



vertiflite Commentary

Advancing Vertical Flight Technology in Demanding Environments

By Mike Hirschberg, Executive Director

Seventy years ago, on February 25, 1943, twenty-six year old Edward Katzenberger stood up in a high school in Stratford, Connecticut and called a meeting to order. Those in attendance had gathered with an ambitious goal in mind – to establish an organized scientific society capable of attracting and holding the attention of an entire industry in disseminating information on what were then called rotating-wing aircraft. At that meeting, they founded the American Helicopter Society.

In 1943, with the world at war, the Allies' fledgling rotating-wing industry had few legends. Igor I. Sikorsky was one. His VS-300 had first flown just four years earlier; the U.S. Army Air Forces had just accepted his XR-4 for fielding. Others included Army Col. H. Frank Gregory, who had been sizing up the military potential of the Autogiro and the helicopter for eight years, and Brits James A.J. Bennett and Reginald A.C. Brie, who each inherited Juan de la Cierva's passion for the Autogiro. Frank Piasecki and Bell's Arthur Young were still unknowns, months away from their first flights. In fact, Sikorsky had the only successfully flying helicopters outside of Axis-controlled territory.

These and other leaders backed the new society. But those who drafted AHS's first constitution, organized the initial meetings, and crafted the technical program of our First Annual Forum in Philadelphia on April 3, 1945 had not yet made their names in this industry. Founding member Tony Paradiso was still just 21 years old when

he volunteered to help draft the Society's constitution. Katzenberger had just joined Sikorsky in 1942, not long after Ralph Alex, AHS's first president, left a fixed wing career to work on the XR-4's powerplant and systems. William Kossler has just received orders to develop a training program for U.S. Navy and Coast Guard helicopter pilots and mechanics.

The individuals who created AHS were largely young, bright, hard-working engineers, scientists, mechanics, pilots, government officials and academics. They had in common demanding, full-time jobs, family responsibilities, a passion for vertical flight and the ambition to succeed in it. Just like our members today.

It is unlikely when he called that meeting to order 70 years ago that Katzenberger could know that he would contribute directly to the design of 12 helicopter types. There is no way he could have known that – working side by side with creative minds, visionaries and industry and government leaders at AHS Forums and other meetings – he would help build an industry whose products would pluck the first astronauts from the sea, save thousands of sailors from the ocean's wrath, carry injured warriors to safety and sustain the hope of disaster victims all over the world. On that day in 1943, he was just a new AHS member. But because of the initiative of a handful of volunteers, a 70-year legacy was born.

This is not tired old history. It is living history. To this day, AHS members develop, gather and disseminate

information that defines the cutting edge of what we now call vertical flight technology through our Society's Annual Forums and Specialists' Meetings. Just as our founders did, today's members have the opportunity to work side by side with this industry's best minds, visionaries and leaders to define our future.

AHS members past and present have created the world's premier professional vertical flight technical society. Our goal is to provide global leadership for scientific, technical, educational and legislative initiatives that advance the state of the art of vertical flight and its application around the world. Since our founding, the Annual Forum has been key to achieving that goal. The single best opportunity you have as an AHS member to help shape the future is to attend the Annual Forum, held this year on May 21-23 at the Phoenix Convention Center in Phoenix, Arizona.

This year's Forum theme is appropriately, "Advancing Vertical Flight Technology in Demanding Environments." For the vertical flight community, "demanding environments" has historically referred to high operating altitudes and temperatures, and degraded visual conditions in complex austere sites. Recently, frequent natural and man-made disasters have increased the need for vertical flight capability while introducing new operating challenges. Today, however, those challenges seem dwarfed by financial challenges facing vertical flight operators and governments across the globe.

In Forum 69's presentation of some 250 technical papers and in panel sessions with leaders of manufacturers and military programs, you can join in discussions of the challenges our industry faces today and the opportunities they may present.

Leonardo da Vinci wrote that to truly understand a subject, one needs to view it from multiple perspectives. Today, we recognize the need to avoid "GroupThink" and be exposed to new ideas and expand our horizons. New perspectives are the best spark for generating innovation and creativity.

The AHS Forum brings together the world's technical experts from industry, academia and government – the all-important trifecta for cross pollination – to discuss the latest advances, challenges and theories



of vertical flight. Engineers and scientists, managers and CEOs, aviators and procurement officials, professors and students, business developers and the press all gather together to provide

their perspective, exchange ideas, lessons learned and contact information for future interactions. As our early members often found, the unplanned discussions at the Forum are much more valuable – for industry, academia and government – than the formal planned presentations. The Forum is the place to be, as it has for almost 70 years.

To learn the latest about vertical flight technology and the current markets and budgets for its application, go to our website, www.vtol.org/forum, to register for Forum 69 today. To be prepared for the "Demanding Environments" of today and tomorrow, you can't afford to miss it!



2013 AHS Calendar of Events

Don't miss our exciting Technical Specialists' Meetings and other great events planned for 2013!

AHS 69th Annual Forum & Technology Display, May 21-23, 2013, Phoenix, Arizona. *The AHS 69th Annual Forum and Technology Display is the world's leading international conference on vertical flight technology. The three-day event will include over 200 technical presentations on every discipline from Acoustics to Unmanned Systems.*
www.vtol.org/forum

RotorTech Asia Pacific Conference & Exhibition 2013, Jul 16-17, 2013, Singapore. *The landmark event – being the first of its kind in Asia – combines technology; maintenance, repair and operations (MRO); the industry market in Asia; and an extensive trade show.* www.rotortechasia.com

International Powered Lift Conference (IPLC), Aug 12-14, 2013, Los Angeles, California. *IPLC focuses on the latest developments in Vertical and/or Short Take-Off and Landing (V/STOL) aircraft research, concepts, and programs.*
www.vtol.org/iplc

The 4th International Technical Specialists' Meeting on Vertical Lift Research, Development, Test & Evaluation, Aug 28-29, 2013, Patuxent River, Maryland. *The purpose of the meeting is to share ideas, concepts, information and techniques regarding Vertical Lift RDT&E. Presentations concerning all aspects of commercial and military RDT&E are welcome.* www.vtol.org/pax

European Rotorcraft Forum (ERF), Sep 3-6, 2013, Moscow, Russia. *ERF is one of the premier events in the rotorcraft community's calendar, bringing together manufacturers, research centers, academia, operators and regulatory agencies to discuss advances in research, development, design, manufacturing, testing and operation of rotorcraft. Abstract submission deadline is February 28, 2013.*
www.vtol.org/erf

Asian/Australian Rotorcraft Forum (ARF), Aug 30-Sept 1, 2013, Tianjin, China. *This Forum offers an excellent opportunity for attendees to learn of and discuss the latest advances in rotorcraft technologies and current development programs. Abstract deadline is March 30.*
www.vtol.org/arf

75th Anniversary of the First Rotating Wing Aircraft Meeting, Oct 27, 2013, The Franklin Institute, Philadelphia, Pennsylvania. *The First Rotating Wing Aircraft Meeting was held at the Franklin Institute on October 27-29, 1938. It was from this event that the American helicopter industry was born. A special symposium is being held to commemorate this historic event.* www.vtol.org/first

Technical Specialists' Meeting on Rotorcraft Structures and Survivability, Oct 29-31, 2013, Williamsburg, Virginia. *This technical specialists' meeting covers all aspects of structures and materials, crashworthiness, safety and survivability.*
www.vtol.org/structures

