

# STEP Training

By Peter Hibbert, Baines Simmons

## Are You in Step?

In his report into the 2006 Nimrod accident, The Rt Hon Lord Justice Charles Haddon-Cave praised the initiative of two RAF officers for instigating a Human Factors Maintenance Error Management System called HF M(EMS) within RAF engineering. The report also referenced how our company, Baines Simmons, that had proven expertise in project-managing error management in the civil sphere, had also been engaged to assist with the venture. Over time HF (M)MEMS developed into RAF AEMS (Aviation Error Management System), it then became a tri-service initiative evolving through DAEMS (Defence Aviation Error Management System), DAEMS II and in its current form it is the MOD's Safety Training for Error Prevention (STEP) programme, which Baines Simmons continues to manage on behalf of the MAA.



CoAST Training Centre, MOD Shrivenham (Photo: MAA –A. Johnson and CoAST)

## What is STEP?

STEP is a technical support initiative designed to facilitate the establishment of an effective Aviation Safety Management System (ASMS), by increasing competence and awareness of Air Safety, or to put it simply as someone at Abbey Wood once said to the author, improve the 'Safety SQEPicity' of both the organisation and the individuals within it. (SQEP: Suitably Qualified and Experienced Personnel).

## Training Courses

STEP training consists of a suite of courses that can be standalone or attended as part of a competence pathway - although this does mean that there is duplication of topics on some of the courses, albeit pitched at different levels. This means that if you are attending multiple STEP courses be mindful that whilst you may have previously covered part of the subject, others may not as they may be doing the course as a standalone for their role.

As some of the courses build subject knowledge this also means that if you are doing more than one there is an ideal order to complete them so wherever possible look at the

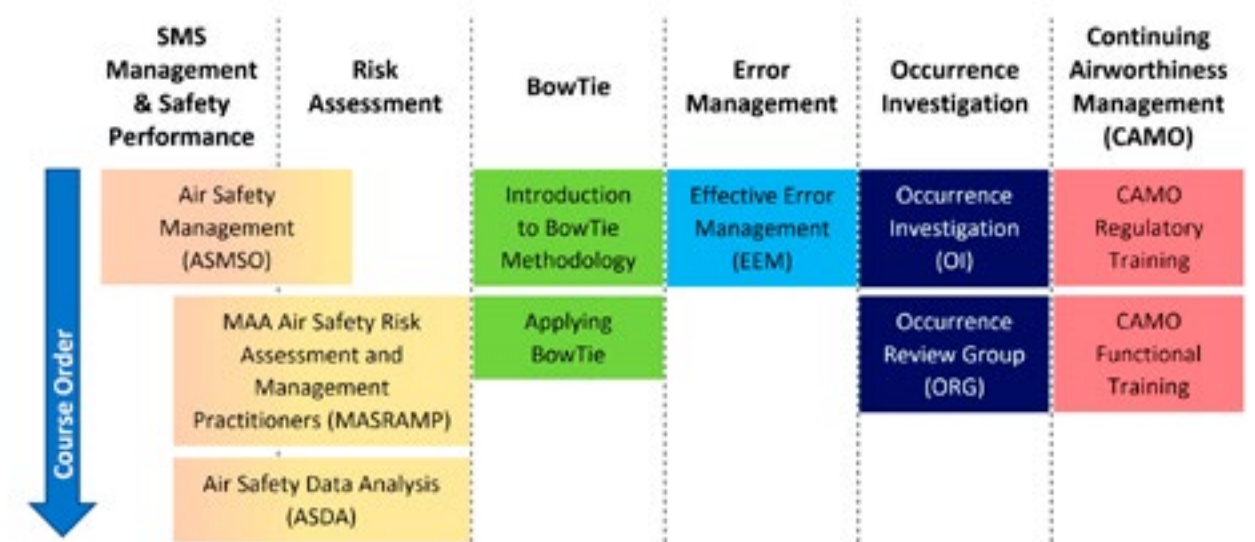
table on the next page and work with your course sponsor / STEP PoC to complete the courses in the vertical order shown. All courses are delivered at the MAA Centre of Aviation Safety Training (CoAST) at The Defence Academy, Shrivenham, locally on unit or virtually via Microsoft TEAMS.

## ASMSO – Air Safety Management System Overview.

This 2-day course provides a high-level view of an Aviation Safety Management System. It covers the reasons for, and benefits of, effective ASMS implementation, the 16 functional elements of an ASMS, their interactions and how an effective ASMS is needed to support an Air System Safety Case (ASSC).

**MASRAMP – MAA Air Safety Risk Assessment & Management Practitioners Course.** Examining RA 1210 - ownership and management of operating risk (risk to life), this 3-day course enables delegates to understand and apply basic Safety Risk Management (SRM) techniques and provides a better understanding of the MAA's expectations with respect to the practical implementation of risk management regulation. (Note: As the course is focused on individuals new to risk management the training is likely to be unsuitable for experts seeking advanced instruction).

**ASDA – Air Safety Data Analysis.** The Air Safety Data Analysis (ASDA) course teaches the 'building-block' principles of data analysis using ASIMS data and Microsoft Excel. It is a practical hands-on 3-day course, aimed at Practitioners in a



MAA graphic, redrawn by Baines Simmons.

Safety role, who are required to understand and/or compile Air Safety reporting, and draw conclusions linking back into Safety Risk Management. It also discusses using available data and relating it back to Continuous Improvement and Air System Safety Cases. (Note: As the course is currently focused on individuals new to role, the training is likely to be unsuitable for experts seeking advanced instruction).

## BowTie – Introduction to BowTie methodology.

The power behind the BowTie methodology lies in its effective application and this 3-day course, endorsed by CGE Risk Management Solutions (developers of BowTie software), is aimed at helping delegates to effectively manipulate and produce your own BowTies to communicate risk to the right audience.

**BowTie – Applying BowTie.** The power behind the BowTie methodology lies in its effective application and this 3-day course, endorsed by CGE Risk Management Solutions

(developers of BowTie software), is aimed at helping delegates to effectively manipulate and produce your own BowTies to communicate risk to the right audience.

**EEM – Effective Error Management.** This 3-day course provides an overview of the key components of an Error Management System and how it supports an Engaged Air Safety Culture. From reporting through to investigations, Review Groups and measuring the performance of the system, all elements are considered, and, importantly how the maximum benefits of each can be delivered. By exploring the field of Human Performance, the course examines the effective use of the Error management 'tool kit' to facilitate consistent and effective human orientated output and enhance operational performance.

**OI – Occurrence Investigator's course.** Conducting a successful 'Human in the System' investigation can be a complex and demanding undertaking. Exploring why errors







have occurred or outcomes were not as expected, while maintaining a non-judgemental, Just Culture based approach requires careful consideration and planning. The 4-day Occurrence Investigators course is a practical skills-focussed course which gives the participants the complete skill set and techniques to confidently conduct effective Occurrence Investigations and present their findings. Delegates are given the opportunity to develop their investigative interview skills using the latest thinking in cognitive interviewing techniques, they also explore investigation planning, preparation, and data analysis and consider the development of effective, efficient, and sustainable recommendations.

**ORG – Occurrence Review Group.** The 2-day Occurrence Review Group (ORG) course offers the candidates the chance to explore the learning opportunities that often exist when things do not go as planned. The outputs of the ORG are a key component of an effective Error Management System, and in addition to assuring the Duty Holder that the investigation has delivered against its terms of reference, it also plays a vital role in the operationalisation and delivery of Just Culture. The training covers the full ORG process and allows the candidates to conduct an ORG on a real-world event. The course is highly interactive and delivers a complete range of practical skills, competence, and confidence to enable ORG members to conduct effective reviews of investigations that support a Just Culture.

#### **CAMO – Continuing Airworthiness Management**

**Organisation – Regulatory Training.** This 1-day course aims to provide delegates with an understanding of the UK Defence Continuing Airworthiness Management Organisation. It introduces MRP RA 4900 series regulation and focuses on explaining the Defence CAMO construct and philosophy, identifying the key responsibilities, and describing the relationship between the CAMO and other stakeholders. The course is aimed at all CAMO staff, front line command staff and those that work in support including DT personnel. CAMO - Continuing Airworthiness Management Organisation – Functional Training. This 3-day course will introduce and examine the key tasks expected of a Defence CAMO from the perspective of how to achieve greater effectiveness. It focuses on enabling delegates to develop or discover principles, techniques and skills that have traditionally been acquired from experience in the field, learning from trial and error and more experienced peers. It aims to reduce the time it takes to develop an individual to be competent and effective in CAMO skills.

#### **Preparing for a STEP Course**

The most important thing to recognise before attending a course is that no matter what your rank, or experience level is, everyone has something to contribute. The courses encourage open communication from every participant so please join in the discussions enthusiastically.

Some courses have pre-reading requirements, these are not extensive and completing them allows you to get the most out of the course. Some courses will have small homework tasks set, again these aren't overly time consuming and completing them allows for more to be covered during the classroom sessions, so be prepared for a little work during the evenings.

#### **A Virtual Course**

Virtual training was introduced to STEP to allow training to continue during the Covid lockdowns, and it will remain a course delivery option going forward.



The Baines Simmons facilitators have been informed by the MAA that the JPA course competency will not be awarded to anyone that doesn't engage, so test your IT set up beforehand and ensure you have your camera on for the course. If your MOD IT doesn't have a working camera try and source IT that does, or maybe even log onto the session using a personal laptop, although no phones or tablets please, they simply don't have large enough screens.

It is appreciated that when attending virtual sessions distractions can occur, the facilitators are used to people walking past, the dog jumping up, kids running in or even the rabbit trying to chew through the laptop power supply. However, please don't arrange meetings, or other engagements during the session. It can also be tempting to get on with your outstanding administration and check your e-mails, please don't. Put simply, don't treat a virtual classroom any different from a physical one.

#### **Specialist Technical Support (STS)**

STEP also allows Baines Simmons to offer specialist support in areas such as Risk Management / Duty holder upskilling and

2nd party assurance activity. 16 CAMO improvement modules have also been developed to target specific pain points within a CAMO, provide a diagnosis of current processes, identify areas for improvement and provide a realistic action plan to deliver the desired future state.

It is important to note that these 'CAMO' modules are not training courses, as they focus on the CAMO, rather than individual, performance. The modules cover all CAMO tasks and are flexible enough to be able to be shaped to address what an individual CAMO requires; they are then run in a bespoke combination depending on the CAMO's needs. The Baines Simmons team are experts in their fields, many are ex-military and enjoy the opportunity to give back. Whether facilitating a training course, providing STS or as part of the administrative support team, they want you to get the most out of the engagement, so please feel free to talk to them and attend STEP activities being prepared to participate and learn.

If you wish to know more about STEP contact your local STEP PoC or e-mail: [STEPsupport@Bainessimmons.com](mailto:STEPsupport@Bainessimmons.com).

## **BAINES SIMMONS**

### **SAFETY SERVICES**

Keven Baines and Bob Simmons, both ex RAF NCO engineers, licenced aircraft technicians and CAA airworthiness surveyors established Baines Simmons over 20 years ago and Bob Simmons remains in the business as a Director today. As well as delivering aviation safety training, Baines Simmons also provides technical support in all areas of aviation safety, regulation, and fatigue risk management. As part of their outsourced services the company provides wildlife hazard management services for many airfields, including 15 UK Military airfields. Baines Simmons also manages large elements of the world's largest private aircraft registry on behalf of the regulating government body, this involves conducting aircraft surveys and approving maintenance programmes.

It is from this position of expertise, across many facets of aviation, that the company looks to add value to military aviation through the MOD STEP programme.