Michael A. “Tony” Paradiso is a true aviation pioneer. Not only is he an original founding member of the American Helicopter Society (now AHS International) but an early Sikorsky Aircraft employee, witnessing the continued development of the VS-300 helicopter, as well as the XR-4, XR-5 and XR-6 helicopters.

When Tony addressed the attendees at the Grand Awards Banquet at the recent AHS International Forum 68 in Fort Worth on Wednesday night, May 2nd, he spoke of the early history of AHS:

The seed of the American Helicopter Society was planted by Sikorsky Aircraft engineers, Hal Lemont and Stan Petrop. After attending the January 29, 1943 Rotary Wing Aircraft meeting by the Institute of Aeronautical Sciences at the Astor Hotel in New York City, Hal said, “It was the most unsatisfactory meeting of sales and promotional propaganda by the various manufacturers who presented the papers. It’s time to start a helicopter society of engineers, by engineers, and for engineers.”

Shortly thereafter, during a brown-bag luncheon, Stan told a handful of engineers, Chet Mayerson, Harry Jensen, Fred Rosman, and me about Hal’s intention to start a helicopter society. I told them that I was a member of the Institute of Aeronautical Sciences and the Society of Automotive Engineers, so I volunteered to draft a plan based on the benefits of being a member of those societies. Ralph Alex was asked to review and make comments on the plan. The first original meeting was held at Stratford High School. The meetings progressed under the leadership of Ralph Alex. And on April 13, 1943, the first draft of the Constitution was submitted by the Chairman, Ed Katzenberger. Ralph Alex was unanimously elected as the first president of the American Helicopter Society.

Of those original six Sikorsky engineers – Lemont, Petrop, Mayerson, Jensen, Rosman and Paradiso – only Tony is still with us today. Speaking prior to the presentation of the Vertical Flight Foundation (VFF) scholarships to the winning students at the Awards Banquet:

Today, membership has grown to nearly 7,000 members worldwide, and the name has been changed to AHS International. The baton is being passed to the students who are honored tonight. The Society will be enhanced by their leadership, and I foresee a bright future for the Society.

Tony later shared with the AHS History Committee his early involvement with Sikorsky Aircraft:

When I arrived at Sikorsky Aircraft in April 1941, there were 25 engineers. Only 25% were assigned to the development of the helicopter. The other engineers were involved in the production of the three Sikorsky VS-44A trans-Atlantic flying boats which were sold to American Export Airlines for $750,000 each. The profit from that contract was used to help pay for the development of the helicopter.

In May 1941, Igor Sikorsky piloted the helicopter to a world’s record endurance flight of 1 hour, 32 minutes and 26 seconds. I was a witness to that flight. Afterword, Igor Sikorsky presented us with autographed photographs to commemorate the occasion.

The Sikorsky VS-300 helicopter went through three major design configurations in 1941. On December 8, 1941, the VS-300A had achieved all objectives to become the first practical helicopter in the United States. Les Morris, first helicopter test pilot at Sikorsky, completed all flight tests for the three configurations in a total of 31 hours and 35 minutes.

In October 1943, Igor Sikorsky piloted the VS-300A on its final flight when he presented it to the Henry Ford Museum in Dearborn, Michigan. Mr. Sikorsky gave us all post cards that he had carried on this final flight.

I believe some stories about the conditions that existed at Sikorsky Aircraft may be of interest. Igor Sikorsky was involved personally with the hiring; I remember getting personal letters from him before and after I was hired. I started at Douglas Aircraft in 1939 for $0.50/hour and joined Sikorsky Aircraft in April of 1941 for $1.65/hour. I returned to Douglas in October 1945 and then back to Sikorsky from 1948 to 1951. I returned to Douglas in 1951 and stayed with them until retirement in 1986. I never burned any bridges and was always welcomed as I went back and forth.

When asked about Igor Sikorsky, Tony said earnestly, “Mr. Sikorsky was fond of saying, ‘I did not invent the helicopter. I just took the many ideas and integrated them!’ His favorite word was ‘intuitive,’ and he used it all the time!”

Tony recalled his early work at Sikorsky:

I was hired at Sikorsky primarily to do the electrical work (radio and instrumentation). My primary interface was with the aerodynamicists, the power plant engineers for operating instrumentation, and the pilots for aircraft performance instrumentation. My first instrument panel in the XR-4 shook so badly, the pilots could not read the instruments, so I had to dampen out the vibrations. I also worked with pitot systems, airspeed indicators, and dual tachometer designs.

The engineers were embedded with the craftsmen in the shop, so it was common to make back-of-the-envelope sketches to save time. A lot of the design
changes involved trial and error. Time was not spent holding meetings or writing numerous reports. One will be surprised to learn that there are no original drawings for the VS-300. The drawings that are currently in the files are the result of reverse engineering. A Sikorsky engineer went to the Henry Ford Museum to record measurements of the VS-300A and make the drawings that are in the file.

Every year at the AHS International Annual Forum, the Alexander A. Nikolsky Honorary Lecture is presented. When asked about Nikolsky, Tony responded:

Nikolsky kept pretty much to himself in an office he shared with Alex “Prof” Sikorsky – everyone called him “Prof.” Prof had a huge slide rule at least 20 inches long. Supposedly he could read his slide rule to five decimal places (because of the scale) while the rest of us could read ours to only three decimal places. Those two were considered management and had offices, while the rest of us [engineers] were in a “human stock yard.” It was all fannies and elbows.

Many of those 25 engineers were Russian émigrés, and almost all had unique stories of their escape from Russia and the Russian Revolution (1917). You would hear Russian spoken periodically in the shop.

Igor Alexis “Prof” Sikorsky was the cousin of Igor Ivanovich Sikorsky. He was the chief aerodynamicist at Sikorsky Aircraft and served as the Technical Chairman of the First Annual Dinner of the nascent AHS, in October 1944. Tony described the conditions for engineers in the early 1940s:

Drawings were made using a couple of triangles, a 45 degree and a 30/60 degree. We also had a French curve, a compass, and a ruler. All calculations were made using a slide rule and the book of math/trig tables. There were no health insurance or pension benefits. The entry-level engineer was paid about $2 an hour! During WWII, we all worked nights, Saturdays and Sundays – 70 hour work weeks were common. GET THE JOB DONE! I was making $1.65/hour. And there were no pension plans or health insurance in those days.

Tony has been a frequent special guest at the Annual Forum:

In 1984, at the 40th Annual forum, I presented my copy of the draft of the constitution to the Society. Also in 1984, I received a piece of fabric of the original VS-300 embedded inside a Plexiglas cube. In 1994, at the 50th Annual Forum, I presented the Society a 1/20th scale, museum-quality model of the Sikorsky VS-300A helicopter. The model was not built from a kit. It was built from scratch by three master model builders: Bob Philips, Bryan Finch, and Alan Weber. They spent about 600 hours building the model. Sikorsky Aircraft provided drawings, photos taken during the restoration to Smithsonian standards, and videos for reference to ensure high quality reproduction for the details of the model. It was appraised to be valued at $20,000.

Michael A. “Tony” Paradiso’s contributions to vertical flight were significant, and his efforts at Sikorsky include creating the first American production helicopter and creating the American Helicopter Society. For both, we are eternally grateful. His experiences during those days could fill countless pages. He has truly earned the title of “Pioneer.”
ENGINEERS AT SIKORSKY AIRCRAFT
WHEN I ARRIVED IN APRIL 1941

Igor Sikorsky  Victor Utgoff
Mike Gluareff  “Chief” DeBosae
Serge Gluareff  Chet Mayerson
Alexander Nikolsky  Ted Hunter
Alex ‘Prof’ Sikorsky  Ed Kottsieper

Jack Harkness  Harry Jensen
Jack Reed  Fred Rosman
Ed Dudek  Nick Glad
Bill Hunt  Serge Bobelef
Ralph Alex  Bob Smith

Ralph Lightfoot  Bob Jesperson
Mike Buivid  Mike Starzic
Bob Labinsky  Serge Gargarin
Bill Kostok  Paul Pomanareff
Ray Coates  Tony Paradiso

The five members of management and 25 engineers when Tony Paradiso was hired at Sikorsky.

1943 FOUNDING MEMBERS
OF THE
AMERICAN HELICOPTER SOCIETY
PRESENT THIS EVENING

Ralph P. Alex
Igor Bensen
Stephen Chris
Irven Culver
James Gean
Stanley Hiller, Jr.
Edward Katzenberger
Ralph Lightfoot
Charles ‘Les’ Morris
Edward Nesbitt
Owen Niehaus
Michael ‘Tony’ Paradiso
Ken West
Wayne Wiesner

From the program for the American Helicopter Society 40th Anniversary Annual Forum & Technology Display, Honors Night Banquet, Thursday, May 17, 1984.

AHS Technical Specialists’ Meeting on Airworthiness, Condition Based Maintenance (CBM), and Health and Usage Monitoring (HUMS)
Sponsored by the Redstone Chapter of the AHS International
February 11-13, 2013, Huntsville, Alabama

The Redstone Chapter of the American Helicopter Society International (AHS) and the Helicopter Association International (HAI) will be sponsoring a Technical Specialists’ Meeting on Airworthiness, Condition Based Maintenance (CBM), and Health and Usage Monitoring (HUMS) on February 11-13, 2013, Huntsville, Alabama. The Specialists’ Meeting will present applicable technologies that are new to continued airworthiness, current and potential processes, and hardware required for military and civil aircraft airworthiness.

Please see the event flyer and Call for Papers at http://vtol.org/cbm for complete information.