EASA NEWS 06

EUROPEAN AVIATION SAFETY AGENCY | JANUARY 2011

A look back at Aviation Safety in 2010

Dear Readers,

For the first time in over 40 years, there was no fatal accident in European commercial fixed-wing air transport operations in 2010. However, a good year for Europe was a poor one for civil aviation worldwide. Preliminary data shows that the number of fatal accidents worldwide in this category has increased from 39 in 2009 to 52 this year, resulting in 881 fatalities.

Looking back over recent decades, there has been a progressive reduction in the world-wide accident rate. However, this trend has been interrupted over the past five years as increased traffic has also resulted in an increased number of accidents. To tackle this situation, action on the safety issues of crucial importance such as loss of control and runway excursions is an imperative. To make lasting improvements, there is an immediate urgency to implement safety management and facilitate the integration of new technologies.

EASA is also working hard in its responsibilities within the Air Traffic Management (ATM) domain. In November 2010, together with Patrick Ky, Executive Director of the SESAR Joint Undertaking, I signed a cooperation and working arrangement between our two organisations. This agreement confirms EASA's active involvement in the implementation of the SESAR work programme. The extension of EASA system to ATM will require all actors and stakeholders in the domain to cooperate far more closely than ever before.

Patrick Goudou, EASA Executive Director

Photo: SESAR JU

Patrick Ky and Patrick Goudou

EASA at the 37th ICAO Assembly

The 37th ordinary Session of the ICAO (International Civil Aviation Organisation) Assembly was held in ICAO Headquarters in Montréal from 28 September to 8 of October 2010. EASA played an active participation in this in support of the EU. Executive Director, Patrick Goudou, and seven Agency representatives participated in the Assembly, as part of the EU Delegation.

What is the ICAO Assembly?_ ICAO Assemblies are important fora impacting directly on the Organisation's governance. The ICAO Assembly is the highest governing body of the Organisation, which inter alia elects the contracting States to be represented on the ICAO Council, examines and takes appropriate action on the reports of the Council, including priorities for the next three years, votes annual budgets, determines the financial arrangements, reviews expenditures, and approves the accounts of the Organization.

The ICAO Assembly meets at least once in three years. All contracting States have equal right to be represented at the Assembly and each contracting State is entitled to one vote. International Organisations (e.g. the European Commission) do not have the right to vote.

Why is it important for EASA?_ EASA has a direct interest in remaining informed of the developments within the ICAO Assembly and trying to influence this important decision-making forum, in synergy with the European Institutions and other European organisations. Indeed, the 18 ICAO Annexes (i.e. annexes to the Chicago Convention) cover the whole spectrum of safety and environmental protection for international civil aviation. All ICAO Contracting States have the obligation to implement the standards published in these Annexes or to file differences if they don't.

"EASA assists Member States in fulfilling their obligations and promotes Community views throughout the world"

EASA must, as per the Basic Regulation, not only "assist Member States in fulfilling their obligations under the Chicago Convention", but also "promote Community views throughout the world by establishing appropriate cooperation with third countries and international organisations". The Agency must therefore contribute to influencing ICAO decisions and rulemaking.

What was the role of EASA in the preparation?_ An internal EASA Working Group was established to prepare the ICAO Assembly. This group developed a number of common "papers" and "positions".

Development of working papers: the EU presented 13 papers to the Assembly covering issues including the Next Generation of Aviation Professionals,

EASA at the 37th ICAO Assembly

promoting Regional Safety Oversight Organisations, runway safety, transparency, transition to Continuous Monitoring Approach. EASA drafted some of these papers and provided comments to those drafted by other European bodies. Such papers aim to promote European views on many technical matters in which EASA will play a central role, through its rulemaking, certification and approval and standardisation activities.

Drafting of common positions: approximately two thirds of the 75 agenda items had a direct or indirect impact on EASA. Although European papers were not produced on all of them, the EU has views to express on most of them. Therefore, the Agency prepared common European "positions", proposing a common line, supported by various technical, diplomatic and tactical arguments. These positions were reviewed and coordinated by the EU Institutions (Commission and AVIA Group of the Council) with other European partners including the European Civil Aviation Conference (ECAC) and Eurocontrol. 27 out of 33 common positions which were adopted and distributed to all European delegations at the Assembly had been prepared by EASA: these documents drove the verbal interventions by "one European voice" (usually, but not always the Presidency) during the Assembly sessions.

"Roughly two thirds of the 75 agenda items had an impact on EASA"

37th ICAO Assembly

Photo: ICAO

Key outcomes_ European successes have been achieved on climate change, Continuous Monitoring Approach (CMA) for the ICAO Universal Safety Oversight Audit Programme (USOAP) and Regional Safety Oversight Organisations with increased recognition through several Assembly Resolutions and acknowledgement that their role can also include analysis, rulemaking and direct certification activities.

Some progress was achieved towards more transparency by ICAO in communicating safety information to the general public. However, under strong pressure from some countries, such disclosure of information to the travelling public will be subject to the development and adoption of a code of conduct on the use of safety information.
The proposed development of a new ICAO Annex on safety processes was also endorsed by the Assembly.

Conclusions_ In conclusion, the Agency has positioned itself as the key technical body advising the European Commission on all aviation safety matters for the Assembly (including on ATM/ANS safety). The common European positions were largely endorsed and verbally supported during the Assembly by all ECAC States, even though the European front can still be reinforced on some issues.

The reports and Resolutions proposed by the Technical Commission were unanimously adopted by the final Plenary session, with the exception of a single Reservation on item by Australia/New Zealand. Several of the positions originally proposed by EASA are reflected in the Assembly reports and Resolutions.

The European Commission and EU Presidency expressed their satisfaction with the level of preparation of the EU for this ICAO Assembly. The instrumental role of EASA in this respect was highlighted and appreciated.

The European Helicopter Safety Team: The Vertical Challenge

Eurocopter 130

The European Strategic Safety Initiative (ESSI) is a ten year partnership launched in 2006 to enhance aviation safety in Europe and worldwide. ESSI is a voluntary, not legally binding partnership between EASA, other authorities and the industry. The ESSI has three components: the European Commercial Aviation Safety Team (ECAST), the European General Aviation Safety Team (EGAST), and the European Helicopter Safety Team (EHEST).

The EHEST took off in 2006. It is not only the helicopter component of ESSI but also the European branch of the International Helicopter Safety Team (IHST). Launched in 2006, IHST is combined government and industry effort to reduce the helicopter accident rate by 80 percent by 2016. EHEST is committed to this challenging IHST objective, with emphasis on improving European safety.

"EHEST is committed to the challenging IHST objective to reduce the helicopter accident rate by 80% by 2016"

Today, EHEST is co-chaired by EASA, Eurocopter, and the European Helicopter Operators Committee (EHOC) and counts around 50 organisations from the full range of stakeholders including manufacturers, operators, authorities, helicopter and pilots associations, research institutes, accident investigation boards and a military operators from across Europe.

The EHEST is structured as follows:

- The European Helicopter Safety Analysis Team (EHSAT) analyses accident reports and identifies intervention recommendations using a process inherited from the IHST. Because of regional characteristics including different languages, various national teams have been formed in Europe. Analyses from the regional teams are consolidated at European level. A preliminary analysis report of 2000-2005 European accidents was published in November 2009 and the final report was issued in October 2010. 'Pilot judgement and actions', 'Safety Management and Safety Culture' and 'Pilot situation awareness' are the top three safety actions.

- The European Helicopter Safety Implementation Team (EHSIT) uses the analyses and the interventions suggested by the EHSAT to develop a safety improvement action plan. To address the top EHSAT priorities, the EHSIT has launched Specialist Teams on Operations and Safety Management Systems (SMS), Training, and Regulation. The EHEST also counts a Communication team to promote the initiative and its deliverables, especially among those who suffer most accidents - small operators and the General Aviation community.

The EHEST also supported the development in 2010 of a helicopter version of the International Standard for Business Aircraft Operations (IS-BAO), with the objective to expand its use to other helicopter operations.
In parallel, the IHST has developed a series of toolkits accessible on its website addressing Safety Management Systems (SMS), Risk Assessment, Training, and Helicopter Flight Data Monitoring (HFDM). A fifth Toolkit on Maintenance is being developed.
EHEST and IHST were presented at the Internal Helicopter Safety Seminar (IHSS) on 3 and 4 October 2010 in Cascais, Portugal and at the 4th EASA Rotorcraft Symposium on 8 and 9 December 2010 in Cologne.

EHEST

RELEVANT INTERNET LINKS:
http://www.easa.europa.eu/essi/ehestEN.html
http://www.ihst.org/

Safety Knows no Borders - Boeing 787 Aircraft Operational Evaluation

Boeing 787 Aircraft Operational Team

The role of the Operational Evaluation Board_ Long before EASA was established, aircraft manufacturers, authorities and operators alike recognised the benefits of jointly evaluating the operational aspects of introducing a new aircraft type into service which allowed for common recommendations and mutual assistance across European borders and authorities.

On an international level, this concept was officially recognised when the Common Procedures Document (CPD) was signed in June 2004 between Transport Canada, the Federal Aviation Administration (FAA) and the, then Joint Aviation Authorities (JAA).

The process transferred from the JAA to EASA in February 2006 and today's Operational Evaluation Board (OEB) process provides methodology and guidance to support the assessment of, amongst other things, flight and cabin crew training, type rating designation, operational suitability, simulator qualification, cabin maintenance programmes and equipment such as the Electronic Flight Bag.

"The benefits of jointly evaluating the operational aspects of introducing new aircraft types into service have long been recognised"

Although the OEB process is based on a voluntary application and its outcome constitutes a recommendation to the competent authorities, manufacturers recognise the benefits of harmonised safety assessment since these eliminate the duplication of many approval activities. Indeed, given the characteristics of a new aircraft, it seems logical that the safe operation on a global level requires the same safety objectives to be met worldwide.

Evaluating the Boeing 787_ Safety knows no borders – this becomes clear in joint evaluations when sharing experiences, views and recommendations. While regulatory structures and the implementation of provisions may differ, the underlying requirements to facilitate safe operations are the same.

The Boeing 787 operational evaluation was carried out jointly by the US Federal Aviation Administration (FAA), Transport Canada and EASA, providing more than 20 flight crews for the different elements of flight crew training evaluation.

The Boeing 787 operational evaluation by the EASA Certification Flight Standards department marks over 100 completed evaluations in a ten year period. The selection of flight crew candidates is crucial to the success of any operational evaluation. As evaluations are often affected by changes in flight test and production schedules, a high degree of flexibility as well as appropriate administrative processes is required from the participants. With the current tools in place, EASA has been fortunate to be able to involve highly qualified crews from authorities and industry in OEB evaluations.

When developing a new aircraft such as the Boeing 787 as a variant to an existing model for an operational perspective, one of the first critical steps in the evaluation is to determine the level of differences between the base aircraft and the new model. This is normally accomplished by reviewing the so-called table of Operator Difference Requirements (ODR table) and validating that the variant and the base aircraft are sufficiently alike in handling characteristics through a flight test comparison.
For the Boeing 787, this comparison was performed successfully by Capt Rod Mitchell, an experienced Fleet Training Manager with close to 6000 flight hours in the Boeing 777 base aircraft.

Training courses_ Several training courses had to be evaluated: a different course for Boeing 777 current pilots, credits for shortened training courses for Boeing 757/767 and Boeing 737 rated pilots, as well as a full type rating course for crews without any experience on new-generation Boeing aircraft.

Captain Herbert Meyer, EASA Certification Directorate

An extensive assessment of the complete courses was performed including computer based training, use of a flight training device, full flight simulator training, and finally, culminating in an aircraft validation flight on the Boeing 787. The OEB team evaluating the training consisted of one industry pilot, two National Aviation Authority flight inspectors, and one EASA OEB pilot.
A noteworthy event in this Boeing 787 evaluation happened when Capt. Herbert Meyer completed the evaluation of the full type rating course by flying the aircraft from Boeing Field in Seattle to Grant County Airport (Moses Lake) – being the first EASA pilot to obtain a type rating in an OEB evaluation.

The EASA OEB report containing detailed recommendations from the evaluation of the B787 training courses will be published shortly after the issue of the EASA Type Certificate:
http://easa.europa.eu/certification/flight-standards/fs-overview.php

THE OSD CONCEPT
Recognising the value of the OEB process, the EU recently transposed and expanded this concept into the European aviation regulatory framework for certain areas of operational evaluations, while keeping some others voluntary. The Implementing Rules for this newly evolved concept of Operational Suitability Data (OSD) will soon be consulted for applicability in April 2012. It will address aircraft type specific provisions regarding pilot training, simulator reference, cabin crew training, and certifying maintenance staff.

EASA Rulemaking Update

Publication of Authority and Organisation Requirements documents

On 4 October EASA published the Comment Response Documents (CRDs) containing the amended text of Part-Authority Requirements (AR) and Part Organisation Requirements (OR) in the field of air operations and personnel requirements. Common authority and organisation requirements will be an essential contribution to ensuring uniform application of Community rules, by streamlining oversight and management system requirements for all stakeholders. The documents can be accessed on the EASA website. The Agency expects to submit its Opinion to the European Commission during spring 2011.

EASA Rulemaking Update

Safety Management by Organisations – an Essential Feature of the Proposed Organisation Requirements

Within the Organisation Requirements, the paragraph OR.GEN.200 fostered a significant number of reactions during the Notice of Proposed Amendment consultation phase. This paragraph implements the ICAO standarts related to Safety Management Systems (SMS). It was encouraging to see that not only did stakeholders show great interest in the way their implementation was proposed but the vast majority also showed willingness to go along the route of safety management. Some concerns were however expressed that the proposed rules might not always be sufficiently clear to allow the easiest application.

"The vast majority of stakeholders showed willingness to go along the route of safety management"

Therefore, the Agency, supported by the AR-OR review group, ensured that the amended text reflected a constant desire for as much clarity, proportionality and flexibility as possible. The Comment Response Document (CRD) to NPA 2008-22C and 2009-02C shows the resulting text. The basic principles are kept, but the readability has significantly improved. How are these requirements going to impact the current activity of European aeronautical organisations?

EASA's Approach_ First, it is noticeable that the proposed texts do not mandate the implementation of an SMS as such. Why not follow the obvious route of repeating the ICAO SMS standards? Actually, the Agency did not wish to impose an additional management system superimposed onto the existing ones, whether they related to finance, quality or any other concern of an organisation manager. Imposing a safety management system separate from the others could be seen as a pure additional prescriptive requirement, with the risk that organisations would simply try to satisfy their authority by showing that they have added in their organisation all the required prescriptive elements.

"EASA did not wish to impose an additional management system superimposed onto the existing ones"

Instead of requiring the implementation of an SMS, OR.GEN.200 lists the elements that the organisations must address. OR.GEN.200(a)(3) states: "[The organisation shall establish, implement and maintain a management system that includes] the identification of aviation safety hazards entailed by the activities of the organisation, their evaluation and the management of associated risks, including taking effective actions to mitigate the risk."

Adaptable to individual organisations_ Thus, the proposed requirements are based on the idea that safety, as well as compliance with rules, should be a concern for all personnel and for all activities of the organisation, and not just the reason for an additional department to be created to satisfy the authority and rule compliance. The requirements are presented in such a way that allows the organisation to apply them the way it sees fit. In particular, they allow the implementation of an integrated management system where safety is a parameter to be taken into account with each decision, rather than a juxtaposition of management systems. Integrated management enables managers to recognise and take into account all significant influences on their organisation, such as strategic direction of their business, relevant legislation and standards, internal policies and culture, risks and hazards, resource requirements and the needs of those who may be affected by any aspect of the organisation's operation.

"Safety, as well as compliance with rules, should be a concern for all personnel and for all activities of an organisation"

This is why the former requirement to implement a quality system (QS) has not been retained as such. This does not mean that the organisation will not need to ensure compliance with the rule any more. A quality system may be used to satisfy different sets of requirements. What the regulator is really interested in is whether the QS satisfy compliance with the rules. Therefore, compliance monitoring is required in OR.GEN.200(a)(6). The requirements in OR.GEN.200 thus offer the ability to implement the ICAO SMS standards, without obliging the organisation to alter its business model.

EASA working in partnership_ Although different in wording, not only is the proposed OR.GEN.200 compliant with ICAO, but it may also be a model that ICAO will follow. Indeed, this international organisation is about to adopt a similar approach. The recent 37th ICAO Assembly has confirmed the creation of a new Annex dealing with safety management. It will contain the standards related to the safety programme required from the authori-


Photo: Socata


Photo: Dassault


Photo: Airbus


Photo: Eurocopter

EASA Rulemaking Update

ties. It could also contain the general SMS standards applicable to all organisations, thus following the total system approach proposed by EASA.

"EASA's partner authorities have showed great interest in this approach"

Main partner authorities of EASA, the US Federal Aviation Administration and Transports Canada also showed great interest in EASA's approach to the implementation of SMS principles. Convinced of the great benefit to stakeholders of having consistent requirements in this area, as well as the overall benefit for global aviation safety, those authorities and the Agency have started collaborating in order to achieve a common understanding of SMS principles. An SMS pamphlet containing answers to ten frequently asked questions has already been published. Those answers were discussed between the collaborating authorities and therefore provide a sound basis for achieving the common understanding of SMS principles.

A methodology to measure safety performance_ It is also worth mentioning that this collaboration should also allow the publication of a methodology for the measurement of safety performance. This methodology will facilitate the management of safety not only within each State, but also at a global level. The AMCs and GMs to OR.GEN.200 should benefit from this collaboration activity, thus facilitating the overall integration of safety management, not only within each organisation's management system, but also with each State Safety Programme (SSP), including those activities now managed by each EU Member State in coordination with the Agency and the European institutions (European Aviation Safety Programme).

The requirements in OR.GEN.200 also allow a proportionate application. Criteria, based on size, nature and complexity of the activities, are given in AMC1 OR.GEN.200(b) to assess the complexity of an organisation. Thus, an aeroclub providing training to private pilots or a small operator will apply a small set of AMCs while a large operator will apply a larger set of AMCs and implement more detailed processes.

Management system requirements designed to fit various organisations, whatever their size, nature or complexity of the activities and whatever business model they wish to apply: this is how EASA proposes to implement the ICAO safety management standards. No doubt that the continuous collaboration with ICAO and third country regulators will help to achieve common understanding of safety management principles, for the great benefit of all stakeholders and global aviation safety.

EASA launches Aerodrome rulemaking activities

The Basic Regulation foresees that by the end of 2013, the implementing rules and guidance material for aerodrome safety shall be adopted. To this end, the Agency has started the necessary rulemaking activities. Due to considerations of resource management and further research into the Agency's approach it was decided that the work on apron management services, aerodrome equipment, and heliport design and operations would be postponed. The initially identified rulemaking tasks are therefore:

- ADR.001 – requirements for aerodrome operator organisations and competent authorities;
- ADR.002 – requirements for aerodrome operations; and
- ADR.003 – requirements for aerodrome design.

After the necessary internal and external consultation with its stakeholders in the period April-May 2010 on the content of the Terms of Reference (ToR) of the rulemaking tasks, the Agency prepared and published the Comment Response Document, as well as the final ToR.

Nominations to Rulemaking groups_ In parallel, the Agency examined the nominations from the Advisory Group of National Authorities (AGNA) and Safety Standards Consultative Committee (SSCC) for group membership and prepared the composition of each rulemaking group. Most groups consist of roughly 60% Member State and 40% industry representatives. However, ACI and other industry associations are considered in every group.

First meeting of the Rulemaking groups_ The kick-off meeting of these rulemaking groups took place at EASA on 6 and 7 July 2010. During this meeting, procedural issues related to the future work of the rulemaking groups were fruitfully discussed. Following the election of the chairpersons of each rulemaking group, everything is now in place for the intensive programme ahead. This work will culminate in the publication of Notices for Proposed Amendments (NPAs), containing draft rules, explanatory memorandums and impact assessments, for public consultation in the winter 2011/2012.

"Everything is in place for the intensive work programme ahead"

Stakeholder communication_ A concept paper was developed in order to make this rulemaking activity more accessible to interested parties. This paper describes benefits of the EU rulemaking and describes the division of tasks between the Agency and the Member States, who remain the certifying and overseeing authorities.

The paper has found great interest and can be downloaded on EASA's dedicated Air Traffic Management and airports web page.
http://www.easa.europa.eu/atm/

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Come to meet EASA during the first half of 2011

DATE	EVENT	PLACE
30 January - 4 February	European Parliament EU Agencies Exhibition	Brussels
8 - 10 March	ATC Global	Amsterdam
13 - 16 April	AERO International Air Show	Friedrichshafen
17 June	Nacht der Technik - EASA Open Doors	Cologne
20 - 26 June	Paris Air Show	Paris

For more details on our presence at these events, please send an email to: info@easa.europe.eu

EASA hosts Certification Workshop with industry representatives

In line with the EASA's continuous efforts to improve communication with stakeholders, the Agency organised a Certification workshop with industry representatives from manufacturers and airlines on 21 January 2011. Some 50 key persons from various domains joined the workshop and contributed to a fruitful exchange of information.

The main focus of presentations given by the Certification Directorate was on recently developed information tools such as the Certification Memoranda (CM) or Safety Information Bulletins (SIB). In addition, an open discussion took place on further improvements of the information flow from the Agency to its stakeholders and a commitment was made to organise further workshops of this nature.

Volcanic Ash Operations Workshop

Following the highly successful International Air Safety & Climate Change Conference which took place in Cologne on the 8 and 9 September 2010, EASA hosted a Volcanic Ash Operations Workshop on 20 January 2011. This provided an opportunity for aircraft operators and others to exchange views on risk assessment methodologies for natural hazards like volcanic eruptions.

Please check the EASA website
http://www.easa.europa.eu
for the outcomes of this workshop.

Opening session of the Volcanic Ash Operations Workshop

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