AIR SAFETY WEEK 2005

The theme of this year's Air Safety Forum was "Airline Pilots: Still Strong, Still Focused, Still Safe."

By Jan W. Steenblik, Technical Writer

nternationally renowned as one of the "crown jewels" of ALPA, the Association's annual Air Safety Forum, held in August in Washington, D.C., is a showcase of ALPA efforts, achievements, and issues remaining to be resolved in airline safety. The Air Safety Forum—in recent years, pared down to a packed day-and-a-half, and culminating in the Association's Air Safety Awards Banquet (see "ALPA's Annual Air Safety Awards," October)—is the event to which the public and journalists are invited. More than 250 ALPA pilot safety representatives, management pilots, and representatives of the aviation industry and U.S. and Canadian government agencies came together at the Forum this year (see "Air Safety Forum," this page).

But this "crown jewel" is set in a broader setting—ALPA's 5-day Air Safety Week, which starts on a Sunday morning for some of ALPA's technical groups, committees, and project teams, and consists of ALPA-only meetings—sometimes with discreet, off-the-record participation by representatives of U.S. and Canadian government agencies, manufacturers, airlines, and other aviation movers and shakers. ALPA concurrently held its annual 3-day International Aviation Security Academy (see "Committee Corner," October).

One of the more eagerly anticipated features of the ALPA-only gathering is the "town meeting" held on Tuesday afternoon, when the chairmen of ALPA's technical groups brief the other pilot safety representatives on current projects, recent accomplishments, and ongoing issues. Following are some highlights from this year's town meeting:

Operations Committee

Capt. D.R. Smith (Alaska), chairman of ALPA's Operations Committee (OpsComm), which consists of the Central Air Safety Chairmen of all of ALPA's 41 pilot groups, characterized the work of OpsComm as the venue "where the rubber meets the road."

He noted three particular areas of interest to OpsComm: (1) fatigue, which he said is becoming an ever-

Air Safety Forum

All 16 presentations made at this year's ALPA Air Safety Forum on seven subjects—aviation security, runway safety, safety management systems (SMS), human factors and training, advances in airliner technology, air traffic control, and operational issues in recent airline accidents— are available on Crewroom.alpa.org.

To access these PowerPoint presentations, sign in to Crewroom, go to the "Committees" tab near the top of the page, and open the Air Safety Website. Scroll down to "2005 Air Safety Week" and click on the link to the PowerPoint presentations.

greater problem for ALPA members, as "some pilots are spending as much as 400 hours per month away from home," (2) the need for an Aviation Safety Action Program (ASAP) at more airlines, and (3) the many challenges involved in efforts to improve airport capacity and efficiency at San Francisco International Airport without compromising safety.

Capt. Mark Reed (Independence), OpsComm vice-chairman, urged town meeting attendees to take back "to your Central Air Safety Committee, your MEC, or your LEC, thanks for their support for your work." Doing that ALPA safety work, he argued, "may get tougher before it gets easier."

Human Factors and Training Capt. Scott Schleiffer (Atlas Air), chairman of ALPA's Human Factors and Training Group, added, "In every project, we need more people." Areas needing more involvement, he said, include

- upset recovery training,
- threat and error management training,
- · improving crew monitoring skills,
- helping to create an FAA advisory circular on distance learning, and
- following up on rewriting FAR Part 121, Sections N and O (training and qualification of flight crews and dispatchers).

Safety management

Capt. Rick Clarke (United), leader of ALPA's Safety Management System (SMS) Project Team, discussed the





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three main thrusts of his team—supporting SMS's being implemented in Canada, helping ALPA become SMS-compliant internally, and getting the FAA and U.S airlines to embrace SMS. Of the latter goal, he said, "It's working pretty well."

Cargo

First Officer Bill McReynolds (FedEx), chairman of ALPA's President's Committee for Cargo, charged that the air cargo industry is "permeated with exemptions and lack of regulatory oversight." He noted that air cargo operators, as a group, have an accident rate five times that of passenger airlines, and that "a huge difference" exists between carriage of dangerous goods on passenger flights versus carriage of those on dedicated freighters.

Strategic plan for safety

ALPA's Executive Air Safety Chairman, Capt. Terry McVenes (US Airways), talked about ALPA's strategic plan for safety. "We've been fortunate in that we've had only minimal reduc-

tions in budget," he declared, "but what with furloughs, early retirements, and resignations, we've had problems finding enough pilots to do the work."

In addition, he noted, "we're facing reduced government funding for key projects, and increased pressure to streamline accident investigations. We have to look very carefully at the cost/benefit implications of safety initiatives."

Airport liaison representatives Capt. Mitchell Serber (Comair), chairman of ALPA's Airport Ground Environment Group, charged that ALPA Airport Liaison Representatives (ALRs) are largely underutilized by others in the ALPA Air Safety Structure. "Some of you may not even know what an ALR is," he acknowledged. "We need to do a better job of communicating that. Your one-stop shopping regarding airport issues should begin with your ALR. You can find an interactive map [of airports served by ALPA ALRs] on the AGE website in Crewroom.alpa.org."

ATC

Capt. Larry Newman (Delta), chairman of ALPA's Air Traffic Services Group, and Capt. Brian Townsend (America West), chairman of ALPA's National Airspace Modernization (NASMOD) Project Team, discussed several ongoing ALPA activities regarding air traffic control and NASMOD, including simultaneous offset



ALPA Air Safety Forum panels included one on new aircraft. Left to right, F/O Dave Hayes (Northwest), ALPA ADO Group chairman; Capt. Terry Lutz (Northwest), ALPA ADO Group vice-chairman, International; Capt. Tom Imrich, chief pilot, research, Boeing; Bill Bozin, V-P for safety and technical affairs, Airbus North America; Capt. Chuck Ellis, senior experimental test pilot, Bombardier.

Airport Awards

Capt. Mitchell Serber (Comair), chairman of ALPA's Airport Ground Environment (AGE) Group, presented an ALPA award for "pilot friendly" airport to representatives of Cherry Capital Airport in Traverse City, Mich. Accepting the award, Airport Director Stephen R. Cassens said an ALPA pilot safety representative used to ask him for an opportunity to look over the airport. Cassens said he was initially skeptical about what a pilot could add to the FAA and state inspections already conducted at the airport.

"Once we saw [the ALPA representatives'] cooperative attitude," Cassens continued, "we realized that we could have a mutually very beneficial relationship."

Also honored with an award was Capt. Ross "Rusty" Aimer (United), for his work as ALPA Airport Liaison Representative (ALR) to Monterey (Calif.) Peninsula Airport.

instrument approaches (SOIA), ADS-B, RNP approaches (RPAT), and RNAV visual approaches.

Canadian update

Capt. Bob Perkins (Air Canada Jazz), ALPA's air safety coordinator for Canada, briefed the group regarding several Canadian issues. Land-and-hold-short operations (LAHSO) in Canada continue to differ in significant ways from those in the United States, he said, and ALPA therefore continues to recommend that pilots not participate actively or passively in LAHSO north of the border.

Two of Canada's five airlines have an SMS already, Capt. Perkins noted, and the other three are in the process of developing such a safety management system. One key aspect of SMS, he said, is its "cross-border compatibility"—i.e., if the flight crew of a U.S. airline is involved in an event in Canada, Transport Canada will allow the airline's SMS program (and FOQA and/or ASAP) to handle it.

The 250-KIAS speed limit below





Capt. Bob Perkins (Air Canada Jazz), ALPA Air Safety Coordinator for Canada and ALPA AGE vice-chairman (in red tie and glasses), and Capt. Mitchell Serber (Comair), ALPA AGE Chairman, join Cherry Capitol Airport reps, above, and Capt. Jack Eppard (American Eagle), honored for his work as ALPA ALR at DFW.

10,000 feet that has been U.S. law for many years still has not been mandated in Canada, Capt. Perkins warned. Current SOP in Canada is to climb on departure at speeds faster than 250 KIAS; however, this practice may not meet TERPS assumptions for obstacle clearance planes, and increases the risk of serious outcome from an inflight bird strike.

Regarding ALPA efforts to improve airport rescue and firefighting requirements in Canada, "the battle continues," Capt. Perkins noted.

Aircraft Design and Operations First Officer Dave Hayes (Northwest), chairman of ALPA's Aircraft Design and Operations (ADO) Group, talked about several projects and activities of his group.

FedEx, said F/O Hayes, still owns the MD-11 that was used in the NASA project to develop the Propulsion-

Controlled Airplane (PCA) concept—i.e., software that, by converting flight control inputs to differential thrust, permits pilots to fly a transport-category airplane with frozen or severely damaged flight controls. The PCA project was quite successful and, F/O Hayes reported, "FedEx is very supportive of PCA and wants it on their airplanes—the sooner, the better."

Inflight icing certification is another ADO interest. Capt. Jim Bettcher (Delta, Ret.), though retired from flying the line, is still working on this, with hopes of seeing new draft FAA requirements for inflight icing certification by the end of 2005. Upcoming meetings, F/O Hayes noted, would indicate "what kind of industry pushback we'll see against the proposal to expand the inflight icing certification envelope."

Speaking of "industry pushback," F/O Hayes said that codification of FARs relating to ETOPS and LROPS have helped improve the margin of safety for these operations, though he noted "some pushback from op-



erators of tri[jet]s and quads."

Other ongoing ADO activities include those regarding wake turbulence, MMELs, and MELs ("probably no single program affects all of us more, every day, in everything we do"), and all-weather flying.

A 3-day meeting with high-ranking Airbus officials in June at the manufacturer's headquarters in Toulouse, France, was "another interdisciplinary effort" of several interests within ALPA's Air Safety Structure, F/O Hayes reported. He said that, as a result of the meeting, "I think [Airbus representatives] now see ALPA as a resource that can help them. That doesn't mean they resolved all of our concerns, but we have established a good working relationship."

Similarly, said F/O Hayes, "[Capt.] Terry Lutz [(Northwest), ALPA ADO vice-chairman, international] has done a great job of mining our already excellent relationship with Boeing [see "Committee Corner: Flight Deck of the Future," page 23].

Accident investigation

First Officer Mark Solper (America West), chairman of ALPA's Accident Investigation Board (AIB), discussed new investigative tools and techniques available to ALPA accident investigators. He said that ALPA is updating its manual for accident investigators and will use the updated manual as the foundation for its Basic Accident Investigators Course.

He also announced that the AIB was launching a program to mentor new graduates of that course—i.e., pilots who have just been trained to be the chief accident investigator for their MEC.

Dangerous goods

First Officer Mark Rogers (United), director of ALPA's Dangerous Goods Program, provided an update on on-



Capt. Mack Moore (United, Ret.), 2001 ALPA Air Safety Award honoree, left, listens as F/O Tom Phillips (US Airways), 2002 ALPA Air Safety Award honoree, makes a point during the Forum, broadcast by CNN and C-SPAN2.

going ALPA activities regarding lithium batteries. Lithium ion batteries, he explained, are no more dangerous to carry aboard aircraft than other types of conventional electric batteries. Primary lithium batteries (the kind that cannot be recharged), however, contain metallic lithium and pose unique risks as dangerous cargo.

In 1999, F/O Rogers said, a pallet of 120,000 primary lithium batteries was damaged during unloading at Los Angeles International Airport. About 3½ hours later, the pallet burst into flames, which quickly spread to an undamaged pallet of batteries. Ramp workers could not extinguish the fire; firefighters did, but not easily.

The FAA Technical Center tested the fire hazard of primary lithium batteries in June 2004. Researchers found that a suppressed cargo fire generates enough heat to ignite primary lithium batteries. The lithium fire burned at 1,400 degrees F—above

the melting point of aluminum—and halon had no effect on the fire.

In September 2004, ALPA sent a letter to the Department of Transportation urging action on this safety issue. The DOT issued an emergency rulemaking prohibiting carriage of primary lithium batteries aboard passenger-carrying aircraft.

On the other hand, advised Capt. Patrick Boyle (Alaska), director of ALPA's Accident Survival Programs, FAA activity on second-generator smoke detectors is stalled.

Two new hazards: Camping meals that have a self-contained heating pad, and the onboard oxygen generation system (OBOGS). ALPA's Aircraft Design and Operations Group is developing Association policy on OBOGS.

Although Halon 1211 does not work on lithium fires, it "is on the aircraft for a reason," Capt. Boyle advised. "It's not toxic. Don't be afraid to use it."