The Smithsonian and the NASM have joined forces to present a new exhibition, "Milestones of Flight," that will open to the public on July 1. The exhibit will showcase the history of aviation and spaceflight, with a focus on the roles of women and underrepresented groups in these fields. The exhibit spans from the Wright brothers' first flight in 1903 to the Apollo 11 moon landing in 1969, with stops along the way to highlight key moments in aviation and space exploration.

The exhibit will feature a variety of artifacts, including early aircraft, such as the Wright Flyer, and spacecraft, such as Apollo 11. Visitors will also have the opportunity to interact with virtual reality simulations and other interactive exhibits, allowing them to experience what it was like to be a pilot or astronaut.

"Milestones of Flight" is part of the larger Smithsonian Institution's 1976 Bicentennial celebration, which celebrates the nation's past, present, and future. The exhibit is one of many new exhibits and programs being introduced by the museum in the coming months, as the museum seeks to engage a new generation of visitors with its rich collection of artifacts and stories.

The opening ceremony will take place on July 1 at 10:00 a.m., with speaking engagements by museum staff and guests. The public is invited to attend the opening ceremony and explore the new exhibition, which will be open daily from 10:00 a.m. to 5:30 p.m. For more information, visit the Smithsonian Institution's website or call 202-633-1000.

By Linda S. Thomas
Continental remarkably clear and well defined, com-
rock.

American X-15, half aircraft, half spacecraft; the North
afford, with each gallery assigned to suitable
gallery bays.

progressed, we refined the gallery subject list
galleries and their contents any time during
in totality they cover the entire subject of
understandable and enjoyable to our
program has been the subject of intensive
four exhibits.

Though the Wrights only flew
The three giant glass-roofed galleries were
The basic organization of the galleries is
beneath the DC-3, was designed in
The DC-3 is followed by the Boeing
The 12 windowless galleries were assigned
Space station in which the visitor can sample
Space.

early date we resolved that the basic
examples are shown from different angles and
pictures of the machine, yet the visitor can learn much
This machine, yet the visitor can learn much

But a little behind is the Eastern Air

became a reliable and dependable aircraft of the 1920s and
Behind and a little below is the Eastern Air

would give people the illusion of flying.

The Albert Einstein Spacearium with its
flying over the Rockies, for display in
Helping Barbely assemble and troubleshoot
for an exclusive one-year premiere at the
program includes a computer-generated model of the earth,

The theater will screen the premiere film

For example, we are guided through the
Astronautics Research Division of Gian-

times in the Flight Technology gallery by
drawings and animated puppets of five
typical technologists who are the products of
whether we are on Sea-Air
Operations or gallery operations we embark on an ocean

and projectionists for the McLean Theater in

By Melvin B. Zisfein, deputy director of
National Air and Space Museum, joined
the Smithsonian Institution in March 1971 com-
ing from the Franklin Institute Research Laboratories.

By William Ebersole
The Albert Einstein Spacearium with its
"spacearium"... will give people the illusion

Helping Barbely assemble and troubleshoot

One exacting task assigned to Ron Miller

The theater will screen the premiere film

The Albert Einstein Spacearium with its
20-foot dome is the only fully automated
planetaryarium of its type in the world, acro-
managing Planetarium Officer Jerry Barbely.

A Gyrosystems computer controls the

sound system for this theater, the sound system powers more than 30 mul-
taneous award of bachelor of science degree in
to see the earth as seen from a nearby orbit.

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Smithsonian Pioneers in Air-Space Effort

By Kathryn Lindeman

The Smithsonian’s interest in air and space dates back to before the Civil War, when it became evident that the future would belong to those who could control the skies. In 1851, a balloon was launched from the Castle of York in New York City to demonstrate the feasibility of aerial navigation. The balloon was inflated with hot air and升 into the sky. The event was a success, and it marked the beginning of the museum’s interest in aeronautics.

Secretary of the Smithsonian with his idea. Henry took Lowe to visit President Lincoln and from this mutual interest resulted the Wright brothers’ first flight. In 1896, the Smithsonian’s annual report included a description of the Wright brothers’ flight. The report noted that the brothers had flown a distance of 175 feet and that the aircraft had a wingspan of 37 feet. The Wright brothers had designed their aircraft, the Wright Flyer, with the help of the Smithsonian’s Committee of Aeronautics.

In 1898, when the Spanish American War broke out, the War Department asked Secretary Langley to develop an air craft capable of carrying a man. Langley experimented another five years before his first trial run, but failed in two attempts at flight. Nine days after Langley’s second try, the Wright Brothers successfully launched their manned flying machine, at Kitty Hawk. The Wright Brothers’ flyer would not come to the Smithsonian for display for 45 years, until 1948. The fourth Secretary, Charles D. Walcott, was among those who, realizing the need to place American aviation on a firm scientific footing, began in 1912 to actively petition Congress for an aeronautical research and policy center.

In 1915 their efforts resulted in the creation of NASA’s forerunner, the National Advisory Committee for Aeronautics (NACA).

Charles Greetly Abbott, fifth Secretary of the Smithsonian, continued his research of the sun as a key to understanding the weather. A letter from Robert H. Goddard concerning his efforts to build a rocket that could reach into outer space suggested great possibilities to Abbott for his own studies and sparked a Smithsonian grant for Goddard’s continued rocket research. The Smithsonian supported Goddard’s research through years of discouragement and financial reverses.

He finally made history on March 16, 1926, when he launched a 10-foot rocket to 40 feet, marking the first flight of a liquid fueled rocket.

In 1925, the Smithsonian’s aeronautical collection began after the 1876 Philadelphia Exhibition when a group of kites was acquired from the Chinese Imperial Commission.

In 1920, a World War I balloon was opened to exhibit the collections related to flight. Some items from the collections were also displayed in the Arts and Industries Building next door.

The National Air Museum was established officially in 1946 as a Smithsonian bureau, and in 1958 the present site for the new Museum was specified.

Twenty years later, Congress changed the name to the National Air and Space Museum and authorized preparation of plans and construction of the new building.

Frank Murray and Philip Kelly, both of United Rigging, supervise installation of the V2 rocket in NASA’s Space Hall.
Clockwise from upper left: Pitts Special; Wreck of War II Gallery; Wicker gondola; Thunder Bird mural. Russian specialists assembled Soviet docking system to the Apollo docking module; Hindenburg cabin and scale models; Spirit of St. Louis.

"Launch"

named for Charles Lindbergh, and "Jet Plane," by Peter, Paul and Mary; electronic music; a miniature solar-cell powered train, and airline travel posters. This gallery uses cartoon figures behind doors to describe the federal agencies that participate in air and space programs, and a Technology Transfer Game explains the factors involved in bringing air and space innovations into our daily lives.

Ping pong halls, representing ideas, run down tracks and encounter little figures representing the bad luck of "bureaucratic bungling" and "limited usage," or the good luck of "money available." "Congressional interest," and "broad applications.

In the rear center of Space Hall, the Apollo-Soyuz spacecraft have been installed by American and Soviet technicians in the docked position. The Gallery also has manned spacecraft, ballistic missiles and satellite launch vehicles. Not far from the Apollo-Soyuz sits a wingless craft that resembles a silver bathtub. Television fans will recognize it right away as the aircraft that crashed in the opening scenes of "Six Million Dollar Man." That craft and others like it were later used in many successful reentry tests.

In the Balloons and Airships Gallery, exhibits tell the history of lighter-than-air flight. Universal Studios opening scenes of spacecraft, ballistic missiles and satellites. That craft and others like it were later used in many successful re-entry test programs.

Another way of conveying the idea of flight to the visitor is the film "To Fly." Viewers in the 485-seat auditorium are surrounded by more than 30 speakers while watching the 25-minute film on a five-story screen. The film takes them down Niagara Falls in the basket of a balloon, over Manhattan in a plane, through the St. Louis Gateway Arch, over Hawaii on a glider, and in a spacecraft among the planets.

"To Fly" was produced by Francis Thompson, Inc., of New York City and funded by the Continental Oil Company as a bicentennial public service.

Under a giant dome nearby is the Albert Einstein Spacearium where visitors may stop for a 45-minute refreshment course on just about everything man has learned of the universe over the past 200 years.

Given to the Smithsonian by the Federal Republic of Germany, the planetarium projects some 9,000 stars, the Milky Way, distant galaxies, and the five planets in the solar system that are visible to the naked eye.

So much for finding our way around the universe; how do we find our way around the Museum?

Illustrated directories and signboards are located throughout the building. Visitors from abroad also should have no trouble because most signs and directories are written in French, German, Spanish, and Japanese, as well as English.

A library for historical research on aeronautics and space flight is located on the third floor, overlooking the Hirshhorn Museum and Sculpture Garden. Open to staff members and the public by appointment, the library contains some 20,000 bound volumes, extensive picture archives, and a rare book collection.

Public and staff dining rooms and administrative offices are also located on the third floor. While standing in line in the food carousel area, diners may gaze out over the Capitol and its grounds. The cafeteria will be open for lunch and dinner during the summer months.

The Museum Shop on the first floor will sell models, books and slides. "Cavalcade of Flight," an exhibit of models, will be displayed in the shop.

One of NASM's most interesting features, located in the basement and hidden from public view, is the automatic central control system.

Monitoring more than 80 audiovisual units and the security, fire, and environmental control systems, it is the only one of its kind in the world. The system, coordinated by Hernan Otano, NASM's audiovisual chief, was manufactured by Hughes Aircraft Company.

But no matter how many galleries visitors walk through, they will probably want to return to the Kitty Hawk Flyer for one last look. It is that small wooden, propeller-driven plane, hung in the center of this museum, that brings together the old balloons and new rockets, the earliest ideas of flight and the latest solar system theories, as well as the distinct worlds of aviation and space exploration.