

ALPA Casts Its Safety Net Across Oceans

► The CEO of the African airline approached the simple stage at the front of the auditorium.

"Charlie," he said to Charlie Bergman, manager of air safety and operations in ALPA's Engineering and Air Safety Department, "we have nothing like this—nothing." The man presented his business card and said, "Please send me everything you can."

Global aviation, like many other aspects of life, may be divided into the "haves" and the "have-nots." As a representative of one of the "haves," Bergman had just made a promise from the podium to send a DVD on ways to improve runway safety to anyone in the room who was interested. The gentleman from Africa—and 38 other folks who came forward with business cards—were very interested.

Bergman had just finished giving a joint presentation with Bill Davis, vice-president for safety in the FAA's Air Traffic Organization, regarding ongoing government and industry efforts to reduce the rate and risk of runway incursions. The venue was

the Flight Safety Foundation's 58th Annual International Air Safety Seminar (IASS), held Nov. 7-10, 2005, in Moscow, Russia. The theme of the 2005 IASS, held jointly with the International Federation of Airworthiness and the International Air Transport Association, was "Safety is Everybody's Business."

Founded in 1947, the Flight Safety Foundation (www.flightsafety.org) is an independent, nonprofit, international organization engaged in research, auditing, education, advocacy, and publishing to improve aviation safety. FSF is based in Alexandria, Va., near Washington, D.C. The Foundation's mission is to pursue continuous improvement in global aviation safety and accident prevention. FSF has long been distinguished by its objectivity and international focus. While interacting with other members of the aviation industry, the Foundation is independent of government and commercial organizations.

ALPA has decades-long ties to FSF. Just a few examples:

- ALPA aviation safety representatives participated in FSF's project during recent years to develop recommendations for best practices in ultra-long-range airline operations. These "best practices" have been shared throughout the airline industry and are being put to use daily on flights such as Singapore Airlines' New York-to-Singapore route, scheduled for 18½ hours.

- Capts. Tom Phillips (US Airways) and John Long (US Airways, Ret.) have led workshops on controlled flight into terrain (CFIT) and FSF's award-winning Approach and Landing Accident Reduction (ALAR) Tool Kit in several countries. Both ALPA aviation safety activists participated in developing the ALAR Tool Kit.

- Capt. Robert Sumwalt (US Airways, Ret.) is a past chairman and continues to serve as a member of FSF's prestigious Icarus Committee.

- Keith Hagy, director of ALPA's Engineering and Air Safety Department, chairs FSF's International Advisory Committee, on which Bergman



Capt. Terry McVenes (US Airways), ALPA's Executive Air Safety Chairman, led the ALPA delegation of presenters to the Flight Safety Foundation's 58th Annual International Seminar. He presented a paper on "Changing National Safety Culture Through Data Sharing," with special emphasis on the Voluntary Aviation Safety Information-sharing Process now under way in the United States.

serves as an alternate. Hagy also serves as an ex officio member of FSF's European Advisory Committee, on FSF's Executive Committee, and as an ex officio member of FSF's Board of Governors. Hagy and Bergman serve on FSF's Agenda Development Committee.


Earlier in 2005, would-be presenters from across the globe submitted more than 100 abstracts of ideas for papers for the Moscow meeting. Of those, only 21 were selected. ALPA safety representatives gave five of the papers, more than any other single organization.

Bergman and the FAA's Davis discussed encouraging signs that the incidence of the most severe categories of runway incursions is on the decline in the United States. They pointed to standard operating procedures developed from an industrywide consensus of "best practices" for pilots to use while taxiing as a direct cause of this reduction. New technology—especially in cockpits—could reduce runway incursions rates by as much as 95 percent, they said.

Capt. Bill de Groh (American Eagle), who serves both as the vice-chairman of his pilot group's Central Air Safety Committee and as the ALPA Aircraft Design and Operations Group vice-chairman for domestic operations and director of aircraft performance programs, gave a paper, at the Moscow conference, on rejected takeoffs.

"The RTO accident and incident problem is not limited to a single operator or any one country," Capt. de Groh pointed out. "Clearly, this is an international problem in need of an international solution." He added, "Because of increased traffic levels, during recent years, the number of RTOs may have increased," and each RTO carries a risk of ending in an overrun incident or accident. "At least three areas of improvement," Capt. de

On the Web

All five ALPA presentations are available on the Association's members' only website. To access the presentations, visit Crewroom.alpa.org and click on the "Safety/Security" tab. 

Groh asserted, "would significantly reduce this risk: (1) readily available aircraft performance information on contaminated runways, (2) training, and (3) aircraft system technology."

Capt. Harry "Boomer" Bombardi (Delta), ALPA Inflight Fire Project Team Leader, gave a presentation on "A Pilot's Perspective on Dealing with Fire in Flight." He said that a flight crew using current procedures to deal with a smoke/fire/fumes (SFF) situation that is of unknown nature and intensity and that has not triggered a cockpit alert encounters two major problems:

1. The flight crew's decision to divert/land is usually delayed because no standardized checklists/procedures exist to help them quickly and correctly determine whether a non-alerted SFF event of unknown nature and intensity is under control.
2. Lack of detection and extinguishing devices makes nearly impossible the flight crew's task of quickly and correctly determining the nature and intensity of the non-alerted SFF event and resolving the problem.

Capt. Bombardi discussed the work of the international SFF Steering Committee, which includes manufacturers, airlines, and three aviation organizations, including ALPA. The SFF Steering Committee's mission, he said, "was tightly defined to the issue of developing standard SFF definitions, philosophy, and a checklist template." The SFF Steering

Committee found that SFF incidents happen more frequently than one would expect (data show, on average, at least one unscheduled landing/day). The group determined that the only safe way to deal with an SFF event of unknown nature and intensity is to assume the worst and land.

Capt. Scott C. Schleiffer (Atlas), ALPA's new Executive Air Safety Vice-Chairman and chairman of ALPA's Human Factors and Training Group, presented a paper titled, "We Need to Know What We Don't Know." He asserted that "safety" is not an absence of accidents or incidents, presence of programs or management, or positive outcomes of internal and external audits, but risk management—an "active effort to identify hazards, analyze risk, and establish controls to mitigate."

Capt. Schleiffer argued, "Safety's foundation is a corporate culture that actively fosters risk management. Safety is a set of programs, proactive and reactive. It accepts and acknowledges human fallibility—but most important, it's an attitude of every employee."

The culture of reporting, he said, "requires *trust* to foster interest in acknowledging problems and allowing employees to help in finding solutions." Regarding non-punitive data collection, he added, "flight crews and other operational personnel will not be forthcoming with the needed information if the data can be used against them. Any likelihood that safety-critical information will be used against the person or organization reporting the incident needs to be reduced—practically eliminated."

In fact, "safety culture parallels CRM [cockpit resource management]," Capt. Schleiffer asserted. "We all understand CRM in the context of the cockpit. Culture is the result of a CRM between and among all the em-

ployees and the company management. Management is the captain, but like the flight deck captain, managers must solicit, listen to, evaluate, and act on the best available information and the recommendation of the group.

"The best captain," he said, "is respected for how much and how well he uses the input of all. He is very safe and very efficient. He is trusted."

"A dictatorial captain is unsafe and not very efficient. He just has control. He is despised."

Carrying on the theme of the importance of sharing operational safety information, Capt. Terry McVenes (US Airways), ALPA Executive Air Safety Chairman, and Dr. Tom Chidester, director of the Aviation Performance Measuring System at the NASA Ames Research Center, presented a paper on "Changing National Safety Culture Through Data Sharing." They discussed in detail the Voluntary Aviation Safety Information-sharing Process (VASIP), an ongoing national effort stemming from earlier government/industry work to develop voluntary safety reporting initiatives such as Flight Operations Quality Assurance (FOQA) and the Aviation Safety Action Program (ASAP) used by several U.S. airlines.

"VASIP," said Capt. McVenes, "is intended to accomplish two separate but complementary objectives. One is developing the technical process to extract de-identified safety data from any participating FOQA or ASAP program, merge it, and then make it accessible to appropriate industry and FAA stakeholders for analysis. The other is developing the comprehensive, structured process among all stakeholders that will permit them to analyze aggregate industry safety data, identify problem areas, develop and implement appropriate corrective action plans, and then measure the effectiveness of those actions and share the conclusions with stakeholders. Follow-on development can include connecting other safety data, such as data from the Aviation Safety Reporting System (ASRS) or the National Aviation Safety Data Analysis Center (NASDAC), with VASIP data



The FSF International Air Safety Seminar is held in a different major world city every year and draws speakers and audience members from six continents.

to broaden understanding of issues identified through safety data."

In 2004, Capt. McVenes presented a paper on cargo airline safety at that year's FSF International Air Safety Seminar. That paper focused on the disparities between passenger airline and cargo airline safety. "In Africa, the disparities are even greater," Capt. McVenes notes, "so some of the African attendees had lots of questions. I've been corresponding with some of the folks in Africa. Their accident rates are higher than those in the West. So they're trying hard to close the gap."

On the other hand, Capt. McVenes points out, "I always learn something from these international meetings. Whenever we get a chance to listen to speakers from throughout the world, we gain perspective. Even the fact that other people in other countries are struggling to deal with the same problems—we can find different solutions to the same problems. We tend to clear up our thinking on these issues—or tie it all together because we see the big picture from a different perspective."

Capt. McVenes points out, "Several years ago, the rest of the world was way ahead of the United States on FOQA—programs were up and running in Japan and several European

countries. We used the Flight Safety Foundation venue to gather information about all these FOQA programs around the world. FSF prepared a comprehensive report on FOQA and submitted it to the FAA; that's what the agency used as its starting point in developing FOQA in this country."

Adds Hagy, "Some ALPA members might wonder why their Association devotes resources to participating in an international event for an international audience. Through our participation in the FSF International Air Safety Seminar, ALPA gets international exposure for our safety concerns and our perspectives. We interface with a truly international aviation community—a 'who's who' of commercial aviation worldwide—which helps to promote our safety agenda."

Hagy concludes, "ALPA members fly more than 30 different aircraft types built on certificates from several countries, and they fly into more than 700 airports worldwide. By participating in major international aviation safety events such as the FSF IASS, we have the opportunity to influence the aviation regulatory authorities, airport managements, and manufacturers from many countries around the globe." —*Jan W. Steenblik, Technical Editor*