



Mark Lacagnina

European seminar highlights strategies for safety improvement.

BY MARK LACAGNINA | FROM LISBON

Urgent calls for action in establishing binding obligations to block criminal prosecution of people who provide safety information and in pooling the resources of member states to create a pan-European air accident investigation board kicked off the Flight Safety Foundation (FSF) 22nd annual European Aviation Safety Seminar (EASS) March 15–17 in Lisbon, Portugal.

More than 200 aviation professionals attended the seminar, which

was co-presented by the European Regions Airline Association (ERA) and Eurocontrol.

A regulation on aviation accident investigation and occurrence reporting proposed recently by the European Commission (EC) was the focus of a discussion led by Mike Ambrose, ERA director general, and Kenneth P. Quinn, FSF general counsel and secretary, and a partner in the Washington law firm Pillsbury.

Ambrose said that although well-intentioned, the EC's proposal "is very

unlikely to create any significant improvement in air safety." Its major drawback, he said, is that it misses a major opportunity to strengthen occurrence reporting by guaranteeing confidentiality for people who report safety-critical events and for the people identified in the reports.

Quinn said that there is an "increasing tendency to turn accident sites into crime scenes" and discussed several investigations that were impeded by prosecutors and police, resulting in restrictions of access to physical evidence

and the refusal of individuals involved in the accidents to cooperate with investigators.

### 'Enough Is Enough'

"The flow of important safety information is being hampered and delayed," Quinn said. "Enough is enough. This prosecutorial abuse is directly putting safety on trial and the public at risk, and it's time to end that."

Regarding the current manslaughter trial of Continental Airlines and five individuals in connection with the July 25, 2000, crash of Air France 4590, a Concorde that received foreign-object damage on takeoff from Paris, he said, "We at the Foundation believe that case is an utter waste of resources and a great example of prosecutorial abuse, and should be shut down now."

Ambrose and Quinn emphasized the importance of time. "Accident investigation needs to be rapid so that lessons are learned quickly and are passed on to the operators," Ambrose said. "It must not be jeopardized by judicial systems or other external agencies that seize some of the wreckage or some of the information."

ERA has called on the European Council and Parliament, which are reviewing the EC

proposal, to ensure that aviation investigatory agencies have priority over other agencies and to prohibit access by other agencies, the media and the public to information gathered during an investigation without guarantees of confidentiality.

### 'Obligations With Teeth'

ERA and the Foundation have joined several organizations in calling upon the International Civil Aviation Organization (ICAO) to strengthen its protection of safety information sources.

Quinn said that ICAO Annex 13, which sets the standards and recommended practices for aircraft accident and incident investigation, "simply does not go far enough in protecting sources of data and information that are absolutely critical to safety improvement.

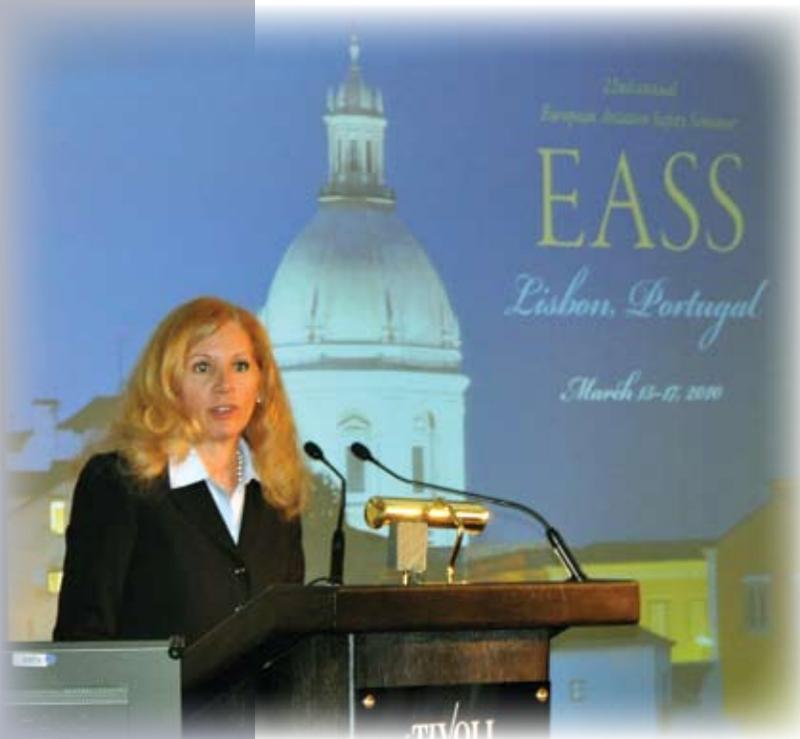
"Unless we foster a just culture environment, when we ask people to come forward with safety-sensitive information, we may inadvertently be setting them up for a loss of liberty. And that's not fair. We need to make sure that there are international obligations — with teeth — to protect these individuals."

Quinn noted that protection of safety-information sources is among the topics on the agenda for the ICAO High-Level Safety Conference in Montreal from March 29 to April 1. "The Foundation embraces recommendations that ICAO form a multidisciplinary task force of legal experts from the aviation industry, law enforcement, judicial authorities and the public to achieve a balanced approach that is supportive of blameless reporting and sharing of critical aviation safety information and the proper administration of justice," he said.

### 'Mandatory Club'

Ambrose and Quinn characterized as flawed a provision of the EC proposal to establish a "European Network of Civil Aviation Safety Investigation Authorities" comprising state investigatory agencies, the European Aviation Safety Agency (EASA) and EU judicial departments, prosecuting offices and police that would operate under voluntary agreements to cooperate in accident investigations.

Economic concerns must not outweigh safety, said Lynn Brubaker.



Emily McGee



**Kenneth Quinn called for an end to the increasing tendency to turn accident sites into crime scenes.**

Ambrose said that the proposal for a “mandatory cooperative club ... is a recipe for costly inefficient bureaucracy with no safety benefits.”

“Voluntary co-operation is a recipe for no cooperation,” Quinn said. “We need to have clear legal obligations.” He noted that the Foundation supports a recommenda-

tion by ERA to scrap the proposed network and go forward with an option initially considered by the EC but rejected as “premature”: the creation of a European civil aviation safety board.

“One of the reasons, we are told, that the Commission has not gone down this road is that the results from EASA have been less than satisfactory, and neither the Council nor the Parliament is consequently interested in establishing another EU-wide institution,” Ambrose said.

Nevertheless, a multinational investigatory agency would have significant advantages, he said. “It would permit the pooling of resources to provide improvements in training, facilities, equipment and investigation techniques. We would achieve collectively far higher standards of accident investigation.”

### ‘Spiral Dive’

Further insight on how criminal prosecution impedes safety reporting was provided by Hans Houtman, consultant and former incident investigation coordinator for ATC The Netherlands. “The open culture of reporting incidents has become very fragile,” he said.

Characterizing increased criminal prosecution as a “spiral dive that will be hard to stop,” Houtman said that society must move away from the “old view that punishment is the best way to eliminate errors and mistakes.”

Avoidance, detection and correction of human error are among the key issues addressed

by the *Operators Guide to Human Factors in Aviation* (OGHFA), a topic presented by Jean-Jacques Speyer, a university professor and retired senior director of flight operations and training for Airbus.

Speyer said that OGHFA, a product of the FSF European Advisory Committee, comprises various materials addressing more than 100 human factors topics. Available on the SKYbrary Web site, OGHFA is meant to supplement and support threat and error management, he said.

### ‘We Need New Ideas’

Concerns about the impact of the continuing economic downturn on safety efforts were voiced by Lynn Brubaker, FSF board chairman, and by David McMillan, director general of Eurocontrol.

“The industry must continue to research, investigate, innovate and educate on safety,” Brubaker said.

“We must ensure that cutbacks do not have an effect on safety programs,” McMillan said. “We cannot afford to slow down our efforts. Aviation safety in Europe, although improving, still has a long way to go.”

A rundown of accident statistics for worldwide passenger and cargo airline operations was provided by David Learmount, operations and safety editor for *Flight International*. He said that although the 28 fatal accidents and 749 fatalities last year were below the decade averages of 31 and 806, respectively, “traffic fell significantly in 2009, so the figures, when the rates have been finalized, will not look as good.”

Learmount discussed FSF data showing that the serious accident rate among Western-built jets in the 1990s dropped by nearly one-half this decade. He attributed this “giant leap in safety” to the “harvesting of the fruits of the seeds sown in the 1980s and 1990s,” including the advent of data-driven safety strategies, the Foundation’s efforts to reduce approach and landing accidents and controlled flight into terrain, and the global mandate of terrain awareness and warning systems.

Since 2003, however, “there’s been no improvement at all in terms of accident numbers,”

Learmount said. “Preventable accidents are still happening, so there is still plenty of room for improvement. We need to come up with new ideas.”

Michel Tremaud, retired head of safety management for Airbus, said that safety can be improved if the industry does a better job of identifying accident/incident precursors and utilizing the lessons learned from them. The best tool for this is flight data monitoring that includes interviews with the pilots, flight attendants, air traffic controllers, maintenance technicians and others involved, he said.

Tremaud also cautioned that change should be viewed as a potential precursor. “Changes bring improvement, but they also carry their own risks,” he said. “We need to evaluate changes to identify the risks they could bring.”

### Persistent Excursions

Jim Burin, FSF director of technical programs, discussed the Foundation’s effort to reduce runway excursion accidents, which include overruns and veer-offs. He said that the frequency of runway excursion accidents has remained steady at about 30 per year.

Data gathered by the Foundation show that most landing accidents result from unstabilized approaches and from not taking advantage of the opportunity to go around, while most takeoff accidents result from takeoffs rejected above  $V_1$ .

The latter was the topic of a presentation by Gerard van Es, senior consultant on flight safety and operations for the NLR Air Transport Safety Institute. He said that although  $V_1$  is based on an engine failure, about 80 percent of the 135 high-speed rejected takeoffs (RTOs) in large commercial airplanes that led to accidents or serious incidents from 1980 through 2008 resulted from other factors such as aircraft configuration, wheel/tire

failures, directional control problems, noises/vibrations and bird strikes.

Van Es said that in nearly one of five occurrences, the RTO decision was made before  $V_1$  but action to reject the takeoff was not taken until  $V_1$  was exceeded. A possible factor is a standard operating procedure at most airlines that requires the captain to call and perform an RTO. “This might involve a transfer of control, causing difficulties and delays, if the first officer is the pilot flying,” he said.

### ‘Train Like You Fly ...’

Paul Miller, a member of the Independent Pilots Association safety committee, and David Williams, a former line captain and check airman, explored the relationship between training and safety.

Pointing to several recent major accidents, Williams said, “It is not poor pilots who are crashing airplanes but pilots who have been improperly trained. ... You have to confirm that you train like you fly and that you fly like you train.”

Miller said that the safety department and the training department often are viewed by airlines as costs rather than investments. “Every airline should be training at the same level,” he said.

Other presentations at EASS 2010 included a discussion by Alexander Krastev, a Eurocontrol safety expert, of a wide-ranging program recently launched by the organization to counter the rising trend in airspace infringements.

Thomas Lange, senior safety pilot for Boeing, presented the lessons learned about fuel system icing during the investigation of the Boeing 777 approach accident at London Heathrow Airport.

The “Aerospace Performance Factor,” a tool for integrating and monitoring safety data gathered throughout an airline’s operations, was described by

Kenneth Neubauer, technical director for aerospace safety at Futron.

Ed Pooley, principal consultant for The Air Safety Consultancy, discussed the role of the safety pilot in augmenting and monitoring the flight crew during approach and landing. He noted that very little guidance exists for intervention by the safety pilot.

The importance of managerial communication to safety and strategies for improving it were presented by Randy Ramdass, senior director of technical operations for Continental Airlines.

Emma Romig, principal investigator for flight deck research and development at Boeing, discussed the various regulatory approaches to combating fatigue. She also described a fatigue risk management system developed for the Chinese civil aviation authority.

Joseph Texeira, director of safety programs for the U.S. Federal Aviation Administration, described a new system developed by the agency to gather and analyze reports by air traffic controllers. He said that most reports to date have identified “procedures that were not working” and required correction.

Ben Winfree and Ken Nagel, partners at Alertness and Performance Management, presented the results of a recent survey of 1,359 regional airline pilots. They said the results show the need for education on fatigue risk management and for possible medical help for pilots suffering from chronic fatigue.

Adrian Young, manager of quality assurance for Denim Air, described the hazards of operating in remote areas and how his company meets the challenges of maintaining a high level of safety. 🗨️

*The final proceedings of EASS 2010, on CD, will be mailed to all FSF members. Information on purchasing a copy of the proceedings is available in the “Aviation Safety Seminars” section of the FSF Web site, <[www.flightsafety.org](http://www.flightsafety.org)>.*