication skills.

#### **Course Goal:**

The goal of the HFAT course (pursuant to CAR 573.06, 726.12 & 426.45) is to integrate individual skills (including those people in related technical and managerial support positions) with interpersonal skills and basic HF knowledge thereby, improving communication and the effectiveness of all safety programs in the workplace. To summarize; to reduce human error and operational loss, via awareness training and education, ultimately improving safety in the process.

HFAT teaches us to identify and understand the role of Human Factors (the scientific study of the interaction between people and machine) within the work environment. HFAT also provides a correlation between HF and a SMS, focusing in the process on human error, avoidance and the subsequent consequences. The course introduces HF philosophy, enabling the participant to appreciate that 'Error' and 'Loss' are both preventable and within his/her own power to control.