

The Aero Club of  
Northern California

The 2001 "Crystal Eagle" Award Winner

**IGOR I. SIKORSKY**



## IGOR I. SIKORSKY – A MAN WITH A DREAM



*His best friends secretly referred to it as "Igor's Nightmare." A maze of steel tubes, gears and belts topped by a giant three-bladed rotor, the machine presented a thin thread upon which to hang the future hopes of the company. Yet, its middle-aged creator clearly had confidence in his contraption. Dressed in a dark business suit and turned-up fedora, he climbed energetically behind the controls and coaxed the 65-horsepower Lycoming engine to life. As the rotor blades clattered noisily overhead, the machine lifted a few feet off the ground and hovered there for a full 10 seconds before sinking gently back. Thus, on a field beside the Housatonic River, in Stratford, Connecticut, on the morning of September 14, 1939, Igor Ivanovich Sikorsky renewed his 30 year-old dream of vertical flight.*

*The idea for the helicopter goes back to the Chinese top, a toy propeller which rises in the air when rotated between the palms of the hands. Even Leonardo da Vinci and later the Wright Brothers failed to turn it into a full-sized flying machine. Igor Sikorsky succeeded.*

# IGOR I. SIKORSKY

## FATHER OF THE HELICOPTER

Igor I. Sikorsky was born in Kiev, Russia, on May 25, 1889. As a boy, thanks largely to the influence of his mother, who was a doctor, and his father, a psychology professor, he showed great interest in contemporary science – particularly, aviation. While still a schoolboy, he built and flew several model aircraft made from tissue paper and strips of bamboo.

A youthful tour of Germany in the company of his father, during which he first heard of the Wright brothers and came in detailed contact with the work of Count Zeppelin, more or less settled the question of what career the youthful Sikorsky was to follow.

He graduated from the Petrograd Naval College, studied engineering in Paris, returned to Kiev and entered the Mechanical Engineering College of the Polytechnical Institute in 1907. He returned to Paris in 1909, then the aeronautical center of Europe, to learn what he could of the embryo science.

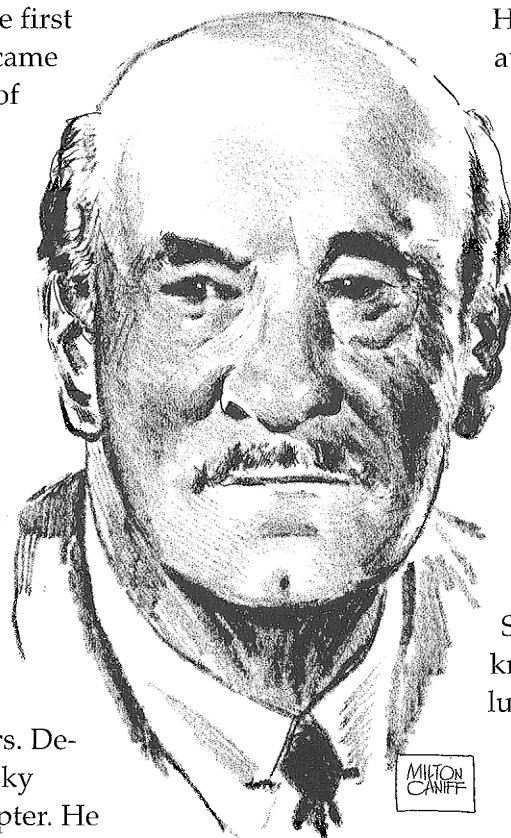
He became known to men who were to make great names in aviation – Bleriot, Feber, and others. Despite advice to the contrary, Sikorsky announced plans to build a helicopter. He bought a 25 hp Anzani engine and went home to Kiev to begin building a rotary-wing aircraft. The helicopter failed; not enough power and not enough known of the rotary-wing art. Sikorsky then turned his attention to fixed-wing aircraft.

His first success came with the S-2. His fifth airplane, the S-5, won him national recognition as well as F.A.I. license number 64. Sikorsky's S-6-A received the highest award at the 1912 Moscow Aviation Exhibition, and in the fall of that year the aircraft won the first prize in the military competition at Petrograd.

Sikorsky developed the world's first multi-engine airplane, the four-engine "The Grand". This

aircraft featured an enclosed cabin, a lavatory, upholstered chairs and an exterior catwalk where passengers could take a turn-about in the air.

"The Grand" was followed by a still larger aircraft that, in military versions, proved the most successful bomber to see service in World War I. The Red Revolution put an end to Sikorsky's career in Russian aviation so he emigrated to the United States in 1919.

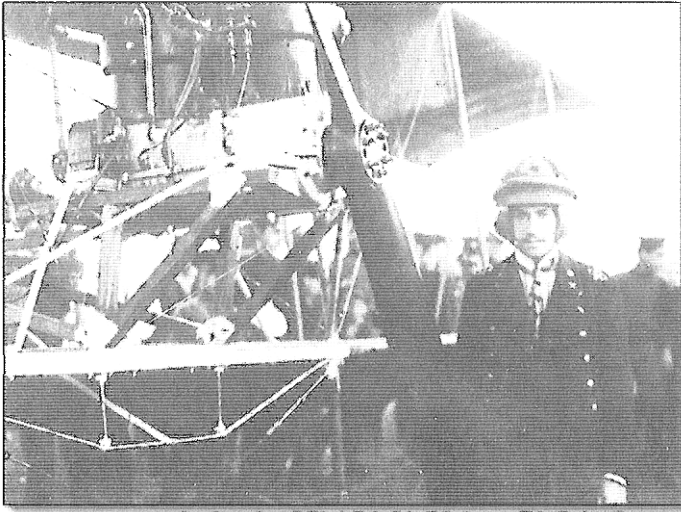


He was disappointed in postwar aviation in the U.S. and resorted to teaching in New York. Finally, in 1923, he was able to launch his first American aviation venture, The Sikorsky Aero Engineering Corp. The first aircraft built was the S-29-A, a twin-engine, all-metal transport that proved a forerunner of the modern airliner. Subsequently, the company became a subsidiary of United Aircraft in 1929.

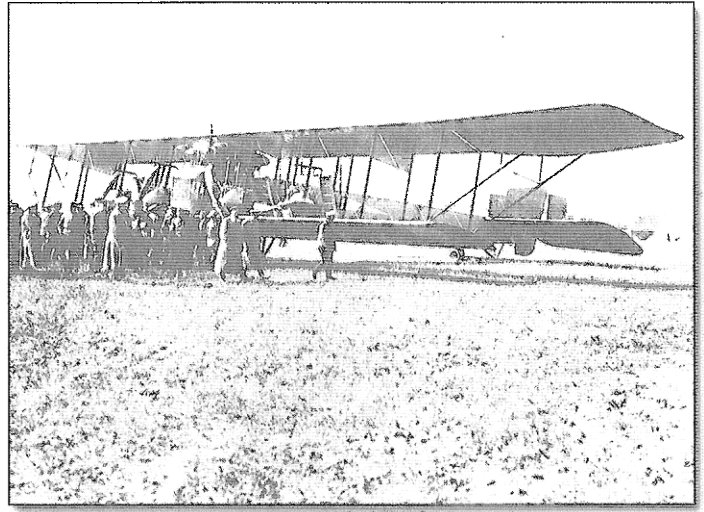
Sikorsky's association with United gave aviation an unsurpassed series of flying boats. All Sikorsky aircraft of the time were known for ease of handling and luxurious comfort.

With two careers behind him, Sikorsky turned again to the helicopter. Finally, on September 14, 1939, he took his VS-300 a few feet off the ground to give the western hemisphere its first practical helicopter. Military contracts followed the success of the VS-300 and many improved versions followed; twin piston engines, turbine, amphibious with flying boat hulls, twin turbine, search and rescue vehicles. Sikorsky helicopters are flown by all U.S. military services, by more than 30 foreign countries, by scheduled helicopter airlines and a large number of independent operators.

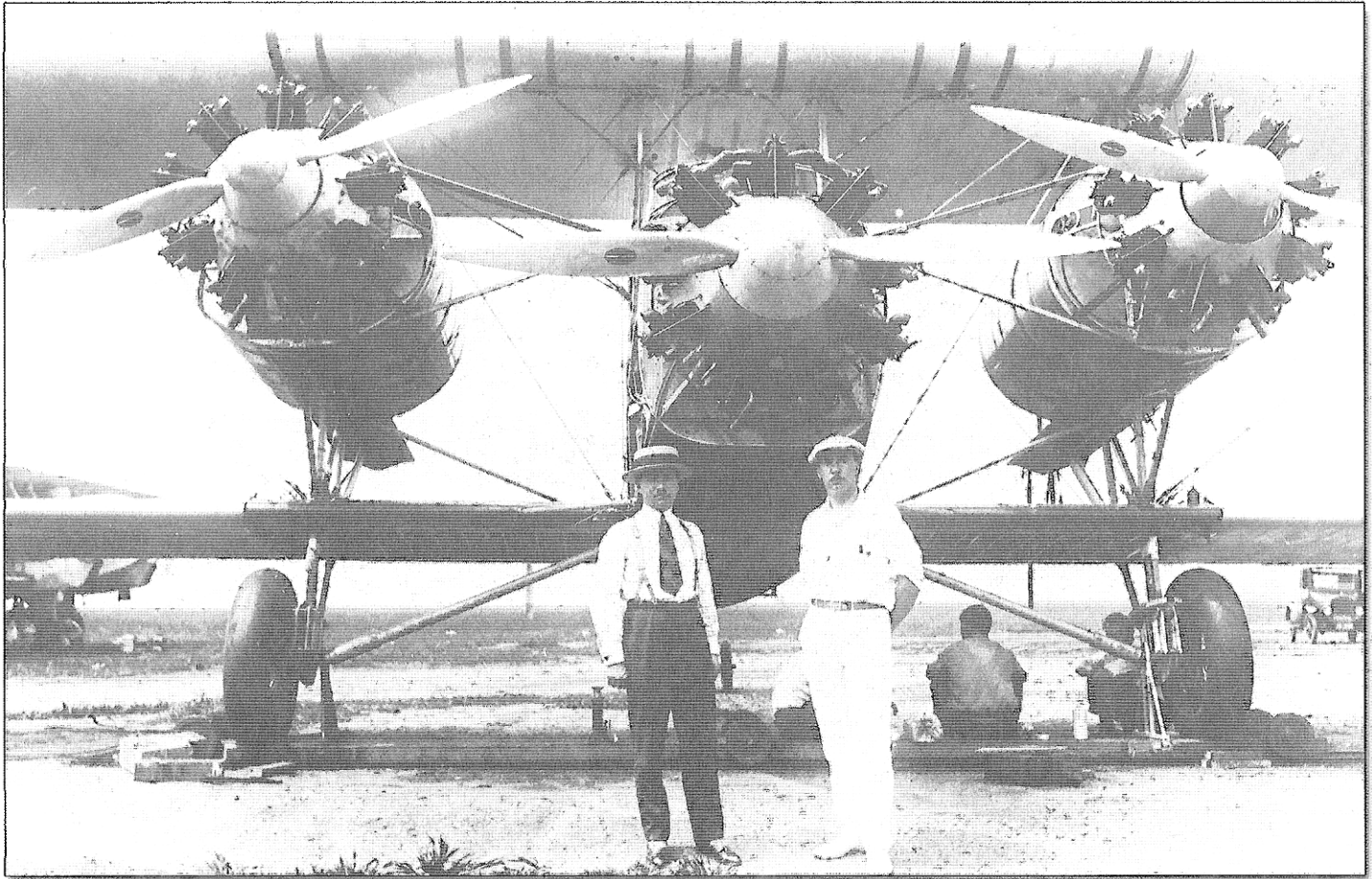
Sikorsky received eleven university and college degrees, and many awards during his lifetime. Mr. Sikorsky died in 1972 at the age of 83.



*Igor Sikorsky in front of his S-5, in 1911.*



*Sikorsky's Ilya Mourometz proved the viability of large aircraft.*



*Sikorsky (right) and Fonck, with the S-35 tri-motor only hours before Fonck's tragic transatlantic attempt.*



The Aero Club of Northern California  
**Nineteenth Annual Awards Presentation**  
**Hiller Aviation Institute**  
 September 22, 2001

Welcome and Introduction ..... Bill Potter

**DINNER**

Introduction of Aero Club Officers and Board Members ..... Bill Potter

Aero Club - NAA Certificate of Honor Awards

- Stanley Hall ..... Jerry Bennett
- Martin Hollmann ..... Tom Leonard
- Jean Tinsley ..... Jim Ricklefs

James M. Nissen Scholarship Award ..... Barbara Murren

- Oscar M. Becerra

Roy Hester Scholarship Award ..... Scott Yelich

- Gerald A. Astwood

Guest Speaker

- Sergei I. Sikorsky ..... Stanley Hiller

Crystal Eagle Award Presentation

- Igor I. Sikorsky ..... Bill Potter

**The Crystal Eagle Award**

The Crystal Eagle Award is presented annually by the Aero Club of Northern California to recognize an individual whose accomplishments have significantly contributed to the advancement of aviation or space technology.

**The Crystal Eagle:  
 A distinctive work of art**

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

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 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.

**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. "Jim" Nissen
- 1988: Anthony W. "Tony" LeVier
- 1989: Elbert "Burt" L. Rutan
- 1990: George S. Cooper
- 1991: Allen E. Paulson
- 1992: Jeana Yeager
- 1993: Robert T. Jones
- 1994: Frank L. Christensen
- 1995: James S. Ricklefs
- 1996: Darryl G. Greenamyre
- 1997: Robert L. "Hoot" Gibson
- 1998: Donald D. Engen
- 1999: Paul H. Poberezny
- 2000: Wanne Handley



## Our Special Thanks to:

ACM Aviation/Stanley Bac  
Hewlett-Packard Aviation Department  
Hugh Center Trust/Art Lund  
San Jose Jet Center

Aris Helicopter, Ltd.  
Hillis Printing/Chuck Hillis  
Patricia Fox  
San Jose International Airport  
Sixteenth St. Design/Bill & Kim Pfahnl

Alpha Eta Rho - SJSU Chapter  
Hiller Aviation Institute  
Robert Wenzel

## About our club . . .

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 our parent organization, the National Aeronautic Association (NAA), which having been founded in 1905 as the Aero Club of America is the oldest independent, non-profit aviation organization in the United States, and the sole U.S. representative to the Federation Aeronautique Internationale (FAI).

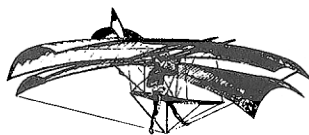
So central to aviation was the Aero Club that until 1926 it issued all pilot licenses in the United States.

The first five pilot licenses issued by the Aero Club were: 1) Glen H. Curtiss, 2) Lt. Frank P. Lahm, 3) Louis Paulham, 4) Orville Wright, and 5) Wilbur Wright. All other pilot licenses issued in the United States subsequent to these five were until 1926 issued by the Aero Club of America.

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 have made outstanding contributions to the advancement of aviation and space flight.

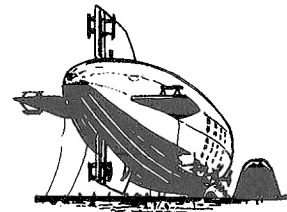
## About our logo . . .

Incorporated in the logo of The Aero Club of Northern California are some of the most significant contributions the Northern California 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 until recently was the United States guardian of the Pacific. It continues to be a major aviation facility supporting both federal and military operations.



*China Clipper - 1935*

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 led to the elimination of the barriers of space and time.



*NASA Ames Research Center - 1940*

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