

ISASI Update

Periodic News from the International Society of Air Safety Investigators

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Gary DiNunno, editor

Editor's Note to ISASI Update Readers

This is the first issue of *ISASI Update*, a periodic, electronic newsletter designed to bring you a quick look at ISASI issues, information, and events with links to more detailed information from other ISASI sources. ISASI President Frank Del Gandio outlines a number of changes in ISASI communications in his July-September *Forum* "President's View" column. He also says you will have an opportunity to suggest names for this electronic newsletter. To ensure you continue getting this newsletter, ISASI must have your current email address. Yes, I know,...if you're reading this then ISASI has your current email address. But what about next week when you switch carriers or change your address with your current carrier? Let ISASI know. Send an email to isasi@erols.com to give us your new contact information.

ISASI Annual Conference Starts on August 19

ISASI's 44th annual conference on air accident investigation will begin in about a month in Vancouver, BC Canada and registration is still open. Technical sessions over three days include keynote speakers from Canada, Korea, and France. Three panel discussions cover preparing a new generation of investigators and handling sensitive information. Fifteen technical papers have been selected for presentation. Before this technical program, two workshops will cover investigating composite failures and military air safety investigations. A separate registration is required for the prequel workshops. For more information go to <http://www.isasi.org> and click on the convention logo. A summary of the panel discussions and workshops can also be found at <http://www.isasi.org/docs/Web-RoundUp-July-&-Aug-2013-A.pdf>.

ICAO Approves Amendment 14 to Annex 13

The International Civil Aviation Organization approved an amendment to the forward of Annex 13 of the Chicago Convention last February that becomes effective July 15, 2013. Annex 13 codifies aircraft accident and incident investigation for all member states. Amendment 14 to Annex 13 establishes a new definition for "contributing factors" and amends the definition of State safety programs, transferred language on state safety programs to Annex 19, amends the Standard on establishment of a database, creates a new provision on assessment of accident and incident database, and expands the list of serious incidents. More information will become available after an ISASI review of the changes. ICAO granted ISASI observer status on the basis of technical knowledge, past assistance to ICAO, and acceptance in the investigative community.

Holistic Accident/Incident Investigation Is Examined

In a paper presented to the 2012 ISASI Conference in Baltimore, Maryland, author Phil Sleight, Principal Inspector of Air Accidents at the Air Accidents Investigation Branch, UK, suggests the group system model that most Safety Investigation Authorities use for air accident investigation is easy to follow and does result in a reasonably thorough and consistent investigation. However, he notes, it can take a long period of time for the group reports to be produced and it is labor intensive, so it uses a lot of resources. The system of specialist groups only dealing with the facts within their specific area can also promote a “silo” attitude, as each group focuses on its own particular area and does not communicate effectively with other groups.

With a holistic approach, each stakeholder is very much part of the analysis as well as the gathering of factual evidence, Sleight says. The holistic approach encourages the engagement of all of the parties at an early stage of the investigation, which then continues throughout the investigation process. Highlights of this presentation can be found in the July-September *Forum* or at <http://www.isasi.org/docs/Forum-July-Sept-2013-for-WEB.pdf>. The full presentation can be found on the ISASI website at http://www.isasi.org/pg_seminar.html under the tag “ISASI 2012 Technical Papers”.

Four Students Selected as ISASI Scholarship Awardees

Congratulations to four college students selected as recipients of this year's ISASI Kapustin Memorial Scholarships. Awardees include Camille Burbank, Cranfield University, UK; Jason Goodman, Embry-Riddle Aeronautical University, USA; Lauren Sperlak, Purdue University, USA; and Mackenzie Dickson, Embry-Riddle Aeronautical University, USA. During a May meeting of the ISASI Mid-Atlantic Regional Chapter, Chapter President Ron Scheede challenged attendees to donate to the Kapustin Scholarship Fund. They responded with a total of \$3,552. More information at <http://www.isasi.org/docs/Web-RoundUp-July-&-Aug-2013-A.pdf>.

Risk Pathways in Air Traffic Control

Authors Michael W. Sawyer, Ph.D., Katherine A. Berry, Ph.D., and Edward M. Austrian, Fort Hill Group, Washington, D.C. report in a presentation to the 2012 ISASI Conference that the U.S. FAA has begun a major revision of the National Airspace System (NAS), called Next Generation Air Transportation System. NextGen is designed, they say, to improve the convenience and dependability of air travel in U.S. airspace while increasing safety and reducing environmental impact. They also note that introduction of new capabilities, decision-support tools, and automation through NextGen operational improvements offers the potential to change the daily activities and operations of air traffic controllers in the NextGen environment.

In their presentation, the authors show how narrative safety data can be used to quantify prominent risk pathways to permit development of targeted mitigation strategies. Risk pathways identify and quantify the statistically significant relationships between causal factors for a given set of data.

While NextGen may produce many positive safety improvements, the authors say the introduction of each new system and capability also offers the possibility of increasing the human contribution to risk in the National Airspace System. From a risk

management viewpoint, research into these effects is needed to address the potential for both positive and negative impacts on the safety of the NAS. For more information look in the July-September Forum or go to <http://www.isasi.org/docs/Forum-July-Sept-2013-for-WEB.pdf>. The full presentation can be found on the ISASI website at http://www.isasi.org/pg_seminar.html under the tag "ISASI 2012 Technical Papers."

Australian ISASI elects officers to new terms

ASASI, at a recent general meeting, swore in officials for their next 2-year terms in office. Lindsay Naylor and Rick Sellers return to office as President and Vice President. Paul Mayes will continue as Treasurer, but decided to relinquish his long-held duties as Secretary to Rick Davies. See <http://www.isasi.org/docs/Web-RoundUp-July-&-Aug-2013-A.pdf>.

Accident Investigation Tools and Techniques are Evolving

Our understanding the world around us has evolved says author Jay F. Graser, ISASI member and Vice President, Gemini Technologies, Gainesville, VA, so have the tools available to analyze flight and its inherent dangers. In a paper presented during the 2012 ISASI Conference

In an accident investigation how we collect and analyze data, drives timely and accurate safety related changes in the aviation industry, Graser says. While accident investigators are continually bombarded by more complex and sophisticated technology, "we cannot lose sight of the fact that we are still dealing with the positive and negative aspects of having humans in the process", he notes. Tools and techniques have evolved around the available technology throughout history, but in the end, the human in the equation becomes the critical factor. Our benefiting from those tools and techniques is dependent our willingness to adopt and apply them, as well as act on what they are telling us. For more information look in the July-September Forum or go to <http://www.isasi.org/docs/Forum-July-Sept-2013-for-WEB.pdf>. The full presentation can be found on the ISASI website at http://www.isasi.org/pg_seminar.html under the tag "ISASI 2012 Technical Papers".

News Bits and Other Information

Additional articles that appear in the Roundup section of the ISASI website:

ISASI Upgrades Member Communications

SCSI and Czech Parties Organize Safety Training

Reachout Forty-Three Held in Korea

MARC Members Greet New FSF Chief Kevin Hiatt

ESASI Annual Seminar Held in Madrid, Spain

Singapore Hosts Second Int'l Accident Investigation Forum

Go to <http://www.isasi.org/docs/Web-RoundUp-July-&-Aug-2013-A.pdf>.

Defying Gravity, Safely and Surely

Deborah A. P. Hersman, Chair of the U.S. National Transportation Safety Board recently told attendees of the Wings Club in New York that every day, more than 2 million people are aloft on U.S. airlines-- defying gravity, safely and surely. She noted that today's safety record has been achieved through the work of Wings Club members

and the entire aviation community -- operators, manufacturers, regulators, labor, service providers and, yes, the independent accident investigator.

A host of developments brought us to today's record, Hersman said. As examples, she pointed to improved airframes and engines, enhanced technology for air traffic control, weather detection, simulated flight and training, and more. She added that there is also a greater appreciation of human factors with improved practices, such as Crew Resource Management.

Hersman observed that the absence of accidents does not equal safety. "Safely defying gravity thousands of times each day requires constant vigilance," she said, "that's because risk remains and always will. Hersman said, "What the aviation community has done is learn and apply effective ways to mitigate many of the risks that we've identified." For more of Hersman's speech go to the July-September *Forum* or <http://www.isasi.org/docs/Forum-July-Sept-2013-for-WEB.pdf>.