

The Corporate Aviation Safety Seminar (CASS) essentially is a “deep dive, an opportunity to dig deeply into safety issues and take back information and ideas that you can apply to your own individual organization,” said Steve Brown, senior vice president of operations for the National Business Aviation Association (NBAA), joining Bill Voss, president and CEO of Flight Safety Foundation (FSF), and Kevin Hiatt, the Foundation’s COO, in

welcoming the more than 325 aviation professionals who attended the 57th annual CASS, presented by FSF and NBAA April 18–19 in San Antonio, Texas, U.S.

“What is presented here is only information ... until it is taken back to your department and used to mitigate risk,” added George Ferito, director of rotorcraft business development for FlightSafety International and chairman of the FSF Corporate Advisory Committee.

The seminar featured two panel discussions — one focusing on fatigue, the other on general safety priorities — and 13 individual presentations on a variety of cutting-edge topics.

Roger Lee, director of corporate safety and quality for Hong Kong-based Metrojet, recipient of this year’s Business Aviation Meritorious Service Award, led off with a presentation of “the young dragons” — business aircraft operators in China, whose current

TAKEOUT MENU

BY MARK LACAGNINA



Frank Jackman



Corporate aviation safety specialists shared information and ideas to be taken home and used.

© Stephen Strathdee/Stockphoto



Snyder (left);
Stein, Ferito and Grace



fleet of 870 aircraft, 6 percent of the world fleet, is expected to grow by 20 percent a year, or 10 times the U.S. rate. “Growth is exciting, but growth comes with risks and problems,” not the least of which are limited airport access and a “disastrous shortage” of fixed base operations, Lee said.

The ingredients of an effective safety management system (SMS) were included in several presentations. Flight risk assessment tools (FRATs), critical SMS elements, were examined by Peter v. Agur Jr., founder and director of The VanAllen Group. He outlined a six-month study of the use of “second-generation,” or software-based, FRATs by 10 aviation departments. The study showed that the tools are highly beneficial in highlighting known risks and identifying unknown risks, but need to be made easier to use and more effective.

In a presentation developed with John Sheehan, a colleague at the International Business Aviation Council, Jim Cannon, director of the International Standard for Business Aircraft Operations (IS-BAO), outlined the fundamentals of SMS implementation, including the prerequisite of management commitment to safety as a core value. Cannon also stressed that the results of safety management must be “fast-tracked” and readily apparent: “There can be no delay in assessment and dissemination of safety information.”

Rick Boyer, aviation manager for SCANA Corp., detailed how his

department developed the “center-piece” of its SMS, a hazard reporting and tracking system that progressed from a hot line message system (“no one used it”), to hard-copy reporting forms, to an automated, PC-based system with Internet access. “While it isn’t easy to implement a hazard reporting and tracking system, it isn’t all that hard, either,” Boyer noted.

SMS implementation today is being impeded by the same types of skepticism and suspicion that fomented resistance to the concept of crew resource management (CRM) decades ago, said Chris Broyhill, chief pilot for Sprint, in a presentation co-authored by fellow Embry-Riddle doctoral candidate David Freiwald. “What CRM did for the cockpit, SMS does for an organization,” Broyhill said, noting that before the advantages of safety management can be realized, senior managers must direct the evolution of a safety culture in which SMS will be embraced.

The safety management theme also was addressed by Thomas Anthony, director of the Aviation Safety and Security Program at the University of Southern California. Anthony probed the physiological and psychological aspects of hazard detection, focusing on the need to *notice*, which, unlike *seeing*, is “a form of recognition that involves subconscious processing.”

Fighting Fatigue

Panelists Curt Graeber, president of The Graeber Group and an FSF fellow;

Doug Carr, NBAA vice president for safety, security and regulation; and Leigh White, president of Alertness Solutions, explored the causes, consequences and prevention of pilot fatigue. Graeber likened fatigue to “subtle incapacitation,” which can be mitigated only by sleep. Carr discussed a recent regulatory interpretation by U.S. Federal Aviation Administration (FAA) counsel that disallows controlled rest on the flight deck by a member of an unaugmented corporate flight crew. He called the interpretation “baseless” and contrary to scientific evidence that controlled rest is a proactive safety measure that can prevent fatigue-related hazards, such as microsleep on final approach. White proposed a demonstration project to prove the operational validity of controlled rest on corporate aircraft flight decks.

Fatigue and controlled rest on the flight deck were high on the list of business aviation safety priorities discussed by panelists Ferito; Dan Grace, director of flight operations, safety and security for Cessna Aircraft; Cliff Jenkins, aviation director and chief pilot for Milliken and Company; and Peter Stein, director of flight operations for Johnson Controls. Priorities also included functional check flight safety, erosion of aircrew skills in the global recession and the tendency to concentrate on checking pilots rather than training them. When the microphones were distributed among attendees, several more



Cox (left), White and exhibit area

priorities were suggested. One was “ego management” on the flight deck, which prompted a lively exchange of ideas, as did a question of how to get all aviation department members to buy into and support an SMS.

Robert Sumwalt, a member of the U.S. National Transportation Safety Board, followed up with a presentation on factors that may persuade pilots to disregard standard operating procedures (SOPs), a transgression that has figured in many accidents. He noted, for example, that SOPs themselves often are at fault because they are poorly conceived or poorly written. “If people aren’t following a procedure, it may not be the people, it may be the procedure,” Sumwalt said. “Change it. Come up with something that will work.”

Stuart Cocks, business development manager for Flight Data Services, presented information developed by the company’s executive vice president, John Flemming, on how corporate and air carrier operators are using flight operations quality assurance (FOQA) data to improve their training programs and subsequently to gauge the effectiveness of program revisions. Cocks noted that while FOQA data can show the “what, where and when” of an event, such as an unstabilized approach, a follow-up nonpunitive interview of the flight crew often is valuable in determining why it occurred.

An overview of the FAA’s Aviation Safety Information Analysis

and Sharing (ASIAS) program was presented by Tony Fazio, the agency’s director of accident investigation and prevention. The program seeks to identify leading safety hazards requiring further study and mitigation, based on voluntary reports and data collected, de-identified and analyzed by Mitre Corp. Fazio noted that the information currently is supplied mostly by the airlines, and he urged business aviation aircraft operators to participate in ASIAS.

Valuing Safety

John Cox, CEO of Safety Operating Systems, discussed “time-driven, activity-based costing,” a proven method of gathering and using financial data to demonstrate the value of safety programs to corporate officers “who don’t speak the language of aviation.” Cox said the method is “time- and labor-intensive but worth the effort.” He gave an example of the painstaking effort involved in demonstrating that investment in a \$1 million program to reduce flight diversions would save a company nearly \$1 million *each year*.

Quay Snyder, president and CEO of the Aviation Medicine Advisory Service and Virtual Flight Surgeons, discussed how to identify the “failing aviator” — a pilot who no longer can perform proficiently — and how to help him or her. Snyder outlined a number of causal factors, including fatigue-inducing sleep apnea and undiscovered medical problems, and noted that aging, by

itself, does not appear to be a critical element in “losing the right stuff.” “Most cases, especially when identified early, are treatable and can result in a return to duty,” he said.

Tips on managing security and medical risks during travel were provided by MedAire’s global director of aviation security, Denio Alvarado. “Security and medical emergencies can affect anyone, anywhere,” he said. “Companies must establish and *test* travel risk management programs, and incorporate them in the SMS.” Alvarado emphasized the need for emergency response planning by describing a case in which preplanned actions were implemented to protect company employees and evacuate them to a safe haven after a general strike escalated into violence and vandalism that effectively shut down the airport where their aircraft was parked.

David Adams and Camille Khodadad, partners in Hall Prangle and Schoonveld, completed the presentations with an examination of judicial actions following accidents. Outlining six recent cases, they noted that criminal investigations and prosecutions have become a nearly automatic response to aircraft accidents in many countries. Adams and Khodadad discussed how aircraft operators can prepare for and respond to such situations, and recommended that actions and countermeasures be established and incorporated in the company’s emergency response plan. 🌀