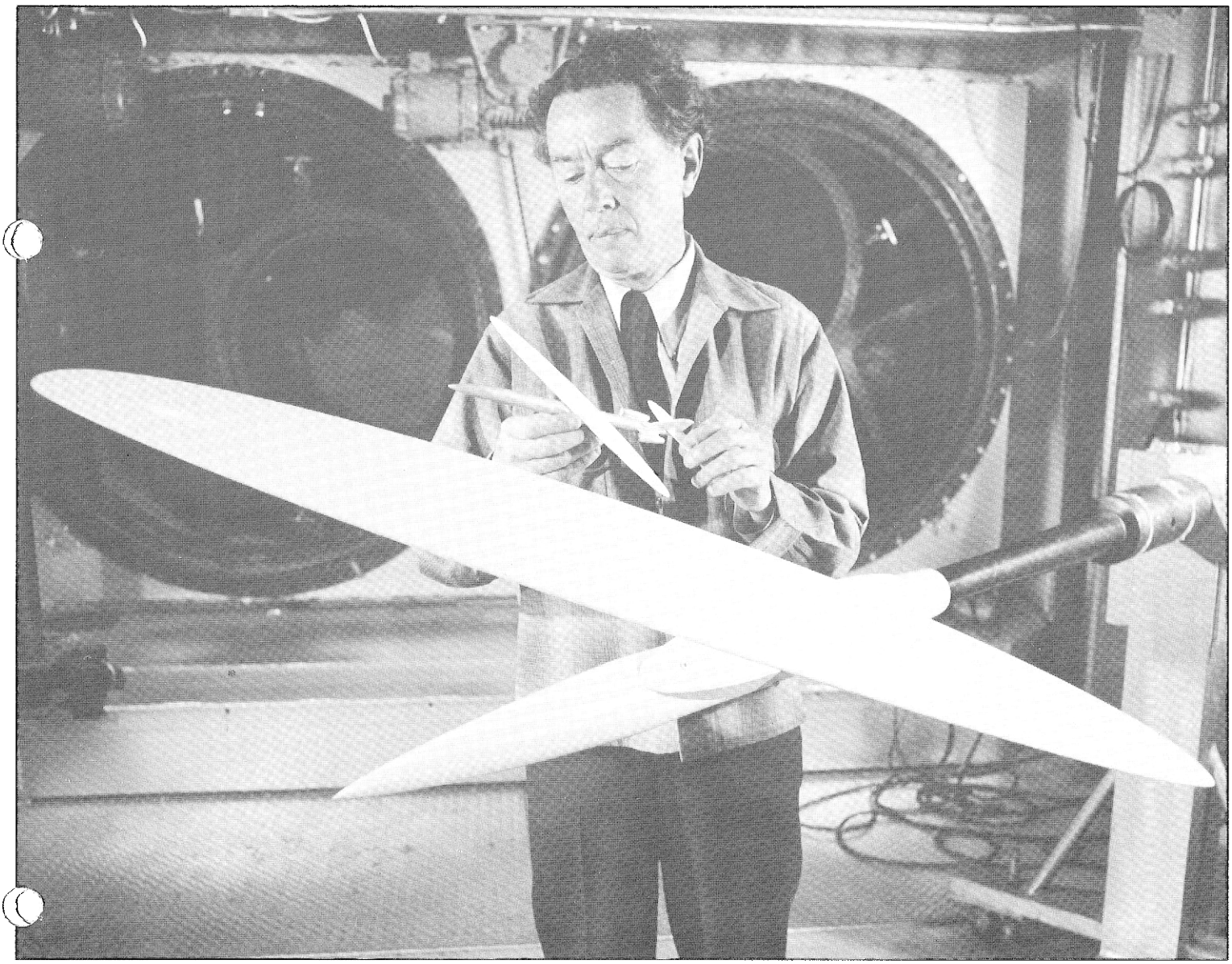
The Aero Club of
Northern California

1993 Award Winner

Dr. Robert T. Jones

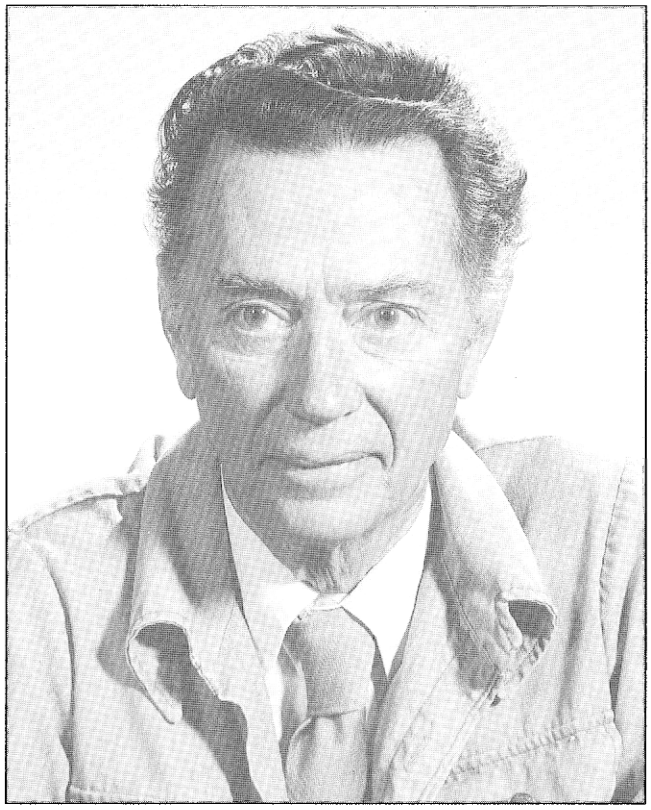


From a Man of Many Ideas...

The revolutionary oblique wing is the concept of the man who developed the familiar swept wing. Although he didn't finish college, he is an internationally acclaimed expert in aerodynamics, optics and biomechanics.

Robert T. Jones

ROBERT T. JONES has earned a Congressional Excalibur Award in recognition of his numerous contributions to aeronautical science and also has been awarded the distinguished Langley Medal by the Smithsonian Institution for his "extensive contributions in theoretical aerodynamics, particularly with regard to development of the swept wind, supersonic area rule and the oblique wing." Past recipients of the Langley award include Wilbur and Orville Wright, Colonel Charles Lindbergh and Rear Admiral Byrd. Named for Samuel Pierpont Langley, aeronautical pioneer and third secretary of the Smithsonian, the medal honors "especially meritorious investigations in the field of aerospace science."



Jones discovered the theory of the "simple sweepback," one of the most important discoveries in aerodynamics (swept wings are seen on most jet aircraft today".

A college dropout in 1928, the lure of flight led Jones to join Charles Fowler's Flying Circus, carrying gas cans, patching wing tips, accepting payment in flying lessons. His first of more than 65 technical papers discussed a 576-pound race plane he designed at the age of 19, while working for Nicholas-Beazley Aircraft in Missouri, which folded in 1930.

Jones was working as an elevator operator for the U.S. House of Representatives in Washington when a chance encounter with another aviation pioneer, Dr. Max Munk, landed him in graduate school. Munk was so impressed with the young man's self-taught knowledge of aeronautics that he enrolled him in three years of night classes at Catholic University. Jones studied airfoil theory, vector analysis and relativity theory under Munk.

In 1934, Jones joined NASA's predecessor agency, the National Advisory Committee for Aeronautics, at its Langley Memorial Aeronautical Laboratory (now the Langley Research Center), Hampton, Virginia, on a nine-month Public Works Administration assignment.

Jones was already a well-known aeronautics expert when he developed his swept wing theory in 1944. Jones' discovery of the sweepback theory was not accepted by most scientists at the time, but NACA began experiments to test the theory. When the allies defeated Germany, U.S. scientists discovered that the Germans knew about the effect of sweep and were incorporating it in new aircraft designs. For his discovery of the sweep effect slender wing theory, Jones received the Syvanus Albert Reed Award from the Institute of the Aeronautical Sciences in 1946. That same year, he went to work for Ames Research Center.

In 1963, Jones left Ames to join AVCO Everett Research Laboratory where he applied fluid dynamics to the problems of blood flow. He returned to Ames in 1970 and continued his earlier efforts on the oblique wing.

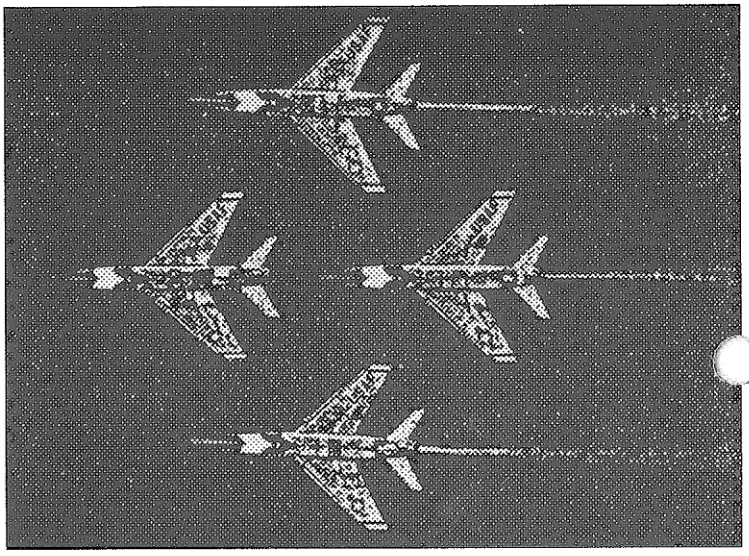
Jones was yet to discover other interests. He studied geometrical optics, learned the art of grinding spherical mirrors and set up an optical shop in his garage, where he built telescopes and lenses. He has also written papers about telescopes, interplanetary travel time, relativity and a design for an artificial heart (a fluid flow problem). When his daughter Patty became a violinist, Jones studied the mechanics and principles of violin making, fashioning eight traditional violins as well as an electronic instrument.

In 1973, Jones was elected to the National Academy of Engineering and the American Academy

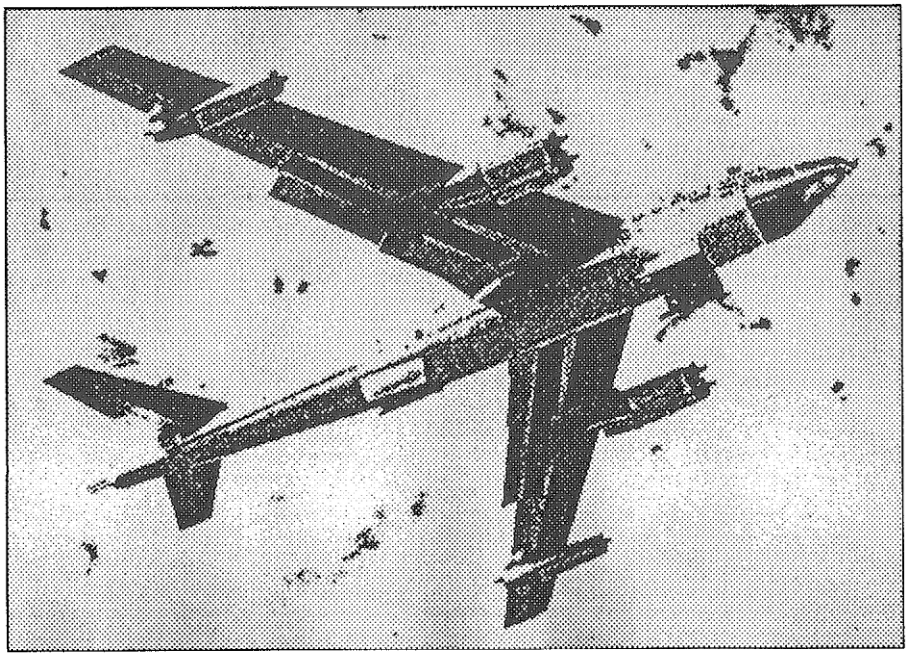
of Arts and Sciences. He was honored in 1976 with a cash award from NASA's Inventions and Contributions Board and received the Prandtl Ring Award in 1978 from the German Aeronautics Society, considered the highest honor in the field of fluid dynamics.

A Fellow of the American Institute of Aeronautics and Astronautics, Jones was chosen for the award of Honorary Fellow in 1979. In 1981, he was elected to the National Academy of Sciences. He has also received the President's Award for Distinguished Federal Civilian Service in honor of the many contributions of his 40-year government career.

Jones is a native of Macon, Missouri, but now resides in Los Altos Hills, California. He has reared six children.



Four North American F-100 Super Sabres of the U.S. Air Force Thunderbirds aerobatics team streak overhead in diamond formation during a 1953 training mission. With a top speed of 864 mph, the Super Sabre was the first operational U.S. jet that was capable of reaching supersonic speeds in level flight.



A Boeing B-47, the world's first sweptwing jet bomber, climbs after takeoff in 1956. The Stratojet's 35-degree wing sweep helped give it a top speed of more than 600 mph, so fast that admiring pilots called it "a six-engine fighter."

Eleventh Annual Awards Presentation

The Aero Club of Northern California
April 3, 1993
San Jose, California

Welcome and Introduction ..... Robert D. Wenzel
Invocation ..... Francis T. Fox

DINNER

Introduction of 1993 Officers and Board Members ..... Robert D. Wenzel
N.A.A. Lifetime Achievement Recognition
- Chuck Tucker ..... Tom Leonard
- Robert Wright ..... Jerry Bennett

Scholarship Awards ..... Scott Yelich
Guest Speaker
- Robert T. Jones ..... Tom Leonard

Crystal Eagle Award Presentation ..... Robert D. Wenzel

The Crystal Eagle Award

The Aero Club of Northern California Crystal Eagle Award is presented annually to recognize and honor an individual who has made an outstanding contribution to the advancement of aviation or space flight.

Crystal Eagle Award Winners
1983: General James "Jimmy" Doolittle
1984: Brigadier General Charles E. "Chuck" Yeager
1985: Stanley Hiller, Jr.
1986: William "Bill" Lear, Sr.
1987: James M. Nissen
1988: Anthony W. "Tony" LeVier
1989: Elbert "Burt" L. Rutan
1990: George S. Cooper
1991: Allen E. Paulson
1992: Jeana Yeager

The Crystal Eagle: A distinctive work of art

The Crystal Eagle Award is a unique work of art crystal handcrafted in Sweden.

It is fitting that the eagle should be the symbol for the Aero Club's annual award. The North American eagle is recognized as a bird possessing great strength, natural grace, keenness of vision and power in flight. The eagle has been used by man to identify with flying since its inception to our current successes in space.

The crystal reflects the medium of flight -- transparent, yet ever present.

The Crystal Eagle is mounted on a California redwood base, unique to Northern California. In its natural state redwood has unusual durability, commensurate with the recipients of this coveted award.

Our Special Thanks to:

San Jose International Airport
Hugh Center Trust
Hillis Printing Company
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Student AAAE Chapter - SJSU

Shirley Bonkowski
Keith Freitas
Cathy Gaskell
Mitsi Matsumoto

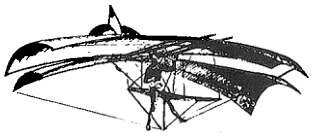
The Aero Club of Northern California was formed to promote those activities which advance aviation and aerospace within Northern California.

We are a chapter of the National Aeronautic Association, (NAA) which is the oldest independent, non-profit aviation organization in the United States, and the sole U.S. representative to the Federation Aeronautique International.

We embrace the goals of our parent organization in our efforts to support a vigorous aviation and space program for students at all levels of learning, and to recognize and honor those who make outstanding contributions to the advancement of aviation and space flight.

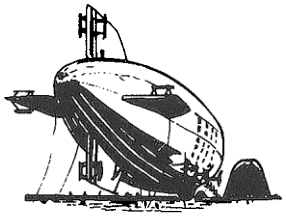
About our logo ...

Incorporated in the logo of The Aero Club of Northern California are some of the most significant contributions the area has made to the art and science of flight.



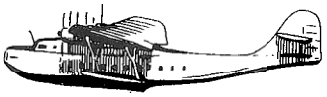
Montgomery Flight - 1904

Often referred to as "The Father of Basic Flying" Dr. John Montgomery was a true aviation pioneer. San Jose was the site of many of his historic achievements. Alexander Graham Bell noted that, "All subsequent attempts in aviation must begin with the Montgomery Machine."



Moffett Field - 1933

Dedicated April 12, 1933, Moffett Field continues to be the United States guardian of the Pacific. It is a part of northern California's defense commitment to aviation.



China Clipper - 1936

Lifting from San Francisco Bay waters on November 22, 1935, the Clipper became the first airplane to fly the Pacific non-stop. Cutting over 15 days off the best surface time from San Francisco to Manila it lead to the elimination of the barriers of space and time.

NASA Ames Research Center - 1982

Northern California's continued contributions to involvement in man's quest for his ultimate destiny is assured by the ongoing advancements in aerospace technology at NASA's Ames Research Center.