

AMATION EMERGIN

By John Perkinson, Staff Writer

o stop a terrorist, you need to think like a terrorist—which is precisely what the unsuspecting participants of this year's annual Aviation Security Forum, or AvSec 2007, of ALPA's National Security Committee (NSC), were suddenly asked to do.

During one of the many briefings, discussions, and group activities of this 4-day, August event, Amotz Brandes,

consultant and former security agent for EI AI Airlines assigned to Los Angeles, walked AvSec participants through the eight stages necessary to plan a terrorist attack—marking, intelligence gathering, surveillance, planning, tooling up, training and rehearsal, execution, and getaway. Brandes pointed out the kinds of vulnerabilities these criminals look for during this process, adding that "typical attacks take one to five years to execute."

Brandes then turned the tables on the audience, dividing them into four



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groups and providing them with different scenarios. He then asked each group to plot an attack.

This riveting exercise and the ensuing discussion revealed the many challenges that plotters would confront while planning an attack on the air transportation system. AvSec 2007 attendees walked away with a new-found appreciation for the available information about terrorism and the many overlapping layers of airline security that protect our airplanes, airports, and most of all, flightcrews and the traveling public.

A new beginning

AvSec 2007, moderated by ALPA's NSC chairman, Capt. Bob Hesselbein (Northwest), and held in conjunction with ALPA's Air Safety and Security Forum in Washington, D.C., represented a new beginning for the Association: the term "security" was incorporated into the official title of the event. The expanding efforts and prominence of ALPA's NSC, coupled with the exponential growth of aviation security concerns after 9/11, prompted the change.

Capt. Chris Beebe, ALPA's vice-president-finance/treasurer, greeted AvSec participants and highlighted the unique nature of this special event, saying, "ALPA has taken on the responsibility of being aircraft-centric. When it comes to airline security, ALPA pilots know airplanes, they understand how to secure them, and they appreciate those who protect them.

"Many aviation security conferences are held annually throughout the world," he added, "but this is the only meeting that provides a pilot's



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perspective, that starts inside the airplane and moves outward."

Previously called the International Aviation Security Academy, the conference was renamed the Aviation Security Forum, or AvSec, to better describe the active role of security advocates and peers gathering to share, debate, and enrich.

More from the Israeli model

Terrorism was a recurring theme during AvSec 2007 as was the Israeli approach to aviation security—considered by many to be the gold standard.

Rafi Ron, consultant and former director of security at Israel's Tel Aviv Airport, also talked about security from the terrorists' perspective, which seeks creative ways to bypass the consistent but inherently limited barriers of technology. He discussed the need for flexibility within security processes, changes to security system designs, and expanding the scope of detection beyond rigid systems and procedures.

"We need to broaden our perspec-

tive," Ron said. "Ground security alone is insufficient to detect or mitigate these critical threats."

Simple profiling is inadequate, he said. A behavioral approach is more effective, he added, citing examples of how previous terrorist attacks were prevented. The airline industry needs to better educate the traveling public—security is a customer service that passengers should appreciate.

Doron Bergerbest-Eilon, consultant and former senior ranking security official of the Israeli Security Agency, Shin Bet, bolstered Ron's position, further examining the manner in which terrorists try to bypass detection. He talked about Israeli protection efforts to better deter threats, and discussed screening techniques designed to spot suspicious behavior and activities long before passengers approach the airport terminal.

Closer to home

AvSec participants also heard from security analysts from this side of the Atlantic who coordinate intelligence activities with other countries.

Nick Cartwright, the director of Security Technology for Transport Canada, covered making improvised bombs and the rationale behind screening for liquids and gels at airports. Cartwright explained the importance of watching for "people who are doing things that don't make sense."

"The bad guys have developed a terrific patience," said Vito Monteleon, intelligence analyst for the U.S. National Counterterrorism Center, who talked about the characteristics of today's terrorist activities as well as about identifying and assessing threats and plots.

Fighting aviation-related criminal acts is a coordinated, multilayered effort, said John Emery of the International Transportation Office of the U.S. State Department, who discussed the

role of international agreements and the importance of engaging and coordinating with foreign governments to deter terrorism. "Threats to international and civil aviation are ongoing," he said. "Terrorists constantly seek to exploit our aviation defenses."

Jeff Peterson, supervisory special agent for the FBI's Counterterrorism Section, and Christopher Weismantel, supervisory special agent for the Bureau's Violent Crimes Section, explained the FBI's role in aviation security, highlighting the airport liaison agent program and the importance of sharing and coordinating information at federal, state, and local levels.

Protecting the flight deck

AvSec 2007 presenters also reviewed the many efforts since the events of 9/11 to protect the cockpit. John Novak, assistant director of flight operations of the Federal Air Marshal Service (FAMS), discussed the structure and organization behind the "deployment of FAMS teams worldwide."

Novak noted that this deployment offers a "flexible, mobile, and dynamic response capability." He added that the TSA's modus operandi is "all about sharing and being collaborative."

FAMS special agents Jeff Davenjay and Ron Phifer, and Capt. Mike Keane (United), deputy chief of the FAMS Liaison Division, discussed the Federal Flight Deck Officer (FFDO) program, its organization, and the resources available to FFDO participants. They discussed weapons carriage, training, logistics, and other issues, many of which are covered in the July 2007 ALPA white paper, Recommendations to Improve the Federal Flight Deck Officer Program, which is available at www.alpa.org.

Another recent ALPA white-paper topic discussed during both AvSec 2007 and joint Forum presentations was the subject of flightdeck second-

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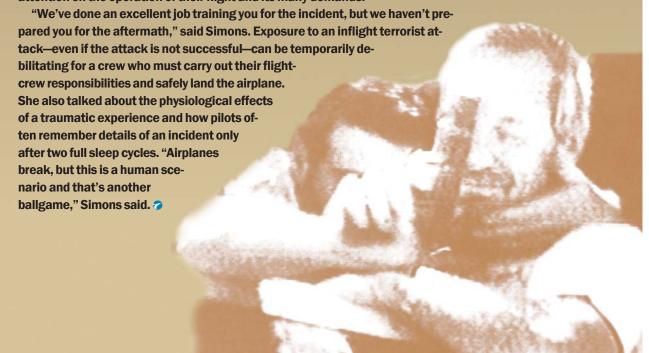
EXAMINING THE MIND

AvSec 2007 delved into the mind of the typical pilot by looking at the physiological and psychological effects of a terrorist act. Lt. Col. Dave Grossman, author and expert on human aggression and the roots of violence and violent crime, provided a fascinating peek into the human psyche to reveal how it responds during periods of intense stress.

Confronted with acts of extreme force and shocking brutality, unconditioned crewmembers and passengers often fail to defend themselves. Grossman said that this reaction is understandable. He noted that sudden, extreme fear produces vasoconstriction, a physical response that prevents blood from circulating within the forebrain, the region responsible for rational thought. This temporary state of virtual paralysis during the violent moments of a hijacking attempt or catastrophic emergency can transform witnesses into "psychological casualties," who may later suffer from deep depression and feelings of remorse.

"You may think people are going to take action, but unless they're trained, they don't," Grossman said as he described specialized training and conditioning available to pilots and, particularly, FFDO participants. "Stress inoculation," as he referred to it, involves exposure to stress in a controlled environment and can help individuals overcome this immobilizing condition and act to deter terrorist efforts.

Dovetailing with Grossman's discussion, critical incident response consultant Susan Lewis Simons talked about coping with an extreme, event-related stress and examined a scenario in which crewmembers foil a violent terrorist attack, and then refocus their attention on the operation of their flight and its many demands.





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ary barriers. Capt. Ed Folsom (United), ALPA Security Council chairman, talked about the installation of the "fortress" (or Phase II) door on U.S. passenger airliners as a result of 9/11, but reported that secondary barriers are needed in conjunction with carefully considered flightdeck access procedures to provide added protection and discourage attacks when authorized persons are entering or leaving the cockpit.

Secondary barriers have been installed on all United B-757s, and soon B-747s will be equipped. The device United is using is lightweight, inexpensive, and easy to deploy and install.

Folsom also addressed the lack of secondary or even primary barriers on all-cargo airliners. He spoke of the dangers of hijackers hidden within cargo containers and overpowering unprotected flightcrew members, and questioned why federal regulations requiring protection for passenger airliners consistently excluded air cargo.

Details about secondary barriers are outlined in Secondary Flight Deck Barriers and Flight Deck Access Procedures,

a Call for Action, ALPA's white paper available to members on the ALPA website (see also "ALPA Pushes For Secondary Flightdeck Barriers," August, page 30).

Dave Thatcher of ARINC talked to AvSec participants about the Cockpit Access Security System, which allows pilots to jumpseat on airliners of other participating airlines.

Kevin McGarr, executive vice-president of the Canadian Air Transport Security Authority, discussed the features of the Canadian Restricted Area Identification Card (RAIC), a biometric-based security-screening system, currently used at more than 20 airports in Canada.

Jerry Wright, manager of safety and security for ALPA's Engineering and Air Safety Department, explained CrewPASS (Crew Personnel Advanced Screening System), another biometric-based flightcrew screening system (discussed in Recommendations of the Air Line Pilots Association, Int'l, for Creating CrewPASS, another ALPA white paper available on the Association's Security web page).

The cargo component

Capt. Bill McReynolds (FedEx), NSC vice-chairman and chairman of the ALPA President's Committee for Cargo, hosted the air cargo component of AvSec 2007. In his remarks, he talked about increased security measures since 9/11, such as enhanced cockpit doors, the FFDO program, changes to the "Common Strategy," criminal history record checks, and the creation of the TSA and the Department of Homeland Security, but stressed that much of the current attention is directed toward passenger operations.

Why the difference?

"Passengers vote, boxes don't," said McReynolds, repeating a frequently used expression in the airline industry that sums up the regulator's view of the importance of securing passengers versus freight. Nonetheless, air cargo poses as big a threat—if not bigger—to public safety and security as passenger operations, warranting additional attention and careful consideration.

McReynolds talked about the difference between public and private airports, and the separate set of cargo security standards applied to each. He highlighted the air cargo operation in Wilmington, Ohio, near Dayton, and the serious safety and security risks this facility currently poses.

He also talked about a recent order FedEx placed for B-777s, which will not include any form of fortress doors to secure the cockpits. "It's a money issue in which saving a few dollars is more important than security," said McReynolds, shaking his head. "At times, it feels like we're barely treading water."

Vic Parker, TSA branch chief for Air Cargo Policy and Plans, said, "The TSA takes a risk-based, layered approach to air cargo security that balances the twin goals of enhancing security without unduly impeding the flow of commerce."

He talked about his agency's current role in air freight security and the changes that will come from the "Implementing Recommendations of the 9/11 Commission Act of 2007," which recently became public law. This legislation requires background checks of the 50,000 freight forwarders and aircraft operators and employees, and extends the security identification display area (SIDA) to include all-cargo operations at public airports. The law sets a number of new screening standards to be implemented between now and 2010.

Dr. Lyle Malotky, chief scientist of the TSA Office of Security Technology, examined the future of air cargo screening in the United States. He talked about current research-and-development efforts and suggested that, by

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SHEDDING LIGHT ON NEW THREATS TO AVIATION SECURITY

AvSec 2007 participants listened as FBI Supervisory Special Agent Gary Adler and Ed Garlick, an FAA official from the New York TRACON, discussed their experience responding to a cockpit laser illumination incident. The presentation included an audio recording of an air traffic controller's conversation with the pilots and a visual display of the controller's monitor tracking the flight.

The illumination temporarily blinded one of two pilots of a small charter jet on approach to Teterboro Airport in New Jersey at 5:25 p.m. on Dec. 29, 2004.

Ironically, the affected pilot and a local law enforcement officer later flew in a helicopter to the scene of the crime where they were illuminated a second time.

The defendant in the case was charged with several counts, including violation of the Patriot Act, but specific law failed to address "flashing" a flight crew (the defendant later accepted a plea bargain). This incident has led government officials to consider making laser interference with air traffic a federal offense. Congress is reviewing proposal language.

means of shared technologies, the United States will be able to work more closely with its international partners.

Stephen Conrad, director of air cargo security for Transport Canada, provided a Canadian perspective, noting that "we're moving more toward performance-based regulations." He added that his organization is also working with international partners to test a variety of existing and leading-edge screening technologies.

"Securing the global air cargo supply chain is a shared responsibility among nations, governments, and industry," he said.

Continuing the trend, ALPA also offers a July 2007 white paper, titled

Recommendations for Improving Air Cargo Security, which is available at www.alpa.org.

Putting security in perspective

Hesselbein summed up aviation security's emerging role at ALPA's 53rd Air Safety and Security Forum, saying, "Seeing security through the eyes of an attacker and understanding how dynamic security efforts thwart terrorist planning and efforts ensured that ALPA pilots left AvSec 2007 appreciating ongoing security efforts and, importantly, armed with valuable information and the necessary insight needed to protect their passengers, cargo, and crews."