ALBUM NASA IMAGES

Album Description

Session TPS Teachers Network Albums -

LOC NASA Manuscript/Print/Mixed Media

LOC NASA Newspaper

LOC NASA Images

LOC NASA Videos

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Library of Congress Resources -

Primary Source Analysis Tool

Getting Started Teaching with Primary Sources

Resources for Family Engagement

NASA -

Engineering Design Process

NASA Educator Guide to the Engineering Design Process

Resources at the Library of Congress can be used alone or in conjunction with NASA images to promote STEM and space education. Materials can be used as a form of research and inspiration for design challenges. The resources also help students connect to the past of space exploration and the people who made it possible. Students can examine the evolution of space exploration by analyzing past and present documentation. They can then take the next step in imagining the future.

TPS TEACHERS NETWORK

ROCKET ENGINE TESTING FACILITY, OBSERVATION BLOCKHOUSE, NASA GLENN

Reference Link: http://www.loc.gov/item/oh1925/

Contributor Names: Historic American Engineering Record, creator
National Aeronautics & Space Administration (NASA)
H. K. Ferguson Company
Cleveland Municipal Airport
National Advisory Committee on Aeronautics (NACA)
Kumar, Rebecca, transmitter
Bates, Jeff, photographer
NASA Information Technology Center (ITC), photographer
Stewart, Robert C, historian
Created / Published: Documentation compiled after 1968
Notes: - Survey number: HAER OH-124-E
- Building/structure dates: 1955-1957 Initial Construction
- Building/structure dates: 1972 Subsequent Work
- Building/structure dates: 2003 Demolished
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
http://hdl.loc.gov/loc.pnp/pp.print

APOLLO 11 SPACECRAFT COMMANDER NEIL ARMSTRONG (FRONT) AND LUNAR MODULE PILOT EDWIN E. ALDRIN (REAR) PRACTICE LUNAR SURFACE MOBILITY AT THE MANNED SPACECRAFT CENTER, HOUSTON ARMSTRONG HAS A CAMERA ATTACHED TO THE CHEST AREA OF THE SPACE SUIT. THIS METHOD OF ATTACHING THE CAMERA IS UNDER STUDY. THE ASTRONAUTS ARE IN PRESSURIZED SPACE SUITS / / PHOTO CREDIT - NAS/ CE ADMINISTRATION.

Reference Link: http://www.loc.gov/item/2019635073/

Contributor Names: United States. National Aeronautics and Space Administration, photographer
Created / Published: [Washington, D.C.] : [National Aeronautics and Space Administration], [April 1969]
Subject Headings: - Armstrong, Neil,--1930-2012
- Aldrin, Buzz
- Apollo 11 (Spacecraft)--1960-1970
- Astronauts--American--Texas--Houston--1960-1970
- Space suits--1960-1970
- Cameras--1960-1970
Genre: Photographic prints--1970-1980
Notes: - Title from item.
- Accession box no. PR 13 CN 1977:003
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
http://hdl.loc.gov/loc.pnp/pp.print
Digital Id: ppmsca 59787 //hdl.loc.gov/loc.pnp/ppmsca.59787

[AERIAL VIEW OF TICKER TAPE PARADE FOR ASTRONAUTS VIRGIL GRISSOM AND JOHN YOUNG (SEATED IN LAST CAR WITH VICE PRESIDENT HUMPHREY), LED BY TRUCKS WITH SIGNS READING "WELCOME ASTRONAUTS", BROADWAY, NEW YORK CITY] / WO R HIGGINS.

Reference Link: http://www.loc.gov/item/2001701745/

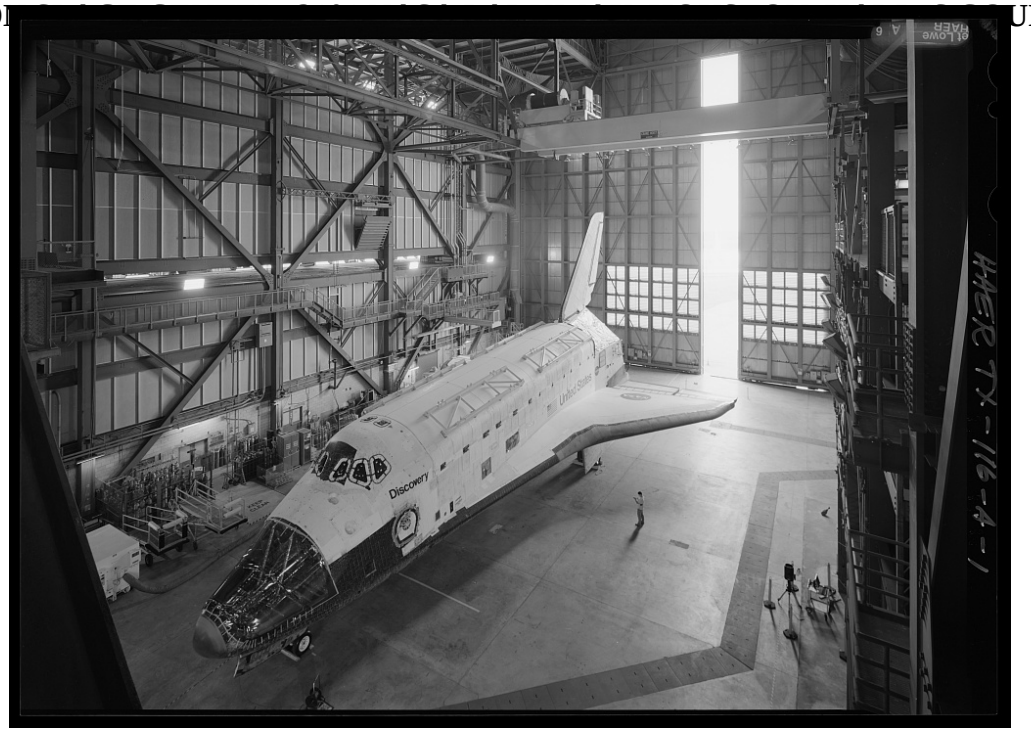
Contributor Names: Higgins, Roger, photographer
Created / Published: 1965 [March 29]
Subject Headings: - Humphrey, Hubert H.--(Hubert Horatio),--1911-1978--Public appearances
- Young, John,--1930-2018--Public appearances
- Grissom, Virgil I.--Public appearances
- Ticker tape parades--New York (State)--New York--1960-1970
Genre: Aerial views--1960-1970
Photographic prints--1960-1970
Notes: - NYWT&S staff photograph.
- Forms part of: New York World-Telegram and the Sun Newspaper Photograph Collection (Library of Congress).
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
Digital Id: cph 3c28924 //hdl.loc.gov/loc.pnp/cph.3c28924

SPACE TRANSPORTATION SYSTEM, SOLID ROCKET BOOSTERS, LYNDON B. JOHNSON SPACE CENTER, HARRIS COUNTY, TX

Reference Link: http://www.loc.gov/item/tx1117/

Contributor Names: Historic American Engineering Record, creator
National Aeronautics and Space Administration, Owner
Created / Published: Documentation compiled after 1968
Subject Headings: - man in space
- national space program
- space exploration
- space flight
- rocket propulsion
- Texas -- Harris County -- Houston
Notes: - Survey number: HAER TX-116-K
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
http://hdl.loc.gov/loc.pnp/pp.print

SPACE TRANSPORTATION SYSTEM, ORBITER DISCOVERY (OV-103), LYNDON B. JOHNSON SPACE CENTER, HARRIS COUNTY, TX



Reference Link: http://www.loc.gov/item/tx1107/

Contributor Names: Historic American Engineering Record, creator
National Aeronautics and Space Administration, Owner
Smithsonian Institution, Owner
Groman, Jennifer, Historic Preservation Officer
Severance, Barbara
Allen, Ralph, Historic Preservation Officer
Smart GeoMetrics, contractor
Created / Published: Documentation compiled after 1968
Subject Headings: - national space program
- man in space
- space flight
- Shuttle Program
- space shuttles
- Texas -- Harris County -- Houston
Notes: - Significance: Discovery, NASA's third Orbiter to join the fleet, was named after one of the two ships that were used by British explorer James Cook in the 1770s. It was the first Orbiter built solely for operations and not for testing and benefited from the knowledge gained from the construction, assembly and testing of the Orbiters Enterprise, Columbia and Challenger. When it was completed, Discovery was almost 7,000 pounds lighter than Columbia. Discovery arrived at the Kennedy Center in Florida on November 9, 1983. After checkout, testing and processing, it was launched on August 30, 1984, for its first mission, 41-D, to deploy three communications satellites. Since its inaugural flight Discovery has completed 39 missions,

traveled over 148,000,000 miles.
- Survey number: HAER TX-116-A
- Building/structure dates: 1983 Initial Construction

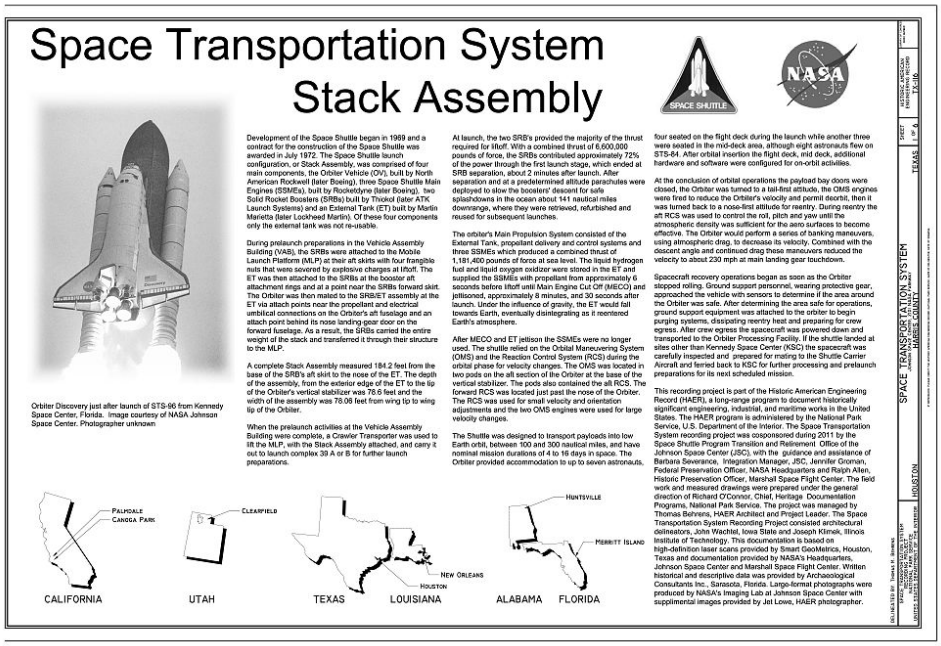
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
http://hdl.loc.gov/loc.pnp/pp.print

GLENN SPACE SHUTTTLE FLIGHT

Reference Link: http://www.loc.gov/item/2019640268/

Summary: Caption for frame no. 8: NASA Administrator Daniel Goldin during a news conference to announce the return to the space program of Sen. John Glenn, D-Ohio, in a 1962 photo behind Goldin. Glenn is slated to fly aboard the space shuttle in October.
Contributor Names: Graham, Douglas (Photographer), photographer
Created / Published: [16 Jan. 1998]
Subject Headings: - Glenn, John
- Goldin, Daniel
- Astronauts
- Press conferences
- NASA (National Aeronautics and Space Administration)
Genre: Film negatives--Color--1990-2000
Notes: - Title, date, and photographer based on information provided by Congressional Quarterly (CQ). Caption/summary only present when provided by CQ.
- LC-CQ06-WR98011603: Frame nos. 7-9.
- Gift; CQ Roll Call; 2011; (DLC/PP-2011:177).
- Forms part of: CQ Roll Call Photograph Collection.
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA http://hdl.loc.gov/loc.pnp/pp.print
Digital Id: ppmsca 61801 //hdl.loc.gov/loc.pnp/ppmsca.61801

SPACE TRANSPORTATION SYSTEM, LYNDON B. JOHNSON SPACE CENTER, 2101 NASA PARKWAY, HOUSTON, HARRIS COUNTY, TX

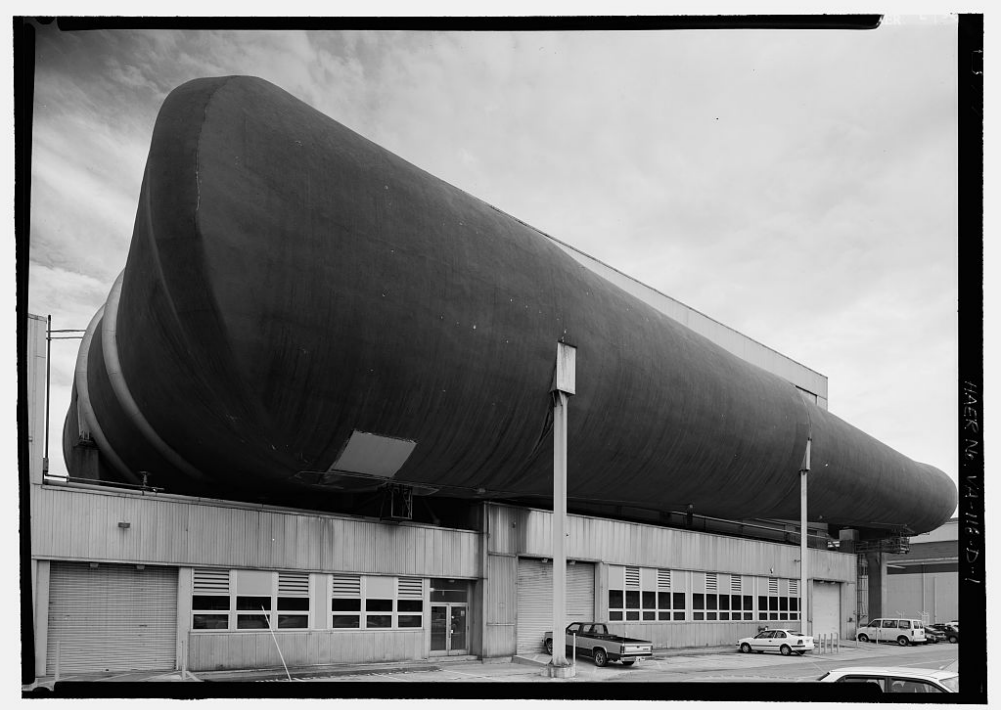


Reference Link: http://www.loc.gov/item/tx1106/

Contributor Names: Historic American Engineering Record, creator
National Aeronautics and Space Administration, Owner
Smithsonian Institution, Owner
Deming, Joan, historian
Slovinac, Patricia, historian
Archaeological Consultants, Inc., contractor
Wolfe, Jeffrey, field team
Nehr, Adam, field team
Farrar, Tom, field team
Behrens, Thomas M, project manager
Wachtel, John, delineator
Klimek, Joseph, delineator
Pierce, Ryan, delineator
Smart GeoMetrics, field team
Lowe, Jet, photographer
Created / Published: Documentation compiled after 1968
Subject Headings: - national space program
- space exploration
- space flight
- man in space
- Shuttle Program
- rocket propulsion
- fuel tanks

- Texas -- Harris County -- Houston
Notes: - Significance: The Orbiter Discovery, OV-103, is considered eligible for listing in the National Register of Historic Places (NRHP) in the context of the U.S. Space Shuttle Program (1969-2011) under Criterion A in the areas of Space Exploration and Transportation and under Criterion C in the area of Engineering. Because it has achieved significance within the past fifty years, Criteria Consideration G applies. Under Criterion A, Discovery is significant as the oldest of the three extant orbiter vehicles constructed for the Space Shuttle Program (SSP), the longest running American space program to date; she was the third of five orbiters built by NASA. Unlike the Mercury, Gemini, and Apollo programs, the SSP's emphasis was on cost effectiveness and reusability, and eventually the construction of a space station. Including her maiden voyage (launched August 30, 1984), Discovery flew to space thirty-nine times, more than any of the other four orbiters; she was also the first orbiter to fly twenty missions. She had the honor of being chosen as the Return to Flight vehicle after both the Challenger and Columbia accidents. Discovery was the first shuttle to fly with the redesigned SRBs, a result of the Challenger accident, and the first shuttle to fly with the Phase II and Block I SSME. Discovery also carried the Hubble Space Telescope to orbit and performed two of the five servicing missions to the observatory. She flew the first and last dedicated Department of Defense (DoD) missions, as well as the first unclassified defense-related mission. In addition, Discovery was vital to the construction of the International Space Station (ISS); she flew thirteen of the thirty-seven total missions flown to the station by a U.S. Space Shuttle. She was the first orbiter to dock to the ISS, and the first to perform an exchange of a resident crew. Under Criterion C, Discovery is significant as a feat of engineering. According to Wayne Hale, a flight director from Johnson Space Center, the Space Shuttle orbiter represents a "huge technological leap from expendable rockets and capsules to a reusable, winged, hypersonic, cargo-carrying spacecraft." Although her base structure followed a conventional aircraft design, she used advanced materials that both minimized her weight for cargo-carrying purposes and featured low thermal expansion ratios, which provided a stable base for her Thermal Protection System (TPS) materials. The Space Shuttle orbiter also featured the first reusable TPS; all previous spaceflight vehicles had a single-use, ablative heat shield. Other notable engineering achievements of the orbiter included the first reusable orbital propulsion system, and the first two-fault-tolerant Integrated Avionics System. As Hale stated, the Space Shuttle remains "the largest, fastest, winged hypersonic aircraft in history," having regularly flown at twenty-five times the speed of sound.
- Survey number: HAER TX-116
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
http://hdl.loc.gov/loc.pnp/pp.print

NASA LANGLEY RESEARCH CENTER, 8-FOOT TRANSONIC PRESSURE TUNNEL, 640



Reference Link: http://www.loc.gov/item/va1899/

Contributor Names: Historic American Engineering Record, creator
Stack, John
Draley, Eugene C
Wright, Ray H
Mattson, Axel T
National Aeronautics and Space Administration
Whitcomb, Richard T
National Advisory Committee for Aeronautics
Langley Memorial Aeronautical Laboratory
Flechner, Stuart G
Patterson, James C, Jr
Fournier, Paul G
Davidson, Lisa, transmitter
Lowe, Jet, photographer
National Aeronautics and Space Administration, sponsor
Laird, Matthew R, historian
Cunningham, Chris, photographer
Newbill, Michael, researcher
Dutton, David H, researcher
Anderson, Richard K, Jr, researcher
Created / Published: Documentation compiled after 1968

- aeronautics
- pipes (conduits)
- motors
- offices
- control rooms
- catwalks
- steel structural frames
- testing
- Virginia -- Hampton -- Hampton

Notes: - Significance: The 8-Foot Transonic Pressure Tunnel was the first of Langley's wind tunnels to be built incorporating the new slotted throat tunnel design from its inception. A significant improvement over its retrofitted predecessors, the new tunnel allowed transonic testing in a more stable environment. In the 1960s, Langley engineer Richard T. Whitcomb and his research team used the tunnel to develop the "supercritical airfoil," which would revolutionize military and civilian aircraft design. The 8-Foot Transonic Pressure Tunnel is significant at a national level because of its role in the early development of transonic tunnels and its later role in testing aircraft designs.

- Survey number: HAER VA-118-D
- Building/structure dates: 1953 Initial Construction
- Building/structure dates: 1981 Subsequent Work
- Building/structure dates: 1958 Subsequent Work
- Building/structure dates: 2011 Demolished

Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA http://hdl.loc.gov/loc.pnp/pp.print

NASA LANGLEY RESEARCH CENTER, 8-FOOT HIGH SPEED WIND TUNNEL, 641

Reference Link: http://www.loc.gov/item/va1795/

Contributor Names: Historic American Engineering Record, creator
Robinson, Russell G
Hood, Manley J
Jacobs, Eastman N
Public Works Administration
Stack, John
Orlin, William
Wright, Ray H
Ritchie, Virgil S
Whitcomb, Richard
Becker, John
National Advisory Committee for Aeronautics
Lewis, George W
Langley Memorial Aeronautical Laboratory
National Aeronautics and Space Administration
Wang, Charissa Y, field team
Durst, Donald M, field team
Herrin, Dean A, project manager
Lowe, Jet, photographer
Hardlines: Design & Delineation, delineator
Stewart, Robert C, historian

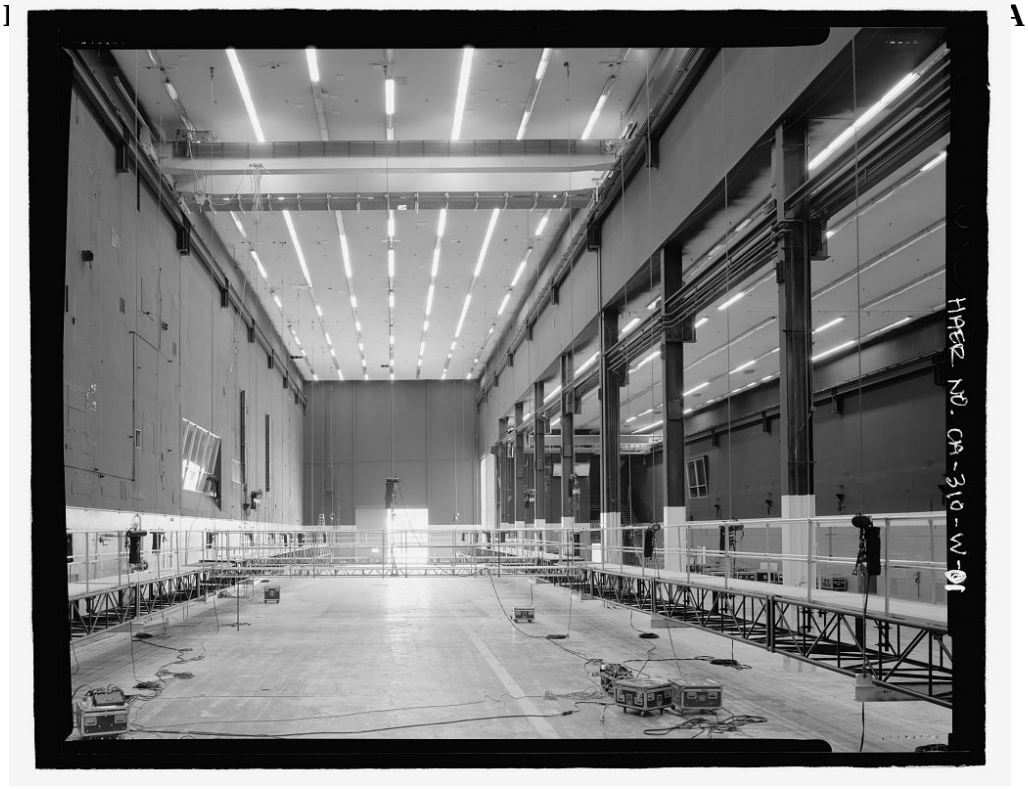
Newbill, Michael, researcher
Dutton, David H, researcher
Anderson, Richard K, Jr, researcher
Laird, Matthew R, historian
Lowe, Jet, photographer
National Aeronautics and Space Administration, sponsor
Created / Published: Documentation compiled after 1968
Subject Headings: - wind tunnels
- aeronautics
- reinforced concrete construction
- motors
- offices
- Art Deco architectural elements
- testing
- Works Progress Administration
- Virginia -- Hampton -- Hampton
Notes: - Significance: The facility was authorized in July 1933 and built by the Public Works Administration for $26,000. It tested complete models of aircraft and aircraft components in a high-speed airstream approaching the speed of sound. Originally capable of testing at Mach 0.75, it was repowered in the 1940s and early 1950s to have a Mach 1.2 potential. The most important contribution of the HST was defining the causes and cures for the sever adverse stability and control problems encountered in high-speed dives. This tunnel also produced the high-speed cowling shapes used in World War II aircraft, and efficient air inlets for jet aircraft. The first 500-MPH analyses of propellers were made here early in the war. After repowering, the 8-Foot Tunnel produced precise transonic data up to Mach numbers as high as 0.92 for such aircraft as the X-1, D-558, and others. Its final achievement was the development and use in routine operations of the first transonic slotted throat. The investigations of wing-body shapes in this tunnel led to Richard Whitcomb's discovery of the transonic area rule. The HST developed an impressive record in aviation history as an example of accomplishment by imaginative researchers.
- Survey number: HAER VA-118-B
- Building/structure dates: 1936 Initial Construction
- Building/structure dates: 1944 Subsequent Work
- Building/structure dates: 1945 Subsequent Work
- Building/structure dates: 1950 Subsequent Work
- Building/structure dates: 1946 Subsequent Work
- Building/structure dates: 1966 Subsequent Work
- Building/structure dates: 1985 Subsequent Work
- Building/structure dates: 2011 Demolished
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
http://hdl.loc.gov/loc.pnp/pp.print

NASA INDUSTRIAL PLANT, MISSILE RESEARCH LABORATORY, 12214 LAKEWOOD

Reference Link: http://www.loc.gov/item/ca3134/

Contributor Names: Historic American Engineering Record, creator
Onyx Architects, contractor
Positive Image Photographic Services, contractor
Jackson-Retondo, Elaine, transmitter
Kaplan, Mark, historian
Olmos, Tavo, photographer
Created / Published: Documentation compiled after 1968
Subject Headings: - laboratories
- California -- Los Angeles County -- Downey
Notes: - Significance: Building 41 was used for missile research and construction and is a contributing factor to the historic value of the NASA site.
- Survey number: HAER CA-310-G
- Building/structure dates: 1942 Initial Construction
- Building/structure dates: 1940- before 1950 Subsequent Work
- Building/structure dates: 1950 Subsequent Work
- Building/structure dates: 1960-1961 Subsequent Work
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
http://hdl.loc.gov/loc.pnp/pp.print

NASA INDUSTRIAL PLANT, SYSTEMS INTEGRATION & CHECKOUT FACILITY, 12214 [illegible] A



Reference Link: http://www.loc.gov/item/ca3478/

Contributor Names: Historic American Engineering Record, creator
Created / Published: Documentation compiled after 1968
Subject Headings: - national space program
- space exploration
- space flight
- assembly plants
- California -- Los Angeles County -- Downey
Notes: - Significance: Building 290 was constructed in 1965 and was significantly used until 1999 when the Downey plant was closed. It was very significant during the Apollo and Space Shuttle programs as a Systems Integration and Checkout facility and served as the final assembly facility for the service and command modules of the Apollo program. Building 290 "was the heart of the Apollo program, combined with Building 6."1 Building 290 is also known for housing the world's largest clean room for 9 months before the Soviet Union superseded it with a similar building. Building 290 was the location where the crew module and aft thrust structures were developed for the Apollo program. "In total over 20 vehicles were constructed in the building."2 At one time, a section of Building 290 was converted into dormitories for the astronauts during testing and training for the Apollo Mission. Building 290 was the location of spacecraft assembly and integration for the American Space-Age. Building 290 was used by assemblers, technicians and engineers who worked to create the hardware that was responsible for taking men to the moon and made the International Space Station possible.3 Memorial plaques for all of the astronauts who flew into space during

bravery and good works. 1 National Aeronautics and Space Administration. "Final Historic Buildings and Structures Inventory and Evaluation, National Aeronautics and Space Administration, Industrial Plant Parcels I and II Downey, California." November 1999. Appendix G. 2 Ibid. 3 Ibid.

- Survey number: HAER CA-310-W
- Building/structure dates: 1965 Initial Construction

Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA http://hdl.loc.gov/loc.pnp/pp.print

NASA INDUSTRIAL PLANT. MANUFACTURING & ASSEMBLY PLANT. 12214 LAKEWOOD

Reference Link: http://www.loc.gov/item/ca3474/

Contributor Names: Historic American Engineering Record, creator
Kaufmann, Gordon B., Architect
Stanton, J. E., Architect
Stockwell, William F., Architect
Murray, Erick, Engineer
Created / Published: Documentation compiled after 1968
Subject Headings: - military facilities
- war (World War II)
- national space program
- research facilities
- development
- aircraft
- California -- Los Angeles County -- Downey
Notes: - Significance: Building 1 has a long history of construction. Originally built in 1929, it was continuously remodeled, added on to, and modified up until 1996. Building 1 is the largest building on the Downey site being 1 million square feet in size. Built during a very significant period of history when aircraft production was just beginning, Building 1 was responsible for the housing and construction of many aircraft under the companies EMSCO, and Vultee. The innovative construction of the folding-wing plane by Kinner was once produced in Building 1, and during WWII under the company Vultee Aircraft Inc., 15 percent of

the aircraft supplied for the WWII was built at the Downey site. Vultee was the "first aircraft manufacturing plant to use powered assembly lines, including a mechanized overhead conveyor, Vultee was able to produce more planes in a shorter span of time than any other similar plant."1 This conveyor system was located in Building 1. Not only was Building 1 significant during the aircraft age, but also during the age of missile development and research as well as the Apollo and Space Shuttle programs. Building 1 was used for large subassembly and final assembly operations on both aircraft and spacecraft command and service modules. Building 1 was also the earliest location for astronaut dormitories on the Downey site. Building 1 was utilized during the Space Shuttle program and housed the full-scale mock-up of the space shuttle. Building 1 is considered "the administrative and historical "heart" of the NASA Industrial Plant. Beneath this building's roof there are approximately 22 separate building, some of which are part of the original plant constructed in 1929, and all of which contribute to the plants 70-year history of design, production, and testing for the aircraft/aerospace industry."2 1 National Aeronautics and Space Administration. "Final Historic Buildings and Structures Inventory and Evaluation, National Aeronautics and Space Administration, Industrial Plant Parcels I and II Downey, California." November 1999. Ch. 13 Historical Context. 2 Ibid.

- Survey number: HAER CA-310-S
- Building/structure dates: 1929 Initial Construction

Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA http://hdl.loc.gov/loc.pnp/pp.print

NASA INDUSTRIAL PLANT. 12214 LAKEWOOD BOULEVARD. DOWNEY. LOS ANGELES

Reference Link: http://www.loc.gov/item/ca3127/

Contributor Names: Historic American Engineering Record, creator
Smith, E M
Vultee, Jerry
Millar, Richard
Kaufmann, Gordon
Onyx Architects, contractor
Jackson-Retondo, Elaine, transmitter
Olmos, Tavo, photographer
Kaplan, Mark, historian
Created / Published: Documentation compiled after 1968
Subject Headings: - industrial facilities
- California -- Los Angeles County -- Downey
Notes: - Significance: The site was one of the country's earliest airplane manufacturing plants and has been instrumental in the development of flight technology including military, supersonic, and high altitude flight vehicles, the manufacturing process of these vehicles, missile technology, guidance systems as well as the Apollo and Space Shuttle programs. The structures included in this report comprise a fraction of the overall facility and are located in the northeastern region of the site.
- Unprocessed Field note material exists for this structure: N973
- Survey number: HAER CA-310

- Building/structure dates: 1929 Initial Construction
- Building/structure dates: 1941 Subsequent Work
- Building/structure dates: 1948-1958 Subsequent Work
- Building/structure dates: 1996 Subsequent Work
- Building/structure dates: 1999 Subsequent Work

Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
http://hdl.loc.gov/loc.pnp/pp.print

ROCKET ENGINE TESTING FACILITY, GRC BUILDING NO. 100, NASA GLENN RESEARCH

Reference Link: http://www.loc.gov/item/oh1924/

Contributor Names: Historic American Engineering Record, creator
National Aeronautics & Space Administration (NASA)
H. K. Ferguson Company
Cleveland Municipal Airport
National Advisory Committee on Aeronautics (NACA)
Kerline, H S
Kumar, Rebecca, transmitter
Bates, Jeff, photographer
Stewart, Robert C, historian
Created / Published: Documentation compiled after 1968
Notes: - Survey number: HAER OH-124-D
- Building/structure dates: 1957 Initial Construction
- Building/structure dates: 1985 Subsequent Work
- Building/structure dates: 1991 Subsequent Work
- Building/structure dates: 2003 Demolished
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
http://hdl.loc.gov/loc.pnp/pp.print

ROCKET ENGINE TESTING FACILITY, GRC BUILDING NO. 205, NASA GLENN RESEARCH

Reference Link: http://www.loc.gov/item/oh1922/

Contributor Names: Historic American Engineering Record, creator
National Aeronautics & Space Administration (NASA)
H. K. Ferguson Company
Cleveland Municipal Airport
National Advisory Committee on Aeronautics (NACA)
Kumar, Rebecca, transmitter
Stewart, Robert C, historian
Created / Published: Documentation compiled after 1968
Notes: - Survey number: HAER OH-124-B
- Building/structure dates: 1962-1965 Initial Construction
- Building/structure dates: 1995 Subsequent Work
- Building/structure dates: 2003 Demolished
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
http://hdl.loc.gov/loc.pnp/pp.print

Reference Link: http://www.loc.gov/item/2016646528/

Contributor Names: O'Halloran, Thomas J., photographer
Created / Published: 1964 April 20.
Genre: Film negatives--1960-1970
Notes: - Title and date from log book.
- Contact sheet available for reference purposes: USN&WR COLL - Job no. 11829, frame 35.
- Forms part of: U.S. News & World Report Magazine Photograph Collection.
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
http://hdl.loc.gov/loc.pnp/pp.print
Digital Id: ppmsca 41627 //hdl.loc.gov/loc.pnp/ppmsca.41627

MICHAEL COLL  **W/SMITHSONIAN**

Reference Link: http://www.loc.gov/item/2019630938/

Contributor Names: Trikosko, Marion S., photographer
Created / Published: 1974 July 9.
Genre: Film negatives--1970-1980
Notes: - Title and date from log book.
- Contact sheet available for reference purposes: USN&WR COLL - Job no. 29757-A, frame 24A.
- Forms part of: U.S. News & World Report Magazine Photograph Collection.
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
http://hdl.loc.gov/loc.pnp/pp.print
Digital Id: ppmsca 55563 //hdl.loc.gov/loc.pnp/ppmsca.55563

Reference Link: http://www.loc.gov/item/2019631449/

Contributor Names: Leffler, Warren K., photographer
Created / Published: 1969 January 9.
Genre: Film negatives--1960-1970
Notes: - Title and date from log book.
- Contact sheet available for reference purposes: USN&WR COLL - Job no. 20323, frame 21.
- Forms part of: U.S. News & World Report Magazine Photograph Collection.
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
http://hdl.loc.gov/loc.pnp/pp.print
Digital Id: ppmsca 56650 //hdl.loc.gov/loc.pnp/ppmsca.56650

Reference Link: http://www.loc.gov/item/2019631448/

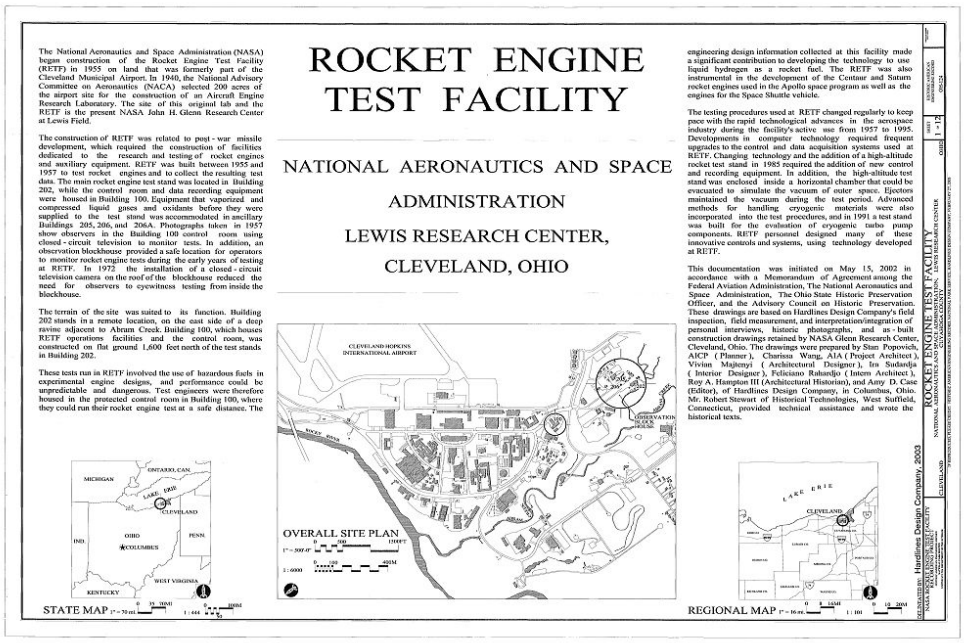
Contributor Names: Trikosko, Marion S., photographer
Created / Published: 1969 January 9.
Genre: Film negatives--1960-1970
Notes: - Title and date from log book.
- Contact sheet available for reference purposes: USN&WR COLL - Job no. 20319, frame 29A.
- Forms part of: U.S. News & World Report Magazine Photograph Collection.
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
http://hdl.loc.gov/loc.pnp/pp.print
Digital Id: ppmsca 56649 //hdl.loc.gov/loc.pnp/ppmsca.56649

THE CHRONIC  **EEN, IMAGE 14**

Reference Link: https://chroniclingamerica.loc.gov/lccn/sn87065526/1963-08-23/ed-1/seq-14/#date1=1777&sort=relevance&rows=20&words=NASA&searchType=basic&sequence=0&index=3&state=&dat

Newspaper: The Chronicle. (Pascagoula, Miss.) 1961-1966
Newspaper Link: https://chroniclingamerica.loc.gov/lccn/sn87065526/1963-08-23/ed-1/seq-14/#date1=1777&sort=relevance...
Image provided by: Mississippi Department of Archives and History
PDF Link: https://chroniclingamerica.loc.gov/lccn/sn87065526/1963-08-23/ed-1/seq-14.pdf

ROCKET ENGINE TESTING FACILITY, NASA GLENN RESEARCH CENTER, CLEVELAND, CUYAHOGA COUNTY, OH



Reference Link: http://www.loc.gov/item/oh1920/

Contributor Names: Historic American Engineering Record, creator
National Aeronautics & Space Administration (NASA)
H. K. Ferguson Company
Cleveland Municpal Airport
National Advisory Committee on Aeronautics
Kumar, Rebecca, transmitter
Bates, Jeff, photographer
NASA Information Technology Center (ITC), photographer
Stewart, Robert C, historian
Dawson, Virginia P, historian
Hampton, Roy A, historian
Created / Published: Documentation compiled after 1968
Notes: - Significance: NASA began construction of the Rocket Engine Test Facility (RETF) in 1955 on land that was formerly part of the Cleveland Municipal Airport. In 1940, the National Advisory Committee on Aeronautics selected 200 acres of the airport site for the construction of an Aircraft Engine Research Laboratory. The site of this original lab and the RETF is the present NASA John H. Glenn Research Center at Lewis Field. The construction of RETF was related to post-war missile development, which required the construction of facilities dedicated to the research and testing of rocket engines and auxiliary equipment...
- Survey number: HAER OH-124
- Building/structure dates: 1955-1957 Initial Construction
- Building/structure dates: 1995 Subsequent Work
- Building/structure dates: 2003 Demolished

http://hdl.loc.gov/loc.pnp/pp.print

ROCKET ENGINE TESTING FACILITY, GRC BUILDING NO. 206, NASA GLENN RESEARCH

Reference Link: http://www.loc.gov/item/oh1923/

Contributor Names: Historic American Engineering Record, creator
National Aeronautics & Space Administration (NASA)
NASA Lewis Research Center Engineering Staff
Cleveland Municipal Airport
National Advisory Committee on Aeronautics (NACA)
Kumar, Rebecca, transmitter
Bates, Jeff, photographer
NASA Information Technology Center (ITC), photographer
Stewart, Robert C, historian
Created / Published: Documentation compiled after 1968
Notes: - Survey number: HAER OH-124-C
- Building/structure dates: 1968 Initial Construction
- Building/structure dates: 1995 Subsequent Work
- Building/structure dates: 2003 Demolished
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
http://hdl.loc.gov/loc.pnp/pp.print

ROCKET ENGINE TESTING FACILITY. GRC BUILDING NO. 202. NASA GLENN RESEARCH

Reference Link: http://www.loc.gov/item/oh1921/

Contributor Names: Historic American Engineering Record, creator
National Aeronautics & Space Administration (NASA)
H. K. Ferguson Company
Cleveland Municipal Airport
National Advisory Committee on Aeronautics (NACA)
Kumar, Rebecca, transmitter
Bates, Jeff, photographer
NASA Information Technology Center (ITC), photographer
Stewart, Robert C, historian
Dawson, Virginia P, historian
Created / Published: Documentation compiled after 1968
Notes: - Survey number: HAER OH-124-A
- Building/structure dates: 1955-1957 Initial Construction
- Building/structure dates: 1984 Subsequent Work
- Building/structure dates: 1991 Subsequent Work
- Building/structure dates: 1995 Subsequent Work
- Building/structure dates: 2003 Demolished
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
http://hdl.loc.gov/loc.pnp/pp.print

NASA'S RETIRED SPACE SHUTTLE ENDEAVOUR, INSIDE THE CALIFORNIA SCIENCE CENTER IN LOS ANGELES, CALIFORNIA

Reference Link: http://www.loc.gov/item/2013631633/

Contributor Names: Highsmith, Carol M., 1946-, photographer
Created / Published: 2013.
Subject Headings: - United States--California--Los Angeles
- NASA
- Space shuttles
- Endeavour
- California Science Center
- America
Genre: Digital photographs--Color--2010-2020
Notes: - Title, date, and keywords provided by the photographer.
- After more than twenty organizations submitted proposals for the display of an orbiter, NASA announced that Endeavour would go to the Los Angeles museum.
- Credit line: The Jon B. Lovelace Collection of California Photographs in Carol M. Highsmith's America Project, Library of Congress, Prints and Photographs Division.
- Gift; The Capital Group Companies Charitable Foundation in memory of Jon B. Lovelace; 2012; (DLC/PP-2012:063).
- Forms part of: Jon B. Lovelace Collection of California Photographs in Carol M. Highsmith's America Project in the Carol M. Highsmith Archive.
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA http://hdl.loc.gov/loc.pnp/pp.print
Digital Id: highsm 24455 //hdl.loc.gov/loc.pnp/highsm.24455

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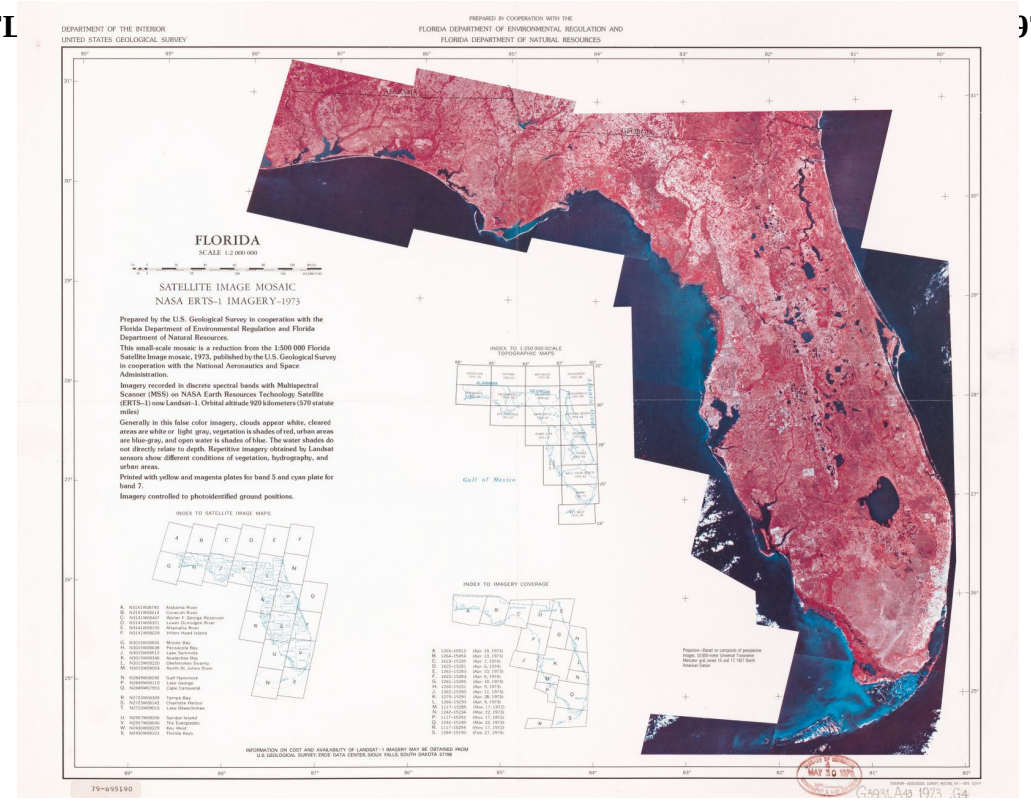


Reference Link: http://www.loc.gov/item/79695190/

Contributor Names: Geological Survey (U.S.)
Florida. Department of Environmental Regulation.
Florida. Department of Natural Resources.
United States. National Aeronautics and Space Administration.
Created / Published: Reston, Va. : The Survey, 1978.
Subject Headings: - Florida--Remote-sensing images
- United States--Florida
Notes: - Scale 1:2,000,000.
- "Projection--Based on composite of perspective images, 20,000-meter universal transverse Mercator grid ..."
- "This small-scale mosaic is a reduction from the 1:50,000 Florida satellite image mosaic, 1973, published by the U.S. Geological Survey in cooperation with the National Aeronautics and Space Administration.
- Includes text, indexes of satellite and topographic map coverage, and "Index to imagery coverage."
- Available also through the Library of Congress Web site as a raster image.
- AACR2
Repository: Library of Congress Geography and Map Division Washington, D.C. 20540-4650 USA dcu
Digital Id: https://hdl.loc.gov/loc.gmd/g3931a.ct010189

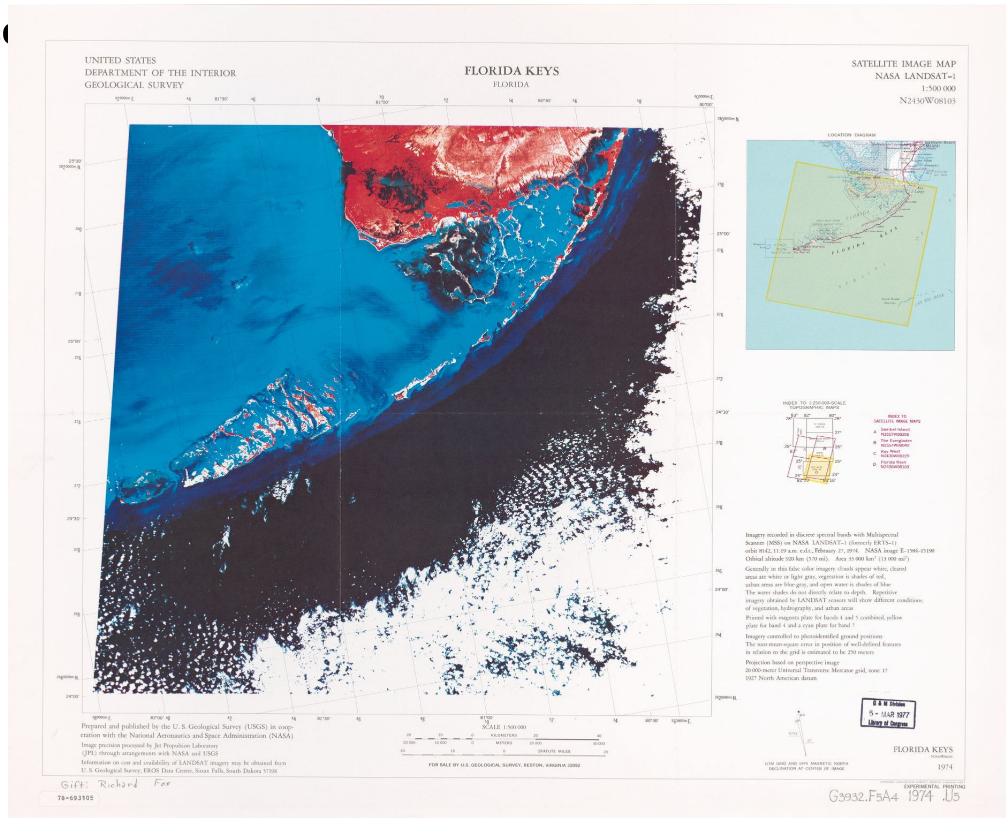
TPS TEACHERS NETWORK

SPACE CRAFT THAT WENT TO MOON IN NASA LOBBY

Reference Link: http://www.loc.gov/item/2016646556/

Contributor Names: Trikosko, Marion S., photographer
Created / Published: 1964 August 4.
Genre: Film negatives--1960-1970
Notes: - Title and date from log book.
- Contact sheet available for reference purposes: USN&WR COLL - Job no. 12331, frame 24.
- Forms part of: U.S. News & World Report Magazine Photograph Collection.
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA http://hdl.loc.gov/loc.pnp/pp.print
Digital Id: ppmsca 41655 //hdl.loc.gov/loc.pnp/ppmsca.41655

FL T-1.



Reference Link: http://www.loc.gov/item/78693105/

Contributor Names: Geological Survey (U.S.)
United States. National Aeronautics and Space Administration.
Created / Published: Reston, Va., 1977.
Subject Headings: - Florida Keys (Fla.)--Remote-sensing maps
- United States--Florida--Florida Keys
Notes: - Scale 1:500,000.
- Alternate title: Florida Keys, N2430W08103, 1974.
- "Projection based on perspective image, 20,000 meter Universal Transverse Mercator grid ... "
- "Experimental printing."
- Includes text, location map, and map "Index to 1:250,000-scale topographic maps."
- Available also through the Library of Congress Web site as a raster image.
- AACR2
Repository: Library of Congress Geography and Map Division Washington, D.C. 20540-4650 USA dcu
Digital Id: https://hdl.loc.gov/loc.gmd/g3932f.ct010297

DISPLAY A  **MARYLAND**

Reference Link: http://www.loc.gov/item/2011634848/

Contributor Names: Highsmith, Carol M., 1946-, photographer
Created / Published: [between 1980 and 2006]
Subject Headings: - United States--Maryland--Greenbelt
- America
- National Aeronautics and Space Administration
- NASA
Genre: Transparencies--Color--1980-2010
Notes: - Digital image produced by Carol M. Highsmith to represent her original film transparency; some details may differ between the film and the digital images.
- Title, date, and keywords provided by the photographer.
- Credit line: Photographs in the Carol M. Highsmith Archive, Library of Congress, Prints and Photographs Division.
- Gift and purchase; Carol M. Highsmith; 2011; (DLC/PP-2011:124).
- Forms part of the Selects Series in the Carol M. Highsmith Archive.
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA http://hdl.loc.gov/loc.pnp/pp.print
Digital Id: highsm 16655 //hdl.loc.gov/loc.pnp/highsm.16655

[STRUCTURES AT NASA REENBELT, MARYLAND]

Reference Link: http://www.loc.gov/item/2011634851/

Contributor Names: Highsmith, Carol M., 1946-, photographer
Created / Published: [between 1980 and 2006]
Subject Headings: - United States--Maryland--Greenbelt
- America
- National Aeronautics and Space Administration
- NASA
Genre: Transparencies--Color--1980-2010
Notes: - Digital image produced by Carol M. Highsmith to represent her original film transparency; some details may differ between the film and the digital images.
- Title, date, and keywords provided by the photographer.
- Credit line: Photographs in the Carol M. Highsmith Archive, Library of Congress, Prints and Photographs Division.
- Gift and purchase; Carol M. Highsmith; 2011; (DLC/PP-2011:124).
- Forms part of the Selects Series in the Carol M. Highsmith Archive.
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA http://hdl.loc.gov/loc.pnp/pp.print
Digital Id: highsm 16658 //hdl.loc.gov/loc.pnp/highsm.16658

Reference Link: http://www.loc.gov/item/2016647286/

Contributor Names: Trikosko, Marion S., photographer
Created / Published: 1965 July 12-14.
Genre: Film negatives--1960-1970
Notes: - Title and date from log book.
- Contact sheet available for reference purposes: USN&WR COLL - Job no. 14231, frame 27.
- Forms part of: U.S. News & World Report Magazine Photograph Collection.
Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
http://hdl.loc.gov/loc.pnp/pp.print
Digital Id: ppmsca 49952 //hdl.loc.gov/loc.pnp/ppmsca.49952