ISASI FORUM

"Air Safety Through Investigation"

OCTOBER–DECEMBER 2010

This issue is devoted to ISASI 2010 Sapporo events

MIKE POOLE

2010 Jerome F. Lederer Award Recipient

"Many people in aviation are really dedicated, and ISASI exemplifies this quality...."

By Esperison Martinez, Editor

Presentation of the Lederer Award is a major highlight of the Society's annual seminar and the main event of the awards banquet marking the close of the seminar. And the ISASI 2010 Sapporo banquet was no exception. The evening was filled with gaiety, rekindling of tin-kicking friendships, and abundant peer respect. The elegantly served meal was a napkin dab away when President Frank Del Gandio said: "This is the time when we give away the coveted Jerry Lederer Award."

Michael Poole, right, accepts the ISASI 2010 Jerome F. Lederer Award from President Frank Del Gandio.

The Society presents its annual Jerome F. Lederer Award for outstanding lifetime contributions to technical excellence in furthering aviation accident investigation and achieving Society objectives. ISASI is an organization dedicated to enhancing aviation safety through the continuing development and improvement of air accident investigation techniques. Jerry, as he preferred to be called, joined ISASI in 1965 and was long recognized as the "Father of Aviation Safety." His aviation lore stretches back to the time of wooden wings and iron men and forward to NASA and manned space flight. He "flew west" at age 101 in 2004.

In calling ISASI member Michael Poole forward as this year's recipient of the Jerome F. Lederer Award, President Del Gandio recounted some Lederer lore. He said, "I'm sure many of you in this room don't know about Jerry and never met him. I can remember the time when some students attending a seminar got the chance to sit and talk to him. Later they said it was the most exciting point of their lives. Jerry had that effect on you.

"I know, because that's the way I was touched. Way back in '82 I heard the old guys, like I am now, talk about Jerry. I thought, "Just to shake his hand, that would be enough." In '86 I was Society secretary and the only Society officer at the Munich, Germany, seminar. I got to talk to him every day. It was an enduring and everlasting connection. He called me often. And if I didn't hear from him for a month, I called him to make sure he was still alive."

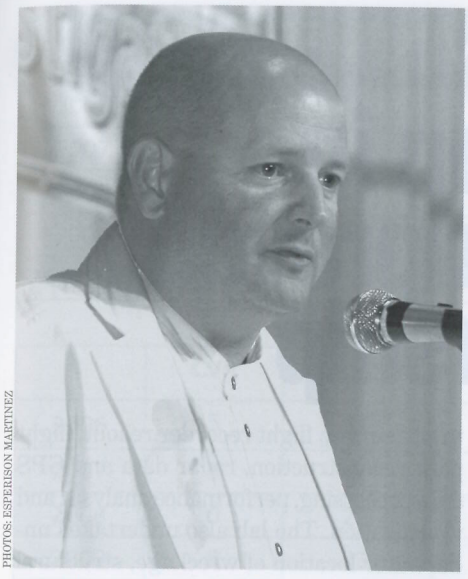
Del Gandio continued to regale the dinner group with "Jerry" stories, including the time when then FAA Administrator Marion Blakey, speaking at a Society seminar, presented Jerry a plaque, only to overhear the ever funster say, "I would rather have a kiss." She obliged.

Remembrances over, President Del Gandio said that the 2010 nominations garnered five entries for consideration by the 12-member Award Committee, chaired by Gail Braden. The review process ended with selection of Michael Poole, a member of the Canadian Society.

Del Gandio then turned to the recipient standing by his side and with a broad smile said, "It is my pleasure to introduce you to Michael Poole, our Lederer Award winner." He continued with Michael's background.

"Mike is a professional engineer with a current pilot's license and is recognized internationally as an expert in the field of flight data analysis. He started his career in the field of accident investigation in 1977 and worked for more than 20 years with the Transportation Safety Board of Canada. During his years at the Board, his accomplishments contributed to a better understanding of the issues involved with flight data analysis. For the last 15 years of his career at the TSB, he developed and was the head of the flight recorder and performance laboratory. He was the Flight Recorder Group chairman on behalf of the TSB on all major accidents in Canada, including Swissair 111 as well as several international accidents.

"Mike was the researcher and author of the light bulb filament impact dynamics study. This research was presented to ISASI in 1986 and is the international standard within ICAO on how to analyze light bulb



PHOTOS: ESPERISON MARTINEZ

filaments to determine if they were on or off during impact forces. He then shifted gears to flight recorders and was responsible for initiating and driving the development of the Recovery Analysis and Presentation System (RAPS) for flight data analysis in his early days at the TSB.

"Mike's innovative and unique approach to using software to decode the black box instead of relying on the recorder manufacturer's interface was the first system in the world that enabled investigators to accurately recover data dropouts. In 1986, he became the first person worldwide to use flight data to develop an interactive 3-D flight animation on a mini-computer. He was a leader in the use of animation systems and the ethics of how they should be used objectively so as not to be misleading since 'seeing is believing.'

"The software developed under his leadership was used to recover data on Tornados for the German Air Force in 1989 as prior to this data were lost every time the aircraft executed a high 'g' turn. This technology was also used for the first time on a major civil accident—1991 Bangalore, India A320—to recover data initially lost during the first impact. This radically changed the outcome of the investigation as the investigators initially suspected engines to be a factor, which was subsequently discounted when the missing data were recovered. He was also a pioneer in applying digital audio analysis techniques to cockpit voice recordings.

"Ever creative in business solutions, Mike created a 'specific purpose account' in Canada whereby Germany, the U.S., France, and Australia contributed to co-fund the development of the unique TSB software replay system culminating in international collaboration on the software development and its eventual commercialization to Flightscape in late 2001 to enable other countries to use the TSB technology. Mike was a co-founder of Flightscape and is a now a member of the executive management team at CAE Flightscape, after CAE acquired Flightscape in August 2007.

"The Flash Air accident in Egypt was the first accident in history in which the state of occurrence (investigating authority), state of manufacturer, state of passengers, and the aircraft manufacturer all used the same flight data analysis software supplied by Mike's company, significantly improving the investigation progress and trust. Mike assisted several countries with the development of their lab capabilities both from when he was at the TSB and in the private sector. He has represented Canada at ICAO on the FLIREC (Flight Recorder Panel) where he succeeded in establishing FOQA as an ICAO standard. He has also represented the TSB at EUROCAE for international flight recorder standards.

"Mike is a long-time member of ISASI and has presented papers at many seminars. He is a long-time friend of mine and of this organization. Mike, it is my great pleasure to present you the 2010 ISASI Jerry Lederer Award. Congratulations!"

When the thunderous applause had quieted, Poole, standing at the lectern, looked out at the audience and said, "This is indeed a surprise and an honor." He then looked down at his tropical stark white linen vested suit and said, I want to start off by explaining why I am dressed like this! He went on, "I wasn't planning on being here. I was on my way to Nigeria...." He, of course, was unaware that he had been selected to receive the Lederer Award. But Barbara Dunn, president of the Canadian Society, knew and when she discovered he was going elsewhere on a business trip she e-mailed him this message: "You have to come. You have to come. You HAVE to come." But she didn't tell him why.

"Mike's innovative and unique approach to using software to decode the black box instead of relying on the recorder manufacturer's interface was the first system in the world that enabled investigators to accurately recover data dropouts. In 1986, he became the first person worldwide to use flight data to develop an interactive 3-D flight animation on a mini-computer. He was a leader in the use of animation systems and the ethics of how they should be used objectively so as not to be misleading since 'seeing is believing.'"

Mike, always independent minded, ignored her plea and headed for Nigeria via France for some informal meetings. In France, he discovered the person he was to meet in Nigeria (chairman of the AIB, Dr. Sam Oduselu) wanted to also go to ISASI in Sapporo. Mike contacted Dunn and said, "It looks like I am coming to Japan after all." But he still did not know what awaited him. Thus he had not packed a traditional business suit, instead packing for very hot weather in Nigeria. Once the white tropical suit was explained, Mike answered the proverbial question: How did I get into aviation? He said: "My father was a fighter pilot, and it's in the blood." Then he added the real story, which follows in extracts from his acceptance speech:

"When I was about 15 years old..., I was in a school yard and met a young man who was taxiing a radio-controlled airplane around the parking lot. I couldn't believe it—it was just amazing. I started talking to him and I asked, 'Are you going to fly it?' He said, 'I don't know how to fly.' I said to him 'the winds are light, visibility is 93 million miles (we could see the sun). How hard can it be?' He then proceeded to advance the throttle and then came that magic moment when an airplane takes off. I say a 'moment' because it literally was a 'moment' as 8 seconds later we had what is called in our industry a major hull loss! I got my first taste of accident investigation due to this accident. I was the investigator, I was the primary witness, and as it turns out, I was also a primary cause, having persuaded him to fly when he should not have!"

His interest never waned. His college years were dedicated to aerospace engineering study and an internship with the Canadian Aviation Safety Bureau. The internship didn't come easy, and it wasn't glamorous. "But I got exposed to many cool things. One of them was the ground work in light bulb filament study."

(continued on page 30)

Lederer Award Winner, *continued from page 17*

Unbeknownst to him, that exposure was his career grail.

Down that career road, the exposure led to winning a light bulb filament impact study contract that required heavy research looking at light bulb filaments with a scanning electron microscope. That work led to development of a paper presented at an ISASI seminar in the mid 80s. The subject created a lot of interest and he caught the attention of the then executive director of the Canadian Aviation Safety Bureau (now the TSB) who was at the ISASI meeting where Mike presented. "Before I left for the ISASI conference, I asked about a job at the Bureau, but I was told that it didn't look too good—hiring freezes. When I got back home, I had a letter that told me I won a competition, which I never remember applying for, and that was the start of my TSB career." And that opened the doors to all his achievements and outstanding service to aviation that was outlined by President Del Gandio.

Mike also spoke to his association with ISASI: "In 1985 in Phoenix, my first ISASI, I was 25 years old and what did I see: I saw an opportunity to learn from a lot of experts. I saw an opportunity to hear a lot of diverse views. And I saw a truly multicultural, international organization. Mostly, I saw a community that I wanted to be part of. Since '85 I think I have missed maybe four seminars. Many people in aviation are really dedicated, and that's what I really like about ISASI. ISASI exemplifies this quality."

Throughout his shared recollections, Mike kept his narrative light, causing eruptions of laughter at some of his more humorous descriptions, especially when he took a few moments to poke fun at some of the highlights of the seminar. But he also had his serious moments, such as when he spoke of his award. "It's a great honor, but it also means I'm getting older and I would like to think wiser. Maturity has given me a very valuable and broad perspective, and ISASI has significantly influenced the way I think professionally and in my personal life. For that, I'm very thankful.... I stand before you wiser and older. But it's about you, the members of ISASI whom I deeply respect. Having received this award from my peers and colleagues is quite rewarding. I do thank you very much."

Mike received a standing ovation and enjoyed the personal thanks that followed from the many people who have had the pleasure of his friendship over the years. ◆

In Memoriam, *continued from page 5*

Safety Investigators (AASI) or Air Safety Investigator Association (ASIA), I determined that the membership should be pledged to or dedicated to aviation safety rather than associated with aviation safety and the name Society would be more appropriate. I selected Society of Air Safety Investigators (SASI), and Joe agreed.

I designed the logo. I wanted to emphasize safety, thus the large golden "S" surrounding the entire blue sky with aircraft entering and exiting the sky. They represent the past, the present, and the future. Additionally, they represent general aviation and commercial aviation. Joe concurred with the design.

A young attorney in the CAB by the name of Charlie King volunteered and agreed to do all the legal work. We determined the content of the original by-laws and what they should reflect, and Mr. King composed them. In the spring of 1964, SASI was approved as an organization.

Joe Fluet appointed himself president and I was assigned to be the secretary-treasurer. Joe assigned the membership numbers giving himself Charter Member 001, Bobby Allen, director of the Bureau of Safety, Charter Member 002, and assigned me Charter Member 003. The original dues were $10. Two of the original honorary members were Alan Boyd, chairman of the Civil Aeronautics Board, and Najeeb Halaby, administrator of the Federal Aviation Administration.

I returned to Fort Worth in 1969 and was not involved with the organization becoming international. I am eternally grateful to anyone who had anything to do with it becoming international as safety issues definitely are international. I was chief of the Fort Worth field office of the NTSB for 10 years and retired in 1986. ◆

ISASI Information

OFFICERS

President, Frank Del Gandio
(frank.delgandio@faa.gov)
Executive Advisor, Richard Stone
(rbstone2@msn.com)
Vice-President, Paul Myers
(candpmayes@bigpond.com)
Secretary, Chris Baum
(chris.baum@alpa.org)
Treasurer, Tom McCarthy
(tomflyss@aol.com)

COUNCILLORS

Australian, Lindsay Naylor
(lnaylor@spitfire.com.au)
Canadian, Barbara Dunn
(avsafe@shaw.ca)
European, Anne Evans
(aevans@aaib.gov.uk)
International, Caj Frostell
(cfrostell@sympatico.ca)
New Zealand, Peter Williams
(pgwilliams@clear.net.nz)
United States, Toby Carroll
(toby.carroll@coair.com)

NATIONAL AND REGIONAL SOCIETY PRESIDENTS

Australian, Lindsay Naylor
(lnaylor@spitfire.com.au)
Canadian, Barbara M. Dunn
(avsafe@shaw.ca)
European, David King
(d.king@cranfield.ac.uk)
Latin American, Guillermo J. Palacia
(Mexico)
New Zealand, Peter Williams
(pgwilliams@clear.net.nz)
Russian, Vsvolod E. Overharov
(orap@mak.ru)
SESA-France Chapter, Vincent Fave
(vincent.fave@aviation-experts.com)
United States, Toby Carroll
(toby.carroll@coair.com)

UNITED STATES REGIONAL CHAPTER PRESIDENTS

Alaska, Craig Bledsoe
(craig_Bledsoe@ak-prepared.com)
Arizona, Bill Waldock
(wwaldock@msn.com)
Dallas-Ft. Worth, Tim Logan
(tim.logan@wnco.com)
Great Lakes, Matthew Kenner
(mtkenner@esi-il.com)
Los Angeles, Inactive
Mid-Atlantic, Ron Schleede
(ronschleede@aol.com)
Northeast, David W. Graham
(dwg@shore.net)
Pacific Northwest, Kevin Darcy
(kdarcy@safeserve.com)
Rocky Mountain, David Harper
(david.harper@kirkland.af.mil)
San Francisco, Peter Axelrod
(p_axelrod@compuserve.com)
Southeastern, Robert Rendzio
(srca@snowhill.com)