



## MESSAGE FROM DIVISION CHAIR ■ ANDREW S. BICOS, PHD



As the new chair of the ASME Aerospace Division Executive Committee, I am looking forward to this year. It has been 100 years since the Wright Brothers

first flew in powered flight. We have come a long way... yet the future will be even more fantastic and members of the Aerospace Division will be there to make it happen.

The role of the Aerospace Division is to help our members with the resources they need to continue to make these contributions. The Aerospace Division is primarily concerned with the mechanical, propulsion and systems engineering aspects of aircraft, spacecraft, and missile design and operation. The division is organized into technical and administrative committees, and functions primarily through the organization and sponsorship of technical conferences and publications, and recognition of outstanding individual technical contributions by means of awards and honors. Our division is an integral part of ASME. The

Aerospace Division is one of the largest of the 37 Technical Divisions in ASME. As such, we can do much to leverage the strength of ASME to help us achieve our goals for our membership, as well as for the aerospace community at large. This is very important at this time when a large part of the aerospace community is suffering from the economic downturn even as we celebrate the 100th anniversary of the Wright Brothers first flight.

In the upcoming 2003-2004 ASME fiscal year, our goals for the Aerospace Division are to strengthen our operating infrastructure to better support our members, continue to strengthen our technical committees, continue our strong government relations activities, recognize those among us who have made outstanding technical contributions, and extend our reach into the community. We will continue to provide our members with opportunities to expand their skills through conference participation, make them aware of the latest trends in engineering, give them a voice at the national level for government relations, and extend their networks through opportunities for professional service.

I look forward to working with you this year to continue improving our

JOHN W. ROBINSON ■ Editor

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Aerospace Division to better serve our members. Please check our website for the latest information at <http://www.asme.org/divisions/aerospace/>

## WRIGHT FLYER III ■ 1905

The Wright Flyer III was designated a Historic Mechanical Engineering Landmark by ASME International on Thursday, Feb. 20, during Engineers Week 2003.

The Flyer is located in Dayton's Carillon Historical Park, an industrial heritage museum known for outdoor exhibits and other displays from this prolific community of inventors and engineering achievement.

The Wright Flyer III is recognized as the first practical aircraft and now joins the roster with other ASME

Historical Landmarks. This machine taught the Wright brothers—and the world how to fly in a useful fashion. While the Wrights had first taken to the air a year-and-a-half earlier, their first flights at Kitty Hawk, North Carolina, proved only that powered flight was indeed possible. Making flight practical and useful was something else. That effort required

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Pictured, left to right: John Tracy, Past Chair Aerospace Division and Boeing liaison, who serves on ASME's Industry Advisory Board; Inderjit Chopra, Past Chair Aerospace Division; Amanda Wright-Lane, the great grand niece of the Wright brothers; Susan H. Skemp, ASME President; and R. Michael Hunt, ASME History and Heritage

## WRIGHT FLYER III

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every bit as much genius, dedication, and hard work as did those first, brief leaps into the air at Kitty Hawk. Wright Flyer III, the Wrights' third airplane, looks much like their first Flyer, the one that showed the world that it could fly, but a number of significant differences make this the machine that made the world want to.

Humans dreamed of flight among the birds since ancient times and attempts were made by many; however, it remained for two unassuming brothers, Wilbur (1867-1912) and Orville (1871-1948) Wright, bicycle mechanics from Dayton, Ohio, to methodically work through the problems associated with flight—lift, power, structural strength, and control—and produce a machine that could accomplish the task. For four years the brothers systematically tackled these problems and overcame them one by one. Along the way they provided a model for aeronautical research and generated information that would help form the foundation for what we now call aeronautical engineering.

The significance of these first flights cannot, and should not, be minimized. They were, after all, the achievement of the lofty goal that many great minds had sought in vain for centuries. The Wrights, however, were practical men, and even while announcing their success and taking preliminary steps to protect their invention, they realized that their quest was far from over. The Wright Flyer had indeed

flown, but it had flown basically in a straight line and only a few feet above the ground. This was far short of the capabilities needed in a practical, useful airplane. To be truly practical, an airplane would have to be able to climb to an altitude that would clear trees and buildings, and it would need to be fully maneuverable so that a pilot could turn it and fly in any direction at will. In addition, a practical airplane would have to be reasonably safe and easy to control. Returning to Dayton in time for Christmas, the Wrights realized that they were at a crossroads. The bicycle shop was their livelihood; they had been pursuing their dream of flight as a sideline. Now that they had achieved what they thought would be their goal, they recognized how much development work still remained to be done. If they were going to undertake that—and to realize any financial reward for their work—the brothers had to make a full-time commitment to aviation. They decided to turn the shop operations over to Charles Taylor (1869-1956), the machinist who had built the Wright Flyer's 12-horsepower gasoline engine, and devote all their time to perfecting their airplane. In addition to managing the shop, Taylor would continue to contribute his talents to flying machine development as needed.

Attendees at the Landmark Ceremony for the Wright Flyer III Historic Mechanical Engineering Landmark on Thursday, Feb. 20 during Engineers Week 2003 are shown in the accompanying photograph. ■

## UPCOMING CONFERENCES

October 7-9, 2003

Seoul National University, Seoul, Korea  
14th International Conference on Adaptive Structures and Technologies  
Conference Chair: Prof. Seung-Jo Kim

November 16-21, 2003

Marriott Wardman Park & Omni Shoreham Hotels, Washington, D.C.

ASME International Mechanical Engineering Congress

Research Development and Design Expo (RD&D)

Defense Research and Engineering Conference and Exposition (DREX)  
<http://www.asme.org/congress>

April 19-22, 2004

Wyndham Hotel, Palm Springs, CA

12th AIAA/ASME/AHS Adaptive Structures Conference

Conference Chair: Dr. Gregory Agnes  
45th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference

Conference Chair: Mr. Patrick J. Goggin  
SPIE's 11th Annual International Symposium on Smart Structures and Materials

Conference Chair: Prof. Vasu Varadan  
Co-Chairing 5 out of 9 Conferences. ■

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