



*Born of Dreams—
Inspired by Freedom*

U.S. Centennial of Flight Commission

National Plan for The Centennial of Flight Commemoration

November 2002

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Section 1 – Executive Summary

December 17, 2002: The beginning of a national celebration.

Beginning on December 17, 2002, our country will have a unique opportunity to re-invigorate our nation's interest in the pursuit of invention through creativity, courage and perseverance.

No other innovation in the last century has so defined our time and initiated such a series of technological advances as the airplane. Many of today's advanced technologies can trace their origins to the development and growth of aviation. Equally important from a historical perspective, the airplane has dramatically changed the course of transportation, commerce, communication and national defense, effectively bringing the U.S. and the world closer together.

Congress created the U.S. Centennial of Flight Commission (COFC) in 1998 to expand national and international interest in the Wright brothers' achievement by enhancing interest in the commemorative activities such as those planned by the First Flight Centennial Foundation and the First Flight Centennial Commission of North Carolina, and Inventing Flight: Dayton 2003 of Ohio.

Supporters of the Centennial celebration agree that activities should share a fundamental purpose: to educate the public about the centennial and its meaning, and to encourage them to participate and engage in commemorative activities, thus gaining something from the experience. Through our collective efforts, we hope to create a national celebration that re-energizes our fascination with the power and opportunity that flight has afforded us.

On December 17, 2002, the COFC will mark the start of the yearlong *Centennial of Flight: Born of Dreams – Inspired by Freedom* celebration with a kick-off ceremony at the Smithsonian's National Air and Space Museum in Washington, D.C. All COFC Partners and Patrons have been invited to attend, and the COFC staff has been working to secure commitments from key government personnel.

This celebration is not about a single event, but rather a century of powered human flight. Vision, persistence and ingenuity have taken people from the dunes at Kill Devil Hills, North Carolina, to the surface of the moon in the course of that century. There are literally thousands of unsung heroes whose ability to dream of flight was only surpassed by their ability to make it happen.

The National Plan presents an overall strategy for the Centennial of Flight commemoration to encourage the broadest national and international participation in the celebration, while publicizing and encouraging programs, projects and events that will involve, educate, enrich and inspire the maximum number of people.

The COFC has accomplished much in 2002. With the acceptance and the implementation of the recommendations below, even more can be accomplished in the future. The COFC members and the First Flight Centennial Federal Advisory Board members endorse the following recommendations to the Congress and the President:

1. Full Funding for the U.S. Centennial of Flight Commission: The budget for the COFC should be funded at the authorized levels of \$900,000 in FY 2003 and \$600,000 in FY 2004 as provided in the Centennial of Flight Commemoration Act.
2. Executive Branch and Congressional Participation on December 17, 2002: The President and Congress (especially those in states and/or committees involved in activities related to flight or

national events) are urged to participate in the national kick-off celebration through presence at either the national kick-off, or corresponding kick-off celebrations in Dayton, Ohio, or Kill Devil Hills, North Carolina. The Department of Interior, Department of Transportation, Department of the U.S. Air Force, Department of the Navy, National Aeronautics and Space Administration, Library of Congress and the Federal Aviation Administration (FAA) are also encouraged to attend, and the heads of some of these departments have already agreed to participate.

3. Federal Government Participation in Multiple Celebration Activities: Congress and the President are urged to encourage all relevant federal agencies to develop plans for participation in the Centennial commemoration. Additionally, these entities are urged to participate where appropriate opportunities arise in Centennial activities occurring across the U.S.
4. Encourage International Celebration: The U.S. Centennial of Flight Commission has made an effort to encourage and support international celebratory activities. Currently, events are being planned by entities such as the Paris Air Show and The Royal Air Force Museum in England. The U.S. Centennial of Flight Commission requests that Congress and the Executive Branch encourage our international partners to participate in the Centennial celebration where deemed appropriate.
5. Fund the Aviation Theme Study: This study, proposed by staff members of the National Park Service, is a high priority project. This national survey of historic sites important to the history of flight represents a tool for underscoring the role flight has played in the development of communities across the nation. The recognition of local sites, events and people represents an important legacy of the centennial.

Section 2 – Introduction

On December 17, 1903, at 10:35 a.m., the world's first successful powered aircraft lifted off the beach at the Outer Banks for a 12-second, 120-foot journey. A new industry was born and a new way of life followed closely behind. Driven by two brothers unwavering in their task, that flight accomplished what people had only imagined since the beginning of time. Realizing this dream took more than wings, wheels and a motor – it took the spirit of adventure, the tenacity brought on by risk and failure, and the desire to achieve a freedom which humans had never before experienced.

In 1998, the United States Congress passed the Centennial of Flight Commemoration Act, Public Law 105-389, 105th Congress (Nov. 13, 1998), as amended by Public Law 106-68, 106th Congress (Oct. 6, 1999).

This law established the U.S. Centennial of Flight Commission (COFC) to assist in the commemoration of the centennial of powered flight and the achievements of the Wright brothers' first powered flight at Kill Devil Hills, North Carolina, on December 17, 1903, and to serve as a national and international source of information for activities commemorating this historic event. Congress also intends that the COFC encourage more than a celebration of this single achievement, to include a commemoration of the full 100 years of aviation history that followed.

Under this mandate, the COFC plans to coordinate and encourage national and international celebrations of the Wright brothers' achievement and its impact on the world in a fashion that inspires the next generation of inventors.

There are six COFC Commissioners, including the Administrators of NASA and FAA, as well as representatives from North Carolina and Ohio, Experimental Aircraft Association (EAA), and the National Air and Space Museum.

Section 12 of the Act provides for the establishment of the First Flight Centennial Federal Advisory Board. The Board is composed of 19 members, five of whose positions are included by statute, and 14 other U.S. citizens meeting various statutory criteria. Of these fourteen positions, six are appointed by the President of the U.S., four by the Majority Leader of the U.S. Senate and four by the Speaker of the U.S. House of Representatives. This Board has been formally chartered and held its first meeting August 9, 2001, under the chairmanship of Dr. Tom Crouch, Senior Curator for Aeronautics at the National Air and Space Museum.

The Advisory Board shall offer advice and counsel to the COFC on matters related to the Act, including but not restricted to: (1) effectively applying COFC resources in order to achieve the goals established in the Act; (2) formulating recommendations to Congress and the Executive Branch on how to best promote national awareness of the commemoration of the centennial of powered flight and the achievements of the Wright brothers; (3) increasing the visibility of centennial activities; and (4) identifying ways in which individuals and organizations can be encouraged to participate in the centennial commemoration.

The U.S. Centennial of Flight Commission's Responsibilities

The United States Congress charges the COFC with playing the leading role in coordinating and publicizing activities celebrating the achievements of Wilbur and Orville Wright and commemorating a century of powered flight. The COFC has the authority to make broad recommendations to the President of the United States, Congress and federal agencies on the celebration.

The COFC's primary responsibilities are to:

- Generate publicity for the celebration.
- Encourage individuals and organizations across the country to conduct commemorative activities.
- Give advice and recommendations to individuals and organizations conducting commemorative activities.
- Maintain a Web site and a national calendar of events.
- Send representatives to international meetings.
- Maintain a speakers' bureau.
- Supervise staff operations.
- Sponsor meetings.

Under the Centennial of Flight Commemoration Act, the COFC is also required to make recommendations concerning the issuing of commemorative postal stamps; commemorative coins and medals; the publication of books and educational materials; the production of conferences and educational programs; and the creation of competitions and awards.

Commission Support for National Activities

The COFC's outreach plan includes support for marquee activities being planned by state commissions and organizations in North Carolina, Ohio and across the country. Events include national symposia, Wright Flyer tours and reenactments, special exhibits and new museum openings, spectacular air shows, festivals, and much more.

As we approach 2003, the COFC will work to create national exposure for the celebration year and provide comprehensive information about celebration activities, historical materials and educational resources. Visit www.centennialofflight.gov for more information on all of the exciting activities being planned.

The Spirit of Flight

An equally important goal of this celebration will be to encourage the values that have characterized 100 years of aviation history: ingenuity, inventiveness, persistence, creativity and courage. These values hold true not just for pioneers of flight, but also for all pioneers of invention and innovation, and they will remain an important part of America's future.

Using the story of aviation, the COFC hopes to inspire a new generation of inventors in children around the world and ignite a new level of enthusiasm for perseverance and determination in the quest for ingenuity.

The National Plan

Centennial of Flight: Born of Dreams – Inspired by Freedom. These words lie at the heart of the COFC's outreach efforts. Through publication of a strategic plan, the COFC hopes to encourage national and international appreciation and celebration of the 100th anniversary of flight in a fashion that inspires vision, persistence and creativity in a future generation of inventors.

Again this year we have chosen to integrate the requirements of the Annual Report with the National Plan for the Centennial of Flight Commemoration.

No invention has made such an indelible imprint on our world as the airplane. In 2003, the national celebration *Centennial of Flight: Born of Dreams - Inspired by Freedom* will commemorate the world's rich history of aviation accomplishments through events, symposia, air shows, special programming, exhibits, tours, educational outreach and more.

Section 3 - Centennial Partners, Media Patrons, Memoranda of Agreement and Official Licensees

Centennial Partners

On July 10, 2001, the COFC approved the concept of a “Centennial Partner.” The Centennial Partner designation recognizes the extraordinary events and organizers that bring more national attention and awareness to all Centennial events. The criteria is the organization or event: be exceptionally relevant to the centennial of powered flight or the history of aviation; has a strong educational focus; leaves a tangible legacy; has a plan/process in place to measure success against objectives; has national impact; works collaboratively with other organizations toward common goals and objectives for the benefit of the Centennial celebration and the public interest; and has a formal Memorandum of Agreement with the COFC. The COFC staff and the History and Education Panel screen the applications requesting Centennial Partner status and present recommendations to the U.S. Centennial of Flight Commissioners.

The following organizations are Centennial Partners of the *Centennial of Flight: Born of Dreams - Inspired by Freedom* national commemoration. Each is developing major activities or assisting in the development of activities for 2003.

Inventing Flight: Dayton 2003

Founded in 1989, Inventing Flight: Dayton 2003 is the state of Ohio commission charged with promoting aviation, the Wright brothers, and the role of Ohio in the birth and future of flight. Inventing Flight: Dayton 2003 will celebrate expanding the boundaries of human experience via new discoveries with a yearlong tribute to the amazing determination and ingenuity of these two pioneers. In addition to a wealth of aviation related events taking place throughout the city, the height of activities in Dayton will occur from July 3-20, 2003, when Deeds Park, a 12-acre site near downtown Dayton, will be transformed into Celebration Central.

J. Bradford Tillson, chairman of Inventing Flight, is a U.S. Centennial of Flight Commissioner.

First Flight Centennial Foundation

The First Flight Centennial Foundation, a non-profit organization, was formed in North Carolina for the purpose of celebrating the 100th anniversary of powered flight. The Foundation’s objectives include improving Wright Brothers National Memorial, helping to produce the First Flight Centennial event on site in December 2003, and sharing the story of the Wright brothers and their achievements through specific events and activities. As a fundraising partner of the National Park Service, the Foundation has the distinct honor of providing opportunities for on-site recognition of sponsors and donors, as well as designation as an Official First Flight Centennial® Sponsor.

Dick Howard, president of the First Flight Centennial Foundation, is a U.S. Centennial of Flight Commissioner.

EAA

EAA is a growing and diverse international organization of more than 170,000 members with a wide range of aviation interests and backgrounds. It was founded as the Experimental Aircraft Association in 1953 by a group of individuals in Milwaukee, Wisconsin, who were interested in building their own

airplanes. Through the decades, the organization expanded its mission to include antiques, classics, warbirds, aerobatic aircraft, ultralights, helicopters and contemporary manufactured aircraft.

EAA's Centennial celebration, *Countdown to Kitty Hawk presented by Ford Motor Company*, includes a series of activities to mark the 100th anniversary of the Wright brothers' achievement. The centerpiece of this celebration is the flight of EAA's 1903 Wright Flyer reproduction – the only accurate flying reproduction of the original – at Kitty Hawk, North Carolina, on December 17, 2003, 100 years to the date of that remarkable first flight.

Tom Poberezny, president and Chief Executive Officer of EAA, is a U.S. Centennial of Flight Commissioner.

FAA

The FAA's role in the observance of this anniversary includes support for the COFC, of which the FAA's administrator, Marion Blakey, is a member. The FAA's own programs in observance of the Centennial include outreach events organized in partnership with schools and the aviation community. The agency's aviation education home page also provides a special Web page with educational material about the Wright brothers.

The FAA is the sector of the U.S. government primarily responsible for the safety of civil aviation. The FAA was originally designated the Federal Aviation Agency when established by the Federal Aviation Act of 1958. The present name was adopted in 1967 when the FAA became a component of the Department of Transportation.

NASA

The administrator of the National Aeronautics and Space Administration, Sean O'Keefe, is one of the six members who serve on the COFC. NASA, by supporting the COFC in observing the centennial of flight anniversary, will carry out the element of its mission "to inspire the next generation of explorers." In addition, NASA Headquarters and the nine NASA Field Centers located across the nation are planning education-based activities to celebrate the centennial. Also, NASA offers a variety of educational resources for all ages on their Web site.

The guiding principles for U.S. exploration of air and space have remained remarkably consistent for more than 80 years. In 1915, when aviation was still in its infancy, Congress created an organization that would "supervise and direct the scientific study of the problems of flight, with a view to their practical solutions." That organization, the National Advisory Committee for Aeronautics, evolved into NASA in 1958 when Congress formed a civilian agency to lead "the expansion of human knowledge of phenomena in the atmosphere and space."

Smithsonian's National Air and Space Museum

The mission of the Smithsonian's National Air and Space Museum is to "commemorate, educate and inspire." In October 2003, the Museum will celebrate the upcoming centennial with the new exhibition, "The Wright Brothers & The Invention of the Aerial Age." A thorough presentation of the Wrights' technical achievements will be paired with a rich examination of the cultural impact of early powered flight. The centerpiece of the gallery will be the original 1903 Wright Flyer, displayed on the ground for the first time since acquired by the Smithsonian in 1948.

In December 2003, the Museum will open its 760,000 square foot companion facility at the Washington Dulles International Airport in Northern Virginia. The much anticipated Steven F. Udvar-Hazy Center will house the 80 percent of the unparalleled national collection that has not been generally accessible to the public.

General J.R. "Jack" Dailey (Retired) is the director of the National Air and Space Museum and serves as chairman of the U.S. Centennial of Flight Commission.

First Flight Centennial Commission

The overall objective of the North Carolina First Flight Centennial Commission is to host the centennial anniversary of mankind's first successful flight in a powered aircraft and celebrate the subsequent 100 years of aviation. The Commission's mandate is to "develop and plan activities to commemorate the centennial of the first flight and other historical events related to the development of powered flight." The Commission includes the Governors of North Carolina and Ohio, the Chair of the U.S. Centennial of Flight Commission, and leaders from throughout North Carolina.

The Commission's fundamental task is to remind the world what a magnificent achievement the first flight was; to educate the public on what flight has meant to the world; and to commemorate that achievement in North Carolina, the United States and throughout the world. This will be done through events, educational activities and partnerships with all who want to join in celebrating a century of flight.

American Institute of Aeronautics and Astronautics (AIAA)

For more than 65 years, AIAA has been the principal society of aerospace engineers and scientists. Officially formed in 1963 through a merger of the American Rocket Society and the Institute of Aerospace Sciences, AIAA is the world's largest professional organization devoted to advancing engineering and scientific pursuits within aviation, space and defense on behalf of government, industry and academia.

AIAA launched the Evolution of Flight campaign in May 1999 to mark the 100th anniversary of flight, recognize the achievements of the men and women who challenged history, and lay the groundwork for the next 100 years of innovation in aviation and space technology. Through programs and events, AIAA will honor individuals in aerospace history whose legacy continues to impact society. They will encourage new talent in the sciences to ignite innovation in the aerospace industries and bring the leaders of the community together to shape a common vision for the future.

Aviation Week

The Aviation Week division of The McGraw-Hill Companies is the world's premier multimedia information and service provider to the aviation and aerospace market. The cornerstone of the Aviation Week portfolio is *Aviation Week & Space Technology*, the world's leading aviation and aerospace industry magazine covering technology, business and operations in the commercial, military and space markets for more than 100,000 paid subscribers in 130 countries. With McGraw-Hill Education Publishing, they expect to connect *The Next Century of Flight* message to 30 percent of U.S. classrooms by 2003, 40 percent by 2005.

Aviation Week's *The Next Century of Flight* is a multimedia education initiative dedicated to helping the global aerospace industry capitalize on the 100th anniversary of powered flight in 2003 and position itself for generations to come. The program has three core objectives:

- Re-ignite the spirit of the global aerospace industry.
- Raise worldwide awareness of the importance of the industry and its bold vision of the future.
- Inspire young people to pursue careers in aviation and aerospace.

Aviation World's Fair 2003

Aviation World's Fair 2003 hopes to honor the 100th anniversary of controlled, powered flight and the birth of the aerospace industry with an event focused on the Wright brothers' epic triumph, and other milestones of flight.

On October 1, 2002, Virginia Secretary of Transportation Whitt Clement announced that the State of Virginia was going to suspend its financial support of the 2003 Aviation World's Fair. Aviation World's Fair is currently looking for a new venue. For updates, please refer to the Aviation World's Fair Web site at www.awf2003.com.

Festival of Flight

Festival of Flight 2003 will be an 11-day celebration of the achievements in aviation, encompassing both a look back at the heritage of flight and a look to the future of aviation and space travel.

The opening weekend's art festival, The Arts Take Flight, will feature aviation-inspired works of art from a variety of media, including fine art, music, drama and dance. Throughout the weekend, hot air balloons will be tethered in downtown Fayetteville and kite-flying demonstrations (from Kitty Hawk Kites) will assure that even the youngest in the audience will be captivated by flight.

Two days of air shows will feature dramatic flight demonstrations and engaging static displays. The Aviation Exposition will run for seven days at Fayetteville's Crown Center, where four distinct exhibition facilities provide 120,000 square feet of indoor exhibit space to depict the past, present and future of flight.

Outside the exhibit halls, the exposition continues with more exhibits and displays.

The Festival will conclude on Monday, May 26, Memorial Day. Solemn morning ceremonies will honor the men and women who gave their lives for this country, followed by an All-American Memorial Day parade.

With an emphasis on education, Festival of Flight seeks to compel students' interest in aviation and flight technology through interactive exhibits, celebrity speakers, exclusive access to the exposition and a yearlong educational program.

U.S. Air Force Centennial of Flight Office

In January 2001, the Chief of Staff of the U.S. Air Force established the U.S. Air Force Centennial of Flight Office to research, plan and coordinate the U.S. Air Force's active participation in the

worldwide celebration. The U.S. Air Force Centennial of Flight Office's objectives are to build, maintain and strengthen relationships within the worldwide aviation community through the support of, and participation in, Centennial activities; and to research, develop, coordinate and support opportunities (both internal and external) to promote a deeper understanding of America's Air Force as part of our proud heritage and our vision.

Media Patrons

The Media Patron program was created in an effort to further the COFC's mission to inform and educate people of all ages about the history and development of powered flight. The goal of the program is to generate widespread awareness for the *Centennial of Flight: Born of Dreams – Inspired by Freedom* commemoration. The lack of paid advertising support for the Centennial celebration made it necessary to explore creative ways to generate widespread awareness. As media outlets express an interest in partnering with the COFC, opportunities are explored to generate in-kind media exposure for the celebration through multiple distribution channels. In exchange for the in-kind exposure, approved media outlets will be recognized as "Media Patrons" of the coordinated national campaign, *Centennial of Flight: Born of Dreams – Inspired by Freedom*. In essence, the COFC will exchange the value of the media exposure for the right to use the COFC logo and "Media Patron" designation.

In order to be designated as a Media Patron, media outlets must meet several criteria, including but not limited to the ability to:

- Reach millions of viewers/readers through multiple channels.
- Create a national impact, generating at least 15 million impressions.
- Offer content/programming relevant to the Centennial celebration, which must include an educational component.

To date, the COFC has selected two organizations as Media Patrons, Primedia and Third Millennium Entertainment.

Primedia

Primedia will target national, international, educational and niche audiences through a number of Centennial-themed media programs, including *Moments In Flight*, a series of 90-second videos designed to educate viewers about aviation pioneers, events or technological milestones. Other Primedia initiatives include a flight-themed documentary for television, a commemorative print edition on the history of powered flight and Internet broadcasts of *Moments in Flight*. Primedia has several educational initiatives planned, including historical programming for Channel One, which reaches eight million students and 400,000 teachers daily.

Primedia is in initial discussions with Channel One and WETA (PBS Washington) about a joint TV special that would air nationally on PBS on December 17, 2003, and a coordinated Channel One in-school program. This would include Channel One coverage of key Centennial events.

Primedia's history magazines are currently determining feature magazine stories for 2003, including special features related to the Centennial. Primedia is also discussing a series of "Official Centennial articles" that would be coordinated with the COFC.

Primedia is finalizing topics for the Moments in Flight vignettes and expects to produce 20-30 vignettes for use in home video and in-flight domestic and international airlines. Video and the related quiz (see below) may be made into a 30-minute TV special.

Primedia is compiling a CD Rom Centennial Quiz as a companion to the Book of Flight (from the Smithsonian's National Air and Space Museum). The CD, *Celebrating 100 Years of Powered Flight*, will include various volumes, including *Inventing Flight*, *First In Flight*, *Aviation Pioneers*, *History Timeline*, *Flying machines*, and *Into Space and Beyond*.

Primedia is working with *Inventing Flight* to produce the Dayton National Park Center Video. The original script has been rewritten and approved by the National Park Service and Dr. Tom Crouch.

Third Millennium Entertainment (TME)

Third Millennium Entertainment's slate of productions includes *Born of Dreams – Inspired by Freedom*, a two-hour television special, hosted by stars. It will be in the style of a combination of the Academy Awards and Kennedy Center Honors as tribute is paid to the legendary international events in the history of flight and to the "Heroes," the men and women from each service protecting our country today.

The project is currently in development and seeking funding. Pre-production is planned for spring 2003, taping is planned for November 2003 and the program will air in December 2003.

TME also will produce 100 one-minute spots featuring many of the historical moments of aviation and the very special men and women who made that history. Eighty of the *Moments* will cover the important events in the international history of flight and 20 *Moments* will honor the men and women protecting our country today.

Centennial of Flight Moments will be composed through a melding of more than 200 archives of film, photographs, feature films, television programs, paintings and maps, and will provide an understanding of the pivotal events of aviation over the last century; insight into the lives of those who made that history; and an appreciation of the barely imaginable challenges of the next century.

TME also will produce a two-hour documentary titled *We Fly* to complement the *Centennial of Flight Moments* and the television special *Born of Dreams – Inspired by Freedom*.

Other plans include a one-hour documentary titled *Women in Flight*, that will honor the achievements of women in aviation, and a two-hour documentary titled *The Best of the Celebration of the Centennial of Flight*, which will bring together the highlights of the exciting yearlong celebration of events from Washington D.C., to Dayton, to Oshkosh and Kitty Hawk. This program will pull the major events together into one presentation that will memorialize the Centennial of Flight celebration. TME plans to provide this program free of charge to our armed services worldwide.

The *Centennial of Flight Moments* will serve as the starting point for an extensive educational project designed to enhance the knowledge of aviation events over the past century and to prepare students to contribute to the next century of aviation development. TME will create a Web companion piece to the *Centennial of Flight Moments*. The core educational component of the site will be modules designed for classroom use in middle and high schools built around specific Standards of Learning. They will include lesson plans for the teachers, class activities and Web projects for classes. Using the *Centennial of Flight Moments* themselves, plus some supplementary materials (i.e. licensed photos

and sounds), these modules will be designed for teachers to use as part of their curricula, in the areas of U.S. and world history, social studies, popular culture, science, etc.

The most appropriate *Centennial of Flight Moments* will be re-edited into 4-6 half-hour educational videos, representing 6-8 distinctive categories. Examples of the categories include a flight module, a space module, an extraordinary people module, a lifestyles module, and a world events module. Each module will take the students on a guided tour of a particular aspect of the Centennial of Flight, vividly illustrated through the *Centennial of Flight Moments*.

The materials will appeal to 1.5 million teachers and 27 million students and will be designed to meet specific National Science and Social Studies Standards. Designed to have cross-curriculum applications, the materials can be used in History, English, Art, Social Studies, Science, Geography and Math classes. The *Centennial of Flight Moments* in the classroom will include educational videos (a re-edited series of 4-6 videos) broadcast on public television stations and a teacher's guide filled with activities, lessons, thematic information and resources available on the Web site.

The materials will be available on the Internet and will be in a format that can be easily photocopied and sent to participating schools.

Memoranda of Agreement

Memoranda of Agreement have been signed with a number of centennial organizations, including all of our Centennial Partners, formally making them a part of the national *Centennial of Flight: Born of Dreams – Inspired by Freedom* campaign. As a result of the agreements, the COFC will provide outreach support to these organizations that have a similar mission to promote awareness of the Centennial commemoration.

Aviation Foundation of America, Inc.

The Aviation Foundation of America, Inc., in celebration of the Centennial of Flight, is sponsoring the re-creation of the National Air Tours (originally held annually from 1925 through 1931) in 2003. The Foundation will be organizing the Tours, envisioned to include approximately 25 vintage aircraft along with other aircraft representative of the progress of aviation. Over 30 cities will be visited across the United States from Detroit to California to Kitty Hawk and back to Detroit.

Challenger Center for Space Science Education

The families of the Challenger Space Shuttle Mission 51-L founded Challenger Center in 1986 as a living memorial to the spirit of exploration – the same spirit that motivated the crew of the Challenger Space Shuttle in their quest to learn. True to their legacy, Challenger Center uses space as a theme to excite, inspire and encourage students in the study of mathematics and science and the application of technology, and to provide motivation toward careers in the fields of science and engineering.

Challenger Center is in the process of developing new educational materials to be delivered as part of their involvement in Space Day 2003. The materials will be focused on the 100th anniversary of the Wright brothers' first powered flight. It is currently envisioned that these new educational materials will challenge students in grades 4-8 to create their own designs for future vehicles of flight using the ingenuity and creativity of Wilbur and Orville Wright as inspiration and models of their own efforts.

Chicago Centennial of Flight Commission

The Chicago Centennial of Flight Commission was started in 2001 by a group of aviation industry organizations in the Chicago area and Great Lakes region that was interested in promoting aviation awareness through public exhibits. Plans for centennial activities include the “Chicago Centennial of Flight: 100 History Making Aircraft” model exhibit at the Museum of Science & Industry, scheduled from May 23, 2003 through September 28, 2003, as well as events and symposia throughout 2003. In addition to promoting aviation awareness to the general public, the Chicago Centennial of Flight Commission hopes to promote aviation education for children in grades K-12.

DGVF Productions

DGVF Productions is currently producing the broadcast documentary titled *Kitty Hawk: The Wright Brothers' Journey of Invention*. This program is scheduled to air on PBS in 2003 with Connecticut Public Television as its presenting station. Three years in the making, this two-hour telecast promises to be the definitive documentary about the Wright brothers' invention of the airplane. *Kitty Hawk* draws on the expertise of over a dozen Wright brothers' authors and specialists, including Tom Crouch, Peter Jakab, James Tobin, Fred Howard and Leonard Bruno. The program tells the interesting technical story of the Wrights brothers' inventive process, while offering windows on their fascinating lives in Dayton and the dunes of the Outer Banks in North Carolina.

In addition to the 2003 broadcast, the documentary will be released on video and digital video disc assuring years of additional exposure in the general public and through libraries and schools. *Kitty Hawk* is scheduled for completion by early 2003.

RCPI Landmark Properties, LLC

The Centennial of Flight Expo was conceived by RCPI in 2002 as part of the arts and cultural programming of Rockefeller Center. Rockefeller Center is a national monument, a commercial business and retail complex located in New York City. The Rockefeller Center Centennial of Flight exhibit presents the historical, social and political growth of aviation beginning with the Wright brothers' first flight. The exhibit will include an educational brochure that will be distributed to over 300,000 attendees of the event. The brochure will highlight each of the displays, offer anecdotal information and help guide visitors through the labyrinth of aviation and space exhibitry. The Centennial of Flight Expo is scheduled from July 28-August 17, 2003.

Royal Aeronautical Society

From its formation in 1866, the Royal Aeronautical Society has been recording developments in aeronautics, aviation and aircraft/aerospace technology through its lectures, conferences and publications. Publishing an illustrated chronological volume, *Letters of the Wright Brothers: The Letters of Wilbur, Orville and Katharine Wright*, to coincide with the forthcoming 2003 centenary celebrations of the Wright brothers' first flight, would seem an appropriate way for the Royal Aeronautical Society, the oldest aeronautical society in the world, to commemorate the achievement of the Wrights and also add to the existing knowledge about them as most of this material has never been published before.

Space Day Foundation

The Space Day Foundation is a private operating foundation dedicated to space-related education. Its mission is to motivate students to acquire the math, science and technical skills needed in the workforce of the future. Its core activity is Space Day, the award-winning educational initiative that nurtures young people's enthusiasm for the wonders of the universe. The annual Space Day celebration is the capstone of a massive grassroots effort reaching hundreds of thousands of teachers and millions of students in the U.S., Canada and beyond. Currently, there are 75 Space Day Partners, including NASA.

The Space Day Foundation will use the Space Day 2003 celebration to complement the COFC's celebration of the Centennial. The theme for 2003 will be "Space Day 2003: Celebrating the Future of Flight." Space Day promotional and education initiatives will springboard from the celebration of the Centennial of Flight.

The Wright Experience

The mission of The Wright Experience is to preserve the legacy of the Wright brothers and other early aviators and aircraft inventors, their experimentation, discovery and methodology; to create a living classroom that provides inspirational examples of innovation and discovery for school children and people of all ages; and to provide for the remanufacture of original Wright brothers' aircraft.

3 Roads Communications

Legends of Airpower is a biographical series of 52 programs, 26 running and 26 in production, made for public television. Each episode focuses on the life and times of a noteworthy American aviator. *Legends* contains a mixture of historical footage, still photographs and penetrating interviews that give audiences an educational and entertaining look at the people and events that shaped powered flight's first century.

On April 17, 2000, Gus McLeod became the first person to reach the North Pole in an open cockpit aircraft. In 2003, Mr. McLeod will fly solo his propeller-powered aircraft around the world, crossing both the North and South Poles en route. This trip is being made to: (1) bring attention to achievements of aviation's pioneers during powered flight's centennial celebration; (2) commemorate the 60th anniversary of the Tuskegee Airmen's deployment to Europe; (3) educate people, especially school children, about his adventures, as they follow his progress on the Internet, and later, as they view the PBS documentary about the journey, and (4) recognize, during Black History Month 2003, the contributions of African-American Aviators.

Virginia Air & Space Center

From engaging permanent exhibits and interactive traveling exhibits to inspirational educational programs, the Virginia Air & Space Center has served as a leading source for informal science education for nearly 10 years. The Center's efforts will continue in 2003, when it will open a new Aviation Exhibit Hall highlighting the origins of flight and Hampton Roads' significant role in commercial, general and military aviation.

Wolf Trap Foundation for the Performing Arts

Wolf Trap Foundation for the Performing Arts works in partnership with the National Park Service to operate Wolf Trap National Park for the Performing Arts. Wolf Trap plans to celebrate the Centennial of Flight with a performance on September 6, 2003. This performance will be presented as part of Wolf Trap's *Face of America* series, and will feature music, dance, and historic film footage and high definition television images projected on giant screens at the Filene Center, Wolf Trap's 7,000 seat outdoor amphitheatre.

Official Licensees

The COFC has also signed formal licensing agreements with C. Forbes, Inc.; Spin Master Toys; Custom Pin and Design; Welcome Enterprises; and Disc Marketing.

Tena Clark, Chief Executive Officer of Disc Marketing, was commissioned in 2001 by the NASA Art Program to write a song commemorating the Centennial of Flight. The song is called "Way Up There."

Section 4 – Educational and Cultural Programs

U.S. Centennial of Flight Commission

Materials developed for classroom use:

The COFC has developed two educational posters in cooperation with the Office of Education at NASA Headquarters featuring the accomplishments of the Wright brothers. The activities on the backs of the posters provide hands-on experiences for students relating to some of the scientific and engineering processes the Wright brothers used. The posters are available online from NASA at spacelink.nasa.gov/products. They are also available on the COFC Web site, www.centennialofflight.gov/education/posters.htm.

A bookmark featuring the COFC Web site is available. The back of the bookmark includes several activities that encourage educators and students to explore the various educational components of the Web site and to research, plan and participate in their own centennial of flight activities and events. It is available on the COFC Web site.

A new educational poster, *The 1902 Glider: How the Problem of Control was Solved*, is available. The poster addresses the problems the Wright brothers' encountered and the solutions they applied during their invention process. The eight-panel back includes an electronic linkage campaign and additional resources. This poster will be available online from NASA at spacelink.nasa.gov/products. It can also be requested via the COFC Web site at www.centennialofflight.gov/education/posters.htm.

A second new product, "The First Century of Flight: NACA/NASA Contributions to Aeronautics," is a timeline that features NACA/NASA's contributions during the first century of flight. The back of the poster contains a history of NACA/NASA, a summary of current aerospace technology, future possibilities for flight and educational resources. The timeline is suitable for classroom use and is available from NASA at spacelink.nasa.gov/products.

The COFC Web site also features many educational resources for educators and students in the Educational Resources Center section, that was previously called the Educational Resources Matrix. This database includes educational links from more than 50 aviation and aerospace related organizations and associations. Information about careers, museums, curriculum materials, grants, scholarships, student competitions, educator workshops and a vast array of additional topics are included. Links can be explored by organization or sorted by category, allowing users to quickly identify resources of interest. Educational links related to the Wright brothers and/or the centennial of flight are highlighted within each category. These links can also be sorted as a separate category.

A large number of essays are available on the COFC Web site under the History of Flight section. The essays provide information about significant people and events that have contributed to the history of aviation and aerospace throughout time. Photographic and/or graphic images, dictionary hot links and detailed timelines are provided with each essay and the material is cross-referenced and searchable. Bibliographic suggestions for further investigations are also provided. Although the essays will appeal to many audiences, they have been specifically designed for classroom use. At least two national educational standards for mathematics, science, technology, geography and/or history have been identified for each essay.

NASA's Office of Education, in partnership with the COFC, is developing a "Centennial of Flight Educational Tool Kit." All of the Tool Kit products will be contained in a two-pocket folder featuring the COFC logo on the front and the NASA logo on the back. The Tool Kit will include an educators

guide; a poster about the Wrights' 1902 glider; a NACA/NASA timeline; a 32 page, full color booklet featuring the pre-history of flight, a century of flight, the future of flight and educational resources; and four bookmarks. This package will be available in December 2002.

Conferences and Symposia:

The COFC is charged with playing a leading role in encouraging and publicizing activities related to the achievements of the Wright brothers and a century of powered flight. The COFC staff has participated in numerous conferences and seminars to date and will continue to promote national and international participation in the centennial of flight by exhibiting and speaking at conferences, seminars and symposia. In addition, the COFC staff is supporting the individual initiatives of each Centennial of Flight Commissioner's host organization, partnership organizations and Centennial of Flight affiliates.

Calendar of Events:

The COFC's "Calendar of Events" hosts a broad array of events related to the centennial of flight and the history of aviation. The events are classified into one of the following categories: Air Show, Fly-In, Fair or Festival, Educational Activity, Convention, Exhibit, Symposium, Open House or Air Race. The calendar has a "Submit an Event" feature and is searchable by date, event type, event title or location.

Publication of Popular and Scholarly Work:

The COFC has entered into an agreement with the Federal Research Division of the Library of Congress. Under this agreement, the Library of Congress will revise and update "Wilbur and Orville Wright: A Bibliography" (Washington, D.C., Library of Congress, 1968). A total of 2,055 biographic entries were delivered to the COFC for use on the COFC Web site.

The COFC Web site provides its users with authoritative sources concerning the Wright brothers and the history of aviation and aerospace. Many valuable references are on the site now. In addition, there will be a periodic call for solicitations of scholarly and authentic materials that can be used to further enhance the COFC Web site.

Inventing Flight: Dayton 2003

Inventing Flight: Dayton 2003 was founded in 1989 to promote aviation, the Wright brothers and especially Dayton, Ohio's role in the birth and future of aviation. Drawing from the rich history of the Wright brothers, Inventing Flight will launch a once in a lifetime event, "The Centennial Celebration," designed to instill enthusiasm for innovation and new ideas.

Inventing Flight: The Centennial Celebration, July 3 - 20, 2003:

The centennial of flight will be celebrated through a rich collection of events and activities designed to showcase Dayton, Ohio, as the "Birthplace of Aviation" and aviation's impact on our culture. There will be a 17-day summertime celebration culminating in July 2003, that will pay tribute to the Wright brothers, who lived and invented the airplane in Dayton, Ohio, yielding a celebration of the ingenuity and imagination that is part of all innovation.

"Celebration Central" at Deeds Point will serve as the logistical hub for the entire regional series of events, providing transportation, ticketing, and information about all the exciting events and special

attractions. At “Celebration Central” guests can expect to experience an action-packed adventure, leading them through a world of discovery based on the powerful example set by the Wright brothers achievement of powered flight:

- Welcome Walk – the gateway to the event.
- EAA’s Countdown to Kitty Hawk presented by the Ford Motor Company Pavilion – a tribute to the Wright brothers.
- Lockheed Martin Exploration Pavilion – a look at how flight has enabled us to see our world in an entirely different way – from above!
- LexisNexis Communications Pavilion – a celebration of how flight has made our world a smaller place.
- Bank One Imagination Pavilion – provides an opportunity to dream about the next 100 years of flight.
- Children’s Area – flight-themed playground and numerous hands-on, flight-related activities including rides and interactive displays.
- Speakers Pavilion – the platform for aviation celebrities and experts to share their experiences.
- “Air Mania” – live musical review.
- “Wings” – a nightly river-based spectacular staged on four large barges.
- Orbit Zone – discover what pilots experience, whether it is a moment of weightlessness or the thrill of landing your own shuttle, guests can live the excitement!

Schedule:

- Opening Ceremonies and City of Dayton Independence Day Celebration – Downtown Dayton, July 3.
- “Celebration Central” at Deeds Point – Downtown Dayton, July 3-20.
- Time Flies – A Living Heritage Experience – Dayton Aviation Heritage National Historical Park Sites, July 4-20.
- Wright Photo Exhibition – Dayton Art Institute, July 4-20.
- The RE/MAX Balloon Celebration – U.S. Air Force Museum, July 4-6.
- CITYFOLK Festival – RiverScape, July 5-6.
- International Blimp Meet – U.S. Air Force Museum, July 11-13.
- Dayton Black Cultural Festival: A Tribute to the Tuskegee Airmen – Montgomery County Fairgrounds, July 6-13.

- International Symposium and Exposition on the Next 100 Years of Flight, hosted by the AIAA and ICAS – Dayton Convention Center, July 14-17.
- National Aviation Hall of Fame Enshrinement Ceremonies: Pioneers of Flight Homecoming – U.S. Air Force Museum and Dayton Convention Center, July 18-19.
- Vectren Dayton Air Show presented by Kroger – Dayton International Airport, July 17-20.
- Closing Ceremonies – Celebration Central at Deeds Point, July 20.

2001/2002 Accomplishments:

- Announced eight presenting level corporate sponsorships.
- Launched “Mission Pass” ticket package and merchandising programs in July 2002.
- Broke ground for the “Centennial of Flight Legacy Plaza” in August of 2002.
- Commenced logistical planning for transportation, security and emergency response, visitors services and infrastructure.
- Created exhibit and site plans.
- Commenced entertainment planning.

Inventing Flight for Schools Curriculum:

The objective of this program is to inspire middle school students by leading them through the “discovery process,” the very process the Wright brothers underwent in building the first successful powered aircraft. There is a Teachers Guide, which includes 15-lesson plans complete with hands-on activities and multimedia accompaniments, including short videos and CD-ROMs with additional background information, activities and demonstrations. It was produced by Author Gordon Schimmel, Think^{TV} and Inventing Flight. Field testing and multimedia production have been completed. Distribution is scheduled for the 2002-2003 school year.

2001/2002 Accomplishments:

- Three Telly Awards for video production.
- Second Place at 2002 public broadcasting “First View” conference.
- Mathile Family Fund award recipient.
- Distribution of complimentary packages to each of Ohio’s public school districts.
- National distribution on an at cost basis.

Boonshoft Museum of Discovery Planetarium Production:

The objective of this project is to inspire students and families through an exciting multi-dimensional medium and to tell the story of the Wright brothers. The Boonshoft Museum of Discovery is

producing a Digistar© planetarium production and accompanying teachers guide built on the Inventing Flight Curriculum materials. Development and production are still in progress. Distribution is scheduled for the 2002-2003 school year.

2001/2002 Accomplishments:

- Planning for premiere event to take place in the fall of 2002.

“Birds, Flight and the Wrights”:

The objective is to explore natural flight and how it inspired the Wrights’ development of heavier-than-air, powered, manned flight. The Aullwood Audobon Center has developed a teachers guide, nature trail and field trips. Production is still in progress. Distribution is scheduled for the 2002-2003 school year.

Commissioned New Choreographed Modern Dance Works:

The Dayton Contemporary Dance Company will inspire audiences through the creation of new modern dance works based on the theme of flight. Four new choreographed works will be premiered each year leading up to the centennial and then they will be taken on tour during the centennial year. The first premiere was in the 2000-2001 season. The second premiere was in the 2001-2002 season. The third and fourth premieres will be in the 2002-2003 season. A concert and world tour of all four works will occur in 2003.

2001/2002 Accomplishments:

- Invitation to premiere dance festival for innovative new works.
- Established full tour schedule for 2003-2004 season, including many international appearances.

Commissioned New Symphonic Works:

The objective of this event is to inspire audiences through the creation of new symphonic works based on the theme of flight. The Dayton Philharmonic will premiere four new symphonic works during the 2002-2003 arts season. There will be a joint concert for all four works with the U.S. Air Force Band in May 2003. Bank One has agreed to sponsor this concert.

Wright Brothers Photography Exhibit:

The objective of this event is to share the excitement of early aviation by sharing these never-before-seen images. The Dayton Art Institute is creating a photography exhibit featuring Wright brothers images from private collections, as well as from the Wright Archives of Wright State University. Other elements of the exhibit will include early aviation posters from a major French collection. The exhibit will premiere in June 2003 at the Paris Air Show. It will be exhibited at the Institute in Dayton July 4-20, 2003, and then at the First Flight Pavilion, Kill Devil Hills, North Carolina, in the fall of 2003.

Inventing Flight Class of 2003:

The objective of this event is to inspire area students to be ambassadors for Inventing Flight and to become the next generation of aviation industry leaders. Over 30 students from the greater Dayton area, who will graduate from high school in 2003, have served as the Inventing Flight Class of 2003 since the fourth grade. These students’ interest in flight has been nurtured through a series of enrichment experiences.

2001/2002 Accomplishments:

- Space Camp, Huntsville, Alabama. – summer 2001.
- NASA Glenn Research Center Tour – summer 2001.
- Etiquette and Media Training – winter 2002.
- Ground School Training through Sinclair Community College – summer 2002.
- EAA Air Venture Academy – summer 2002.

Public speaking engagements throughout the community – Ongoing.

First Flight Centennial Foundation

The First Flight Centennial Foundation's educational and cultural programming is focused on capital improvements and program developments. The focus of our activity is the site of the first flight, Wright Brothers National Memorial, where facilities are inadequate to share the story with over half a million visitors per year. Both quality and quantity of educational and cultural programming currently exist; therefore, our vision is to enable programming to be presented to millions of visitors through capital improvements and appropriate on-site venues.

EAA

The Experimental Aircraft Association (EAA) is a membership-based association comprised of 170,000 aviation enthusiasts. The EAA began as a group dedicated to the pursuit of making aviation more affordable through homebuilt and restored aircraft. The organization has grown over the last 50 years to include many constituents with a common goal such as providing activities with airplane building, restoring, flying, exploring and learning. The EAA's *Countdown to Kitty Hawk* is an initiative designed to celebrate the accomplishments of Wilbur and Orville Wright. As creators of the first homebuilt aircraft, the Wright brother are viewed by EAA members as their direct "forefathers."

EAA has developed an ambitious educational program. In 2003, EAA will conduct a United States tour of its Wright Flyer to six significant locations across the country. In cooperation with nationally known aerospace museums, each 2003 stop is proposed to include a middle school academic competition called Wild Blue Wonders. Wild Blue Wonders is a middle school component of the Experimental Aircraft Association Aviation Foundation and brings the power of aviation into the classroom. Wild Blue Wonders uses a multi-disciplinary approach to activity-based learning. The five components of the program address a long list of state and national math, science, technology, history, geography, language, art and life skill standards. The program is presented by Ford Motor Company.

Additional opportunities are available online and in person at the EAA Museum in Oshkosh, Wisconsin.

FAA

FAA developed a specialized area for the 100th anniversary of powered flight on the National Aviation Education Web site, www.faa.gov/education, which is solely dedicated to the centennial of flight and

the history of the Wright brothers. This Web site area provides historical data, Wright brothers curriculum, hands-on activities and the FAA booklet “How We Made the First Flight – the Wrights Brothers’ Story,” which is downloadable in English and Spanish. Additionally, a play for middle school students can be found on the site. Over 360,000 visitors viewed the Web site in 2002.

FAA generated centennial celebratory posters and art contests are also offered on the FAA aviation education Web site. Centennial-themed classroom activities, teacher workshops, aviation education expos at airports and FAA cosponsored Aviation Career Education summer camp programs have been ongoing since 1998, the 95th anniversary of powered flight, and will continue in 2003. Early learners will continue to meet Orville and Wilbur, as well as FAA mascot “Air Bear” at numerous “Air Bear” classroom visits throughout the country. Over 1,000 youngsters met the Wrights in Oklahoma school systems in 2002. An updated story line of “Air Bear and Friends Travel to the Airport” is being developed and will be placed online in the spring of 2003.

A national and international aviation art contest for youth is co-sponsored annually by FAA in partnership with National Association of State Aviation Officials, Federation Aeronautique Internationale and National Aeronautic Association. The theme for 2003 is “100 Years of Powered Flight.” Contest guidelines and entry forms may be found on the FAA’s Aviation Education Web site.

NASA

The NASA Office of Education, along with the other NASA Enterprises, is producing curriculum materials, programs and resources relative to the centennial of flight. These include posters, Web sites, exhibits and publications written for elementary and secondary school audiences and beyond.

- The brochure “Celebrating a Century of Flight” is a collaborative effort among the COFC, NASA and the U.S. Air Force, and is intended for distribution to the flying public through airlines and at events throughout 2003. NASA intends to leverage the brochure's content and enhance it for use in a learning environment. The brochure will be released in December 2002 and will be available online at wright.nasa.gov and spacelink.nasa.gov.
- Centennial Posters – In cooperation with the COFC, three posters about the Wright brothers have been produced. These were *The Wright Way: Innovation Through Engineering*, *The Wright Way: The Process of Invention* and *The 1902 Glider: How the Problem of Control was Solved*. In addition, NASA has developed a poster on the NACA/NASA contributions to aeronautics; and the centennial of flight. These posters have been or will be posted on NASA's Spacelink educational materials area as they become available. The Wright brothers’ posters also can be requested via the “Contact Us” button on the COFC Web site.
- Online Opportunities – NASA has developed many programs, projects, and products that promote the centennial of flight. Each of the following programs and products include special activities that focus on the 100th anniversary of powered flight:
 - NASA Centennial of Flight themed *Aerospace Technology Education* Web site that will feature all of NASA’s centennial related programs and products, aerospace.nasa.gov/edu.
 - *NASA Explores* features lessons at all levels that have been prepared by experienced educators. New math, science, and technology material is provided weekly, www.nasaexplores.com.

- *Virtual Skies* provides activities that promote student awareness of aviation careers related to airport design, weather, navigation, air traffic management, communication, and aviation research, virtualskies.arc.nasa.gov.
- *Reliving the Wright Way* Web site includes extensive background information on the Wright brothers' flight research with ties to current NASA research. Activities are available at the K-12 levels. Interactive online simulations of the Wright flyer demonstrate the principles of flight, wright.nasa.gov.
- Distant Learning Opportunities:
 - *NASA SCIENCEFiles* enhances the teaching of math, science, and technology in grades 3-5 via four 60-minute programs per year. The show airs on PBS and includes a teachers' guide with student activities, scifiles.larc.nasa.gov/treehouse.html.
 - *NASA CONNECT* establishes a connection between NASA research and math, science, and technology concepts for 6-8 grade students. The program airs on PBS, NASA TV, and the Internet, connect.larc.nasa.gov.
 - *Destination Tomorrow* promotes scientific literacy for lifelong learners by exploring NASA aeronautical research projects that impact our daily lives. The program airs on local cable access channels, some PBS stations, and NASA television, destination.larc.nasa.gov.
- Materials for the Classroom
 - *Earth to Orbit Engineering Design Challenges* presents engineering challenges for grades 6-9 and connects students with the work of NASA engineers as they solve problems, eto.nasa.gov/.
 - *Exploring Aeronautics CD-ROM* covers the fundamentals of flight and teaches students in grades 5-8 to use the tools of aeronautics used by NASA researchers to test aircraft designs, catalog.core.nasa.gov/.
 - *Flight Testing Newton's Laws CD-ROM & Videotape Series* is designed for high school physics students and explains the math and science principles behind Newton's Laws of Motion, trc.dfrc.nasa.gov/trc/ntps/index.html.
 - *NASA Aerospace Education Resource Guide CD, Centennial of Flight Edition* is an interactive catalog, lesson planner and PDF library that includes most of NASA's aerospace technology products, core.nasa.gov/.
 - *Exploring the Extreme – F-15 Active Wallsheet and Educator Guide* includes a poster and a guide with activities related to an experimental aircraft used by NASA to explore the extreme limits of aircraft technologies related to engine and flight control, search "Exploring the Extreme" at spacelink.nasa.gov.
- Touring Programs
 - *Mobile Aeronautics Education Laboratory* introduces communities to numerous stations that can be established permanently in schools, libraries and museums. The curriculum covers remote sensing, aeronautics, GPS, weather, wind tunnels, aircraft design, and a virtual reality demonstration.
 - *Aerospace Technology Education Exhibit* promotes math, science and technology education and is available for large national education conferences.
- LaRC and the Virginia Air & Space Center have developed the Centennial of Flight Education Program. This program will serve students during March, April and May, and September, October and November of 2002. The program includes an educational science experience at the Virginia Air & Space Center that will incorporate activities relating to the past, present and

future of flight. All programs will have activities that correlate to the National Standards of Learning. From the Wright Flyer to the Space Shuttle, students will explore the history and science of flight. They will visit the state of the art Aeronautic Education Laboratory, Aerozone, one of only six in the country. Additionally, they will see an IMAX film and tour the exhibits. Interpreters dressed as Orville and Wilbur Wright will be their special guides while visiting the Virginia Air & Space Center.

- Conferences, Symposia and other Events – NASA continually supports conferences, symposia and other events on current and future research and technology as part of its ongoing mission. These include:
 - Co-sponsored the North Carolina First Flight Centennial Commission’s International Flight Symposium and Festival, “They Taught the World to Fly: The Wright Brothers and the Age of Flight,” October 22-25, 2001, at North Carolina State University in Raleigh, North Carolina.
 - Aero Expo I, December 2001 – This event celebrated the contributions of the Tuskegee Airmen during World War II. This two-day event included 1,200 student and teacher participants, a Web cast, grades 5-8 curriculum development, tours of Ames facilities, and hands-on student activities.
 - Reflecting on a Century of Flight was an early event organized by NASA in celebration of the centennial of flight and was held in Washington, D.C., at the Carnegie Institute on December 14, 2001. This cooperative venture was a half-day event that allowed for commemoration and reflection on the meaning of a century of flight, and a discussion of future possibilities. Topics considered were: the success of the Wright brothers; the importance of military aviation; expanding the frontiers of flight through high speed aeronautics; the extension of human flight into space; and looking toward the future of flight.
 - A series of brown bag symposia on technology in Washington, D.C., during 2001-2003.
 - Aero Expo II, April 2002 – This event celebrated the contribution of women to aviation and science. The two-day event included 900 student and teacher participants, a Web cast with a panel of three female pilots, grades 5-8 curriculum development, tours of Ames facilities and hands-on activities for the students.
 - Air Expo Moffett Field 2002, July 2002 – Air Show & Technology Exposition, featuring NASA and military aircraft, and a NASA Technology Pavilion, was held to give the public an opportunity to see 100 years of flight – past, present and future.
 - The Office of Aerospace Technology hosts annually the *Turning Goals Into Reality* conference that focuses on NASA’s accomplishments in aerospace technology and the future of flight. The 2003 conference will be in Hampton, Virginia.
 - The NASA History Office during the 2001 to 2003 period is co-organizing history and Wright brothers’ sessions at AIAA conferences, the Organization of American Historians 2002 annual meeting in Washington, D.C., sessions at the 2002 International Astronautical Federation annual meeting in Houston, Texas, and a session at the 2003 American Historical Association annual meeting in Chicago, Illinois.
 - Aero Expo III, December 10-11, 2002 – Continuation of highly successful program conducted by Ames Education Programs Office for Bay area 5-8 graders.
 - Aero Expo IV, October 2003 – Continuation of highly successful program conducted by Ames Education Programs Office for Bay area 5-8 graders.
 - National Engineers Week, February 16-23, 2002 – Developed Centennial presentation for delivery at local schools for Bay area K-12.
 - Virtual Take Our Kids to Work Day, April 2003 – Annual event conducted by NASA Quest team; Centennial themed Web casts, Web chats, online forums, etc. for a worldwide audience.

- Family Day at Ames Research Center, June 2003 – Ames Research Center facilities open for tours.
 - Ames Research Center Air Show, July 2003 – Air show with centennial theme for the general public.
 - Ames Formal Dinner, October 2003 – Formal dinner for Ames employees and their families, with Ames Research Center retirees speaking about contributions of Ames Research Center work to the centennial of flight.
 - Robotics Summit, summer 2003 – Centennial theme for the summit held at Ames Research Center in collaboration with Carnegie Mellon and National Hispanic University.
 - Past, Present and Future of Flight Symposium, mid to late 2003, Washington, D.C.
 - Other Symposia and colloquium include: Digital Fly By Wire 30th Anniversary, the National Advisory Committee for Aeronautics reunion, the Mach 2 50th Anniversary and other centennial of flight related lectures at the field centers.
- Publication of Popular and Scholarly Work – NASA has many publishing activities underway between now and December 17, 2003. Many of these activities are accomplished as a matter of course in the conduct of the NASA History Office’s responsibilities as the corporate memory of NASA. Specific projects relating directly to the history of flight that are currently underway include:
 - Gorn, Michael H., *Expanding the Envelope: Flight Research at the NACA and NASA, 1915 - 2000* (University Press of Kentucky, 2001). One of the most important aspects of the National Advisory Committee for Aeronautics and the NASA mission is its flight research efforts. This book will document the historical research and development program of the agency by focusing on flight research. This project is complete and the manuscript is being prepared for publication.
 - Hallion, Richard P., and Michael H. Gorn, *On the Frontier: Flight Research at Dryden, 1946 - 1999* (NASA SP-2001-4315, 2001). This includes additional chapters and revisions to the 1984 publication.
 - Hansen, James R., General Editor, *Inventing the Airplane: A Documentary History of NACA/NASA Aerodynamics Research, Vol. 1* (NASA SP-2002-4409, 2002 - 2006). This six- volume work will be a companion to the highly regarded Exploring the Unknown series of documentary volumes on space flight. Each volume will relate to a specific period in the development of the airplane.
 - Leary, William M., *We Freeze to Please, A History of the Icing Research Tunnel* (NASA SP-2002-4229, 2002). One of the most unique facilities within NASA is the Icing Research Tunnel at the Glenn Research Center. This tunnel, built in the 1940s, has been devoted to determining the effect of ice on the flight of aircraft and rockets and has been critical in the development of protective systems for more than 50 years.
 - Schultz, James, *Winds of Change: An Illustrated History of the Langley Research Center* (NASA SP-2003-4316, 2003). This is an update and reprint of a work prepared in the 1980s.
 - Conway, Erik M., *High Speed Dreams: A History of NASA’s Supersonic Transport* (NASA SP-2003-4233, 2003). A professional science and technology historian will research and write a comprehensive, peer reviewed history documenting the programmatic, institutional and technological history of NASA's research related to commercial high-speed research. LaRC’s High Speed Research Project Office is funding this project.
 - Heppenheimer, T.A., *The Hypersonic Region: A History of the NACA/NASA High Speed Research Program* (NASA SP-2003-4232, 2003). This book will present a case study for historians of technology by bringing together the history of the efforts to fly higher and faster from the beginning of aviation to the present.

- To be determined, *Biographical Essays on Aerospace Engineers* (NASA SP, 2003). This will be a set of biographical essays on various people involved in advancing the frontiers of flight including: Max Munk, Walter C. Williams, Fred Weick, Richard Whitcomb and John Stack.
 - Jenkins, Dennis R., *The X-15: Extending the Frontiers of Flight* (NASA SP-2004-4236, 2004). This book will be the first full-length historical treatment of the X-15 flight research program between 1958 and 1969. Although there are memoirs from pilots, no one has prepared a project history of this important hypersonic research effort.
 - Douglas, Deborah G., *Finding Practical Solutions: NACA/NASA Langley and the Development of American Aeronautical Technology* (NASA SP-2004-4235, 2004). This new study of Langley Research Center focuses on the federal government's contributions to the development of aviation technology and attempts to assess the many internal claims of the benefits produced by that federal support.
 - Bednarek, Janet Daly, *America's Airports: Airfield Development, 1918 - 1947* (Texas A and M University Press), Published 2001. The NASA History Office has entered into a partnership with Texas A and M University Press for the publication of a "Centennial of Flight" series of books that will appear between 2001 and 2005. There are currently 15 titles under contract for publication in this series. The intent is to bring out four volumes per year in the Centennial of Flight series.
 - Renstrom, Arthur, *Wilbur and Orville Wright; A Bibliography* (NASA SP-2002-4527). This edition of this classic bibliography of the Wright brothers has been updated and is once again in print. Produced in cooperation with the COFC, this work is an annotated bibliography of the works on and by the Wright brothers.
 - Wallace, Lane, *Wild Blue Wonders*. This educational book is a collaboration between NASA and the EAA Aviation Foundation and was published in 2001.
 - The NASA Office of Aerospace Technology publishes its "Annual Report" on NASA's latest accomplishments in the field of aerospace technology each May. These yearly reports highlight the latest research and technology being developed which will advance the future of flight in the air and in space.
- Art Programs include:
 - *Flight: A Celebration in Art and Literature* by Anne Collins Goodyear, Tabori Publishing, 2003, will be a large format, illustrated history of the art and literature of flight. It will consist of a compilation of artwork and literary masterpieces organized into thematic chapters to be introduced by respected scholars.
 - *Aerospace Design: The Art of Engineering* from NASA's Aeronautical Research is an exhibit co-organized by the Art Institute of Chicago and NASA. The exhibit is intended to draw viewers into the complex wonders of technology, deepen their appreciation for form and function in aerospace, and pique their interest in technical innovation. NASA has a wealth of artifacts from the basic and applied research projects that tackled the challenges of air and space flight. Many of these artifacts, including extremely detailed wind tunnel models, special tools created for specific research purposes, drawings and images created from the collected research data, can be appreciated from a purely artistic standpoint. Elegant design solutions, computer generated or experimental visualizations, and expert craftsmanship have all contributed to vehicles that have changed the world of flight. The exhibit will explore the physical aspects of aviation and space flight through an appreciation of design evolution, powers of scale, materials, tools of the trade and imagery that captures not only moments in history, but also the realization of theories and ideas. The exhibition will take place at The Art Institute of Chicago from August 16, 2003, through February 8, 2004; The American Institute of Architects Octagon Museum in Washington, D.C.; and seven other venues over the next three years, along with the two

panel variants of the exhibit which will travel to various airports and museums throughout the country during this time. The exhibit will feature approximately 100 objects consisting of models, airfoils, propellers, blades, framed drawings, photographs, etc.

- *Pushing the Limits: Aviation Flight Research as seen through the NASA Art Program* is an exhibit that describes the history of flight research at the National Advisory Committee for Aeronautics and NASA through the paintings in the NASA Art Program. The works feature pilots and their aircraft that routinely pushed the limits, expanding the boundaries of flight. Many top artists have contributed their works to NASA's Aeronautical collection, including Bob McCall, William S. Phillips, Stan H. Stokes, Mike Machat and Ren Wicks. This exhibit opened at the Museum of Flight in Seattle in June 2002, and will run through January 2003, traveling to Rockefeller Center in New York; Fayetteville, North Carolina, April 2003-July 2003; and The Outer Banks History Center Manteo, North Carolina, August 2003-January 2004. A small catalog/brochure on the show was produced of the works in this exhibition, which consists of 21 works from the NASA Art Program.
- Additional works of art will be commissioned for the NASA Art program during the coming years. For more than 30 years, the NASA Art Program has documented America's major accomplishments in aeronautics and space. NASA's art collection includes works by Robert McCall, Andy Warhol, Robert Rauschenberg and Jamie Wyeth. The works depict a wide range of subjects, from Space Shuttle launches to aeronautics research, The Hubble Space Telescope and even virtual reality. The NASA art program archive now numbers more than 800 works of art. In addition, more than 2,000 works, including those by Norman Rockwell, have been donated to the National Air and Space Museum.
- The NASA Art program is also exploring, but has not yet committed to, a project to prepare a set of lithographs and/or postcards on the history of flight illustrated with works from the NASA Art Program.

Smithsonian's National Air and Space Museum

The National Air and Space Museum plans a variety of educational products and programs for the centennial, its exhibition "The Wright Brothers & The Invention of the Aerial Age," and the opening of the museum's companion facility, the Steven F. Udvar-Hazy Center, located at Washington Dulles International Airport in Northern Virginia.

- Books:
 - *Smithsonian Institution's National Air and Space Museum Book of Cockpits*, by Eric Long, Mark Avino, edited by Tom Alison, Dana Bell, Boston Mills Publishers (now Firefly Books), 2001.
 - *Smithsonian National Air and Space Museum Book of Flight*, by Judith Rinard, (for ages 12-adult), Firefly Books, 2001.
 - *The Smithsonian National Air and Space Museum Directory of Airplanes: Their Designers and Manufacturers*, edited by Dana Bell, Greenhill Books/Stackpole, 2002.
 - *Radar Remote Sensing of Planetary Surfaces*, by Bruce Campbell, Cambridge University Press, 2002.
 - *Cold War Laboratory: RAND, the Air Force, and the American State, 1945-1950*, Martin Collins, Smithsonian Institution Press, 2002.
 - *Beyond Earth: Mapping the Universe*, edited by David DeVorkin, National Geographic Books, 2002.
 - *Flight: 100 Years of Aviation*, by R.G. Grant, DK Publishing, 2002.
 - *Brotherhood of the Bomb: The Tangled Lives and Loyalties of Robert Oppenheimer, Ernest Lawrence, and Edward Teller*, by Gregg Herken, Henry Holt & Company, 2002.

- *To Reach the High Frontier: A History of U.S. Launch Vehicles*, edited by Roger D. Launius and Dennis R. Jenkins, University Press of Kentucky, 2002.
 - *Charles Lindbergh and the Spirit of St. Louis*, Dominick Pisano and F. Robert van der Linden, Abrams, 2002.
 - *Smithsonian National Air and Space Museum Book of Flight*, by Judith Rinard, (for ages 8-11), Firefly Books, 2002.
 - *Airlines and the Air Mail: The Post Office and the Birth of Commercial Aviation*, by F. Robert van der Linden, University Press of Kentucky, 2002.
 - *Arriba! A Latin American Aviation History*, by Dan Hagedorn, Howell Press, 2003.
 - *Apollo 11 Collection Box*, by Robert Craddock, Chronicle Books, spring 2003.
 - *The History of Aviation*, by Tom Crouch, W.W. Norton, spring 2003.
 - *Great Aviators and Epic Flights*, by Von Hardesty, Hugh Lauter Levin Associates, fall 2003.
 - *The Wright Brothers & the Invention of the Aerial Age*, by Peter Jakab and Tom Crouch, National Geographic Books, fall 2003.
 - *The Nation's Hangar*, by F. Robert van der Linden, Howell Press, fall 2003.
 - *100 Years of Flight: A Chronicle of the Aerospace Industry, 1903-2003*, by F. Robert van der Linden and Frank Winter, AIAA, fall 2003.
 - *Artifacts*, by Carolyn Russo, Abrams, fall 2003.
 - *Steven F. Udvar-Hazy Center Guidebook*, by Dik Daso, National Air and Space Museum, fall 2003.
- Other Activities:
 - Art Exhibition – The National Air and Space Museum will host a Society of Aviation Artists Centennial Art Show, a juried exhibition of paintings on the history of aviation, planned for June 2003 to spring 2004.
 - Family Days – Special days throughout the year will be designated for all-day family programming. The days will be filled with hands-on activities, demonstrations and a chance to talk with experts.
 - Discovery Stations – These staffed mobile learning centers will be used in locations throughout the museum to provide visitors with hands-on lessons and experiments involving the history and science of flight.
 - Take-Home Activity Cards – These educational keepsakes will reinforce the science and social history content of the collections.
 - Teaching Posters – Posters with reproducible instruction panels on the back will be produced and distributed to teachers. The poster also will serve as a way to promote online activities and electronic field trips.
 - Online Educational Activities – The National Air and Space Museum's Web site will feature educational components with interactive online lessons to bring the science and history of flight to students in their classrooms or homes.
 - Electronic Field Trips – With the potential to reach several million students in classrooms around the country, these transmissions will include discussions with experts and a variety of engaging activities.

First Flight Centennial Commission

The First Flight Centennial Commission created a powerful educational legacy and changed lives through the Class of 2003, the centennial schools and Centennial Teacher of the Year programs, the international symposium, publications, the statewide library summer reading program, its participation in the Wright Flight and Aviation Maintenance Career Commission programs, and many other interactions with teachers and students.

The mission of the First Flight Centennial Commission includes establishing and encouraging educational programs that help individuals of every age to learn and understand more about the history of flight, North Carolina's contributions and the impact of flight. More information about the programs listed below can be found on the First Flight Centennial Commission's Web site, www.firstflightnc.com.

International Symposium on Flight:

The Commission hosted a major symposium on flight in October 2001 for national and international audiences. There were 22 national and state organizations that co-sponsored the symposium. Published proceedings will be forthcoming. A Centennial workshop for teachers was held in conjunction with the international symposium.

First Flight Centennial Schools:

The Commission has created the First Flight Centennial Schools program for elementary and middle schools throughout North Carolina that will continue until the end of the 2003-2004 school year. In preparation for the Centennial celebration, educators are encouraged to incorporate aerospace education into their classroom. Students learn about the Wright brothers' achievements, milestones in aviation, aerospace history and careers in aviation. The First Flight Centennial Commission has developed a Teacher Resource Guide and periodic newsletter, and has partnered with NASA and other organizations to provide teachers with resources in aerospace education. In addition, the annual Centennial Teacher of the Year program awards \$1,000 to the winning teacher and an additional \$1,000 to each school. This program is fully endorsed by the North Carolina Department of Public Instruction.

Class of 2003:

The First Flight Centennial Commission's Class of 2003 was formed in early 1997 to serve as a flagship educational initiative for the centennial observance. The initial membership came from seventh graders in the eight educational districts of North Carolina. The Class of 2003 has a counterpart group in Dayton, Ohio, that is sponsored by Inventing Flight: Dayton 2003. The two organizations plan to host an annual educational experience in the summer for the two classes, including trips to Dayton, the Outer Banks and NASA Space Camp.

Publications:

The First Flight Centennial Commission is sponsoring or co-sponsoring several publications, including:

- *Roncommock's Reed: North Carolina and the Genesis of Aviation*, by Tom Parramore, University of North Carolina Press, anticipated publication date of 2002.
- *Reports from Kitty Hawk*, edited by Larry Tise, University of North Carolina Press, anticipated publication date of early 2003.
- *They Taught the World to Fly: The Wright Brothers and the Age of Flight*, published selected proceedings of the international symposium held October 22-25, 2001, anticipated publication date of early 2003.
- *The Private Papers of Wilbur and Orville Wright*, edited by Larry Tise, anticipated publication date of early 2003. Endorsed by the First Flight Centennial Commission and co-

sponsored by NASA Langley Research Center, Library of Congress and East Carolina University.

American Institute of Aeronautics and Astronautics (AIAA)

The AIAA and its industry partners are collaborating on an ambitious campaign to celebrate the 100th anniversary of flight, recognize the achievements of the men and women who made history, and lay the groundwork for the next 100 years of innovation in aviation and space technology. AIAA's plans include the following:

The International Air and Space Symposium and Exposition. The Next 100 Years. July 14-17, 2003, Dayton Convention Center, Dayton, Ohio:

In celebration of their achievement and the legacy of other pioneers in aviation and space, the AIAA and the International Council of the Aeronautical Sciences will host the International Air and Space Symposium and Exposition. The mission of the technical symposium is to move the aerospace industry forward in the 21st century, promoting the establishment of long lasting initiatives that will benefit the world community while highlighting the importance of aerospace research. The symposium will provide an international forum for the historic celebration of flight and bring together leaders of the world aerospace community to shape a common vision for the future. A series of special events in conjunction with the symposium will be coordinated between the AIAA, International Council of Aeronautical Sciences, Inventing Flight: Dayton 2003, the National Aviation Hall of Fame, Wright-Patterson Air Force Base and the Dayton Air Show.

1903 Wright Flyer Centennial Tour and Exposition:

The AIAA is proud to be working with the Los Angeles section on the national tour of its full scale 1903 Wright Flyer. The tour, which is expected to reach over two million people, will offer historical information about the Wright Flyer and the Wright brothers, provide inspirational and educational outreach about aviation and space, and create public awareness of the centennial of flight.

The tour kicked off in Los Angeles, California, on September 26, 2002. Tour stops include the Nellis Air Force Base Open House, in Las Vegas, Nev.; World Space Congress 2002 in Houston, Texas; the New England Aerospace Museum in Hartford, Conn.; Kennedy Space Center in Cape Canaveral, Florida; the Festival of Flight in Fayetteville, North Carolina; the Dayton Air Show in Ohio; Van Nuys Aviation Expo in Van Nuys, California; the Long Beach Airport in Long Beach, California; the Edwards Air Force Base Open House in California; and Legoland in Carlsbad, California. The tour will include interactive activities, appearances by pioneers in aviation and space, educational handouts, information on the Evolution of Flight Campaign and much more.

American Institute of Aeronautics and Astronautics Section and Student Branch Activities:

To ensure the largest possible participation in Centennial activities, the AIAA is supporting special projects developed by the AIAA sections and student branches commemorating the 100th anniversary of flight. Some sections are planning flight demonstrations; others are organizing local conferences focused on cutting edge technologies. These events will provide an opportunity for local sections, student branches and individuals to embrace the celebration and generate more enthusiasm for the aerospace profession. Funding for approved programs has already begun and will continue through 2003.

Class of 2003 Ambassadors:

The next generation of pioneers is already here. Supported by the Evolution of Flight Campaign, a group of 20 high school students from around the world are participating in an array of aerospace and educational activities designed to energize and excite them about careers in aerospace.

Beginning in 1999, the Ambassadors participated in the Global Air and Space Conference and Space Day in Washington, D.C. Previous trips include a tour of the Boeing facility in Seattle, Wash.; the U.S. Space and Rocket Center Advanced Space Academy in Huntsville, Alabama; the U.S. Air Force Academy in Colorado Springs, Colo.; the EAA Air Academy, and the EAA AirVenture in Oshkosh, Wisconsin; a trip to San Diego, California, where the students participated in a host of activities at the Naval Air Depot North Island; the San Diego Aerospace Museum; the University of California at San Diego Engineering Department; and Legoland. The most recent trip was to Cocoa Beach, Florida. Ambassadors were treated to tours of the Cape Canaveral Air Station, NASA's Kennedy Space Center and the 125th Fighter Wing – Florida Air National Guard Station.

The Ambassadors are taking their enthusiasm back to their schools and communities. They have each developed programs to promote public awareness of the centennial of flight and are encouraging other students to pursue interests in science and technology.

American Institute of Aeronautics and Astronautics Foundation Orville and Wilbur Wright Graduate Awards:

The American Institute of Aeronautics and Astronautics Foundation Orville and Wilbur Wright Graduate Awards are designed to recognize the achievements and support the contributions of tomorrow's aerospace professionals. The first awards, being presented in January 2003, will be awarded to four graduate level students participating in aeronautical or aerospace research endeavors in fulfillment of their engineering or science studies. Each recipient will receive \$10,000 to further his or her education and research.

Evolution of Flight Distinguished Lecture Series:

Working with our corporate partners, AIAA has identified over 50 individuals to participate in an enhanced American Institute of Aeronautics and Astronautics Distinguished Lecture Series exclusively focused on the evolution of flight. Lecturers will visit AIAA local sections and student branches to talk about the past, present and future of aerospace technology.

Learn-To-Fly Scholarships:

In cooperation with CESSNA Pilot Centers, the AIAA will award 50 aspiring pilots and astronauts with Learn-to-Fly Scholarships in 2003. Guidelines are currently under development.

Publications:

In conjunction with the Evolution of Flight Campaign, the AIAA is working with the aerospace community on a series of traditional and multimedia publications that will document distinguished contributions to aviation and space and offer views on the history of our industry. Publications available in 2003 include:

- *The Development of Modern Aerodynamics* by J. A. D. Ackroyd, B. P. Axcell and A. Ruban. The authors have catalogued significant developments in the field of aerodynamics from innovators such as Prandtl, Kutta and Zhukowsky, and placed them in the proper context of their contribution to aerospace engineering. A number of the papers are translated to English for the first time.
- *In 100 Years of Flight: A Chronicle of the Aerospace Industry, 1903-2003*, Robert van der Linden and Frank H. Winter, authors of the monthly Aerospace America column "Out of the Past," will document significant achievements in the aerospace industry.

- *The Airplane: A History of its Technology* by John D. Anderson, Jr., will celebrate and commemorate the centennial of flight by examining the progress of aviation technology and its historical and social impact in a richly illustrated volume.
- A special edition of the *American Institute of Aeronautics and Astronautics Journal: Special 100th Anniversary of Flight Issue*, will consist of significant papers published in the journal and its predecessors from 1930 through 2000. In the words of Editor-in-Chief Gerard M. Faeth, “The selection of these papers will provide an opportunity to reflect on the progress made in the aerospace field since the remarkable achievement of the first flight of the Wright brothers on December 17, 1903.”

There will be special Centennial editions of AIAA publications such as *The International Reference Guide to Space Launch Systems* and *The American Institute of Aeronautics and Astronautics Aerospace Design Engineers Guide*.

Aviation Week’s *The Next Century of Flight*

The Next Century of Flight is a global education and leadership program dedicated to help the aerospace industry capitalize on the flight centennial to honor its proud past and position itself for generations to come. Program objectives are to: reignite the spirit of the aerospace industry; raise worldwide awareness of the industry’s spirit of innovation and discovery; and inspire young people to pursue careers in aerospace.

The Next Century of Flight puts an extra emphasis on education to inspire young people to pursue careers in aviation and aerospace. *The Next Century of Flight* has launched a global education initiative under the established LIFTOFF! brand. LIFTOFF! is a curriculum support program which was launched in partnership with McGraw-Hill Education and Scientific Research Associates in the 1990s. Under *The Next Century of Flight*, LIFTOFF! is being re-energized and anchored by the Next Century of Flight Channel at www.AviationNow.com. The Next Century of Flight Channel connects the LIFTOFF! program to more than 900,000 user sessions per month, and features Aviation Week and McGraw-Hill Education content, as well as links to partner content and additional curriculum sources. Through its affiliation with Macmillan/McGraw-Hill, the Next Century of Flight scholarship program is expected to reach more than 30 percent of U.S. K-6 classrooms by 2003, and 40 percent by 2005 via Macmillan/McGraw-Hill Science Teacher Editions and the Aviation Week LIFTOFF! Education Web site. Ultimately, the LIFTOFF! program will provide direct financial support for select students via The Next Century of Flight scholarship program.

Festival of Flight 2003

The Aviation Exposition will take place at Fayetteville’s Crown Center where four distinct exhibition facilities will depict the past, present and future of flight. The Heritage Hall will feature AIAA’s Evolution of Flight exhibit, including the AIAA’s exact reproduction of the 1903 Wright Flyer. Other historical displays and exhibits will explore the evolution of flight and the tremendous impact that 100 years of aviation has had on our society. The Aviation Exhibition Hall will be the site of military, commercial and general aviation aircraft displays, simulations and demonstrations highlighting our present day aviation capabilities. The Crown Coliseum will be devoted to NASA, space and future flight, and will provide massive interactive displays and programs telling the story of our journey into space and providing a glimpse into the future of flight and space travel. The Festival of Flight Theater will serve as our venue for celebrity speakers and films about flight.

Outside the exhibit halls, the exposition continues with more exhibits and displays. Among these will be a recreation of the lunar surface where the U.S. Space and Rocket Center will present winners of its moon buggy competition. And, most exciting, will be daily fly-overs of Dana Smith's 1903 Wright Flyer and the Wright's historic Vin Fiz aircraft.

A yearlong educational curriculum has been developed to compel students' interest in aviation and flight technology. This educational focus will culminate with 1,000 students being sponsored each day for exclusive access to the Festival's Aviation Exposition. Celebrity speakers and a live satellite link with the International Space Station are some of the special programming that is planned for student audiences.

The following is a brief schedule of events and a listing of the daily themes at the Festival's Aviation Exposition:

- Friday, May 16: Opening ceremonies featuring live music, an original dramatic production and the launch of Tom Grubb's kinetic multi-media sculpture, Star Gate 2003.
- Saturday, May 17: "The Arts Take Flight" arts festival throughout downtown Fayetteville.
- Sunday, May 18: General aviation air show at Grannis Field, "Barnstorming at its Best," featuring national aerobatics teams, static displays, heritage aircraft and a fireworks display.
- Monday, May 19: Aviation Appreciation Day, featuring the evolution of aircraft and honoring women in aviation, in addition to a fly-over of all types of aircraft.
- Tuesday, May 20: Space Flight/NASA Day, celebrating space and future flight.
- Wednesday, May 21: Humanitarian Flight Day, featuring rotary wing aircraft and life-saving rescue aircraft and aviators.
- Thursday, May 22: Military Transport Day, focusing on airborne operations and global reach.
- Friday, May 23: Combat Aircraft Day, honoring war heroes and combat aircraft.
- Saturday and Sunday, May 24-25: The Thrill of Flying is the Festival's military air show which will also feature open houses at Fort Bragg and Pope Air Force Base. The air show will showcase U.S. military capabilities, fighter and bomber aircraft, and vintage war birds.
- Monday, May 26: Memorial Day observance and parade.

U.S. Air Force Centennial of Flight Office

The U.S. Air Force is planning the following activities:

- Participate in the Student Aware and develop curriculum guide for Technical and Vocational Educators. Survey mathematic, science and social studies teachers to determine their interest in receiving "Wright in a Box" for educational purposes. These kits will be distributed free of charge to the 30,000 teachers registered in the Technology Education/Recruiting Service Database. Promote the use of a centennial theme in "Win the Perfect Prom" sweepstakes.

- Provide links to aviation related Web sites from the U.S. Air Force Centennial Web site, www.centennialofflight.af.mil.
- Attend informational conferences and technical exhibitions to spread the centennial message to educators, students and the general public. Current exhibit uses a combination of live demonstrations and videos to communicate the evolution of aviation.
- Provide advertising on Web site and in U.S. Air Force publications for the AIA Rocketry Challenge. Promote challenge in Department of Defense schools and encourage support in Reserve Officers' Training Corps programs. Participate in the final competition to be held in Washington, D.C.
- Promote aviation related curriculum for the STARBASE program. Develop at-home activities and participate in an art contest and mass rocket launch.
- Create trading cards featuring U.S. Air Force Demo Team aircraft/pilots, the Thunderbirds and the U.S. Air Force Stars to be given out at air shows and other public events.
- Plan a series of centennial-related articles in Airman Magazine for its monthly publication in 2003 and provide a 2003 calendar of events in its January issue.
- Produce an airline seatback magazine for the centennial year covering historical and current aviation topics.
- Publish a series of 13 pamphlets, authored by Dr. Meilinger. Proposed topics include: The Most Significant Events in American Airpower History, Key Air Leaders, Great Air Campaigns, The Most Significant Aircraft, Incredible Medal of Honor Winners, Key Aeronautical Inventions, The Worst Disasters in American Airpower History, Top Aces, Legends of Air and Space, Great Air Commanders, Top Ten Quotes on Airpower, Ripping Yarns and Top Flicks. These pamphlets will be distributed to schools, JReserve Officers' Training Corps programs and military members.
- Establish or re-enact an aviation record each month during the centennial year. School tracking of the U.S. Air Force aviation record will be encouraged. Events will be open to the public and publicized in the media and at the U.S. Air Force Museum.
- Produce a lithograph series that captures the significant aviation milestones. This series will be used as an educational tool to be distributed to teachers and students to heighten the educational community's awareness of the importance of this event.
- Participate in various events in conjunction with Women in Military Service for America to highlight women's contributions to aviation during women's history month, March 2003.
- Develop a Broadway style musical production to be performed by the U.S. Air Force Band during the centennial year.
- Incorporate a centennial theme in The Tops in Blue's production of their national tour during the centennial year.

- Create a speakers' bureau promoting senior U.S. Air Force leaders and significant contributions to aviation.
- Premier the newest traveling exhibit of recruiting services at air shows and national events throughout the centennial year.
- Encourage Reserve Officers' Training Corps units to foster educational programs within their local communities.

Aviation Foundation of America – National Air Tour

When the 2003 National Air Tour arrives in town, people will have a chance to see over 25 vintage aircraft from the 1920s and 1930s, including Ford tri-motors, Stinson tri-motors and aircraft with romantic old names like Travel Air, WACO, Paramount, Curtiss, New Standard and Eaglerock. There will be bi-planes, monoplanes and flying boats, all harking back to the "Golden Age of Aviation." Kids will once again have a chance to go up in a real Ford Tri-motor or an open cockpit biplane, perhaps a WACO or a New Standard. More modern aircraft will be there too, so people can see just how far we have come since we took to the air nearly a century ago.

Space Day Foundation

The Space Day Foundation, a 501(c)(3) operating foundation, was created to support Space DaySM, the award-winning educational initiative promoting achievement in science, math, engineering and technology. The Foundation will focus its efforts in three priority areas: support of Space DaySM program activities; evaluation of the impact of projects on stimulating students' involvement in scientific study and careers; and promoting collaborative efforts in space related education. Senator John Glenn and Dr. Vance Coffman, Chairman and Chief Executive Officer of Lockheed Martin, serve as co-chairs of Space DaySM, which will be celebrated around the world on May 1, 2003.

As the nation prepares to commemorate the centennial of flight in 2003, the Space DaySM educational initiative will honor the previous 100 years of aviation and aerospace accomplishments and inspire the explorers of the future. Over the coming months, students can participate in an array of Space DaySM educational programs and activities focused on the future of flight, including the following:

Space DaySM Design Challenges:

This unique online collaborative program provides teams of 4-8 graders the opportunity to tackle the challenges of living and working in space. The Space Day 2003 Design Challenges are: Fly to the Future (envision, design and build a model aircraft of the future); Planetary Explorers (design a model spacecraft that can fly on Earth and also on another planet or moon); and Watt Power! (build a model aircraft that can remain airborne using a renewable energy source). To provide the appropriate level of challenge, each of the Space Day Design Challenges will be offered to grades 4-5 and 6-8. Selected student teams and their "Stellar" solutions will be announced on Space Day, May 1, 2003. The Design Challenges address the Teaching and Content Standards of the U.S. National Research Council's National Science Education Standards, as well as the recommendations of the American Association for the Advancement of Science's Benchmarks for Science Literacy for a Changing Future and Project 2061.

Cyber Space DaySM:

The only annual Web cast entirely devoted to space, science and math, will be broadcast live over the Internet and via satellite. Teachers, students and space enthusiasts around the world can participate in

Cyber Space Day on May 1, 2003. Cyber Space Day 2002 is also archived on spaceday.com, and has been indexed to facilitate future viewing and educational use by teachers and students.

Student Signatures in Space®:

This initiative flies digitized student signatures into space on a NASA shuttle mission. Each year, students at approximately 500 selected schools sign posters during Space Day events and activities. More than two million elementary and middle school students have sent their signatures into space over the past six years.

The Wright Experience

2001/2002 Accomplishments:

- Published seven in-depth interactive features on www.wrightexperience.com.
- Participated in “Celebration of Flight” initiative as described below.
- Numerous lectures and events.

Specific Objectives:

Working with the Discovery of Flight Foundation, Wright Experience will provide reproduction engines, propellers and aircraft for the NSF Informal Science Education (ISE) grant proposal, “Celebration of Flight.” The program will produce:

- National Science Foundation ISE museum exhibit.
 - Grades K-12 informal science education.
- Grant proposal submitted May 31, 2002.
 - Targets K-12 with a 3,500 sq. ft. traveling museum exhibit.
 - Addresses Technological Literacy Standards published by the International Technology Educational Association, National Science Education Standards.
 - Provides for camp-in experiences, teacher training and outreach to rural environments and underserved populations.
 - Grant covers a three-year period, but the designed life of the exhibit will be 10 years, and it should last well beyond that.
 - Museum hosting periods are three months, three venues per year; Association of Science and Technology Centers will manage the exhibit.
- As a supporting element of the exhibit, not covered by the grant, a Model B aircraft will tour via tractor-trailer in a “rolling classroom.”
 - Flight demonstrations at airshows.
 - Static run-up of engine and props, operation of the controls available at all times.
 - Program specialists (engineering co-op students and interns) will conduct short lessons in the design process and scientific method used by the Wrights.
- Grades 11-12 Vocational/Technical program.
 - Supports the Automote Youth Education Services program by examining design in a historical context and providing technical problem-solving activities.
 - Design investigation.
 - Compare the fuel delivery systems of the 1903, 1904 and 1906 engines.

- From gravity-fed drip to intake injection via mechanical fuel pump.
- Their creative solutions saved weight by integrating the fuel system into the engine structure.
- Modern fuel systems are directly related to the Wright systems.
- Grades 5-8 curriculum development.
 - Project-based program that supports inquiry-driven learning and the use of engineering design practices.
 - An opportunity to spark an interest in science and engineering using the world's most encompassing design project.
 - Curriculum focused on multidisciplinary design and higher level problem solving skills.
 - Other existing programs (unit-based).
 - Society of Automotive Engineers' A World In Motion.
 - Invention Convention.
- Products.
 - Science Education Trade Book.
 - Teacher technology training.
 - Design/build/fly competition for middle school students.
 - Possibly partner with Society of Automotive Engineers' A World in Motion Program.

3 Roads Communications

3 Roads Communications produces *Legends of Airpower*, an ongoing public television biography series that educates viewers about the life and times of the great American aviators. Thirteen episodes were broadcast during the 2000-2001 season (Chuck Yeager, Benjamin Davis, Billy Mitchell, Duke Cunningham, Jimmy Doolittle, Gabby Gabreski, Jimmy Stewart, Curtis LeMay, Bernard Schriever, Hap Arnold, Chuck Horner, Russ Dougherty, and John Glenn), and 13 more episodes were added during the 2001-2002 season (John McCain, Charles McGee, Robert Morgan, Tooey Spaatz, Buzz Aldrin, Kelly Johnson, John Alison, Charles Lindbergh, Jackie Cochran, Eileen Collins, Francis Gary Powers, William Tunner, and the Wright brothers). To date, *Legends'* episodes have been broadcast over 7,500 times on 234 stations covering 81.4 percent of the nation's TV households. The series has been underwritten by the Aerospace Education Foundation and the National Aviation Hall of Fame. During the course of the 2002/2003 season, 13 new episodes (Jim Lovell, Everett Alvarez, Paul Tibbets, Igor Sikorsky, Don Lopez, Deke Slayton, Robin Olds, Chappie James, Butch O'Hare, Sam Johnson, Joe Foss, Thomas McGuire, and Claire Chennault) are scheduled for release. Another 13 episodes will be produced for the 2003-2004 season. Check local listings for broadcast dates/times.

3 Roads Communications is also documenting *Gus McLeod's Pole to Pole Global Flight*. On April 17, 2000, Gus McLeod became the first person to reach the North Pole in an open cockpit aircraft. In late 2003, Gus will attempt to fly solo in a propeller-powered aircraft around the world, crossing both the North and South Poles, and visiting every continent en route. He will be educating people (especially children), via the Internet, about pioneer aviators, including his childhood heroes, the Tuskegee Airmen. Professors in the history and geography departments of Florida Atlantic University are drawing up a curriculum, and Gus is working with the FAA to help get his message into the nation's classrooms. Gus also plans to work with *The Next Century of Flight* to promote the *Aviation Week/ICAS* "Top 100 Stars of Aerospace Initiative." During the past year, Gus has toured the country speaking to schoolchildren, civic groups, aviation organizations and general audiences about how his life has been affected by the "magic of flying."

Virginia Air & Space Center

From the history of Orville and Wilbur to the latest NASA journey to space, the Virginia Air & Space Center will explore all 100 years of powered flight.

Props, Wings and Flying Things!:

This overnight science experience will enrich students in the history and science of flight. From the Wright Flyer to the Space Shuttle, hands-on activities correlate to National Standards of Learning. Students will:

- See a Wright Flyer, hot air balloons, jet fighters and airliners.
- Build and launch a model rocket.
- Participate in live science demonstrations.
- Come face-to-face with space and aviation exhibits.
- Meet a NASA scientist.

The package includes:

- IMAX film, Virginia Air & Space Center exhibit tour, and science demonstrations.
- Two free chaperones per 20 students.
- One overnight stay in a Hampton hotel.
- Dinner.
- Centennial of flight goody bag.
- Model rocket kit.

The Wright Stuff:

From the Wright brothers to the International Space Station, celebrate the centennial of flight. Discover how manned flight began and where it's going. Explore the science behind the Wright brothers' first flight, come face-to-face with air and spacecraft, and find out what's new on the International Space Station.

Science Demonstrations:

- Props, Wings & Flying Things (Grades Pre-K-2) – Celebrate the centennial of flight with the Wright brothers. Discover the “Wright” answer to the questions “How do you fly? Where and how did Orville and Wilbur build the first airplane? Does weather affect the way airplanes fly?” See what it takes to push an airplane across the sky, and find out why it is sometimes better to be little than big!
- Props, Wings & Flying Things (Grades 3-5) – “How does a bird fly? How does a plane take off? What machines do we put together to make an airplane, and what materials are used to

make them?” Discover what it takes to fly and what makes a plane go fast or slow. See how weather affects the way planes fly. Explore how human-designed aircraft are similar to natural flying machines like birds and bats, and how these aircraft help us cut the ties that bind us to earth.

- Props, Wings & Flying Things (Grades 6-12) – Use Newton’s Laws to put energy to work and make an airplane move. Turn on the heat and conquer gravity with hot air. Use basic applications of aerodynamics, wing design and aircraft construction to understand the forces that affect flight. Discover how technology has changed our lives and made the Earth into a small world after all.

Library of Congress

The Librarian of Congress is a statutory member of the First Flight Centennial Federal Advisory Board and will offer advice and counsel to the COFC. Further, as custodian of the papers of Wilbur and Orville Wright, the Library of Congress plans to mount a Wright brothers Web page in spring 2003. It also has plans for an exhibition in fall 2003 that will celebrate the Wright brothers’ accomplishments.

The Library of Congress Publishing Office plans to publish a large format art book, *First Flight*, in 2003, which will contain a comprehensive series of digitally restored Wright photographs. The Library of Congress Digital Library plans to digitize as many of the Wright brothers papers as possible and make them available on the Web by 2003. These projects are dependent upon available funding.

Wright State University, Special Collections and Archives

Special Collections and Archives in the Wright State University Libraries, in support of Wright State University’s mission of educational excellence, collects, preserves, and provides access to primary sources that document the history of aviation and the legacy of the Wright brothers for which the University is named. Special Collections and Archives is the repository for one of the most complete collections of Wright brothers material in the world.

Wright State University is planning the following activities:

- *Diaries: 1857-1917*. Publication of Bishop Milton Wright diaries, completed March 2000.
- *Following the Footsteps of the Wright Brothers: Their Sites and Stories*. Symposium, completed September 2001.
- *Wright Brothers Family Scrapbook for Ohio Memory Project Web Site* – collection of photos and documents, completed spring 2002.
- *Wright Brothers Educational Resource Packet* – Reproductions of original documents and photos designed to introduce students to the invention of the airplane and the history of the Wright brothers. Students have used it successfully for Science Day and History Day projects. It is available in print form, and on the Web at www.libraries.wright.edu/special/wright_brothers/packet/.
- *The Wright Brothers in Photographs*. Digitization project to make nearly 4,000 photographs from the Wright Brothers Collection and related collections available at OhioLINK’s Digital

Media Center. As of September 2002, over 700 images were in the database. Goal is to have entire photographic collection online by December 2003.

- *A Dream Fulfilled: The 1903 Wright Flyer Replica at Wright State University*. Book published to tell the story of the building of the 1903 Wright Flyer replica for the Paul Laurence Dunbar Library, Wright State University. Completed July 2002.
- *International Symposium of Aviation Photographers (ISAP III)*. Symposium to be held at Wright State University February 27-March 1, 2003. Will bring together aviation photographers from around the world.
- Friends of the Wright State University Libraries Annual Luncheon. Features aviation authors and speakers through 2003. The luncheon is held each May. In May of 2002, Jean Tinsley, Whirlygirl founder, was featured speaker. Scheduled speaker for May 2003 is Tom Crouch.
- Special Collections and Archives staff presented papers on aviation topics at North Carolina State History of Flight Conference, October 2001.
- *Aviation and the Human Experience Symposium*. Wright State University is participating in a collaborative effort to hold this symposium on April 3-5, 2003. WSU, Sinclair Community College, the University of Dayton and Central State University are working together on this project. The symposium features three themes: Aviation and Race and Gender, Aviation and Humanitarian Efforts, and Aviation in Art and Culture. WSU is planning and hosting the Aviation in Art and Culture segment.
- *Beyond the Wright Brothers: Dayton's Aviation History*. Symposium to be held at Wright State University, October 10, 2003.

Aerospace Industry Association (AIA)

AIA represents more than 200 manufacturers of aerospace equipment. Founded in 1919 as the Aeronautical Chamber of Commerce of America, early members of AIA included Orville Wright and Glenn H. Curtiss, and nearly every important aircraft manufacturer at that time. AIA looks forward to working with other organizations in the aerospace community to highlight the heritage of the aerospace industry, and to increase public awareness about the industry's past, present and future, while attracting young people to a career in aerospace.

AIA is publishing *Milestones of the First Century of Flight* as part of its 2003 observance of the Wright brothers' first flight. Written by F. Clifton Berry, Jr. and published by Howell Press, www.howellpress.com, the 224 page book defines the 100 singular aerospace achievements of the first century of flight as identified by a panel of experts AIA brought together to celebrate the association's 80th anniversary in 1999.

Few technological developments have had as great an impact on mankind as flight. A beautifully presented coffee-table volume, *Milestones* showcases the aerospace manufacturing industry and the first century's greatest aerospace achievements ranging from the Wright brothers' first powered flight to the Space Shuttle missions of 2002.

The book will be published and available for purchase in December 2002. AIA hopes that the book will expand general awareness about the first 100 years of flight while spotlighting some of the spectacular achievements of the aerospace industry.

AIA will promote the book and the milestones on its Web site and in its publications. The number of books sold and media interested in the milestones will measure success of the book. AIA will also distribute the book to government decision-makers to promote a better understanding of the industry.

In honor of the centennial of flight, AIA and the National Association of Rocketry (NAR) are sponsoring a national model rocket competition for U.S. high school and junior high school students. The challenge is to design, build and fly a multi-stage model rocket carrying two raw eggs and an electronic altimeter to exactly 1,500 feet, returning both eggs intact. The top five teams will share in a total prize pool of approximately \$50,000 in savings bonds. Approximately \$9,000 in cash awards will be divided among the sponsoring teachers' departments.

The contest is limited to a total of 500 U.S. high school teams. Each school may enter two teams. The application deadline to enter the challenge was November 15, 2002.

The project was designed in 2002 and information on the challenge was posted on AIA's and NAR's Web sites. Dozens of queries from students, teachers, parents and others are being answered on a weekly basis as teams are beginning to form and work begins on the challenge. More than 25 organizations have become partners of the Team American Rocketry Challenge.

The final grand championship fly-off is in Northern Virginia in May 2003. The 100 teams at that event will have been selected from hundreds of teams entering the Team America Challenge from across the U.S. To qualify, a team must conduct a flight locally (no later than March 9, 2003) in front of an adult member of the NAR, and have that observer fill out the qualification flight form in the Team America Handbook. AIA and NAR will determine which 100 teams had the best flights based on the scores in these forms and will invite these 100 teams to attend the final fly-off.

Schedule of Events:

January 2002	Program promotion began.
November 15, 2002	Deadline for student teams to register for the contest.
March 9, 2002	Deadline for team qualifying flights.
March 14-21, 2003	100 qualifying teams notified.
May 10, 2003	Final grand championship fly-off, The Plains, Virginia.

National Park Service, Wright Brothers National Memorial, North Carolina

The National Park Service's Visitor Center at Wright Brothers National Memorial contains a small museum and an auditorium with reproductions of the Wright brothers' 1903 Flyer and 1902 Glider. Presentations by Park staff are given hourly in the auditorium year-round with alternative programming offered in the summer months. Self-guided tours of the grounds include: the site of the original first powered flights on December 17, 1903; reproductions of the Wright's 1903 camp buildings; and Big Kill Devil Hill, a stabilized sand dune upon which the Wright brothers experimented with their various gliders, and the home of the 60 foot high Wright Monument. School and commercial tour groups may schedule programs by calling the Park Visitor Center.

Dayton Aviation Heritage National Historical Park

Dayton Aviation Heritage National Historical Park, a unit of the National Park Service, was created by the Dayton Aviation Heritage Preservation Act of 1992, as amended. The purpose of Dayton Aviation Heritage National Historical Park is to: commemorate the legacy of three exceptional men, Wilbur Wright, Orville Wright and Paul Laurence Dunbar, and their lives and works in the Miami Valley; recognize the national significance of the contributions made by Paul Laurence Dunbar and the Wright brothers, and the City of Dayton's role in their contributions; and promote preservation and interpretation of the resources related to the lives of these three men.

Dayton Aviation Heritage National Historical Park plans to open new facilities or expand existing interpretive visitor facilities at all four units of the National Park in 2002-2003. These include the Wright-Dunbar Interpretive Center and the Aviation Trail Visitor Center and Museum located at the Wright Cycle Company building complex; the Huffman Prairie Flying Field Interpretive Center located at the Wright Memorial at Wright-Patterson Air Force Base; and the John W. Berry, Sr. Wright Brothers Aviation Center located at Carillon Historical Park. The Ohio Historical Society will be expanding the visitor facilities at the Paul Laurence Dunbar State Memorial. In addition, the National Park Service will continue to operate The Wright Cycle Company building and will rehabilitate the Hoover Block where the Wright brothers operated their print shop from 1890-1895. Wright-Patterson Air Force Base will rehabilitate the Huffman Prairie Flying Field, removing non-historic features, restoring missing historic features, improving visitor access and installing interpretive media. The Ohio Historical Society will restore the Paul Laurence Dunbar House and associated barn.

One of the purposes of Dayton Aviation Heritage National Historical Park is to provide educational programming. Park staff has developed two educational curriculum guides for educators. One is for students in grades 4-6 titled, "From Wheel to Wing," and one is for secondary students titled, "The Wright Story." Both curriculum guides incorporate state proficiency standards and curriculum. The guides were made available through the Park Web site in August 2001. An additional educational curriculum guide was prepared by Wright-Patterson Air Force Base for Huffman Prairie Flying Field and became available in summer 2002.

Dayton Aviation Heritage Commission

The Dayton Aviation Heritage Commission, in accordance with PL 102-419, evaluated various options for creating a permanent management structure to replace itself when it sunsets on December 31, 2003. It approved the creation of a new non-profit, the Aviation Heritage Foundation, Inc. and assisted with the incorporation of the new organization. The principal purpose of the new group will be to advocate and support the Dayton Aviation Heritage National Historical Park along with the numerous aviation heritage sites in the state of Ohio. In addition, the Commission, along with other aviation groups in the state, is seeking federal legislation that would establish the National Aviation Heritage Area. This action was the outgrowth of a study undertaken by the Commission in spring 2002, which identified the "Ohio Aviation Heritage Corridor," a collection of sites and activities related to the development of aviation that stretches throughout the state. Legislation was introduced in both the U.S. House of Representatives and the U.S. Senate, and passage is anticipated before the 107th Congress adjourns.

U.S. Air Force Museum, Dayton, Ohio

The U.S. Air Force Museum's Education Division offers a variety of innovative programs and hands-on activities to promote aerospace knowledge and generate enthusiasm among students for learning about science, math and history. These will position the Museum as a partner in education in the Dayton community and throughout the state of Ohio. Through interactive activities, youth and teacher workshops, outreach programs and museum tour programs, the Museum's Education Division reaches students, teachers, youth groups, adults and families. Educational opportunities for 2003 include:

- Aerospace Education workshops for teachers and ongoing hands-on, minds-on aerospace education workshops for students.
- Community aerospace outreach with Dayton and Montgomery County Public Libraries.
- The Museum will co-host the Science Education Council of Ohio's Annual Conference and the National Congress for Aviation and Space Education.
- Aerospace curriculum developed through Project SOAR (Science in Ohio through Aerospace Resources) will be expanded to include linkages to national standards in science, mathematics and technology education.
- Regional competitions for the "Wild Blue Wonders" program of the EAA Museum.
- Special events with a strong educational component.
- Family Day event held every third Saturday of the month and featuring hands-on, interactive activities promoting aerospace concepts and aviation history for children ages 3-13.
- Read Across America event featuring volunteers reading aviation-related children's stories to second and third grade groups at various stations by aircraft throughout the Museum.

Maryland Historical Trust

The Maryland Historical Trust seeks to support the national observance of the centennial of flight by raising awareness of the United States aviation history and of Maryland's role in that history.

The Maryland Historical Trust is sponsoring two programs in observance of the centennial of flight. One is a program of oral history interviews documenting significant aspects of the state's varied aviation experience. Fifty persons who have played significant roles in all aspects of Maryland's aviation history will be interviewed and documented. The project is being done in cooperation with the University of Maryland Baltimore County's Martha Ross Center for Oral History. The other project, undertaken in cooperation with the College Park Aviation Museum, is a survey report on Maryland aviation history, and on associated resources and properties.

Additionally, a mass-market publication presenting the results of the oral history and survey report, and the development of a K-12 school curriculum on Maryland aviation history are planned, although they will not be completed prior to December 17, 2003.

Naval Air Systems Command – NAVAIR

NAVAIR participates in and sponsors a number of technical symposia, conferences and seminars through the course of the year. NAVAIR is looking into ways to promote the centennial of flight through these events.

Wolf Trap Foundation for the Performing Arts

Wolf Trap Foundation for the Performing Arts is a 501(c)(3) not for profit organization operating in partnership with the National Park Service to run Wolf Trap National Park for the Performing Arts. To celebrate the centennial of flight, Wolf Trap is joining with three other National Park units: Dayton Aviation National Historical Park; Wright Brothers National Memorial; and Tuskegee Airmen National Historic Site. The *Face of America* performance will be held in September 6, 2003, and will combine live music and dance onstage with film and high definition television images of flight projected on giant screens above the Filene Center stage.

Commissioned New Work:

Wolf Trap and our Park Service partners have established an artistic direction for *Face of America 2003* that focuses on capturing the spirit of flight.

As part of *Face of America 2003*, Wolf Trap has commissioned a new work featuring a collaboration between two of the performing units for *Face of America 2003*: Blue Land Media, which created the stunning images for the first three Face of America programs (Yosemite National Park, Virgin Islands National Park and Mammoth Cave National Park), and award-winning choreographer Elizabeth Streb, who is redefining dance with her exploration of the outer limits of motion of bodies in space. Plans for the program will also include live and recorded music, and a video tribute to the Tuskegee Airmen. Wolf Trap is working with the U.S. Air Force Centennial of Flight Office to coordinate special U.S. Air Force participation in this event.

Specific Objectives:

Face of America 2003 will be an evening performance and will include outreach activities that capture the spirit of flight and connect the celebration with our National Parks.

Activities/Events/Products:

In addition to the newly commissioned dance by Elizabeth Streb, the *Face of America 2003* performance will feature a new musical work and a filmed montage celebrating the spirit of flight.

Video from the event will be made available for display at the three partner park sites: Dayton Aviation Heritage National Historical Park, Wright Brothers National Memorial and Tuskegee Airmen National Historic Site.

Schedule:

Fall 2002 – Design of music and film/HD video components featuring Dayton Aviation Heritage National Historical Park and Tuskegee Airmen National Historic Site; naming of spokesperson for *Face of America 2003*.

April 2003 – Filming of Streb’s work at Kitty Hawk; *Face of America* Web Adventure goes online at www.wolftrap.org.

September 6, 2003 – Presentation of *Face of America 2003* at Wolf Trap.

December 2003 – *Face of America* video made available to Wright Brothers National Memorial, Dayton Aviation Heritage National Historical Park and Tuskegee Army Airfield National Historic Site.

Section 5 – Outreach

Public outreach will be a critical component in ensuring the success of the Centennial of Flight commemoration in 2003. Organizations across the country have posted their events on the calendar on the COFC Web site. Many are also issuing their own press releases. Several organizations have created special opportunities for outreach throughout the past year and will continue to do so in the next year.

U.S. Centennial of Flight Commission

Centennial of Flight: Born of Dreams – Inspired by Freedom

Through the national *Born of Dreams – Inspired by Freedom* campaign, the COFC hopes to encourage national and international appreciation and celebration of the 100th anniversary of powered flight in a fashion that inspires vision, persistence and creativity in a future generation of inventors. Outreach activities in this effort are fastened to three primary strategies: to lead, to coordinate and to educate.

In the lead role, the COFC plans national outreach activities and acts as a unifying force for cooperation among all the players involved in the celebration. It also offers comprehensive information on the Centennial of Flight and inspires more organizations to become involved.

In the coordination role, the COFC seeks national and international exposure for celebration events and activities through a national publicity campaign. An extensive media relations campaign leads this effort. The COFC also works with the media to create special programming around the Centennial and encourages corporate participation in telling the story of the centennial of flight.

The COFC also hopes to educate the general public and inspire the next generation of inventors. Outreach efforts will promote existing educational programs and facilitate the distribution of educational materials. The COFC promotes the Centennial to key education associations, and raises awareness of educational resources through media relations, media tours and Web site interaction.

Although the COFC's outreach work is far from complete, outreach activity to date includes:

Lead:

- Conducting more than a dozen presentations to key groups and associations targeting aviation, aerospace and pilots.
- Creating a partnership with the President's Commission on the Future of Aerospace and Aviation.
- Creating a partnership with the Royal Air Force Museum in London to link celebration activities in 2003.
- Working to create a three-week display in Rockefeller Center Plaza involving the U.S. Air Force, NASA and EAA in partnership with Ford and Microsoft.
- Engaging the U.S. Navy, the Department of Education, the Department of Transportation and the FAA to get more involved in the celebration.

- Creating a stronger partnership among the individual organizations that will ultimately lead to a stronger national celebration.
- Continuing to assist the efforts of those trying to create new activities on a daily basis.

Promote:

- Generated more than 15 million impressions to date, including stories on ABC Nightly News, CBS Early Show, Popular Science, Popular Mechanics, Washington Post, Chicago Tribune, L.A. Times, Smithsonian, Boston Globe, Dayton Daily News, Virginian-Pilot, Milwaukee Journal-Sentinel, Star Tribune, Charlotte Observer, Newsday, Dallas Morning News and more.
- Creating a Media Patron Program and signing agreements with two Media Patrons, Primedia and Third Millennium Entertainment, to create Centennial television specials and media campaigns.
- Engaging companies like Spin Master Toys to promote the Centennial celebration in retail outlets across the country to include Target, Wal-Mart, and Toys-R-Us.
- Securing commitments from numerous major networks, national newspapers and magazines to produce stories concerning the Centennial in 2003.
- Engaging international media to include the British wire service (Reuters) and the Italian news wire (ANSA), as well as the BBC.
- Working with national cable outlets like The History Channel, Discovery and National Geographic that are creating special aviation related programming in 2003.
- Coordinating a national kick-off celebration in Washington, D.C., that will include top government officials, military officials, Centennial Partners, Media Patrons and a guest speaker.
- Working with NASA to create a themed Space Shuttle launch in 2003 and to coordinate satellite media tours with the International Space Station.

Educate:

- Creating a partnership with Channel One, which reaches eight million students every day for coverage of Centennial activities in 2003.
- Working with McGraw Hill's education division to create special aviation related programs targeting children in grades K-12 in 2003.
- Working with USA Today's education program to develop special Centennial coverage for classroom use.
- Participating in major educational conferences in 2003 reaching tens of thousands of science, math and history teachers.

In the next year, the COFC will continue its outreach efforts, encouraging people to get involved, creating media exposure and promoting educational programs to teachers and students. The COFC will work with Centennial Partners to help promote their events, while continuing to take advantage of additional media opportunities as they arise.

Inventing Flight: Dayton 2003, Ohio

Inventing Flight staff, partners and volunteers have had a prominent presence at a number of flight-related events and activities, including:

- 2001 Paris Air Show.
- EAA's Sun N' Fun Fly-In – Lakeland, Florida, 2001 & 2002.
- Dayton Air Show – Dayton, Ohio, 2001 & 2002.
- EAA's AirVenture – Oshkosh, Wisconsin, 2001 & 2002.
- Ohio Airport Conference – Columbus, Ohio, 2001 & 2002.
- RE/MAX 2002 International Convention – Orlando, Florida.
- 2002 Ohio Social Studies Teachers Association Conference – Columbus, Ohio.
- The 2002 Dayton Black Cultural Festival – Dayton, Ohio.
- 2002 Ohio State Fair – Columbus, Ohio.
- 2002 Annual Tuskegee Airmen Convention – Atlanta, Georgia.

In addition, Inventing Flight has been represented at numerous smaller regional air shows, festivals and conferences.

To raise awareness of the Centennial celebration, Inventing Flight has produced an extremely effective, four-color brochure that gives a complete overview of the celebration and a “calendar of events” for July 2003. This brochure has been distributed at the aforementioned events, and to our partners who share them regionally, locally and nationally at various conventions, conferences and professional associations. It has appeared as an insert in various publications and the graphics have been used in a variety of partner publications.

Additionally, Inventing Flight has a speakers' bureau that speaks to groups locally, regionally and nationally about the Inventing Flight celebration. To date, the speakers' bureau has directly reached roughly 10,000 people with the centennial of flight message.

Inventing Flight's media events and news releases have garnered a significant amount of attention. The “In the News” section of the Web site features all of Inventing Flight's media releases. Stories about Inventing Flight's sponsorship announcements, event plans, legacy plaza groundbreaking and other news items have appeared throughout the state of Ohio. In addition, Inventing Flight has had numerous contacts with travel writers who are beginning to produce travel stories and series focusing on the centennial of flight as travel opportunities.

Finally, beginning in the summer of 2002, Inventing Flight launched the first phases of a major advertising campaign. The first round of ads are designed to raise brand awareness and promote the Web site as a source of information. These ads are appearing in regional editions of *National Geographic*, *Smithsonian* and *USA Today*. In addition, ads have appeared in *Air & Space* and *Sport Aviation*. Short 15-second sponsorship spots are also appearing on regional public television through ThinkTV. The next phases of the ad campaign, designed to drive event awareness and ticket sales, will commence in January of 2003.

First Flight Centennial Foundation

The bulk of the Foundation's outreach, outside of the Web site, is accomplished through partnerships including:

- Working with Centennial Partners and other organizations interested in First Flight Centennial to provide content for newsletters and announcements to membership.
- Attending meetings, conventions and trade shows with partners to maximize reach and synergies while minimizing costs.
- In November 1997, federal legislation was passed directing the U.S. Mint to produce a commemorative coin honoring the Wright brothers and their achievements. The Foundation will receive site-designated revenue from this program in the form of surcharges awarded on a matching basis. The Foundation contacted interested parties to provide input on coin design and forwarded those design suggestions to the U.S. Mint in August 2001. The U.S. Mint will begin publicizing the coin, utilizing messaging drawn from First Flight Centennial input and images, beginning after December 2002, to create awareness of the coin offering in August 2003.
- Official First Flight Centennial Sponsors are helping to encourage awareness as they promote their affinity with the celebration. Examples include Gulfstream's latest business jet, the GV-SP, proudly carrying the First Flight Centennial logo, or American Airlines' promotion of the Centennial through their in-flight magazine and member communications. Additional partner promotions are in planning.
- First Flight Centennial licensees are also promoting the celebration through advertising officially licensed products ranging from toys to Wright airplane reproductions to commemorative gifts. For more information, visit the Foundation's Web site.

EAA

EAA and its 170,000 members will introduce and educate millions of people about the world changing achievements of Orville and Wilbur Wright. EAA's volunteer members and National Chairman Chuck Yeager have committed to provide the one millionth youth with their first flight by December 17, 2003. In addition to the 30,000 volunteers serving youth, thousands more will host tour stops across the country. EAA's *Countdown to Kitty Hawk presented by Ford Motor Company* is an invitation to participate in the Centennial whether attending one of the tour stops, competing in one of the middle school's Wild Blue Wonders program, participating in the Young Eagles program or going online to rank Eclipse Aviation's "Greatest Aviation Innovations of the Last 100 Years." EAA welcomes volunteer support of the *Countdown to Kitty Hawk presented by Ford Motor Company* national tour.

FAA

Centennial of flight information continues to be shared with aviation mechanics, pilots, airport users groups, students, educators and the general public at FAA sponsored outreach initiatives including FAA Wings programs, Runway Safety programs seminars, Aviation Career Education summer camps programs and educator workshops. In addition to Runway Safety information designed for airport kiosks placed throughout the New England Region, Wright brothers and aviation historical facts will be included in 2003.

FAA's Aviation Education Programs collaborated with partners and Newspapers in Education to produce a newspaper supplement to reach grades 4-7 as a salute to Wright brothers' achievements in the Southwest Region. The Star Telegram will print special supplements and recruit sponsors in the spring of 2003. As incentives, groups will add centennial resources such as posters, videos, etc., and will develop workshops for teachers who subscribe. Duplication of the Newspapers in Education effort in other locations is being explored.

FAA continues to collaborate in regions with the National Association of State Aviation Officials in planning and implementing celebratory events, and to highlight significant individual or group contributions to the evolution of flight. Plans include generating governor's proclamations issued in each state, declaring December 17, 2003, Wright Brothers' Day.

FAA actively promoted Wright brothers' achievements and the centennial's significance at national conferences, air shows and community events in 2002. Plans for FAA involvement at Centennial of Flight events in 2003 include: EAA's AirVenture at Oshkosh; Rockefeller Center Expo; Inventing Flight Festival, Dayton; and First Flight Celebration, Kitty Hawk. FAA will continue to make presentations at national conferences, aviation airport user meetings and symposia to promote the public's participation in the Centennial of Flight celebration.

Centennial of Flight poster, poetry and model aircraft design contests are planned for FAA partnership schools in FAA's Washington, D.C., headquarters for 2003. Plans also include participation in the Centennial kick-off celebration at the National Air and Space Museum on December 17, 2002; Ground Hog Job Shadow Day, February 1, 2003; Take Your Daughters and Sons to Work Day, April 24, 2003; and National Transportation Week, May 19-13, 2003. The theme for these FAA headquarters programs is "Born of Dreams – Inspired by Freedom," with an emphasis on the Centennial's significance.

A partial listing of FAA partners in joint Centennial outreach efforts for 2003 includes:

- Space Day International.
- Organization of Black Airline Pilots.
- International Black Aerospace Council.
- National Association of State Aviation Officials.
- Aviation Walk of Fame, California.
- Flight Path Learning Center, California.

- Los Angeles World Airports.
- Ted Stevens Anchorage International Airport.
- Anchorage Museum of History.
- Air, Land and Sea Expo.
- Bridgewater State College, Massachusetts.
- Daniel Webster College, New Hampshire.
- Massachusetts Institute of Technology, Massachusetts.
- Franklin Institute, Pennsylvania.
- North Texas Association of Aviation Museums.
- Chicago Museum of Science and Industry.
- Inventing Flight: Dayton 2003.
- Chicago Centennial of Flight Commission.
- Museum of Flight, Washington.
- Celebration of Flight, Cherry Point, North Carolina.
- Festival of Flight, Fayetteville, North Carolina.

NASA

NASA has been working with the COFC and other organizations to develop appropriate promotional literature, exhibits, brochures, press releases and audiovisual materials in support of the centennial of flight. NASA is committed to supporting Centennial of Flight activities in addition to those previously mentioned such as:

- Collaboration with the Smithsonian Associates on programs, events and a lecture series covering the topics of aviation and future flight, both in the air and in space.
- Special exhibits celebrating the centennial of flight and NASA's ongoing role in all aspects of flight and NASA's mission. These exhibits will tour the country at major events and a series of smaller exhibits will be available to support other venues.
- Research into the contributions of Orville Wright to the National Advisory Committee for Aeronautics.

- Support experimental testing of Wright brothers' aircraft and components to better understand the process of invention.
- A centennial of flight themed Space Shuttle launch and downlinks from the International Space Station during the centennial year.
- NASA Langley is sponsoring an interactive exhibit at the Virginia Air & Space Center that highlights the Wright brothers' contributions as innovators, scientists and engineers to the evolution of flight. The exhibit includes a replica of the Wright brothers' workshop with many interactive components, such as a bicycle airfoil test device, wind tunnel, wing warping demonstrations and the Wright Flyer simulator. The exhibit is being developed in three phases. The first phase, the Wright brothers workshop, was ready in September 2001. This workshop includes many of the tools the Wrights invented to conduct their research. It also showcases some of the Wright projects in various degrees of completion.
- Hampton Roads Centennial of Flight Commission. The purpose of the organization is to commemorate the 100th anniversary of the Wright brothers' first flight. The Hampton Roads Centennial of Flight Commission is organized in partnership with the COFC, the Commonwealth of Virginia, and other state and national organizations to support and to publicize events in this region and elsewhere, commemorating past accomplishments and promoting future work in aerospace. Through a coordinated effort, the intent is to increase the understanding of the impact of aerospace technology on modern life; to encourage interest in history; to promote related educational programs; and to support the region's tourism efforts. Hampton Roads Centennial of Flight Commission members are representatives of companies, museums, organizations, universities and federal, state and local agencies, as well as interested individuals.
- America's Aviation Adventure. A self-guided tour of aviation sites and museums in Maryland, the District of Columbia, Virginia and North Carolina. The number of sites participating is expected to grow over time. The purpose is to increase awareness and visitation of these sites and to highlight the rich aerospace history of the region and America. Current sites include:
 - Maryland:
 - Glenn L. Martin Aviation Museum, Middle River.
 - Baltimore-Washington International Airport Observation Gallery.
 - Goddard Space Flight Center Visitor Center, Greenbelt.
 - College Park Aviation Museum, College Park.
 - Washington, D.C.:
 - National Air and Space Museum.
 - Virginia:
 - Marine Corps Air-Ground Museum, Quantico.
 - Science Museum of Virginia, Richmond.
 - Virginia Aviation Museum, Richmond International Airport.
 - U.S. Army Transportation Museum, Fort Eustis.
 - Air Power Park, Hampton.
 - NASA Langley Research Center, Hampton.
 - Langley Air Force Base, Langley Air Force Base.
 - Virginia Air & Space Center, Hampton.
 - Naval Air Station Oceana, Virginia Beach.
 - North Carolina:
 - Wright Brothers National Memorial, Kitty Hawk.

- Support local activities in the communities around the NASA Field Centers, including: exhibits and lectures at local museums; activities at public libraries; speakers bureau covering the range of topics from the history of flight to the latest cutting edge NASA research and missions; and tours of NASA facilities to experience the processes of invention and innovation first-hand.

National Air and Space Museum

In October 2003, the Museum will celebrate the Centennial at its flagship building on the National Mall in Washington with a new exhibition, “The Wright Brothers & The Invention of the Aerial Age.” A thorough presentation of the Wrights’ technical achievements will be paired with a rich examination of the cultural impact of early powered flight. The centerpiece of the gallery will be the original 1903 Wright Flyer, displayed on the ground for the first time since acquired by the Smithsonian in 1948. Visitors will have a once in a lifetime chance to study up close the intricate workings of the world’s first airplane.

Smithsonian Institution Traveling Exhibitions:

- “At the Controls: The Smithsonian Institution's National Air and Space Museum Looks at Cockpits” features large format color photographs of cockpits in airplanes and spacecraft from the National Air and Space Museum world-renowned collection. The exhibit traces the development of cockpits and illustrates how flight technology has changed over the last century.
- “Hubble Space Telescope: New Views of the Universe” shows visitors about the exciting ways in which the Hubble Space Telescope is providing a better understanding of the cosmos. A scale model of the Hubble Space Telescope is the focal point of the installation.
- “Women and Flight” features 75 black and white photographs depicting 37 contemporary American women involved in the fields of aviation and space exploration, plus interviews.

Films:

- “STRAIGHT UP! Helicopters in Action” celebrates vertical flight and the essential tasks helicopters perform every day. Featuring more than a dozen aircraft in a series of dangerous missions, the large-format film is narrated by Martin Sheen and produced by the National Air and Space Museum for worldwide distribution.
- “Taking Flight: Century of Wonder,” a planned large-format film, will survey powered flight’s history and impact. The sounds, images and ideas presented will let the audience experience virtually first-hand the milestones of this magnificent human achievement. Produced for worldwide distribution by National Geographic Films with the National Air and Space Museum.

First Flight Centennial Commission

The First Flight Centennial Commission of North Carolina has three traveling exhibits. The large exhibit, “12 Seconds That Changed the World,” is 1,600 square feet and was installed at major

conventions, air terminals (e.g., Chicago O'Hare), state fairs and museums. The two small trade show-like exhibits are used at air shows, professional meetings, conventions and other activities.

The Commission has a range of brochures and promotional items used to increase public awareness. In addition, Commission activities are routinely publicized on its Web site and through press releases.

Of particular value in increasing public awareness of the Centennial was the adoption of the John T. Daniels First Flight photograph as the emblem for the North Carolina quarter. These quarters have been included in the Commission's information packet, and have had a major impact on public awareness.

The Commission has adopted a set of criteria regarding endorsement of Centennial events, activities and commercial activities. If and when approached, the Commission uses the criteria to evaluate the appropriateness of the activity in relationship to the Commission's goals.

American Institute of Aeronautics and Astronautics (AIAA)

AIAA is undertaking the Evolution of Flight Campaign to mark the 100th anniversary of flight, recognize the achievements of the men and women who challenged history, and lay the groundwork for the next 100 years of innovation in aviation and space technology. The central features of this campaign include the elements listed below, each of which has a significant public outreach component.

International Air and Space Symposium and Exposition. The Next 100 Years:

AIAA and the International Council of the Aeronautical Sciences will host the International Air and Space Symposium and Exposition July 14-17, 2003, at the Dayton Convention Center, Ohio.

1903 Wright Flyer Centennial Tour and Exposition:

American Institute of Aeronautics and Astronautics and the Los Angeles section will create a flying replica of the 1903 Wright Flyer that will tour the country.

American Institute of Aeronautics and Astronautics Section and Student Branch Activities:

To ensure the largest possible participation in Centennial activities, AIAA will support special projects developed by AIAA sections and student branches to commemorate the 100th anniversary of flight.

Class of 2003 Ambassadors:

Supported by the Evolution of Flight campaign, a group of 20 high school students from around the world are participating in an array of aerospace and education activities designed to energize and excite them about careers in aerospace.

Evolution of Flight Distinguished Lecture Series:

Beginning in 2002-2003, the AIAA will administer a Distinguished Lecture Series exclusively designed to highlight the evolution of flight. Over 50 individuals will tour the county.

Aviation Week's *The Next Century of Flight*

Since it was launched in 1998, *The Next Century of Flight* has connected with millions of professionals and enthusiasts around the world via original Aviation Week articles and essays, curriculum support for students and teachers (including *The Next Century of Flight* site at AviationNow.com – an E-School News "Site-of-the-Month"), and related partner programs. The

initiative is promoted by an integrated multimedia marketing campaign that showcases *The Next Century of Flight* programs and partners in government, industry and academia.

Editorial/content production will extend to all Aviation Week products and services as appropriate. Promotion includes: ads in Aviation Week group media and select partner media, collateral materials and brochures, the traveling Next Century of Flight Showcase Pavilion featured at major global air shows, and media relations.

U.S. Air Force Centennial of Flight Office

The U.S. Air Force is planning the following outreach activities:

- **National Kick-Off:**
December 17, 2002. The U.S. Air Force plans to kick off the Centennial with the re-enlisting and re-instatement of 100 U.S. Air Force personnel, vintage aircraft and current inventory flyovers, and music and fanfare provided by the U.S. Air Force Band. Possible locations include Fort Myer, the home of the Wright brothers' historic first flight for the U.S. Army. Possible activities include a children's balsa wood launch ceremony.
- **Rose Bowl Parade:**
January 1, 2003. The U.S. Air Force is planning to have a large presence at the 2003 Rose Bowl Parade and game. A senior U.S. Air Force official will be honored as Grand Marshall. A flying review with aircraft through aviation history is planned to perform overhead the crowd; a FAA Certified Wright Vehicle will lead a B-2, F-117 flyover with the brand new F-22 to fly last. Various components of the U.S. Air Force Band will perform. This will be a West Coast event, with national media coverage.
- **Rockefeller Center:**
July 28-August 17, 2003. The U.S. Air Force, along with various organizations like NASA and EAA will participate in the Rockefeller Centennial of Flight Expo. The U.S. Air Force's premier aerial demonstration team, the Thunderbirds, will have a media event to promote their 50th anniversary shows and schedule. The U.S. Air Force will have exterior and internal exhibits to showcase its leading aviation technology and personnel. Aviation industry leaders have been invited to lend their support to the exhibits. Various U.S. Air Force demo teams, as well as the U.S. Air Force Band and Honor Guard, are expected to perform through the month.
- **Festival of Flight 2003:**
May 16-26, 2003. U.S. Air Force participation includes a technical exposition, an aviation art show, education exhibits, flight demonstrations and air shows at Pope Air Force Base and Fort Bragg. Senior U.S. Air Force leadership will participate at the event.
- **Inventing Flight Festival and Deeds Point:**
July 3-20, 2003. Deeds Point will have four large pavilions: (1) Innovation Pavilion - Homage to the Wright Brothers; (2) Exploration Pavilion - A look at how flight has enabled us to see the world in a new way; (3) Communication Pavilion - How flight has made the world smaller; and (4) Imagination Pavilion - Opportunities to dream about the next 100 years of flight. The U.S. Air Force will support the Inventing Flight pavilions by providing a Centennial-themed technical exhibit. The exhibit will include static displays, presenters and panel discussions.

- **2003 Dayton Air Show and Expo:**
 July 17-20, 2003. The 2003 Dayton International Air Show will be expanded from its normal two days to a four-day event. The French government is sending its "Patrouille de France" air team to this event. The U.S. Air Force will support the Dayton Air Show by providing a Centennial-themed technical exhibit. The exhibit will include static displays, presenters and panel discussions.
- **EAA AirVenture – Oshkosh:**
 July 29-August 4, 2003. The U.S. Air Force will augment the Annual Air Industry Demo by providing a Centennial-themed technical exhibit. The exhibit will include static displays, presenters and panel discussions.
- **First Flight Centennial Celebration:**
 December 13-17, 2003. The U.S. Air Force is the lead agency for military participation and coordination of aerial fly-overs at this Centennial year keystone event. Each day will have a theme: General Aviation, Commercial Aviation, Future Aviation and Military Aviation on December 16. Capping the event is a Centennial fly-over re-enactment with a Wright Flyer replica, followed by a Thunderbirds and Blue Angels joint aerial missing man demonstration. Senior U.S. Air Force leadership will be participating. The U.S. Air Force's role will be to coordinate all aerial events, support static displays and provide airspace control.
- **U.S. Air Force Museum:**
 Many aviation events are scheduled at the U.S. Air Force Museum throughout 2003. Among them: aviation art exhibitions, the opening of the new Eugene Kettering Gallery (3rd hanger), a hot air balloon rally, World War I fly-in, Dayton Air Games, giant scaled radio controlled model fly-in, U.S. scale masters radio controlled championship, and an American Kitefliers Association grand national kite competition. Senior U.S. Air Force leadership participation is planned.
- **Gathering of Eagles:**
 The U.S. Air Force will sponsor a special Centennial International Gathering of Eagles in 2003. The U.S. Air Force will collaborate with Air Command and Staff College on this project. One hundred distinguished International Eagles (significant contributors to aviation) will be honored at a black tie event and history symposium. The anticipated site for the event is the Disney Theme Park, California Adventure. This event will be the premier West Coast event.
- **Wright-Patterson 2003 Air Power Event:**
 May 10-11, 2003. One aircraft of every type in the U.S. Air Force inventory will be on display (operational reclama). The U.S. Air Force theme for the event is "Building on the past, reaching for the future."
- **Joint Service Open House:**
 May 16-18, 2003. One aircraft of every type in the Department of Defense inventory will be on display (operational reclama).
- **Global Air Chiefs:**
 September 13-19, 2003. U.S. Air Force will host a gathering of Air Chiefs from around the globe in Washington, D.C. One hundred and twenty five invitations to Global Air Chiefs have

been approved. President and Mrs. Bush have been invited to attend. This event will be held in conjunction with the Air Force Association National Convention.

National Air Tours

In fall 2003, the Aviation Foundation of America is sponsoring the recreation of the 1925-1931 National Air Tours in celebration of the centennial of powered flight and the centennial of the Ford Motor Company. The objective harks back to its original roots to promote and showcase civil aviation and its progress. In 2003, there will be a special opportunity to show how far aviation has come, both over the past century, and over the seventy some years since the Tours were last held.

By its very nature, the 2003 National Air Tour will be an outreach program in and of itself. More than two dozen cities will be visited by the aircraft in the tour, which will travel from Detroit through the central U.S., into Texas, across the south, on to Kitty Hawk and back to Detroit.

An interactive Web site, presently under construction, will allow people to learn of the original and the 2003 National Air Tours and to follow the tours “real time” as they fly across America.

Numerous appearances by tour participants are envisioned at civic and aviation events in 2003 leading up to the tour itself. During the tour, stops are planned at events tied to aviation in general and the Centennial of Flight celebration specifically.

Individual sponsors, hosts and other participants may plan their own particular outreach programs.

Space Day Foundation

By all measures, Space DaySM 2002 was a huge success, reaching new levels of participation and enthusiastic support by the education, science, business and government communities. Forty-eight governors signed proclamations officially declaring May 2, 2002, Space Day. The 75 Space DaySM Partners joined together to provide students with an enriching educational experience. Nearly 2,000 student teams registered for the Space DaySM Design Challenges and the Student Signatures in Space[®] program is so popular that 551 schools enrolled this year, and an additional 181 were put on a waiting list for 2003.

The Cyber Space DaySM Web cast was seen by an estimated audience of 10 million viewers online at spaceday.com and via satellite thanks to Space Day Partners, including the Los Angeles Unified School District, Time Warner Cable and NASA TV which broadcast the program 16 times throughout the week.

The Space Day 2002 public awareness campaign generated approximately 440 million media impressions, both in traditional and online placements.

The Wright Experience

The Wright Experience participates in many public events and mediums, including air shows, museum exhibits, lectures, school tours and through the Web site. Our objective is to educate the public about the scientific achievements of the Wright brothers through the display and demonstration of original Wright artifacts, authentic reproductions, and interactive flight simulators and information kiosks.

Activities to date include:

- January 4 Lecture, QB HANGER, Hagerstown, Maryland.
- February 2 Lecture/Tour, Winchester Pilot group.
- February 23 Lecture, Fredrick Community College.
- April 4-6 National Congress on Aerospace Education.
- April 6 Lecture, American Society of Mechanical Engineers.
- May 2 Tour/Demo, United Airlines Club.
- May 23 Presentation, AIA Board.
- June 15-17 Demo, Ford Student Auto Skills National Finals, Washington, D.C.
- June 22 Demo, National Air and Space Museum Family Day.
- June 22 Tour/Demo, Gettysburg EAA Chapter.
- June 29 Tour/Demo, Virginia Aviation Historical Society Picnic.
- July 14 Civil Air Patrol Educator's Workshop.
- July 23-29 Display/Lecture EAA AirVenture 2002.
- September 10 Turbine Engine Technology Symposium, Dayton, Ohio.

The Wright Experience is also involved in the production of a film with PBS NOVA titled "Inventing the Airplane."

3 Roads Communications

3 Roads Communications will help raise awareness of the Centennial of Flight commemoration by encouraging public television executives to schedule *Legends of Airpower* and other programming that educates the public about the pioneers of American aviation. They will also work to provide stations with "giveaways" that can be offered to viewers during "pledge drives," increasing the visibility of the Centennial celebration. Additionally, 3 Roads will coordinate speaking engagements and media appearances for Gus McLeod as he tours the country discussing his historic flight to the North Pole in 2000, and his upcoming Pole to Pole Global Flight honoring the pioneers of aviation, including his childhood heroes, the Tuskegee Airmen.

Virginia Air & Space Center

Science on the Move:

The Virginia Air & Space Center will bring the museum to you with our Science on the Move outreach program. All outreach programs offer hands-on activities and are designed to meet Virginia's Standards of Learning Guidelines. Programs can be held in classrooms, gymnasiums, libraries or other large area demonstration halls.

The Wright Stuff:

Celebrate the Centennial of Flight (Grades 4-6) – Explore the physical laws involved in flight, from birds and airplanes to the Space Shuttle and not so futuristic space planes. Work with Bernoulli's Principle, the four forces affecting flight and Newton's Laws of Motion. Learn about the basic principles of aerodynamics, airfoil design and airplane lift, thrust and control.

Science Camps:

The Virginia Air & Space Center offers Out-of-This-World Science Camps for children ages 5-12. Aviation themed camps are scheduled for spring, summer and fall of 2003. Various camps include field trips, rocket kits and guest speakers.

1903 Wright Flyer:

The story of the Wright brothers will be told through a series of interactive exhibits from a full-scale reproduction of the 1903 Wright Flyer and the Wright Brothers' Bicycle Shop to a wind tunnel exhibit and a Wing Warper component. The 1903 Wright Flyer is now on display at the Virginia Air & Space Center. The full-scale replica of the Wright brothers' first flight aircraft was created by Arizona Model Aircrafters, a licensee of the First Flight Foundation, and commissioned by the Virginia Air & Space Center for the Centennial of Flight 2003. The replica 1903 Wright Flyer was built by Arizona Models in 97 days and is within 21 pounds of the original Wright Flyer. Eventually the replica 1903 Wright Flyer will be the main entrance for a new 15,000 square foot Aviation Exhibit Hall, set to open in summer 2003. Of the many Wright Flyers being created for the Centennial of Flight, the Virginia Air & Space Center's replica will be the first to be displayed.

The Wright Brothers' Propeller Exhibit:

Guests can get a closer look at the Wright brothers' ingenuity and craftsmanship with a new traveling exhibit at the Virginia Air & Space Center. "The Wright Brothers' Propeller Exhibit" illustrates how the Wright brothers designed, developed and built their highly efficient propellers to achieve manned, powered flight. This new exhibit will engage visitors with basic aerodynamic theory and construction techniques developed by the Wrights to produce wooden propellers. Recent wind tunnel testing at the NASA Langley Full-Scale Tunnel in Hampton, Virginia, has shown that the Wright propellers were "state of the art," and contributed greatly to the successful flights nearly 100 years ago.

Orville & Wilbur: The Wright Brothers Legacy, November 2003-January 2004:

The Dayton Art Institute is circulating an exhibition of rare and unique images of, and related to, Orville and Wilbur Wright. From the early days of their glider experiments in 1900 to the historic first flight in 1903, to their acclaimed receptions in Paris and across the globe, the camera recorded their success and their failures. The first European flight, the first aviatrix and the Wright brothers in moments of jubilation are among the memorable photographs that are included in this beautiful as well as powerful exhibition. *Orville & Wilbur: The Wright Brothers Legacy* is a fascinating art exhibition that includes nearly 90 vintage gelatin silver prints and 20 large scale original color lithographs documenting the first exciting and whirlwind decade of powered flight in Europe. Also included are several photomurals, text panels and a fully illustrated catalogue with wonderful narrative text by

Owen Findsen. Chosen for their aesthetic as well as their historic importance, these images trace the early years of powered flight and the Wright brothers.

Milestones of Flight Lecture Series:

Beginning January 2003, the Virginia Air & Space Center will host a series of distinguished aviation lectures at 7:30 p.m. on the first Tuesday in every month. The lectures are free and open to the public.

Straight Up! Helicopters In Action:

This is an IMAX film, opening February 2003. Learn to fly a helicopter and experience the exciting technology of vertical flight first-hand. Join flight crews as they respond in real time to a nighttime air-sea rescue, repair power lines, manage and save endangered black rhinos, and participate in air-land-and-sea reconnaissance missions. Deliver United Nations' humanitarian aid to war-torn Sierra Leone, harvest trees with minimal environmental impact and save a family from a powerful avalanche in the Swiss Alps.

America's Aviation Adventure Site:

Wing your way through America's aviation history from the birth of flight to state of the art aerospace. Fifteen aviation museums and sites in Maryland, the District of Columbia, Virginia and North Carolina have joined together to file your flight plan for aviation exploration. After you have visited these wonderful museums and sites, have each panel on your passport stamped. After you have stamped eight of the panels listed in the America's Aviation Adventure brochure, you can receive a special America's Aviation Adventure pin. Just present your completed passport/brochure to one of the asterisked museums to receive your pin.

NASA Langley Research Center:

Some of the most important work in aviation safety is performed at NASA Langley Research Center in Hampton, Virginia, the birthplace of America's space program. Established in 1917, NASA Langley Research Center was the first national civil aeronautics laboratory. Entrance is restricted at NASA Langley, but stamps can be redeemed at the Virginia Air & Space Center, the official visitor center for NASA Langley Research Center. Located in downtown Hampton, the Virginia Air & Space Center features over 16 full-sized aircraft and more than 100 hands-on exhibits that explore themes in aviation and space exploration. The Apollo 12 Command Module that went to the moon is displayed, as well as a Lunar Excursion Module Simulator that was used in early astronaut training. Among the aircraft displayed is a replica of the 1903 Wright Flyer, a Stearman N2S-3 and a F-4E Phantom II. A Convair F-106B Delta Dart tells the story of research being done at NASA Langley Research Center for aviation safety. Used at NASA Langley for lightning research from 1980 to 1986, the Delta Dart was purposely flown into thunderstorms and struck by lightning more than 700 times. Other research in aviation being done at NASA Langley Research Center is portrayed through several exhibits including the "Blended Wing Body," a future aircraft design in the works.

Library of Congress

The Library of Congress, through its Interpretive Programs Office, plans a fall 2003 exhibition to be mounted in the Thomas Jefferson Building. Titled "The Dream of Flight," it will trace mankind's universal dream of flying and examine how the Wright brothers changed it from an idea to reality. A compact disk of the exhibition is also planned.

Wright State University, Special Collections and Archives, Dayton, Ohio

Wright State University, Special Collections and Archives, is conducting the following outreach activities:

- 1903 Wright Flyer Replica, Paul Laurence Dunbar Library. Full size replica of the Wright Brothers' 1903 Flyer was installed in the library atrium in September 2001. The volunteer effort took about two years. Permanent exhibit on the building of the flyer was also installed in the atrium in the fall of 2001.
- 1903 Wright Flyer Replica Web Exhibit on the building of the replica and the history of the original flyer. Completed January 2002.
- Guide to the Wright Brothers Collection at Wright State University. Updated and revised guide to the Wright brothers collection. Publication date is December 2002.
- Exhibit of original Wright brothers photographs in conjunction with International Symposium of Aviation Photographers, February 27-March 1, 2003.
- Exhibit partner with Dayton Art Institute on a traveling exhibit to highlight Wright State University's collection and private collections of Wright brothers' material. This will open at the Paris Air Show in 2003 and travel to Dayton in July, then on to Kitty Hawk in December.
- Exhibits: Special Collections and Archives plans to contribute exhibits and programs being planned by Inventing Flight, Dayton, Ohio; Wright Brothers Memorial, Kitty Hawk, North Carolina; National Air and Space Museum; Seattle Museum of Flight; and the Dayton Art Institute.
- Wright Brothers Collection brochure printed in June 2001 to promote awareness of the Collection.
- Special Collections and Archives staff will continue to present lectures on the collection and specific aviation history topics to promote awareness of Wright State University holdings on the Wright brothers and the history of aviation in general.

National Park Service, Wright Brothers National Memorial, North Carolina

The National Park Service event at Wright Brothers National Memorial will be the culminating celebration in December 2003. The First Flight Centennial Celebration is scheduled for five days, December 13-17, 2003. The celebration will commemorate the Wright brothers and their impact on the world.

The National Park Service is seeking interested organizations to provide thematic exhibits, workshops and special programming, including speakers, to enhance the celebration.

A second opportunity exists within the First Flight Centennial Pavilion. The approximately 20,000 square foot Pavilion will be located in the park for nine months from April-December 2003. It will house core exhibits, auxiliary exhibits and a multi-purpose room that will provide a setting for speakers, workshops and other interactive sessions throughout the year. The following thematic topics

will be highlighted in exhibits inside the Pavilion: The Outer Banks at the Turn of the Century; Precursors to Flight; The Wrights in Dayton; The Wrights as Engineers; Glider Experiments; Powered Flight; and A Century of Flight – The Universal Significance of the Wright Brothers. The project is in the developmental stages, and the National Park Service, in partnership with First Flight Centennial Foundation, is looking for exhibit sponsors, exhibitors and speakers.

National Park Service, Dayton Aviation Heritage National Historical Park, Ohio

Inventing Flight: Dayton 2003 is the lead Centennial organization for the Dayton community, providing outreach programming and activities for Dayton Aviation Heritage National Historical Park. In addition to outreach activities and events planned by Inventing Flight: Dayton 2003, Dayton Aviation Heritage National Historical Park will continue to be active in its participation in national and regional air shows. Tentative plans call for the Dayton Aviation Heritage National Historical Park to participate in Sun N' Fun, Lakeland, Florida; Moraine Air Show, Moraine, Ohio; Dayton Air Show, Ohio; AirVenture, Oshkosh, Wisconsin; and WACO Fly-In, Troy, Ohio.

Dayton Aviation Heritage Commission

The Dayton Aviation Heritage Commission will host special events in partnership with other community organizations to commemorate December 17 in 2002 and 2003 at the Wright Brothers Memorial in Dayton, Ohio. These events will involve a wider audience than has normally attended the First Flight Ceremony and will be used to inform the public about the new National Park facilities that have been constructed in the Dayton area in honor of the Wright brothers.

U.S. Air Force Museum, Dayton, Ohio

As with all major events, the U.S. Air Force Museum will have an extensive public outreach program for 2003. News releases, media advisories, public service announcements and flyers will be generated by the U.S. Air Force Museum Public Affairs Division (coordinating with partners as appropriate) for promotional purposes. Major events include such things as:

- January 16-March 31 – “Century of Flight” Aviation Art Exhibit. Exhibition of original Keith Ferris paintings featuring military aviation with an emphasis on the U.S. Air Force.
- April 12-May 24 – “Air Power” Aviation Art Exhibit. Original artwork of aircraft bombers and fighters from World War II to the present with scenes by William Phillips, Roy Grinnell, Ronald Wong, Wilson Hurley and Dru Blair.
- June 6-July 31 – “International Aviation Art Exhibit.” Aviation art of Robert Taylor (England), Tiro Vorster (South Africa), Don Connolly (Canada) and artists from the French Air Force.
- July 4-6, 2003 – RE/MAX Balloon Celebration.
- July 11-13, 2003 – World's Largest Airship (blimp) Meet. The largest national and international gathering of blimps ever, including key support from the Lightship Group out of England.

- August 22-24, 2003 – Dayton Air Games. This extreme aviation sport event will be a spin-off of the X-Games in Los Angeles. Berg Entertainment Industry will provide the infrastructure and production of the event.
- August 26-September 30 – “Those Magnificent Flyers” Aviation Art Exhibit. Exhibition of original James Dietz paintings of World War I aircraft and scenes.
- August 29-31, 2003 – Giant Scale Model Radio-Controlled Aircraft Fly-In. Event coordination and production support will be provided by the Dayton, Ohio, Giant Scale Radio Controlled Club.
- September 12-14, 2003 – "Dawn Patrol Rendezvous" World War I Fly-In. The U.S. Air Force Museum and the Great War Aeroplanes Association will offer a three-day flying event of reproduction and authentic World War I aircraft. These unique aircraft and their pilots will compete in flour bombing and balloon busting exercises. This includes World War I re-enactors in a war encampment area, period music, flying exhibitions of World War I radio controlled model aircraft, World War I vehicles, and a "swap and shop" for World War I items.
- September 24-28, 2003 – U.S. Scale Masters Championships. Westerville Model Aeronautics Association sponsors the U.S. Scale Masters Championships during which all scale radio controlled model aircraft flying and competitions are held on Museum grounds.
- September 30 -October 4, 2003 – Kite Festival. The American Kitefliers Association Grand National Kite Festival convention and competition will take place at the Museum.
- October 9-December 31 – “Fly Me to the Future” Aviation Art Exhibit. Aviation art of Robert McCall, John Clark and Mark Waki featuring space/futuristic aircraft and vehicles.

RAMOLAIR

Roger Mola, doing business as RAMOLAIR, is an independent contractor to the nonprofit trade association, International Council of Air Shows, Inc., and was commissioned to develop a guide to centennial-themed resources for the air shows and air show performers within the International Council of Air Shows, Inc. In particular, RAMOLAIR will:

- Compile lists of resources available to the air show industry for display, the planning of air shows, or traveling exhibits suitable to air shows to celebrate the centennial of flight.
- Compile lists of air shows planning events in 2002 and 2003 related to the centennial of flight.
- Compile lists of resources available to air shows, including static exhibits and flyable historic aircraft related to the Wright brothers.
- Compile lists of other resources for the air show industry directly relating to the planning and staging of air shows.
- Hold a workshop and roundtable discussion during the annual meeting of the International Council of Air Shows, Inc. to help air show organizers connect with these resources.

RAMOLAIR is poised to share resources to identify other items of interest specifically to the air show industry. RAMOLAIR is tracking aircraft built or restored to the Wright theme (replicas or models, either flying or static) or exhibits that can travel and be demonstrated at an air show, hired for an air show or be situated at air shows to support this centennial theme. If there are posters and printed items suitable for distribution at air shows, RAMOLAIR might work with the source to identify suitable outlets and/or help publicize their availability via the International Council of Air Shows, Inc. Web site.

In addition, RAMOLAIR is tracking the shows and events that plan shows along this theme and will help these organizations to network with each other via International Council of Air Shows, Inc. RAMOLAIR may also work with a small number of air shows directly. RAMOLAIR held a workshop and roundtable discussion for organizers representing about 75 air shows and a cross section of events in North America at the most recent convention of International Council of Air Shows, Inc., to help generate ideas and excitement for the centennial theme. This session may be repeated at coming conventions.

Naval Air Systems Command - NAVAIR

NAVAIR is planning the following outreach activities:

- Air Show Hosts:
 - NAVAIR Pt. Mugu, spring 2003, date to be determined.
 - NAVAIR Patuxent River, fall 2003, date to be determined.
 - NAVAIR Lakehurst, May 31, 2003, tentative date.
 - NAVAIR Jacksonville, November 2003, date to be determined.
- Air Show Participants:
 - NAVAIR China Lake at Point Mugu.
 - NAVAIR Cherry Point, date to be determined.

NAVAIR occasionally participates in other events on a case by case basis by site.

NAVAIR has developed community partnerships at each site. These partnerships allow NAVAIR to target diverse local audiences and strengthen aviation ties through innovative programs and activities.

NAVAIR participation in the Kitty Hawk, North Carolina event in December 2003 is being planned. Possible participation may include a Pioneer Unmanned Air Vehicle.

While it does not maintain a formal speakers' bureau, NAVAIR can occasionally provide professional naval aviators for speaking at public engagements.

Wolf Trap Foundation for the Performing Arts

Face of America 2003 will build upon the attention that the series has received from the press. *Face of America* outreach for 2001-2002 included:

- More than 100 print news stories nationally, including the *New York Times*, *The Washington Post*, professional arts magazines, *Islands Magazine* and print outlets near Park Service partner sites.

- National Press Club Luncheon speech carried nationally on CSPAN and National Public Radio.
- Features on *Face of America* carried nationally on *CBS Sunday Morning* and *NPR Morning Edition* and internationally, e.g., Voice of America and German television.
- Television coverage on four Washington, D.C. area stations.
- Twenty-one interviews on local radio stations and television stations, including all four major networks.
- Extensive coverage in African-American and Latino press.

Specific Objectives:

- To garner national recognition for the Centennial of Flight through *Face of America 2003*, with placements in national magazines, television, radio and online outlets.
- To focus local and tourist interest on the celebration of the Centennial of Flight in metropolitan Washington, D.C., drawing attention not only to *Face of America* but also to the new exhibit at the National Air and Space Museum and the opening of the Steven F. Udvar-Hazy Center of the National Air and Space Museum.
- To serve as a platform for promoting the celebration at our partner Park sites.

Specific Activities and Schedule:

- March 2003 – Special event to formally announce *Face of America 2003*. Similar presentations were broadcast nationally from the National Press Club in 2001 and 2002.

Outer Banks Visitors Bureau

A Year Long Celebration Honoring the 100 years of Powered Flight:

- February 2003 – Black History Month honoring the Tuskegee Airmen, Wright Brothers National Memorial.
- March 2003 – Women’s History Month honoring the women in aviation, Wright Brothers National Memorial. From the 99s to women in space, you’ll hear first-hand how women in aviation, historically and currently, have made countless contributions to our nation.
- June 5, 2003 – North Carolina Symphony on the Outer Banks, Roanoke Island Festival Park. Aviation-oriented and favorite classical musical pieces. Free admission and open to the public.
- June 14-15, 2003 – 25th Annual Kite Festival, Wright Brothers National Memorial. Festival enjoyed by all ages with casual competitions for kids and adults. Participate in stunt kite demos, games and contests. Kids can make and fly their kites at the base of the Memorial where flight began. Events start mid-morning and continue through the afternoon. Open to the public.

- June 21-24, 2003 – 27th Annual Air Race Classic, Dare County Regional Airport. An all women’s cross-country air race for stock airplanes under 570 horsepower. This year’s race starts in Pratt, Kan., and ends with a timing line fly-by at Wright Brothers National Memorial, landing at the Dare County Regional Airport, Manteo, North Carolina. Racers will spend three days on the Outer Banks after completing the race.
- July 3, 2003 – Soaring Society (Gliders) Cross Country Flight Finale Ceremony. The Return to Kitty Hawk: Transcontinental Glider Race is a 10-leg gliding race with approximately 50 competitors, both national and international. Race begins in the Los Angeles area on June 17 and finishes at the Dare County Regional Airport, with a ceremonial ending at the Wright Brothers National Memorial on July 3.
- July 6-9, 2003 – RE/MAX Balloon Celebration, Wright Brothers National Memorial. This balloon celebration begins in Dayton, Ohio, and ends at the Wright Brothers National Memorial in Kill Devil Hills, North Carolina (wind permitting), or the balloon closest to the Wright Marker.
- July 18-20, 2003 – EAA’s Air Venture Cup, Dare County Regional Airport. Replicating the excitement of the Bendix Trophy Races of the 1930’s, the EAA AirVenture Cup Race unites aviation’s rich history with its promising future. The race course brings together aviation’s most historic place, Kitty Hawk, the site of the first powered flight, and the current home of recreational aviation, EAA AirVenture in Oshkosh, Wisconsin. Seventy-five experimental aircraft will participate in the cross-country air race, with trophies awarded in five categories. Race begins at Dare County Regional Airport/First Flight Airstrip with a stopover in Dayton and then on to Oshkosh, Wisconsin. There will be a pilot breakfast on Sunday morning at a nominal cost. Open to public.
- August 19, 2003 – National Aviation Day (Orville Wright’s Birthday), Wright Brothers National Memorial. Fly-bys, vintage aircraft display, living history reenactments, speakers to be announced. Open to the public.
- September 1-December 31, 2003 – Pushing the Limits: Aviation Flight Research as seen through the NASA Art Program, Outer Banks History Center Gallery. This art exhibit describes the history of flight research at NACA and NASA through the paintings in the NASA Art Program. The works feature pilots and aircraft that routinely pushed the limits, expanding the boundaries of flight.
- September 5, 2003 – Billy Mitchell on Hatteras Island, Graveyard of the Atlantic Museum, Hatteras, North Carolina. Join us in honoring the memory of General Billy Mitchell. This famed, often-controversial Army Air Service officer demonstrated his theories of military air superiority off the coast of North Carolina on September 5, 1923, by destroying the decommissioned battleships USS New Jersey and USS Virginia. This event became a major milestone towards the use of air power, and was one of the major factors leading to the establishment of the U.S. Air Force. In honor of General Mitchell and his achievements, a ceremony is planned at the Graveyard of the Atlantic Museum, including tours of the special centennial exhibit “Mitchell On Hatteras,” fireworks and an outdoor barbecue by the sea.
- September 26, 2003 – American Hero, American Legend, Hatteras Island. “Undaunted, unconquered and unfaltering” are words that are commonly used to describe those who cherish freedom, and a character uniquely American. Join us September 26 to celebrate the history of

a real American hero and prophet of air power, General Billy Mitchell. A number of exciting activities are being planned for several locations on Hatteras Island.

- September 27, 2003 – Monument to a Century of Flight, Kitty Hawk next to Aycock Brown Welcome Center. ICARUS International unveils its monument to a Century of Flight honoring aviation pioneers from the last 100 years and celebrating future generations with a monument that recognizes their achievements and their gift to humanity now and forever.
- October 10-11, 2003 – Commemorating the 1902 Wright Brothers Glider Flights, Wright Brothers National Memorial.
- December 13-15, 2003 – Aviation Film Festival, Roanoke Island Festival Park, Manteo, North Carolina, featuring the Academy Award Winner “Wings.”

Celebrating 100 Years of Flight! A Five Day Celebration of Events:

- December 13, 2003 – General Aviation Day, Wright Brothers National Memorial. See general aviation exhibits at the Centennial Pavilion on site at the Wright Brothers National Memorial with aircraft fly-bys scheduled. Visit Centennial Park (across the street from Wright Brothers National Memorial) for food and beverages, additional aviation exhibits and other special events.
- December 14, 2003 – Commercial Aviation Day, Wright Brothers National Memorial. See commercial aviation exhibits at the Centennial Pavilion on site at the Wright Brothers National Memorial, with aircraft fly-bys scheduled.
- December 15, 2003 – Future Aviation Day, Wright Brothers National Memorial. See futuristic aviation exhibits at the Centennial Pavilion on site at the Wright Brothers National Memorial, with fly-bys scheduled.
- December 16, 2003 – Military Aviation Day, Wright Brothers National Memorial. See military aviation exhibits at the Centennial Pavilion on site at the Wright Brothers National Memorial, with aircraft fly-bys scheduled.
- **December 17, 2003 – Celebrating a Century of Powered Flight, Wright Brothers National Memorial.** Visit the EAA’s Countdown to Kitty Hawk presented by Ford Motor Company Pavilion, see aviation-oriented exhibits at the Centennial Pavilion on site at the Wright Brothers National Memorial. See the re-enactment of the First Flight with Ken Hyde’s Wright Flyer at 10:35 a.m., and again at 2 p.m., 99 aircraft fly-by for a total of 100, the re-induction of Orville and Wilbur Wright to the First Flight Shrine, and many more exciting events not yet released. For more information, visit www.outerbanks.org, www.firstflightnc.com, www.nps.gov/wrbr or www.celebrate100.org.

National Aviation Hall of Fame

On Saturday, July 19, 2003, the National Aviation Hall of Fame, located at the U.S. Air Force Museum in Ohio, will suspend its annual enshrinement process to honor all of its 180+ enshrinees en masse. The highlight and natural focus of this special tribute will be a reunion of all living enshrinees, invited and hosted by the National Aviation Hall of Fame. At any given time, there are as many as 35 living enshrinees. The National Aviation Hall of Fame anticipates the reunion will attract a veritable

“who’s who” of air and space to Dayton for the weekend. The July 19 black tie gala will provide the ideal, first class close to the preceding three weeks of showcased 2003 events. The last official 2003 Exposition function will be on the air show’s final day, Sunday, July 20, 2003.

One component of 2003 media planning includes promoting the reunion gala as the basis for a televised documentary special, highlighting the historic gathering of aviation luminaries and guests. Ideally, the finished programming would air nationally on or about December 17, 2003. Discussions with several production houses and networks are underway.

There will be more National Aviation Hall of Fame 2003 activities and programs to come, especially focused on education. Additional events will be held in the National Aviation Hall of Fame’s Learning and Research Center throughout 2003.

Wright-Patterson Air Force Base, Ohio

Wright-Patterson Air Force Base is working with the local Dayton community and the National Park Service to celebrate the 100th anniversary of powered flight. In addition to activities being planned at the Wright brothers’ site known as Huffman Prairie Flying Field, the base is planning a major open house, known as *Air Power 2003 – Building on the Past, Reaching for the Future*. The proposed open house, scheduled for May 10-11, 2003, will feature a static display of one of each type of U.S. Air Force aircraft active today. The event, to include senior U.S. Air Force dignitaries and community leaders, will be free and open to the public.

Section 6 – Web Sites

One of the primary goals of the U.S. Centennial of Flight Commission is to increase the overall awareness of the Centennial and related Centennial events. To assist in achieving that goal, the COFC legislation enables it to develop and maintain a public Web page on the Internet that includes activities related to the Centennial of Flight celebration and the history of aviation. The COFC Web page, www.centennialofflight.gov, is continually updated with additional educational, historical, events, sights and sounds, and COFC information. The site itself is intended to be the single point of entry for activities and information related to the COFC, and contains information for everyone from aviation novices to educators to industry experts. To date, several Web site enhancement contracts have been awarded to organizations that provide creditable, historical and educational information electronically to enhance the content of the COFC Web site. This procurement will be advertised again in fiscal year 2003. In addition, the COFC is redesigning the Web site to make it more user friendly and to organize the information by target audiences, e.g., educators, kids, enthusiasts and media. The number of hits to the COFC Web site in October 2002 was almost 500,000.

Inventing Flight: Dayton 2003's Web site is www.inventingflight.com. The Web site underwent major renovations that were launched in July of 2002. Features now include:

- Detailed information about all of the flight-related events leading up to and during the Centennial celebration.
- The ability to order ticket packages and merchandise.
- A calendar of events for the Dayton region featuring all of Inventing Flight's program partners and other community celebrations.
- A comprehensive media section complete with media releases, logos and rights-free photography.
- Downloadable copies of the annual report and design style guide.
- A countdown to the celebration.
- Information about the Wright brothers and their systematic approach to inventing flight.

There is a Young Aviators section of the Web site that provides information on the Inventing Flight for Schools Curriculum, information about the premiere of the Boonshoft Museum of Discovery Planetarium Production, the Inventing Flight Class of 2003 and cool links to inspire the next generation of aviators.

Future enhancements include a section on the process of inventing and perfecting flight, and more in-depth visitor information for travel planners. The site, at already roughly 200 pages, will become even more detailed as plans for the Centennial celebration become more finalized. Inventing Flight's strategy is to encourage as much use of the Web site as possible, stressing the site as the source for all late-breaking news and information.

Traffic to the site was steady, at 3,000-4,000 distinct visits per month, until the enhancements went in place in July of 2002. During the second half of that month, the visits jumped to a total of 7,000-8,000

visits, twice the number of visits before mid July. With the advertising campaigns underway, Inventing Flight expects the number of visits to continue to increase.

The **First Flight Centennial Foundation's** Web site is www.firstflightcentennial.org. Features include information on capital improvements at Wright Brothers National Memorial, event information and North Carolina First Flight Centennial calendar, the monthly Wright Brothers' Trivia Challenge and official First Flight Centennial® merchandise. Interested individuals may subscribe to the monthly e-newsletter update from the homepage.

EAA has two Web sites. The first is www.eaa.org, and the second, which is more specific to the Centennial celebration, is www.countdowntokittyhawk.com.

FAA historical and educational material is currently available at the following Web sites:

- FAA Aviation Education Home page: www.faa.gov/education.
- 100 Years of Aviation “Wrights Stuff” page: www.faa.gov/education/wright/wright.htm.
- Calendar Page: www.faa.gov/education/calendar.htm.
- Photo album: www.faa.gov/apa/history/1album.htm.

NASA’s Web sites are:

- Main NASA Web site: www.nasa.gov.
- NASA Centennial Activities portal site, which includes a calendar of all major NASA activities related to the centennial of flight: wright.nasa.gov.
- History of the NASA and the National Advisory Committee for Aeronautics: history.nasa.gov.
- Information on current and future NASA programs relating to flight in the atmosphere and the future of space flight: www.aerospace.nasa.gov.
- Ames Research Center Centennial Activities Web site: quest.arc.nasa.gov/projects/aero/centennial/ includes links to all Centennial of Flight activities to date, links to Web chat and Web cast archives, biographies and lesson plans.
- Langley Research Center Centennial Activities Web site: www.larc.nasa.gov/2003.
- Educational activities: Spacelink.nasa.gov/celebratingflight.

The **National Air and Space Museum's** Web site is www.nasm.si.edu. An online version of the exhibition “The Wright Brothers & The Invention of the Aerial Age” will feature gallery content including historical images, artifacts on display and audio-visual displays. The site will also include online versions of the computer interactives in the gallery, including a flight simulator. There will be an in-depth look at the component parts of the 1903 Wright Flyer, and samples of music and artwork inspired by the invention of the airplane. Preview materials will be available at www.nasm.si.edu/wrightbrothers.

The Museum also maintains a Web site for the Steven F. Udvar-Hazy Center at www.nasm.si.edu/udvarhazycenter. Features include construction status and images, artifact listings and participation opportunities.

First Flight Centennial Commission's Web site is www.firstflightnc.com. The First Flight Centennial Commission Web site features information on current Centennial events sponsored by the North Carolina Commission, educational programs, extensive links to other key sites and a growing calendar of Centennial events in North Carolina for 2003.

American Institute of Aeronautics and Astronautics' Evolution of Flight Campaign's Web site is www.flight100.org, and it has been created solely to promote the Evolution of Flight campaign and the programs and special activities planned to celebrate the 100th anniversary of flight. An interactive chat room, history of flight timeline, profiles of aviation pioneers, interactive simulations and experiments, image gallery, and historical archives enhance the Web site.

Aviation Week's Next Century of Flight program capitalizes on its connection to Aviation Week's AviationNow.com to create a dynamic, global point of entry for everyone interested in the past, present and future of flight to explore their unique interests. The Next Century of Flight Web site is www.AviationNow.com/NextCentury, and it features news, information and insight about the past, present and future of flight. [AviationNow.com](http://www.AviationNow.com) connects the Next Century of Flight Channel with more than 3,000,000 page views per month and features Aviation Week and McGraw-Hill Education content, plus links to partner content and additional information and curriculum sources. Specific content areas include: Timelines of Milestone Aircraft, News and Views, Events Calendar, Gallery and Archive, and the LIFTOFF! Educational site.

Information about dates, times and events for the **Festival of Flight 2003** can be found at www.festivalofflight.org.

The **U.S. Air Force** has several Web sites that provide a variety of information about U.S. Air Force activities.

- Calendar of events, news articles, U.S. Air Force strategic plan and educational resources is www.centennialofflight.af.mil.
- U.S. Air Force overview, resources and career opportunities is www.airforce.com.
- Information on U.S. Air Force Thunderbirds: history, aircraft, bio's and schedule is www.airforce.com/thunderbirds.
- Site of the official national museum of the U.S. Air Force located in Dayton, Ohio is www.wpafb.af.mil/museum.
- Calendar of events, new articles, U.S. Air Force strategic plan and educational resources is www.afmc-mil.wpafb.af.mil/HQ-AFMC/PA/centennial/index.html.
- Information on "America's Band" is www.bolling.af.mil/band.

- Preservation efforts for U.S. Air Force is www.airforcehistory.hq.af.mil.
- Information on U.S. Air Force aerial events, demo teams and request form is www.airshows.pa.hq.af.mil/.

Third Millennium Entertainment will create a Web companion piece to the *Centennial of Flight Moments*, which will consist of the components listed below. As the *Centennial of Flight Moments* are aired, they will be added to the Web site.

- **Archive Moments:** A user may view the moments using video downloads and/or streaming media, stills from the program and written descriptions. They will be sortable by date, subject, etc.
- **Brief Backgrounds:** Accompanying each *Centennial of Flight Moment* will be a brief, originally written text background that will concisely explain why those images were chosen to portray that particular time, and at the same time provide context for the *Centennial of Flight Moment* in history.
- **Classroom Modules:** The core educational component of the site will be modules designed for classroom use in middle and high schools built around specific Standards of Learning. They will include lesson plans for the teachers, class activities and Web projects for classes. Using the *Centennial of Flight Moments* themselves, plus some supplementary materials (i.e. licensed photos and sounds), these modules will be designed for teachers to use as part of their curricula, in the areas of U.S. and world history, social studies, popular culture, science, etc.
- **Bulletin Board:** The site will contain an online threaded bulletin board for users to post comments and questions.

The Web site for the **National Air Tour** is www.NationalAirTour.org. An interactive Web site, presently under construction, will allow people to learn of the original and the 2003 National Air Tours and to follow the tours “real time” as they fly across America.

The Web site for the Chicago Centennial of Flight Commission is www.chicagocentennialofflight.org/.

The official Web site for all **Space DaySM** activities is www.spaceday.comSM. Students can use a host of online collaborative tools that allow them to share ideas, talk to experts and team up with other kids worldwide to tackle the Space DaySM Design Challenges through email and monitored discussion boards. Resources for teachers, interactive games and a new section devoted to flight are available on the site. Through the site, Space DaySM Partners are able to access educational and promotional materials for use in their communities. Press materials are also available on the site for the media to download. Students, teachers and space enthusiasts in local schools, communities and museums can see what others are doing, and let others know their plans for celebrating Space Day in the “Space DaySM In Your Neighborhood” section of spaceday.com. To find out more about the **Space Day Foundation**, visit www.spacedayfoundation.org.

The Wright Experience’s Web site, www.wrightexperience.com, has been updated regularly to reflect the ongoing activities in aircraft manufacture, research and the presentation of educational materials. The Wright Experience is producing material for the COFC’s Web enhancement

procurement opportunities. Each presentation is a complete Web site unto itself, enhanced with interactive activities, video, animation and hundreds of archival photographs. To date, The Wright Experience has delivered in-depth presentations on the following subjects:

- The Vertical Four Engine.
- The Controls of the Wright Model “B.”
- The Restoration of the Wrights’ #3 Engine.
- The 1901 Glider.
- The 1901 Wind Tunnel.
- The 1903 Flyer, Part I, History of the Flyer.
- The 1899 Kite.

The objective of the Web site is to present the work of the Wright Experience, and to inspire and educate the public about the scientific achievement of the Wright brothers. Currently, the following Web sites are in production: The 1902 Glider; The Flyer’s Fabric; The 1903 Flyer, Part II, The Reproduction Machine; and The Wrights on Film, archival footage of original Wright machines. These remaining Web sites will be delivered by December 2002, pending completion of the 1903 reproduction Flyer.

The **Legends of Airpower** Web site is www.legendsofairpower.com.

Gus McLeod’s Pole to Pole Global Flight Web site is www.gusmcleod.com.

The Web site for **3 Roads Communications** is www.3roads.com.

Special Collections and Archives in the **Wright State University Libraries** can be found at www.libraries.wright.edu, Special Collections. The Web site contains the following feature pages:

- Wright Brothers Collection Guide or Finding Aid.
- “Wright Brothers in Photographs” link to Digital Media Center at OhioLINK, <https://dmc.ohiolink.edu>.
- Wright Brothers Educational Resource Packet.
- 1903 Wright Flyer Replica History.
- “Wright Brothers Family Scrapbook” link to Ohio Memory Web site.

The **Aerospace Industries Association (AIA)** Web site is www.aia-aerospace.org. Increasing page views through 2003 will measure the success of the Web project, interest in the *Milestones of the First Century of Flight* and public interest in the aerospace industry. AIA is preparing a database of the 100 Milestones of the First Century of Flight for its Web site. The one hundred milestones were selected by a panel of aerospace experts in 1999 in conjunction with the AIA’s 80th anniversary celebration.

The milestones have been developed into a book and cover the full spectrum of international aerospace milestones, including brilliant technological innovations, courageous flying feats, stunning military achievements, and pioneering commercial developments. The time span ranges from the first successful powered flights of 1903 by the Wright brothers through the Space Shuttle missions of 2002.

Wright Brothers National Memorial Web site is www.nps.gov/wrbr.

Dayton Aviation Heritage National Historical Park has a Web page on the National Park Service server at www.nps.gov/daav/. The Web site provides basic information and educational materials to include information on each of the park sites and the park partners. Two curriculum guides are available via the Web site, one for grades 4-6, and another for secondary students.

The Dayton Aviation Heritage Commission established a Web site in its effort to study and gather data on the vast number of sites related to aviation development within the State of Ohio, and to seek public comment on the establishment of the National Aviation Heritage Area. The Web site, www.BirthplaceofAviation.Com, will continue to provide information about the Commission, the new non-profit it has formed, The Aviation Heritage Foundation, Inc., and the proposed national heritage area.

The **U.S. Air Force Museum's** Web site registered more than 45 million hits in 2001. Located at www.wpafb.af.mil/museum/, the Web site contains nearly 3,000 pages of information and photographs about aircraft, artifacts, exhibits, galleries, special events, educational programs and museum news. Projecting the story and legacy of U.S. Air Force history to a global audience, the Web site is an invaluable resource for visitors, staff, supporters, media, researchers, authors and the general public.

The **Maryland Historical Trust** Web site is www.marylandhistoricaltrust.net/aviation.html.

The **NAVAIR** Web site is located at www.navair.navy.mil/. The Navy Web site is located at www.navy.mil/. Both sites offer the latest in naval and naval aviation news and the Navy Web site houses a naval aviation photo gallery.

The *Face of America* Web Adventure can be found on **Wolf Trap's** Web site, www.wolftrap.org. This high-traffic Web site has received over 79 million page requests in the first 10 months of 2002. The site includes background information from partner parks, links to project partners and streaming video of artists in performance in our National Parks.

Specific objectives are to introduce Wolf Trap audiences and supporters to the Centennial of Flight, and to offer flight professionals, enthusiasts and the general public a look at flight through the eyes of performing artists. The *Face of America* Web Adventure will be updated to include links to partner organizations, e.g., COFC, U.S. Air Force, etc., in addition to partner National Park Service units. Flight-related music, dance and video will be added to the Web site beginning in May 2003.

The Official travel Web site for the **Outer Banks of North Carolina and the Outer Banks Visitors Bureau**, www.outerbanks.org, provides visitors with everything needed to plan a trip to the Outer Banks. A complete listing of all area accommodations, restaurants, as well as a complete calendar of events is available. Visitors will also find a bonus calendar that lists upcoming events for the 100th

anniversary of flight. General information on the Outer Banks can also be found, including average temperatures, directions, fishing rules and regulations, retail shops, wedding planners, ecotourism activities, water sports and much more.

Official Centennial of Flight Merchandise is available at www.cforbesinc.com and custompin@aol.com.

Section 7 – Capital Improvements and Program Developments

The Centennial of Flight celebration will be the catalyst for the construction of a variety of facilities throughout the country. Some of the facilities will be of substantial construction but temporary in nature; others will be more permanent. The facilities will support a variety of functions and activities. There will be interpretive centers constructed for the purpose of displaying artifacts and providing historical information about the Wright brothers and aviation. These centers will be permanent and will, in some cases, be a part of the National Park system. There will be numerous exhibition facilities constructed for the celebration in 2003. The majority will be temporary facilities with a specific end date for dismantlement. Some will be stationed at a permanent location, while others will be mobile and move throughout the country. In addition, most organizations are developing educational, experiential, artistic or scholarly programs for the commemoration year.

The value of both of these elements is provided in this section. The value of the capital improvements and program development is shown in Figure 7A.

U.S. Centennial of Flight Commission

The COFC has constructed three copies of a traveling exhibit that are available for display at a number of aviation events between now and the end of 2003. Two additional exhibit panels have been developed with the COFC's name and logo. One panel features a picture of the Wright 1901 Flyer; the second panel is an interior shot of the cockpit of The Spirit of St. Louis.

There is an educational component being developed by the COFC.

Inventing Flight: Dayton 2003

The Dayton region is undergoing preparations for the Centennial celebration including major community improvements such as a performing arts center and the recently completed riverfront development, RiverScape. Specifically related to the celebration are the following capital improvements:

- Centennial of Flight Legacy Plaza.
 - Will serve as the “front door” for the Centennial celebration.
 - Ground broken August 8, 2002.
 - Construction to be completed spring of 2003.

- Dayton Aviation Heritage National Historical Park.
 - Carillon Historical Park's John W. Berry, Sr. Wright Brothers Aviation Center.
 - Restoration of Wright Flyer III completed spring of 2001.
 - Installation of exhibits completed spring of 2002.
 - Dedication June 22, 2002.
 - East Interpretive Center and improvements to Huffman Prairie Flying Field.
 - Construction completed spring of 2002.
 - Completion of exhibit installation fall of 2002.
 - Dedication scheduled December 17, 2002.
 - Improvements to visitor access to Huffman Prairie Flying Field ongoing.
 - West Interpretive and Visitors Center.
 - Complete restoration and installation of exhibitry.
 - Completion and dedication in spring of 2003.

- Improvements to the Paul Laurence Dunbar State Memorial complex.
 - Completion in 2003.
- U.S. Air Force Museum.
 - Cold War Hangar estimated to be completed spring of 2003.
 - Major renovation of interior exhibits to be undertaken due to the construction of the Cold War Hangar.
- The Wright-Dunbar Business Village Redevelopment.
 - Façade and structural stabilization of the historic neighborhood of the Wright brothers and Paul Laurence Dunbar.
 - Business occupancy within the historic corridor of the Wright-Dunbar Business Village.

Inventing Flight: Dayton 2003 has a significant educational component.

First Flight Centennial Foundation

The First Flight Centennial Foundation has identified capital improvements to Wright Brothers National Memorial as a critical objective. As a fundraising partner of the National Park Service, the Foundation is proud to offer on-site recognition for sponsors of capital and programming projects, and private sector investments are matched through the U.S. Mint commemorative coin program. The Foundation has completed or initiated the following capital improvements:

- In 1998, the Foundation implemented a nearly \$400,000 restoration and re-dedication of the Wright Monument.
- In 2001, the Foundation delivered architectural and exhibit design plans to the National Park Service for a new Visitor Center or addition. The Visitor Center addition has been deferred until after the celebration at the determination of the National Park Service.
- Utilizing the exhibit plans for the Visitor Center as a base, the First Flight Centennial Foundation is responsible for designing, funding and building the First Flight Centennial Pavilion. The Pavilion is a semi-permanent structure of about 20,000 square feet that will house interpretive exhibits and programming to delight an anticipated four million visitors during 2003 to 2007. The Pavilion budget is \$1.8 million; substantial sponsorship funds have been secured. Site work on the Pavilion will commence in late 2002, with operations commencing in spring 2003. The goals for the First Flight Centennial Pavilion are to: (1) provide an excellent visitor experience for increased public visitation as an adjunct to the Visitor Center with complementary exhibits and educational opportunities; (2) provide a “multi-purpose” room for programming opportunities, including special events, speaker series and school groups; and (3) become a collaborative opportunity for centennial organizations, aviation groups and others, with the approval of the National Park Service. Initial exhibitors and programming opportunities promise to offer a varied, exciting and quality program to the visiting public during 2003 and beyond.
- Work is currently underway on the new Pilot Facility, sponsored by the Aircraft Owners and Pilots Association for Wright Brothers National Memorial. This nearly \$300,000 improvement to the site provides restrooms, flight planning computer information, interpretive elements and broad porches for visitors to observe general aviation operations at the 3,000 foot First Flight Airstrip. The new Pilot Facility will be substantially complete by the 99th anniversary of flight.

For photos of the ground breaking and progress photos, visit the Foundation's Web site or www.aopa.org.

As one of the organizations that goes past the celebration in 2003, the Foundation will continue to work with the National Park Service/Wright Brothers National Memorial to meet identified capital improvement needs including:

- Renovated trails for better visitor access.
- Renovated Monument plaza to make the top of Big Kill Devil Hill more accessible and enjoyable.
- A new Visitor Center addition after the Celebration.
- Other interpretive and educational facilities needs currently in discussion.

EAA

EAA is creating a functional 1903 Wright Flyer that will be operated at Kill Devil Hills, North Carolina, on December 17, 2003. The Flyer will exhibit nationally prior to that date.

The EAA has a significant education/experiential component.

FAA

No capital improvements are planned by the FAA.

FAA has a significant educational component.

NASA

No capital improvements are planned by NASA.

NASA has a significant educational component.

National Air and Space Museum

The National Air and Space Museum is planning a major exhibition, "The Wright Brothers & The Invention of the Aerial Age," to be housed at the flagship building on the National Mall. Three traveling exhibitions from the Museum are on tour. In addition, the Museum's Steven F. Udvar-Hazy Center is under construction at Washington Dulles International Airport. The facility's opening will coincide with the Centennial celebration in December 2003.

National Air and Space Museum has a significant educational and experiential component.

First Flight Centennial Commission

The First Flight Centennial Commission has created two traveling exhibits that will be displayed throughout the country between now and 2003.

The First Flight Centennial Commission has created a variety of educational and experiential components.

AIAA

The American Institute of Aeronautics and Astronautics is creating a flying scale replica of the 1903 Wright Flyer that will tour the country.

The American Institute of Aeronautics and Astronautics has a significant educational and scholarly component.

Aviation Week's The Next Century of Flight

Aviation Week will have a traveling exhibit available during 2003.

Aviation Week will have a significant education and public relations component in 2003.

U.S. Air Force Centennial of Flight Office

The U.S. Air Force Centennial of Flight Office will have traveling exhibits on tour throughout the nation in 2003.

New 3rd Hanger (Cold War Exhibits) at the U.S. Air Force Museum, Wright-Patterson Air Force Base.

"Cross Into the Blue Tour" traveling nationally to promote U.S. Air Force.

U.S. Air Force memorial ground breaking ceremony in 2003.

Plaque dedication at Huffman Prairie conducted in September 2003.

The U.S. Air Force Centennial of Flight Office will have a significant educational, artistic and scholarly component.

The Wright Experience

The Wright Experience maintains traveling exhibits and demonstration materials including reproduction aircraft, original engines and flight simulators. The Wright Experience is participating in the EAA's *Countdown to Kitty Hawk* program by supplying the reproduction 1903 Flyer to be flown at the Wright Brothers National Memorial on December 17, 2003. The Wright Experience is also building a reproduction 1903 Flyer commissioned by Mr. Harry Combs that is to be donated to the Nation and put on permanent display at Wright Brothers National Memorial.

There will be a significant educational component.

Virginia Air & Space Center

The Virginia Air & Space Center has launched the most exciting exhibit expansion in the museum's history, a one-million cubic foot Aviation Exhibit Hall, Space Gallery upgrade and educational classrooms. This major development will enable the Center to strengthen its mission, improve its core aviation and space galleries and provide new educational experiences for adults and children. The

Aviation Exhibit Hall will focus on the origins and future of flight and Hampton Roads' role in commercial, general and military aviation. In the summer of 2003, the Virginia Air & Space Center will open the new Aviation Exhibit Hall in celebration of the centennial of flight.

To date, the Center has raised over \$6.3 million in support of our \$8.9 million capital campaign to fund the design and installation of the Aviation Exhibit Hall and upgrades to the existing Space Gallery. This expansion will engage, educate and inspire visitors with high-tech interactive exhibits encompassing the scope of our mission. The new gallery is scheduled to open in July 2003 in culmination with the historic centennial anniversary of the Wright brothers' first flight.

Library of Congress

An exhibit will be created at the Library in 2003.

The Library of Congress will have an educational component.

National Park Service, Wright Brothers National Memorial, North Carolina

The National Park Service at the Wright Brothers National Memorial is renovating the Interpretive Center. The work consists of exterior and interior repairs and upgrades.

The Wright Brothers National Memorial has a significant educational component.

National Park Service, Dayton Aviation Heritage National Historical Park, Ohio

The Dayton Aviation Heritage National Historical Park and its partners are constructing two new interpretive centers and significantly expanding and improving existing facilities at Carillon Historical Park's John W. Berry, Sr. Wright Brothers Aviation Center and the Paul Laurence Dunbar State Memorial. In addition, the Dayton Aviation Heritage National Historical Park is working in partnership with the Wright B Flyer, Inc. to display a functional Wright 1911 Flyer at Huffman Prairie Flying Field.

There will be a significant educational component associated with the development of all of these facilities.

Dayton Aviation Heritage Commission

The Dayton Aviation Heritage Commission has completed the design of interpretive elements for three sites associated with the Wright brothers in Dayton. These include the original Wright family home site at 7 Hawthorne Street, the laboratory of Orville Wright, and the Wright's fifth cycle shop, where they designed and built the world's first airplane. Construction work has begun on two of the three sites (family home and cycle shop), with plans to complete all three sites before the end of 2003.

U.S. Air Force Museum

The U.S. Air Force Museum has embarked on a major expansion. The expansion's centerpiece, a 200,000 square-foot third building, is on target to open in spring 2003. Construction has progressed rapidly on the hangar, to be called the Eugene W. Kettering Gallery in honor of the first head of the U.S. Air Force Museum Foundation Board of Trustees. Follow-on expansion phases include a hall of missiles, space gallery and education center. The Kettering Gallery will allow the museum to create a

Cold War Gallery, intimately portraying the U.S. Air Force's critical contributions to national defense during the era.

The U.S. Air Force Museum has a significant educational, experiential, artistic and scholarly component.

RAMOLAIR

RAMOLAIR is not planning any capital improvements.

There will be an experiential component.

NAVAIR

NAVAIR has some displays that will be used for a variety of events throughout the nation during the course of the year.

The privately operated Naval Aviation Museum located outside the gate at Patuxent River is planning to construct a new building. This museum houses a unique collection of naval aircraft and aviation technology that has been involved in naval aviation testing and development.

National Aviation Hall of Fame

The National Aviation Hall of Fame is completing installation of exhibits for 2003.

There will be a significant educational component.

Wright State University

The Aviation Maintenance Career Commission (AMCC), in partnership with Wright State University, announced the selection of Wright State University, Dayton, Ohio, as the site for the Charles Taylor Memorial. This memorial will be built in a pedestrian plaza directly in front of the Paul Laurence Dunbar Library, which features a full size replica of the 1903 Wright Flyer in its four story glass atrium. Go to the AMCC Web site for more information, www.amcccommission.com. Groundbreaking for the memorial will take place on May 24, 2003. This will coincide with the FAA's Charles Taylor Award for the Outstanding Aircraft Mechanic of the Year.

Capital Improvements and Program Developments		
Figure 7A.		
Centennial of Flight Celebration		
Partner Program or Event	Capital Improvements	Program or Event
Centennial of Flight Commission	Not applicable	\$4 Million
Inventing Flight: Dayton 2003	\$3 - 5 Million	\$22 - 24 Million
First Flight Centennial Foundation	\$2.5 Million	\$5.3 Million
Experimental Aircraft Association	*	*
NASA	*	*
FAA	*	*
National Air and Space Museum	\$310 Million	*
First Flight Centennial Commission	\$1.25 Million	\$3.8 Million
National Park Service, Wright Brothers National Memorial, North Carolina	\$3.2 Million	*
Dayton Aviation Heritage National Historic Park	\$20 Million	\$600,000
Dayton Aviation Heritage Commission	\$500,000	\$125,000
American Institute of Aeronautics and Astronautics	*	*
Aviation Week's The Next Century of Flight	*	*
The Wright Experience	*	*
Library of Congress	*	*
U.S. Air Force Centennial of Flight Office	*	*
U.S. Air Force Museum	*	*
National Aviation Hall of Fame	\$2.2 Million	\$500,000
Wright-Patterson Air Force Base	See Dayton Aviation Heritage National Historic Park	\$500,000
Virginia Air & Space Center	\$8.9 Million	*
NAVAIR	*	*
Wright State University	*	*
Total	\$351.55 - 353.55 Million	\$36.8 - 38.8 Million

Section 8 – National Commemorative Issues

The COFC wrote to the Chairperson of the Citizens Stamp Advisory Committee on November 9, 2000, requesting consideration of the issuance of a new U.S. stamp to celebrate the 100th anniversary of the first powered flight made by Wilbur and Orville Wright on December 17, 1903. General Dailey, Chairperson of the Centennial of Flight Commission, asked his fellow Commissioners to present similar requests. On November 17, 2001, the COFC received a response saying, “We have made preliminary plans to commemorate this event in 2003, but we are not prepared to release the details at this time.” The COFC understands from several different sources that plans are underway to issue a centennial stamp.

In November 1997, federal legislation was passed directing the U.S. Mint to produce a commemorative coin honoring the Wright brothers and their achievements. The First Flight Centennial Foundation forwarded design suggestions to the U.S. Mint in August 2001. The U.S. Mint will begin publicizing the coin, utilizing messaging drawn from the First Flight Centennial input and images, beginning after December 2002, to create awareness of the coin offering in August 2003. The Foundation will receive revenue from this program in the form of surcharges awarded on a matching basis. Surcharges are estimated at \$4-9 million, depending upon matching funds being secured. Surcharges from the sale of the coin are legislated for the use of: (1) repairing, refurbishing and maintaining the Wright Brothers Monument on the Outer Banks of North Carolina; and (2) expanding or, if necessary, replacing, and maintaining the visitor center and other facilities at the Wright Brothers National Memorial Park on the Outer Banks of North Carolina, including providing educational programs and exhibits for visitors.

A quarter commemorating the Wright brothers’ first flight was unveiled in Raleigh, North Carolina, on March 12, 2001, by U.S. Representative Etheridge, Governor Easley and U.S. Mint Director Johnson. This quarter was the 12th quarter released in the 50 State Quarter program.

On March 18, 2002, the Ohio quarter was unveiled as part of the 50 State Quarter program. Ohio selected a design that features the Wright Flyer and astronaut John Glenn, with the slogan “Birthplace of Aviation Pioneers.”

Section 9 – Economic Impact

The Centennial of Flight commemoration will have a broad, multifaceted economic impact in 2003. The impact will be both short-term from events held throughout the year, and long-term from the result of the buildup of parks, facilities and programs spawned by the celebration. In addition to the direct economic impact, the celebration will create value indirectly by fostering educational and entrepreneurial initiatives among those who will be exposed to the formal programs being developed by a variety of sources during 2003 and beyond. It is hard to imagine that the emphasis on education throughout the centennial year will not spawn some new and dramatic inventions or innovations. It is impossible at this time, however, to quantify that impact as a part of this National Plan. An examination of previous national exhibitions, expositions and celebrations reveals that there is a long term, positive impact from new inventions and innovations.

Specifically, Centennial of Flight commemoration activities will generate economic benefits from several sources, including:

- Spending by participants at the various events planned throughout the country. Some of these events are predicted to draw a national audience in excess of one million participants over a number of days. There also will be a number of events throughout the nation that will draw smaller and more regional audiences. Combined, it is anticipated that several million participants will take part in the Centennial of Flight commemoration throughout 2003.
- Spending by participants visiting the various locations that will be more fully developed as a result of the Centennial of Flight commemoration. These locations include the National Park system; private, not for profit sites; and commercial venues that will have exhibits related to the aviation industry.
- Initial construction and exhibit development. Several million dollars are being spent on the construction of park facilities, commercial exhibits and educational facilities throughout the U.S. in response to the Centennial of Flight commemoration. This work is taking place across the nation with significant activities in Ohio, North Carolina, Virginia, Wisconsin and Maryland.
- Ongoing maintenance and construction expenditures at the more fully developed locations. Upon completion of the Centennial celebration, there will be a continuation of operations at various sites. These ongoing operations will continue to create an economic impact at those locations.
- Employment opportunities at the more fully developed locations. The Centennial of Flight commemoration has created new facilities and helped expand existing programs that are generating more jobs and economic benefits. Several of the sites where capital improvements have taken place will become or expand centers of employment. This will lead to a positive, economic impact at those locations on a very long-term basis.

Estimates of Spending and Multipliers:

There are a variety of studies that have been done on the expenditure patterns associated with events like the Centennial of Flight commemoration. While each event, program and project has identified economic benefits, there are some general figures that can be applied to calculate the economic benefit. For tourism, every dollar spent by a tourist will generate from 40 cents to 80 cents of additional revenue in the area being visited. Ongoing business enterprises such as park and program

operations and construction will generate significantly more impact in excess of one dollar for every dollar spent. This will vary by locale, but it is clear to see the economic potential the Centennial of Flight celebration.

Figure 9A shows the estimated economic impact to be generated by the program partners.

Economic Impact		
Figure 9A.		
Centennial of Flight Celebration		
Partner Program or Event	Recurring	Centennial Year
U.S. Centennial of Flight Commission	Not applicable	Not applicable
Inventing Flight: Dayton 2003	See Dayton Aviation Heritage National Historic Park	\$110 - 112 Million
First Flight Centennial Foundation	*	See First Flight Centennial Commission
Experimental Aircraft Association	*	*
NASA	*	*
FAA	*	*
National Air and Space Museum	\$16.4 Million	\$5.8 Million
First Flight Centennial Commission	*	\$600 Million
National Park Service, Wright Brothers National Memorial, North Carolina	*	See First Flight Centennial Commission
Dayton Aviation Heritage National Historic Park	\$11 - 13 Million	See Inventing Flight: Dayton 2003
Dayton Aviation Heritage Commission	See Dayton Aviation Heritage National Historic Park	See Inventing Flight: Dayton 2003
American Institute of Aeronautics and Astronautics	*	*
Aerospace Industries Association	*	*
Aviation Week's The Next Century of Flight	*	*
The Wright Experience	*	*
Library of Congress	*	*
U.S. Air Force Centennial of Flight Office	*	*
U.S. Air Force Museum	Not applicable	Not applicable
Festival of Flight	*	*
NAVAIR	Not applicable	Not applicable
National Aviation Hall of Fame	\$825,000	Pending
Wright-Patterson Air Force Base	Not applicable	See Inventing Flight: Dayton 2003
Virginia Air & Space Center	*	*

Section 10 – Measures of Success

As with any major undertaking where public funds are expended, it will be important for the COFC and its partners to be able to judge the success of the commemoration. Because the events and products of the 2003 celebration will be diverse and, in some cases global in scope, the measures of success of the commemoration will also be varied. The following are proposed measures of success:

Attendance:

- Level of attendance at major events. Did it meet or exceed expectations?

EVENT	PROJECTED ATTENDANCE	ACTUAL ATTENDANCE
Centennial of Flight Celebration, Kitty Hawk, North Carolina, December 13 -17, 2003.	65,000	
Inventing Flight: Dayton 2003 Expo, Dayton, Ohio, July 3-20, 2003.	600,000	
American Institute of Aeronautics and Astronautics International Air and Space Symposium and Exposition, Dayton, Ohio, July 14-17, 2003.		
First Flight Centennial Pavilion, Kitty Hawk, North Carolina. March-December 2003: 2003-2007:	1,000,000 4,000,000	
Aerospace Industries Association, Team America Rocketry Challenge.	100 Teams	
U. S. Air Force Centennial of Flight Office Art Exhibits: Gathering of Eagles:	500 1,000	
3 Roads Communications - Broadcasts	12,000	
EAA AirVenture Oshkosh, Oshkosh, Wisconsin, July 29-August 4, 2003.	1,000,000	
National Air and Space Museum: The Wright Brothers and the Invention of the Aerial Age exhibit, 2003.		
Library of Congress, "Dream of Flight" exhibition, Washington, D.C., 2003.	50,000 to 100,000	
U.S. Air Force Museum, Ultralight Fly-In, Dayton, Ohio, June 27-30, 2003.	10,000	

U.S. Air Force Museum, Hot Air Balloon Rally and Night Glow, Dayton, Ohio, July 4-6, 2003.	30,000	
U.S. Air Force Museum, World's Largest Airship Meet, Dayton, Ohio, July 11-13, 2003.	30,000	
U.S. Air Force Museum, Dayton Air Games, Dayton, Ohio, August 15-17, 2003.	75,000 to 100,000	
U.S. Air Force Museum, Giant Scale Model Radio Controlled Aircraft Fly-In, Dayton, Ohio, August 29-31, 2003.	20,000	
U.S. Air Force Museum, Dawn Patrol Rendezvous Fly-In, Dayton, Ohio, September 12-14, 2003.	50,000	
U.S. Air Force Museum, U.S. Scalemasters Radio Controlled Aircraft Championship, Dayton, Ohio, September 24-28, 2003.	10,000	
Wolf Trap Foundation for the Performing Arts, <i>Face of America 2003</i> .	4,000	
National Air Tours throughout the nation in 2003.	200,000 to 400,000	
NAVAIR Air Shows (4 shows in 2003).	700,000	
Festival of Flight, Fayetteville, North Carolina, May 16 – 26, 2003.		

Media Coverage:

Level of press coverage at major events and news conferences. Did it meet or exceed expectations?

Numbers and Metrics:

The total number of entries on the COFC calendar.

The total number of hits on the COFC Web site.

Volume of sales of publications.

The number of requests for publicly available free publications, posters, etc.

Level of interest in items such as commemorative coins.

Events:

The total number of states hosting centennial events.

Spin Off:

Is there renewed interest in invention, aviation, science and technology?

Are more young people inspired to pursue careers in aviation and aerospace?

Did the Centennial re-ignite the spirit of the global aerospace industry?

Did the Centennial raise worldwide awareness of the importance of the industry?

Appendix 1– Points of Contact

U.S. Centennial of Flight Commission Sharon Foster, Executive Director	202.358.1903 sfoster@hq.nasa.gov
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National Aeronautics and Space Administration Tony Springer	202.358.0848 aspringe@mail.hq.nasa.gov
National Air and Space Museum John Benton, Executive Officer	202.633.9494 john.benton@nasm.si.edu
First Flight Centennial Commission Kim Sawyer, Community Relations Coordinator Vivian McDuffie, Administrative Assistant	252.441.1637 KimSawyer2003nc@earthlink.net 919.733.2003 vivian.mcduffie@ncmail.net
American Institute of Aeronautics and Astronautics Merrie Scott, Project Manager	703.264.7530 merries@aiaa.org
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Festival of Flight 2003 Margee Herring, Director of Public Relations	910.763.4439 mherring@go-adpr.com
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Appendix 2 – U.S. Centennial of Flight Commission Budget

Budget charts on the next two pages provide the actual funds obligated during fiscal years 1999, 2000, 2001 and 2002; and the plans for fiscal years 2003 and 2004.

The major accomplishment in fiscal year 2001 was the award of two significant procurements. The Outreach Plan procurement was awarded to Carter Ryley Thomas Public Relations and Marketing Counsel to provide ongoing activity support through fiscal year 2003; and Web enhancement procurements were awarded in fiscal years 2001 and 2002 to organizations that provide creditable, historical and educational information electronically to enhance the content of the COFC Web site.

The General Accounting Office audited the COFC financial activity for fiscal year 2001. The General Accounting Office found that in fiscal year 2001:

- 156 of the Commission's recorded obligations and expenditures were supported by documentation that was approved by management.
- Commission recorded no donations, user fees, or in-kind donations for FY 2001.
- Commission's financial records contained some minor errors: actual travel expenditures were understated by a net amount of \$957, and the NASA interagency agreement was overpaid by \$700 that should be refunded to FAA.

The General Accounting Office recommended and the Commission concurred that the:

- Executive Director maintain a complete record or log of Commission financial transactions.
- Executive Director correctly record travel expenses. DONE.
- Executive Director direct FAA to obtain a refund of \$700 from NASA. DONE.

In fiscal year 2002, the COFC ended the year within budget.

In fiscal year 2003, the COFC will continue with the third year of the Outreach and Web enhancement procurements and the third year of the Web site maintenance effort.

CENTENNIAL OF FLIGHT COMMISSION

STATUS AS OF November 30, 2002

ITEM	FUNDING APPLIED FROM	FUNDING APPLIED TO or FOR	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
			<u>\$250,000</u> Actual	<u>\$600,000</u> Actual	<u>\$750,000</u> Actual	<u>\$900,000</u> Actual	<u>\$900,000</u> Planned	<u>\$600,000</u> Planned
Travel.	FAA	Commission Members & Staff.	\$0	\$3,955	\$4,811	\$2,074	\$8,000	\$0
Web Site Design and Development.	FAA	SAIC Contract #DTFA01-99-P-12913.	\$209,324	\$29,948	\$0	\$0	\$0	\$0
Two Servers	FAA	Sun Microsystems - Purchase Order #DTFA01-99-P-50526.	\$40,334	\$0	\$0	\$0	\$0	\$0
Time Line and Essay Contract	FAA	Proxtronic, Inc. Contract #DTFA01-00-C-A0102. FY 00 funds applied thru 9/30/01.	\$0	\$173,909	\$31,800	\$40,000	\$0	\$0
Library of Congress - Updated Bibliography of the Wright Brothers.	FAA	Interagency Agreement #DTFA01-00-X-2058. FY 00 funds applied thru 9/30/01.	\$0	\$49,234	\$0	\$0	\$0	\$0
Budget Recission of 0.22% in FY 01.	FAA	E-mail dated December 29, 2000 from FAA/John Mathewson to FAA/Suzanne Holloway.	\$0	\$0	\$1,650	\$0	\$0	\$0
Miscellaneous.	FAA	FY 00: Stamps for Gen Dailey \$66.00; Oshkosh Air Show \$118.10; FY 01: Anaconda Press business cards \$530.00;	\$0	\$184	\$530	\$0	\$0	\$0
Outreach Contract - OBLIGATED or PLANNED.	FAA	Carter Ryley Thomas; #DTFA0101CA0069.	\$0	\$0	\$300,000	\$380,000	\$300,000	\$0
Web Enhancement Contracts - OBLIGATED or PLANNED.	FAA	PENDING SELECTIONS AND AWARDS.	\$0	\$0	\$233,300	\$134,950	\$197,000	\$194,000
Subtotal	FAA	As above.	<u>\$249,658</u>	<u>\$257,230</u>	<u>\$572,091</u>	<u>\$557,024</u>	<u>\$505,000</u>	<u>\$194,000</u>

CENTENNIAL OF FLIGHT COMMISSION

STATUS AS OF November 30, 2002

ITEM	FUNDING APPLIED FROM	FUNDING APPLIED TO or FOR	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
			<u>\$250,000</u> Actual	<u>\$600,000</u> Actual	<u>\$750,000</u> Actual	<u>\$900,000</u> Actual	<u>\$900,000</u> Planned	<u>\$600,000</u> Planned
Travel	NASA	COFC. Commission Members & Staff. Interagency Agreement #DTFA01-01-X-02014.	\$0	\$0	\$15,000	\$25,000	\$25,000	\$25,000
Credit Card	NASA	COFC. Commission Members & Staff. Interagency Agreement #DTFA01-01-X-02014.	\$0	\$0	\$3,000	\$0	\$1,000	\$1,000
Office Space	NASA	NASA Code CO and GSA. Interagency Agreement #DTFA01-01-X-02014.	\$0	\$0	\$21,641	\$22,073	\$22,514	\$21,050
Equipment	NASA	NASA Code CI. SAIC - ODIN Contract #W-19720. Interagency Agreement #DTFA01-01-X-02014.	\$0	\$0	\$7,692	\$11,019	\$10,566	\$9,052
Office Supplies	NASA	NASA Code CO and GSFC. Interagency Agreement #DTFA01-01-X-02014.	\$0	\$0	\$1,500	\$1,500	\$1,500	\$1,375
Copier	NASA	NASA Code CIP. Miscellaneous office photocopying. Interagency Agreement #DTFA01-01-X-02014.	\$0	\$0	\$2,570	\$1,582	\$4,200	\$4,200
Printing and Graphics	NASA	NASA Code CIP and GPO. Interagency Agreement #DTFA01-01-X-02014.	\$0	\$0	\$64,000	\$85,000	\$60,000	\$60,000
Miscellaneous	NASA	Unplanned activities and products.	\$0	\$0	\$0	\$0	\$0	\$54,000
Overhead @ 6% on FY 2001 amounts in Reimbursable Agreement #1.	NASA	NASA. Interagency Agreement #DTFA01-01-X-02014.	\$0	\$0	\$6,984	\$0	\$0	\$0
Web Site Maintenance, Subtask 10.83 - OBLIGATED or PLANNED.	NASA	NASA Code CI. SAIC - ISEM Contract #W-19800. Interagency Agreement #DTFA01-00-X-02057.	\$0	\$342,699	\$52,000	\$196,000	\$270,000	\$230,000
Subtotal	NASA	As above.	<u>\$0</u>	<u>\$342,699</u>	<u>\$174,386</u>	<u>\$342,174</u>	<u>\$394,780</u>	<u>\$405,677</u>
Total FAA and NASA Actual or Planned Expenditures.	FAA & NASA	As above.	<u>\$249,658</u>	<u>\$599,929</u>	<u>\$746,477</u>	<u>\$899,198</u>	<u>\$899,780</u>	<u>\$599,677</u>
Amount Unused or for Reserve.	FAA & NASA	To Be Determined.	<u>\$342</u>	<u>\$71</u>	<u>\$3,523</u>	<u>\$802</u>	<u>\$220</u>	<u>\$323</u>