# The Wright Icon News

Soaring 220 feet above the intersection of I-70 & I-75 and seen by thousands of vehicles daily, this 120 foot wingspan monument to the Wright Flyer will symbolize Dayton, Ohio throughout the world.

#### **INSIDE THIS ISSUE**

- 1 Realizing Ambitious Goals
- 1 Key Supporters Lining Up
- 1 Become a Member
- **2** A New Supporting Organization
- **2** A Major Design Challenge
- **3** Supporting Organizations List
- 4 Board Member Spotlight

Bringing an Icon to Dayton - The Birthplace of Aviation

Today's Modern Aerospace Hub - Tomorrow's Aviation Leader

October 2009 Volume 1, Issue 1

## **Realizing Ambitious Goals**

What could be more breath-taking, attention-getting, and fitting than a gleaming replica of the 1905 Wright Flyer, an iconic monument soaring 220 feet above the "Crossroads of America" – I-70 and I-75 - showing all the world where practical flight was invented, a feat that changed the course of mankind forever.

To achieve this goal is an ambitious undertaking, to say the least. In addition to the Wright Image Group, which is the main driving force behind making this icon a reality, is a very strong and active partner – The Aviation Heritage Foundation. Together, we have developed the three main goals to ensure this monument takes its rightful place among other iconic monuments across the nation. See *Goals* on page 3

# **Key Supporters Lining Up**

- <u>Dayton Mayor **Rhine McLin**</u>: "As mayor of Dayton, I am delighted to wholeheartedly endorse the construction of this icon representing the entire Dayton area. This will provide visual corroboration for Dayton's claim to be the birthplace of aviation."
- <u>Montgomery Co Commissioner</u> **Dan Foley:** "It's a great way to tell our story and for everyone to recognize that Dayton is the past, present and future home of aviation and aerospace innovation!"
- <u>Dayton Area Chamber of Commerce President/CEO</u> **Phil Parker:** "This project provides an icon that identifies the Dayton area as the capitol of innovation, of inventions, of creative thinking...all the elements which attract new business and make existing businesses more successful."



## Become a Member

The Wright Image Group, Inc., Board of Directors recently approved a proposal to extend membership to residents of the Dayton region and others who endorse the monument and who wish to see it "fly".

Members will be the "Goodwill Ambassadors" for the project, explaining to all the significance behind the memorial, and reinforcing Dayton's claim to be both the city where aviation was born and the hometown of its inventors – The Wright Brothers. Just as importantly, Dayton

# A New Supporting Organization

The Wright Image Group is pleased to have a new supporting organization within the Miami Valley community, the Frank P. Lahm Flight-9 of the Order of Daedalians. The Flight Captain, Tim Kunzweiler, signed a letter of support and delivered it to George Gianopulos. The Daedalians are a national fraternity of current and former military pilots, begun in the 1930's to memorialize the American pilots who flew for the first time in combat during World War I. The local Flight has 182 active members, both men and women.

Board member George Gianopulos is also a member of Flight-9, and was the spark behind inviting Walt Hoy to address the group during a recent monthly dinner meeting. Such a group of pilots, well-versed in aviation and many in engineering as well, can be expected to ask some tough questions. During the discussion, the subject of high "How you going to keep that thing from flying off the platform?"

See *Daedalians* on page 3

# A Major Design Challenge

One of the challenges of erecting the Wright Flyer Monument is supporting the shear weight of an aircraft with a 120 foot wingspan 220 feet above the ground. Originally anticipated to be constructed of stainless steel, the weight of the flyer is estimated to be on the order of 80,000 lbs. With a weight like that, not to mention the awkward size, just lifting the flyer into place will be a complex and demanding project.

In an effort to reduce the level of difficulty and structural demands of this effort, we have enlisted the advice of various makers of composite materials, including the National Composite Center. By using composites, we may be able to lower the weight to as little as 25,000 lbs, a nearly 70% reduction!

Taking advantage of composites not only significantly reduces the structural issues, but highlights a technological strength of our region as a leader in the development of composite materials. The use of composites is not, however, without technical obstacles. The monument must be extremely durable, as it will be exposed to the elements 24/7. Hopefully the developing nano-technology being applied to composites will improve the durability of the materials and make them suitable for use in an exposed structure like the Flyer Icon.

Another issue with utilizing composites in the project is cost. While extremely strong and lightweight, composites are still a significantly more costly material than conventional structural steel or even stainless steel. Hopefully we will find a unique and successful way to take advantage of our regions strengths to create a lasting monument and icon to our area's creativity. We think we're on our way to exactly that.

Weight Vs Durability Vs Cost ???

### Goals from page 1

The first goal, to select an appropriate location and acquire the land, has been accomplished. The Singer Group of Dayton and the State of Ohio have generously donated 2.78 acres of land, valued at \$448,000, to erect the Wright Flyer monument on the southwest corner of the intersection of Interstates 70 and 75 where it will be seen by the occupants of more than 160,000 vehicles per day.

Goal Number 2 involves fund raising, which has already begun. In an uncertain economy, this is one of our most difficult, yet, we believe, attainable goals. To build the actual replica with its 120-foot wingspan, cover the on-site construction, and then raise the monument to its pinnacle 220 feet above the ground, will cost about \$7 million dollars. This also includes the cost of landscaping and maintaining the grounds around the base of the monument.

It is our belief that the general community of Dayton and the business community of the region will help us achieve this goal because of the significance and stature the icon will forever bring to Dayton. We ask your help in literally making this monument "fly!" For those who would like to contribute to the construction effort, please write to "Monument" at 1605 N. Main Street, Dayton, OH 45405, and we will send you a brochure with different levels for recognition.

Goal Number 3 is the actual construction of this magnificent monument. At the moment, we are weighing our options of building the icon out of stainless steel, a composite material, or a combination of both.

### Daedalians from page 2

winds came up and one of the members jokingly asked, "How you going to keep that thing from flying off the platform?" Walt got a laugh out of that, and then explained all the measures taken to ensure the Flyer will remain firmly anchored to the monument! Flight members engaged George and Walt with continued questions after dinner, and pored with great interest over the model of the monument that Walt had set up in the dining room.

Our list of supporting organizations now numbers 12, and efforts are underway to elicit resolutions of support from municipalities around the Miami Valley.

We're rolling right along!

### **Our Supporters**

Kiwanis Club of Dayton - Breakfast **Dayton Lions Club** Kiwanis Club of Kettering- Centerville Exchange Club of Dayton Military Officers Association of America, -Dayton Area Chapter **Hithergreen Aviation Club** High Twelve Club of Dayton Northridge DVKH Optimist Club Frank P. Lahm Flight #9 - Order of Daedalians Zoe Dell Nutter Petitions from individuals -Air Force Research Lab Petitions from individuals -Kettering and Centerville

To get a brochure explaining the different contribution and recognition levels, write to us at:

> Monument 1605 N. Main St Dayton, OH 45405

## Wright Icon News

## Membership from page 1

has been the location for the filing of many additional patents, all supporting and enhancing the capability of the airplane, and continues to be an aerospace region to be reckoned with.

Members will receive a regularly produced newsletter with stories about construction, funds raised toward completing the project and other news which the editor feels will be of interest to the members. We will publish the newsletter quarterly on the WIG website for ready access by all members, and we will e-mail you when the new issue is ready.

## **Board Member Spotlight**



#### Walter S. Hoy – President and Founder

Walt grew up in the St. Louis area and graduated from Saint Louis University with a degree in aeronautical engineering. In 1958, he began a 20-year career in the US Air Force, serving as pilotin-command of 13 different aircraft, both jets and helicopters, and serving a tour of duty in Vietnam. He also worked in the Flight Dynamics Lab at Annual Membership Dues Individual \$20 Couple \$30 Business \$50

To join, send your check for dues to: Wright Image Group, Inc. 1605 N. Main St. Dayton, OH 45405-4198

#### WIG Board of Directors

Walt Hoy - President Stephen Brown – Vice President Walter Ohlmann – Secretary Jacqueline Nawroth – Treasurer George Gianopulos Shayna Kolodesh Jon Kurtz Amanda Wright Lane Ellie Lewis Curt Nelson Anthony Perfilio Walter Rice Marshall Ruchman Bob and Sally Ruh Toula Stamm

Published by: Wright Image Group, Inc. 1605 North Main St Dayton, OH 45405-4198

Phone: 937-276-2963 800-266-4767

Website: www.wrightmonument.org

Email: walter@ponweb.com

Wright-Patterson AFB, and earned an MBA at the University of Dayton. After retiring from the Air Force, Walt founded Airplane Plastics, Inc. and Fox Plastics, later merging them into Fox Lite, Inc, the company that made the canopies for both airplanes that have circled the earth on a single tank of fuel. He is on the Board of Directors for the Wright "B" Flyer, the Good Samaritan Hospital Foundation, the K-12 Gallery, and the Engineers Club of Dayton.