## Working With EASA

The U.K. Civil Aviation Authority's Safety Plan complements the work of the European Aviation Safety Agency.

BY MIKE BELL

here has been a radical change in the way aviation is regulated in Europe. The European Aviation Safety Agency (EASA) was created on Sept. 28, 2003. EASA became responsible for the airworthiness design standards of most civil aircraft registered in the European Union.

The U.K. Civil Aviation Authority (CAA) remains very much in business within its own realm. As a national aviation authority, the CAA's Safety Regulation Group still has a statutory duty for all aspects of regulation not covered by EASA, and is responsible for safety oversight of the U.K. aviation industry, as distinguished from EASA's pan-European rules and standards. It also has the strategic goal to develop our worldclass U.K. aviation safety environment, in partnership with industry, by driving continuous improvements in aviation safety in the U.K., and, in partnership with EASA, across Europe (see ASW, 10/06, p. 46).

The European Union established EASA with the legal authority to be the rule-making and standard setting organization for aviation safety regulation on behalf of all its member states. EASA has already taken responsibility for aircraft and product certification, rules related to the design and maintenance of aircraft products and parts, and standards for organizations designing, producing and maintaining products and parts. Over time, its rule-making role is expected to extend to aircraft operations, flight crew licensing, aerodromes and air traffic management safety.

To deliver results meeting this challenging goal, the CAA developed and published its safety plan for 2006/7–2010/11. In producing this plan, we recognized that there were significant opportunities for more clarity and transparency — for ourselves and our stakeholders — about our safety priorities and how we determined them. In essence, we wanted a safety plan that was:

- Essential for safety.
- Defensible, to us and our industry.
- Unique to the CAA.

This strategic view complements the CAA's ongoing tactical risk management program, which includes risk identification during oversight visits and the assessment of individual mandatory occurrence reports for potential action.



Michael J. Bell is a U.K. CAA Board Member and Group Director Safety Regulation

The Mandatory Occurrence Reporting Scheme (MORS) is fundamental to the CAA's tactical and strategic management of risk, as these processes are only as good as the data that guide them. Established 30 years ago, MORS has been at the forefront of "just culture" ideals and heavily influenced the development of the European Directive on Occurrence Reporting, 2003/42/EC, which requires such a scheme for all EU member states. Despite the mandatory requirement, it is the commitment of the U.K. aviation industry to the theory and practice of just culture ideals that makes the system work so effectively.

The CAA's latest development of its strategic risk management framework is more data driven than ever before, starting with the analysis of fatal accidents involving large public transport airplanes worldwide. Figure 1 provides an overview of the contributing factors in accidents that occurred between 1995 and 2004, as determined by the CAA's Accident Analysis Group. Note that the categories are not mutually exclusive.

To identify safety vulnerabilities, we used multi-disciplinary teams, considered each of the most prevalent accident types and, supported by the data, worked through potential contributions from each major element of the aviation system: aircraft design, aircraft maintenance, air traffic control, airport design, and flight operations. By looking across all sectors, with a mixture of expertise, we minimized the potential for overlooking gaps in safety barriers and also helped knowledge transfer in our organization.

Inevitably, many more actions were suggested than were practicable. Resources in particular are always limited, and the suggested actions were subjected to rigorous peer review and prioritization. Several criteria were used, including statistical safety risk, perceived safety risk and likely effectiveness and efficiency.

European national aviation authorities, in particular, must also use one other criterion: the regulatory environment. While EASA will, within a couple of years, very likely take responsibility for rule-making activity in operations and licensing, member states retain responsibility for oversight of that activity. Therefore, actions have been prioritized that do not necessarily require rule making or formal regulatory intervention, but are aimed at supporting the judgment of regulators and helping industry to improve its own safety performance.

Did we get it right? Well, we listened to the safety concerns of U.K. industry and also matched the risks we identified to other studies, and we seem to be in the right place. For example, Flight Safety Foundation lists controlled flight into terrain, approach and landing, loss of control, and human factors as the top four issues requiring attention. All of these feature in the CAA safety plan, with flight crew human factors issues together in a section we've called "Supporting Pilot Performance."

Of course, the CAA is subject to other influences on its regulatory



**Notes**: More than one contributing factor can be allocated for each accident. Includes fixed-wing turbine-powered aeroplanes for a which a variant has MTWA > 12,500 lbs or 5,700 kg (includes business jets).

Source: U.K. CAA Fatal Accident Database

Figure 1

strategy. The U.K. government is, rightly, demanding that all U.K. regulators perform better in terms of risk management and use the output to help determine their work program. The CAA's risk management strategy, embodied in the safety plan and described briefly here, has been fully endorsed by the U.K. government as good regulatory practice, and we are committed to developing the model further for the benefit of U.K. industry.

EASA is developing its own safety strategy for the areas in which it has competence, called the European Strategic Safety Initiative (ESSI), and future U.K. safety plans will contain CAA actions undertaken as part of ESSI, but we will continue to look to improve safety performance specifically in the U.K. It is almost certain that human factors issues will dominate as we complement EASA rule making with data driven oversight and safety improvement, continuing to focus on areas that are not best addressed by rule making alone. Success will require closer cooperation between the CAA and its stakeholders than ever before, facilitated by industry's safety management systems. We have recently laid the foundations for this as part of preparations for the development of the next safety plan.

The CAA's safety plan and commitment to safety improvement clearly demonstrate that in the new European environment, the national aviation authority has a key role to play. By aligning our tactical and strategic activities with that of EASA, striving for seamless safety oversight and complementary safety improvement processes, we can and must help EASA to drive continuous safety improvement across the continent.●

Note: You can find a copy of the *CAA's Safety Regulation Group Safety Plan 2006* at <www. caa.co.uk/safetyplan>.