

**A**LPA honored eight of its members during the Air Safety Awards Banquet that highlighted the Association's 51st Air Safety Forum, held in August in Washington, D.C.

Capt. Terry McVenes, ALPA's Executive Air Safety Chairman, declared, "During this year's Air Safety Forum, we acknowledge the tremendous investment that ALPA member pilots have made in airline safety and security. To be sure, the return on this investment—in financial and staff resources, in partnerships with government and industry, and most importantly, in volunteer time spent in airline safety and security work—has been considerable: flying on scheduled airlines is the safest mode of transportation today."

Capt. McVenes led audience applause for two special groups—past recipients of ALPA's Air Safety Award, the

# ALPA's Annual Air Safety Awards

**ALPA honors its members who work to advance aviation safety.**

By Jan W. Steenblik, Technical Editor

Association's highest honor for a pilot safety representative, and "those whose support allows us to carry out our work for ALPA—our spouses and significant others." Of the latter group, he said, "Your encouragement, loyalty, and cooperation are invaluable and make ALPA's volunteer efforts so successful."

ALPA's president, Capt. Duane Woerth, declared, "Over eight decades, our union has built a legacy as a leader in aviation safety and security. Tonight, we salute ALPA members whose contributions and accomplishments have secured that legacy for pilots in the future."

Noting that current airline pilots make up "one of the greatest generations of pilots in history," Capt. Woerth warned, however, that ALPA is "at a crossroads: With concessionary contracts, busier flying schedules, younger members, and the impending retirement of many of our key members, we need to act quickly to recruit and motivate the next generation of ALPA volunteers."

Capt. Woerth recognized several distinguished guests, including FAA Administrator Marion Blakey, FAA Deputy Administrator Bobby Sturgell, Transportation Safety Board of Canada Acting Chairman Charles Simpson, NTSB Chairman Designee Ellen Engleman Connors, NTSB member Deborah Hersman, Transport Canada Director of Commercial and Business Aviation Michel Gaudreaux, and former NTSB members Robert Francis and Richard Healing.



**Capt. Steve Luckey**

## Aviation security giant

Capt. Woerth also saluted Capt. Steve Luckey (Northwest, Ret.), "for his successful work in making aviation security a top priority for our profession, the airline industry, and government at the highest levels."

Capt. Luckey, he noted, "is a man whose reputation is unparalleled in aviation security circles. We are very fortunate that he has served as chairman of ALPA's National Security Committee

for the past 11 years. Although he recently stepped down from that position, he continues his work on behalf of ALPA as special security advisor to the Association."

Among his many contributions to aviation security, Capt. Luckey

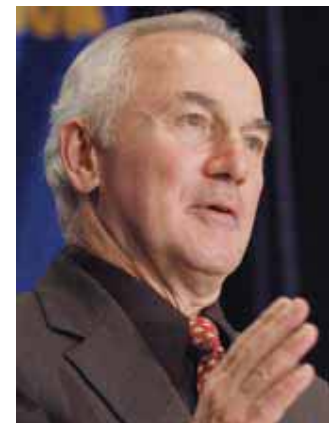
- was instrumental in the creation of the Federal Flight Deck Officer program, which the Transportation Security Administration recently recognized as one of the most effective deterrents against terrorist hijacking of airliners;
- served as a member of the Baseline Working Group of the Vice-Presidential Commission on Aviation Safety and Security;
- served as a member of the TSA's Aviation Security Advisory Committee; and
- has addressed the U.S. Congress, the International Civil Aviation Organization, the U.S. Attorney's Office, and many federal law enforcement agencies on various aviation security issues.

Capt. Woerth said, "Steve, I am honored to present you with this plaque in recognition of your outstanding contributions to advancing initiatives that are making the skies more secure for our flight crews and the passengers and cargo they carry."

## ALPA Presidential Citation

Capt. Woerth presented the ALPA Presidential Citation to two deserving pilots. The award for outstanding service is given "in recognition of unselfish personal dedication and longstanding service in the advancement of air safety in the world's air transportation system with resulting benefits to all who fly."

Capt. Ted Demosthenes (Delta, Ret.), said Capt. Woerth, "spent the better part of two decades working to make sure that, on a dark and stormy night, the world's airline pilots will have the best possible procedures, information, instrument displays, and



**Capt. Ted Demosthenes**

situational awareness to always know exactly where they are, where they want to go, and how to get from here to there with precision, efficiency, and above all, safety.”

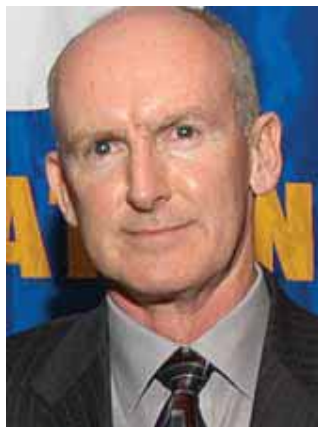
Capt. Demosthenes, during his more than 18 years of representing line pilots’ interests in aviation safety and technical matters through ALPA and IFALPA, served in a number of positions.

As a member, and later chairman, of the ALPA All-Weather Flying Committee, he contributed to a number of advancements and developments in precision navigation, instruments, and displays, including head-up displays (HUDs), cockpit automation, human factors and training, and operating specifications.

One of his most notable achievements was his instrumental role on the FAA’s Performance-Based Operations Aviation Rulemaking Committee (PARC). He served as chairman of the PARC Terminology and Definitions Working Group, addressing issues relating to key terminology and definitions for required navigation performance (RNP), RNAV, and flight operations in general. He still represents ALPA at PARC, which is a key group in furthering implementation of RNP and RNAV operations.

Capt. Demosthenes also has represented ALPA interests on numerous committees and working groups at the FAA, IFALPA, and the Society of Automotive Engineers.

### ALPA Presidential Citation



**Capt. Simon Lawrence**

Capt. Woerth presented another Presidential Citation to Capt. Simon Lawrence (US Airways, Ret.), now an A330 captain for Emirates.

Capt. Lawrence’s extensive contributions to ALPA safety work date back to 1987. He first worked as a member of the Piedmont Airlines ALPA Scheduling Committee on issues affecting the schedules of B-767 pilots.

That same year, he began working on his own as a research evaluation pilot for Lockheed Engineering at NASA Langley Research Center. For 6 years, he worked on synthetic vision for the high-speed civil transport. He went on to be ALPA’s representative to NASA’s Industry Program on Synthetic Vision.

Capt. Lawrence has worked with US Airways, providing input to the airline’s Advanced Qualification Program, or AQP, on pilot issues. He also worked with the FAA and the airline industry on numerous AQP issues.

Capt. Lawrence headed ALPA’s charting and instrument procedures efforts. As ALPA’s representative to RTCA Special Committee 181 (a government-industry group that sets standards for avionics), he helped develop a number of standards. One of the group’s biggest successes was getting wording into appropriate documents requiring automatic temperature compensation for future flight management systems, to deal with extreme tem-



peratures, so pilots wouldn’t have to manually calculate the corrections.

He also represented ALPA to various government and industry

bodies dealing with RNP and various issues relating to air traffic services and to navigation charting and procedures. Most recently he was director of ALPA’s Human Factors Group, overseeing other pilot volunteers working on issues relating to the Airbus A380, the issue of use of the color red in instrument displays, and coordinating with the FAA on high-frequency (HF) radio issues.

### ALPA Superior Airmanship Award

Late on the afternoon of Jan. 19, 2004, Capt. Barry Gottshall and First Officer Wesley Greene were the pilots of American Eagle Flight 4649, Embraer 135 service from Bangor,



PHOTOS: RAY GROWELL/PAGE ONE

**EGL Central Air Safety Chairman, Capt. Victor Cabot (left), and Vice-CASC-Technical, F/O Bill de Groh (right), join ALPA Superior Airmanship Award honorees Capt. Barry Gottshall (second from left) and F/O Wesley Greene.**

Maine, to Boston, Mass. Seconds after takeoff, the airplane began an uncommanded yaw and roll to the right.

Capt. Gottshall, who was the pilot flying, realized that his right rudder pedal was jammed full forward and that he could not move his left rudder pedal. Capt. Gottshall quickly applied left aileron to roll the airplane 15 to 20 degrees to the left to counter the effects of the jammed rudder. While doing so, he asked F/O Greene if *he* could move *his* left rudder pedal; F/O Greene could not.

Shortly thereafter the engine-indicating and crew-alerting system (EICAS) displayed the message, “Rudder One and Two Inoperative.” While Capt. Gottshall continued to fly the severely cross-controlled jet by hand, the two pilots completed the Emergency/Abnormal checklist for this EICAS message. However, the rudder remained jammed; the pilots declared an emergency.

The pilots would now have to make an approach and landing with seriously degraded aircraft control. While Capt. Gottshall focused on maintaining control of the air-



plane, F/O Greene instructed the flight attendant to plan on having the passengers brace for landing, as the pilots were not sure they would be able to maintain directional control after landing and might veer off the runway at high speed.

While the airplane was on the downwind leg of the landing pattern, the air traffic controller reported deteriorating weather conditions—one-mile visibility in blowing snow. Thus, the pilots would have to fly a full ILS approach while holding 15-20 degrees of bank just to maintain course.

During the landing approach, the pilots carefully extended the flaps early, and in small increments, so that if any change worsened the control problem, they would have time to return the flaps to their previous setting.

After they were established on final approach, Capt. Gottshall told F/O Greene to take over control of the thrust levers while he, Capt. Gottshall, concentrated on the flight controls.

At approximately 300 feet above the ground, F/O Greene commanded the passengers to brace for landing. As the airplane slowed near the runway, Capt. Gottshall found he needed to use full aileron—control yoke to the stop—just to maintain directional control.

At touchdown, Capt. Gottshall selected full reverse and, as the airplane slowed during the landing rollout, the rudder control mysteriously returned. The airplane proceeded to the gate uneventfully, with all of the 35 passengers aboard unhurt.

Postflight maintenance inspection revealed that both aft rudder control rods were broken. The loose ends of these rods also appeared to be causing damage to the internal structure of the airplane's tail. The exact cause as to why these control rods failed is still under investigation.

The accident led to an inspection of the rudder control rods of every Embraer jet airplane in the world. No other airplane was found to have the same problem.

As the American Eagle MEC said in nominating these two fine airmen for the ALPA Superior Airmanship Award, "Through their fine teamwork and calm, professional response under pressure, faced with serious aircraft control problems, Capt. Barry Gottshall and F/O Wesley Greene personify the meaning of 'superior airmanship.' Pilots like Capt. Gottshall and F/O Greene...exemplify the professionalism and dedication so common throughout the Eagle pilot ranks."

### **ALPA Superior Airmanship Award**

Late on the evening of April 13, 2004, United Flight 854, Boeing 767-300 service from Buenos Aires, Argentina, to Miami, Fla., was in cruise flight at FL310 over the jungles of southern Colombia, South America. Capt. Brian Witcher and First Officers Donald Arlotta and Ross Windom were the flight crew that night.

Capt. Witcher later recalled the flight, up until that moment, as "a normal all-nighter and the last leg of a five-day trip. With Don, the relief pilot, flying, I was moments away from my rest period."

Suddenly, the autopilot warning horn went off, the cockpit went bright with standby lighting, and the first officer's



**Capt. Brian Witcher (center) and F/Os Donald Arlotta (left) and Ross Windom were the pilots of United Flight 854, a B-767 that suffered total electrical failure at night over jungles and mountains of South America.**

panel went blank. In a proficiency checkride, Capt. Witcher had seen a demonstration of what this problem appeared to be—a complete loss of A/C power, with the hydraulic motor generator (HMG) activating to supply power to the captain's instruments.

Capt. Witcher took manual control of the airplane and called for a checklist to deal with the electrical failure.

The B-767 was fast approaching the terrain-critical area south of Bogota, Colombia, and Capt. Witcher thought about diverting to Caracas, Venezuela, to avoid the Andes Mountains lurking below in the darkness. Then the pilots realized that their "simple" electrical problem was something else.

The overhead electrical panel appeared normal, with no lights on except for the battery discharge light. In fact, the entire overhead panel was normal, with only the auto-speedbrake and rudder ratio lights illuminated. The pilots pressed the light-test switch and confirmed that all the lights worked and none of the bulbs were burned out.

F/O Windom arrived from the crew rest area. The three pilots discussed the situation and their options. Shortly afterward, Capt. Witcher's instruments began to fail.

The pilots immediately declared an emergency and asked air traffic control for a clearance to Bogota. They tried to establish radio communications with United's dispatch office, both through HF and satellite radios, without success.

The EICAS displays were full of cautions. The pilots soon realized that no checklist existed to cover the situation in which they found themselves. They knew they had a serious electrical problem, but the HMG should kick in and keep the captain's instruments powered—at least, that's what the book says.

The only radio still working gave up the ghost while the pilots were trying to get vectors from Bogota Center. So much for the book!

Capt. Witcher said later, "While I sat there watching my instruments die, I decided to try something, anything, to get some power back. The alternative was a totally black



cockpit in about 15 minutes or so and a night landing at Bogota, an airport surrounded by very tall mountains, with all of our electronic navigation and communication equipment useless.”

Capt. Witcher reset the generator control circuit breakers. The pilots were surprised when the VHF radio, and Capt. Witcher’s instruments, came to life again.

“No problem now,” they thought. “We still have an emergency, but with some electrical power.”

Their elation was short-lived: the VHF radio quit again, and Capt. Witcher’s instruments began to fail, while the airplane was still about 200 nautical miles from Bogota.

The FAA requires manufacturers to demonstrate that a modern airliner can continue to operate safely for 30 minutes with no electrical power except the juice in the battery. That’s with a new battery, and after the 30 minutes has gone by, it’s anybody’s guess how much longer the battery will provide essential power.

The pilots of Flight 854 squeezed 41 minutes from their 30-minute battery because they turned off everything they could, including the outside lights, to conserve battery power.

The pilots were very relieved when the landing gear lowered when commanded, because unlocking the gear requires some electrical power. Capt. Witcher reset the generator control circuit breaker three times before they landed safely, but with no clearance from Bogota Tower, because their radios still didn’t work. The pilots landed with less than *two volts* of battery power left.

The airplane was certified for extended twin-engine operations and has redundant electrical generating systems to prevent total loss of both A/C and D/C power. The pilots would not learn until after the flight that a single bracket grounds both transformer rectifier units in the A/C electrical system. United’s Maintenance Department eventually found that corrosion had caused a short circuit of the grounding bracket and that the HMG did not come on line because it falsely sensed that the airplane had normal A/C power.

As a result of the Association’s recently expanded video production capabilities, the banquet attendees viewed video recreations of the events, filmed in simulators and scripted from the pilots’ own accounts.

### **Air Safety Award**

They also watched a short video describing the extensive safety activities of this year’s Air Safety Award honoree, Capt. Robert Sumwalt (US Airways, Ret.), who now runs a corporate flight department. The ALPA Air Safety Award, given each year to an ALPA member who has made significant contributions to aviation safety, is the highest safety award the Association bestows.

Capt. Woerth noted that Capt. Sumwalt has made such contributions on every level, from his MEC to the international arena. “Throughout his career, he has worked tirelessly as a pilot advocate and become a recognized expert in the area of aviation human factors,” Capt. Woerth explained.

As just one example, Dr. Curt Graeber, an internationally renowned expert in aviation human factors who now

works for Boeing, noted on the video that, as a result of Capt. Sumwalt’s efforts, Boeing changed all of its flight manuals. The change acknowledges the wisdom of Capt. Sumwalt’s campaign to change the term “pilot not flying” to “pilot monitoring”—a huge difference in the mindset that all pilots should assume regarding the role of the pilot who is not the “pilot flying.”

Capt. Sumwalt most recently served as chairman of ALPA’s Human Factors and Training Group. His previous



**Capt. Robert Sumwalt**

ALPA work, spanning 17 years, includes helping to found ALPA’s Critical Incident Response Program and the Association’s Training Council, and the US Airways Altitude Awareness Program. He also posted a variety of other accomplishments in areas such as runway incursions, cockpit procedures, wind-shear, and safety research and monitoring.

In the course of his activities, Capt. Sumwalt represented ALPA’s views to organizations such as the FAA, the NTSB, aircraft manufacturers, and the Flight Safety Foundation, where he was a founding member of the Icarus Foundation. A trained accident investigator, he also served as a member of the ALPA Accident Investigation Board.

Accepting the prestigious award “on behalf of many,” Capt. Sumwalt remarked on “pressures on our safety structure that we didn’t have just a few years ago.

“Many people have left the profession, either voluntarily or involuntarily,” he noted. “In many cases, pilots are working more days, meaning fewer days off. So, with fewer people to do the work, less ALPA funding for flight pay loss combined with less available free time to do the work, perhaps you may be thinking about getting out of ALPA safety work. You may be asking yourself, ‘Is it all worth it?’”

Capt. Sumwalt invoked the epitaph of Arthur Schindler, who saved thousands of people from the Nazi Holocaust: “And whoever saves a life, it is considered as if he saved an entire world.”

He added, “Let me assure you, the work you are doing does matter. And yes, it does keep people from dying in airplanes.”

The annual ALPA Air Safety Award, Capt. Sumwalt continued, “is not about me. It is about an organization that has a deep conviction about aviation safety.

“Even in tough economic times, ALPA devotes resources to gather its best—frankly, the best in the air safety business—at this annual Air Safety Forum. And that you can be darn proud of!

“Airline pilots: Still strong. Still focused. Still safe!

“Thank you so much for this gracious honor,” he concluded, “and more importantly, thank you for allowing me to serve you for the past 17 years.”