

* TO SUIT

PARKING (GRAVEL)



1/16" = 1'
HANGAR
STOP # 10

NASA
C-73-1567

FLIGHT RESEARCH BUILDING





NASA
C-73-3427







NASA
KENNEDY SPACE CENTER
CAPE KENNEDY FLORIDA

WORLDWIDE
NATIONAL SPACE EXHIBITION
PARTICIPATING AIRLINES

LANGLEY

NASA
709

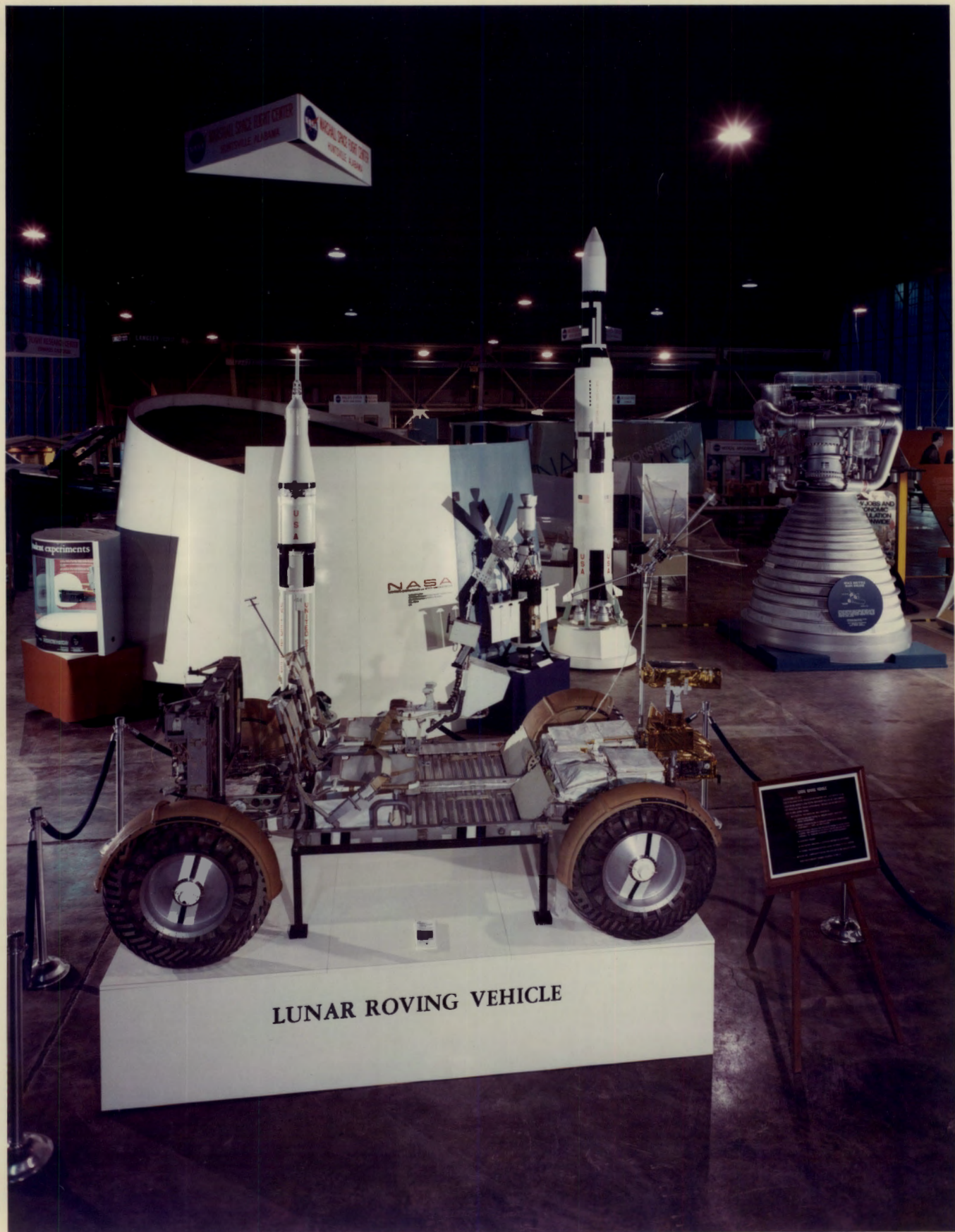
NASA

LEWIS RESEARCH CENTER
Hexagonal-Crystal Bearing Materials

ELECTRON BOMBARDMENT ION THRUSTER

EARTH RESOURCES AND COMMUNICATION

LEWIS RESEARCH CENTER

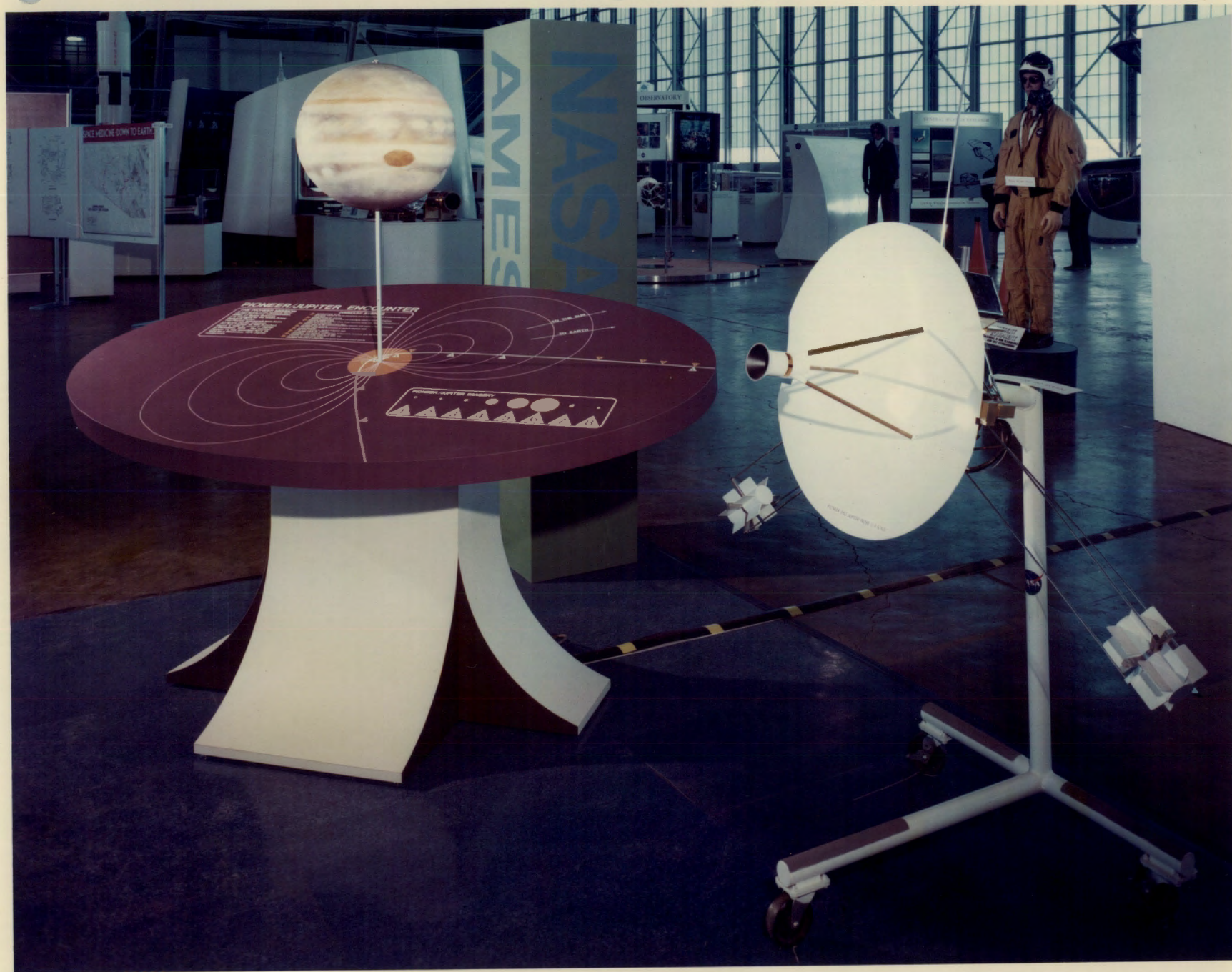


LUNAR ROVING VEHICLE

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C-73-3426

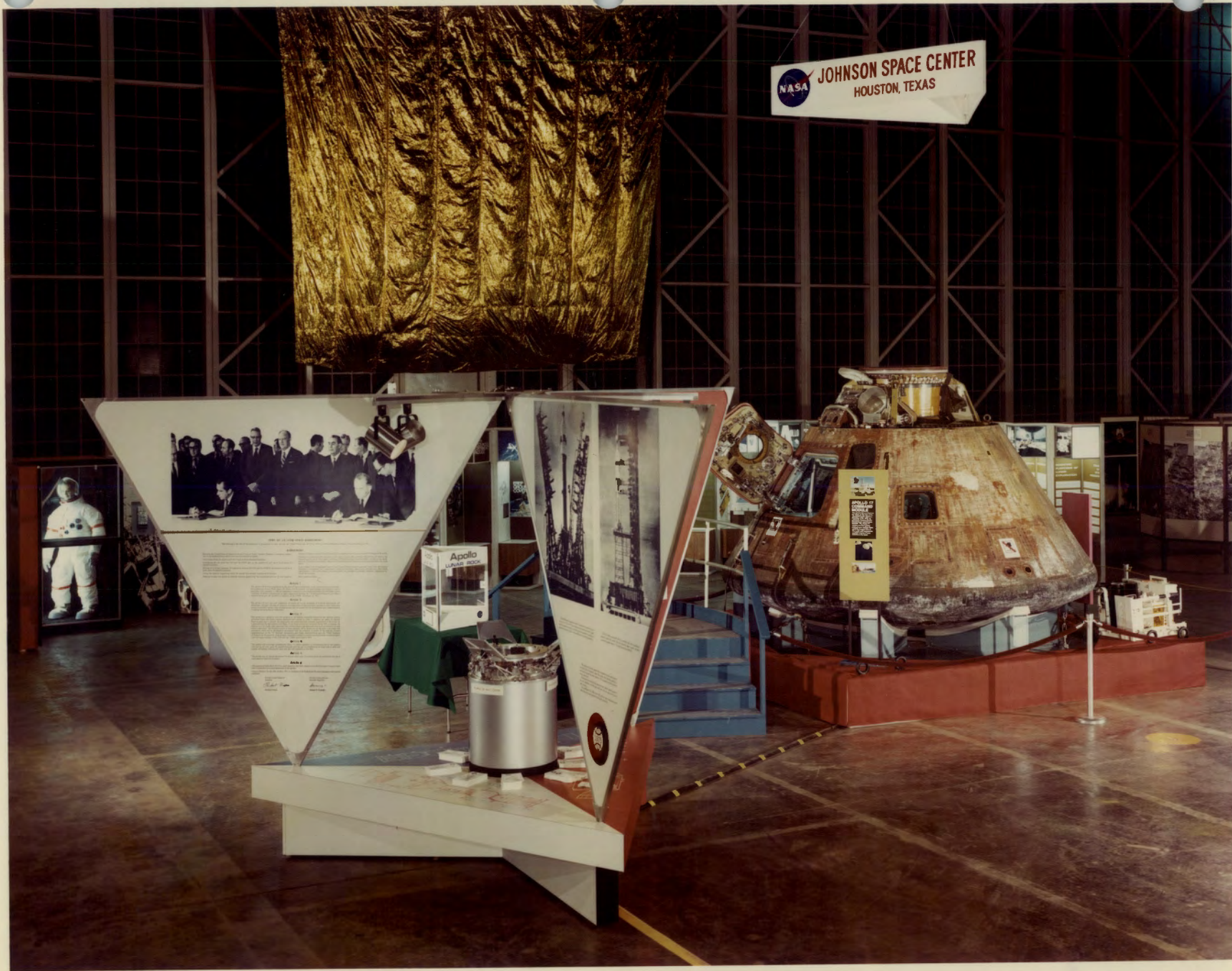






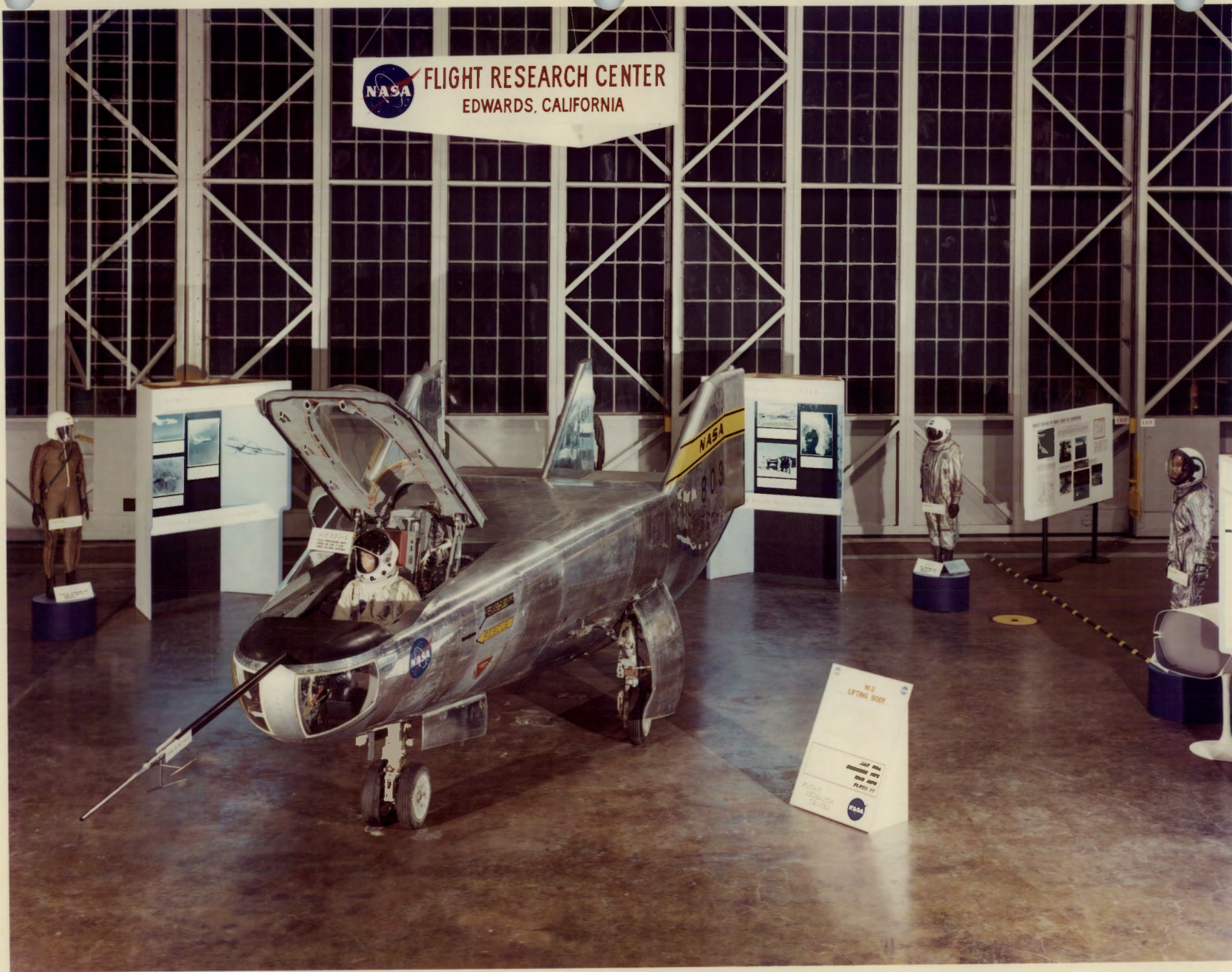
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C-73-3424

NASA FLIGHT RESEARCH CENTER
EDWARDS, CALIFORNIA



HEALTH AND MEDICAL

SIGHT SWITCH

Three sight switch eyeglasses were developed in NASA in a general aid for situations in which high contrast would provide more than normal vision of type. Although this application was not necessary, high contrast eyeglasses have been adapted for use by handicapped persons to allow them to control night devices, to use television devices for seeing pages of books, switching radios and televisions on and off, and operating mechanical shutters on camera installations. Switching signals are received by lowering light from light sources mounted on the eyeglasses to the viewer's eyes. Variations in intensity cause a variation between the reflection from the white and the darker parts of the eye. This variation change can be detected by light sensors, due to the eyeglasses, which activate an electric switch to control the desired mechanism or to signal messages to a user.

FIBER OPTICS BUNDLE

A bundle of glass fibers transmits light from one point to another very much like copper wire transmits electricity. A bundle of these fibers can be bent, wound, or shaped in any otherwise inaccessible optical fiber optic tubes were developed for marking materials on spacecraft hardware and covers such as the fuel tank doors, wing separation, and engine parts. Diagnositicians are currently using fiber optics to scan internal organs of human body. This fiberoptic, with camera was developed by Olympus Corporation of Boston for observing or photographing the gastric wall.

Look through the eyepiece and see photographs of gastric cancer inside the model.

See also: NASA's new fiber optic camera system.



ULTRAMINIATURE MANOMETER CATHETER



A miniature catheter with a pressure transducer is shown in the photograph above. This catheter is capable of measuring blood pressure and can be inserted into a vein of a human being. It is shown here being inserted into the ear of a human being. The catheter is shown here being inserted into the ear of a human being. The catheter is shown here being inserted into the ear of a human being.



Look through the eyepiece and see the magnified view of the catheter in the photograph above. The catheter is shown here being inserted into the ear of a human being. The catheter is shown here being inserted into the ear of a human being.

BIOCOMPATIBLE CARBONS

The carbon fiber fibers of the right are made of carbon. The carbon fiber fibers of the right are made of carbon. The carbon fiber fibers of the right are made of carbon.



Carbon composites developed for space exploration will be biocompatible with the body and will be used in the future for the construction of artificial organs. Carbon composites are developing as new materials for the construction of artificial organs. Carbon composites are developing as new materials for the construction of artificial organs.

IMPLANTABLE MEDICAL DEVICES



Manufacturing of space vehicle electrical and hardware needed to higher efficiency performance and reduced weight and cost savings. These manufacturing developments have made application in the field of medicine. Also see the BIOMINIATURIZATION exhibit.



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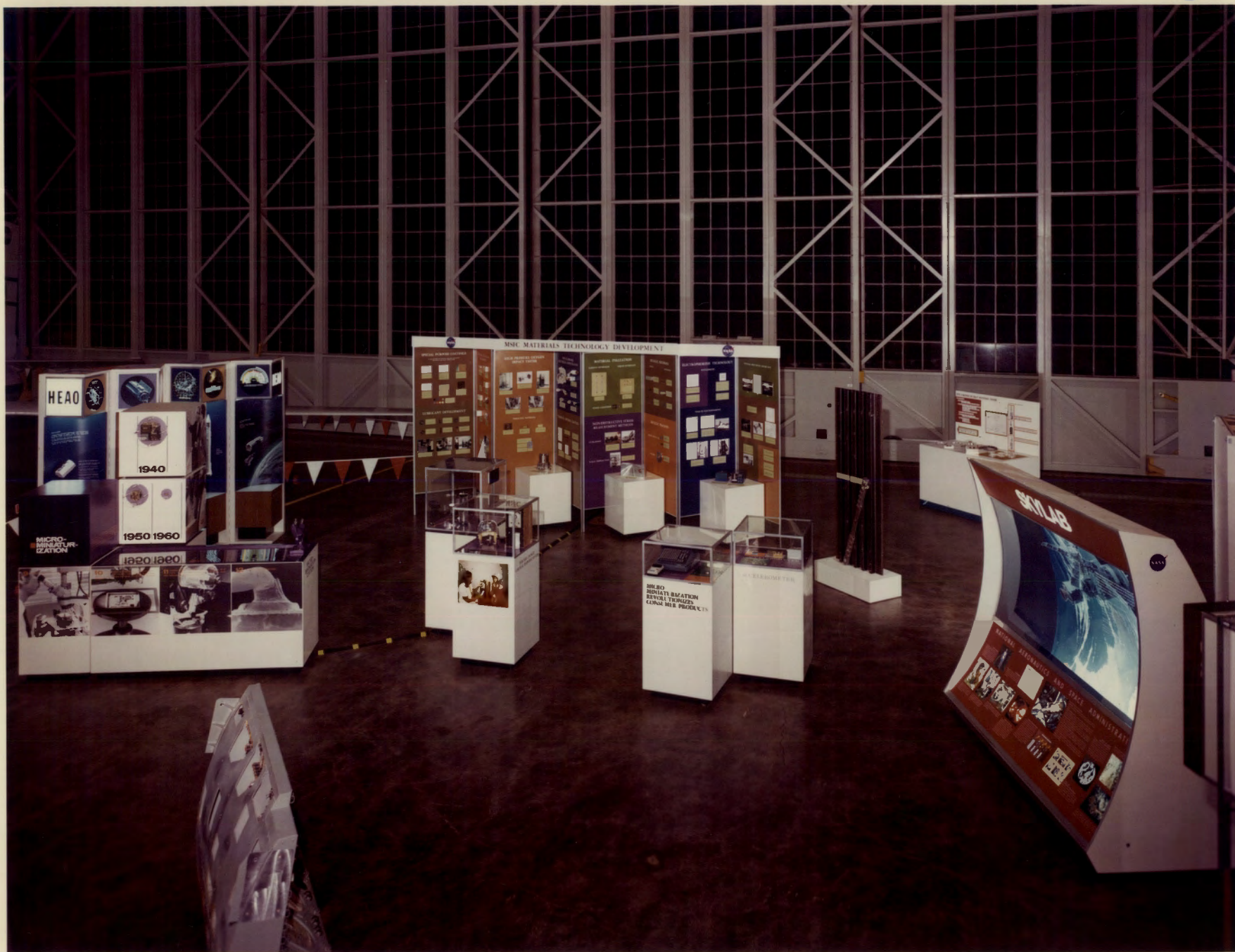
HEARING AID

HEARING AID

HEARING AID

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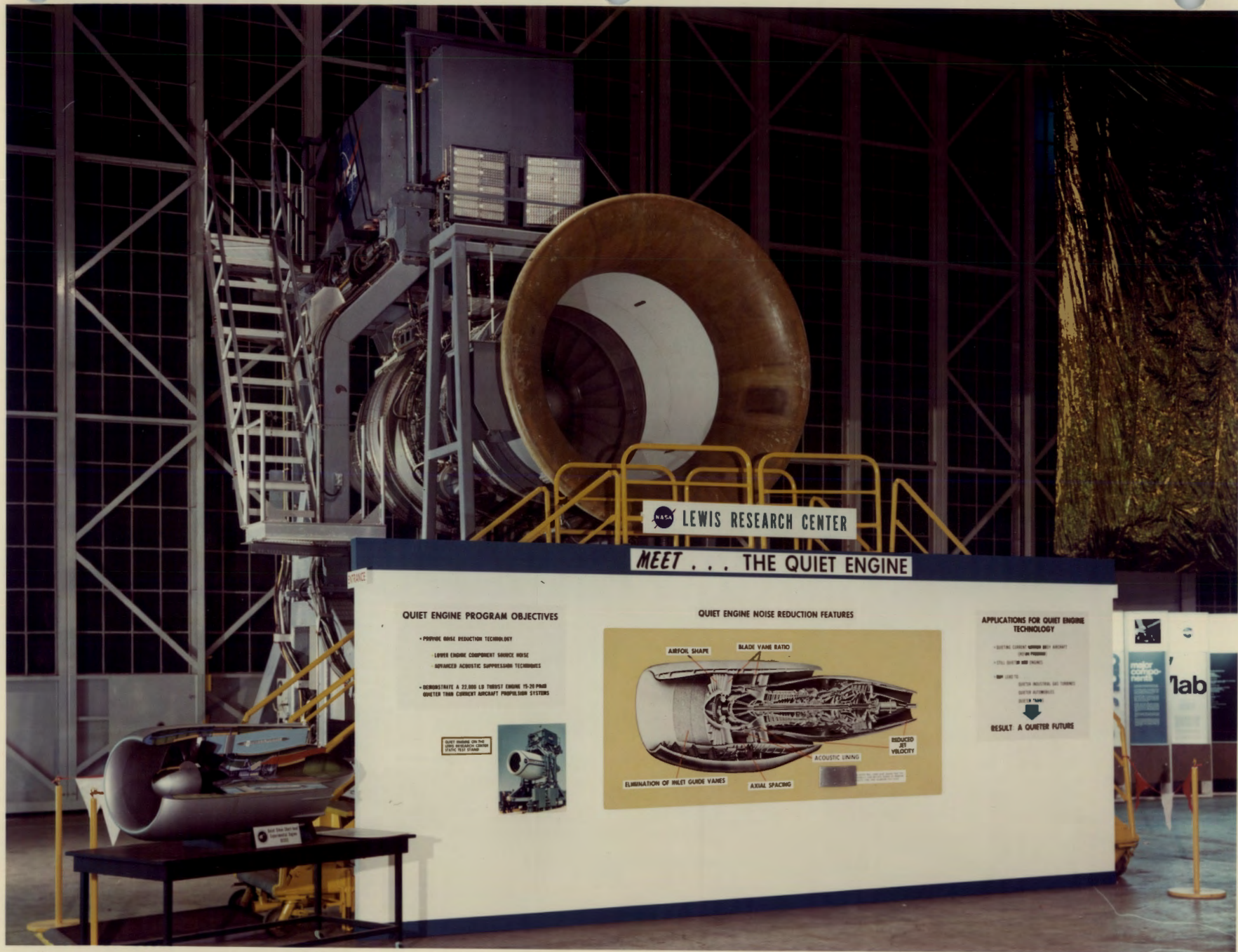




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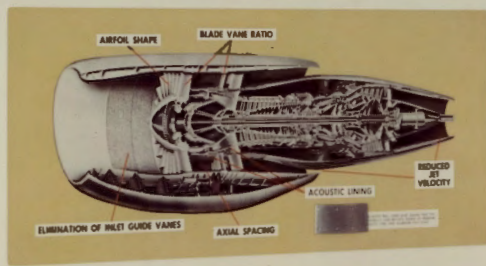
MEET . . . THE QUIET ENGINE

QUIET ENGINE PROGRAM OBJECTIVES

- PROVIDE NOISE REDUCTION TECHNOLOGY
- LOWER ENGINE COMPONENT SOURCE NOISE
- IMPROVED ACOUSTIC SUPPRESSION TECHNIQUES
- DEMONSTRATE A 22,000 LB THRUST ENGINE 15-20 PHON QUIETER THAN CURRENT AIRCRAFT PROPULSION SYSTEMS



QUIET ENGINE NOISE REDUCTION FEATURES

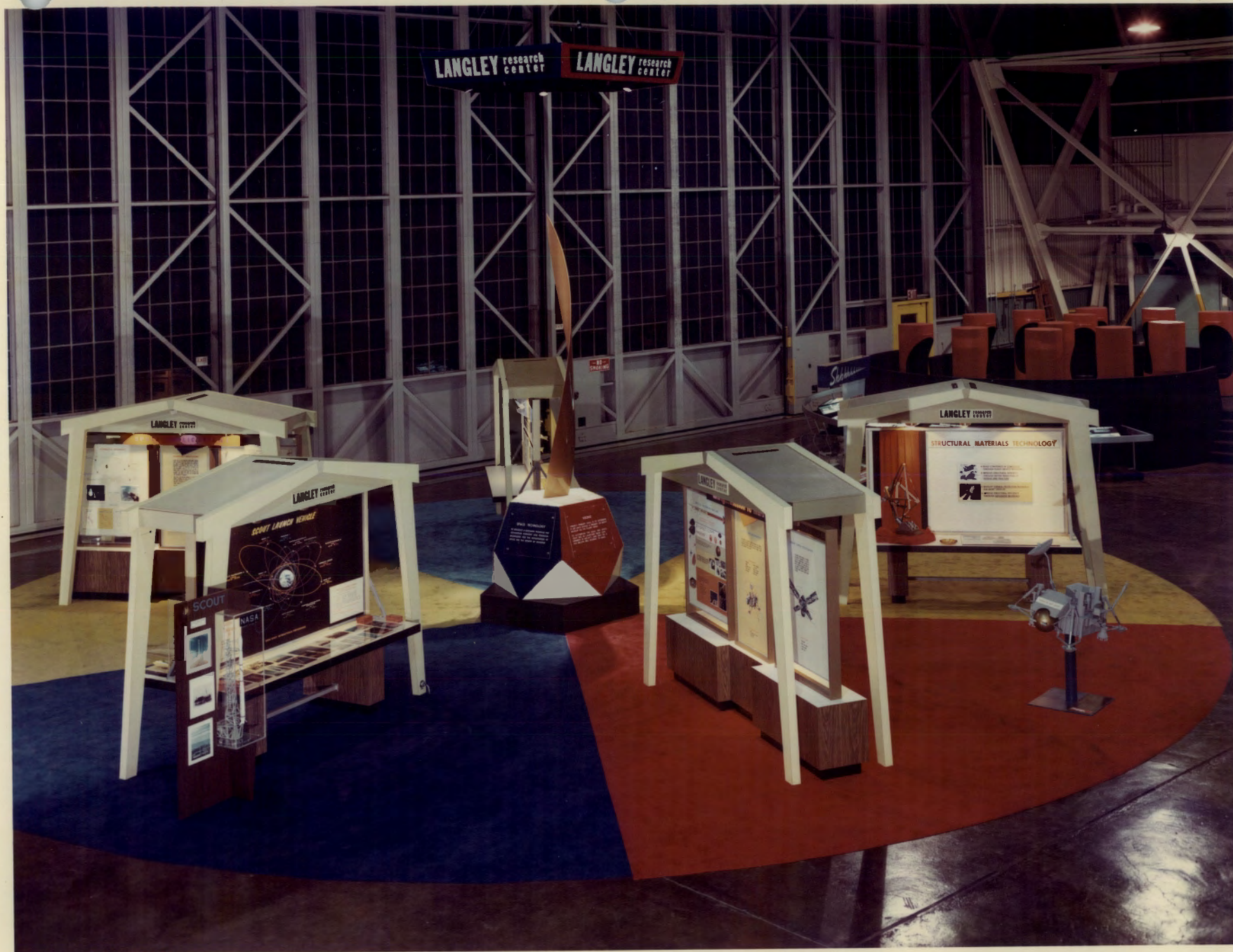


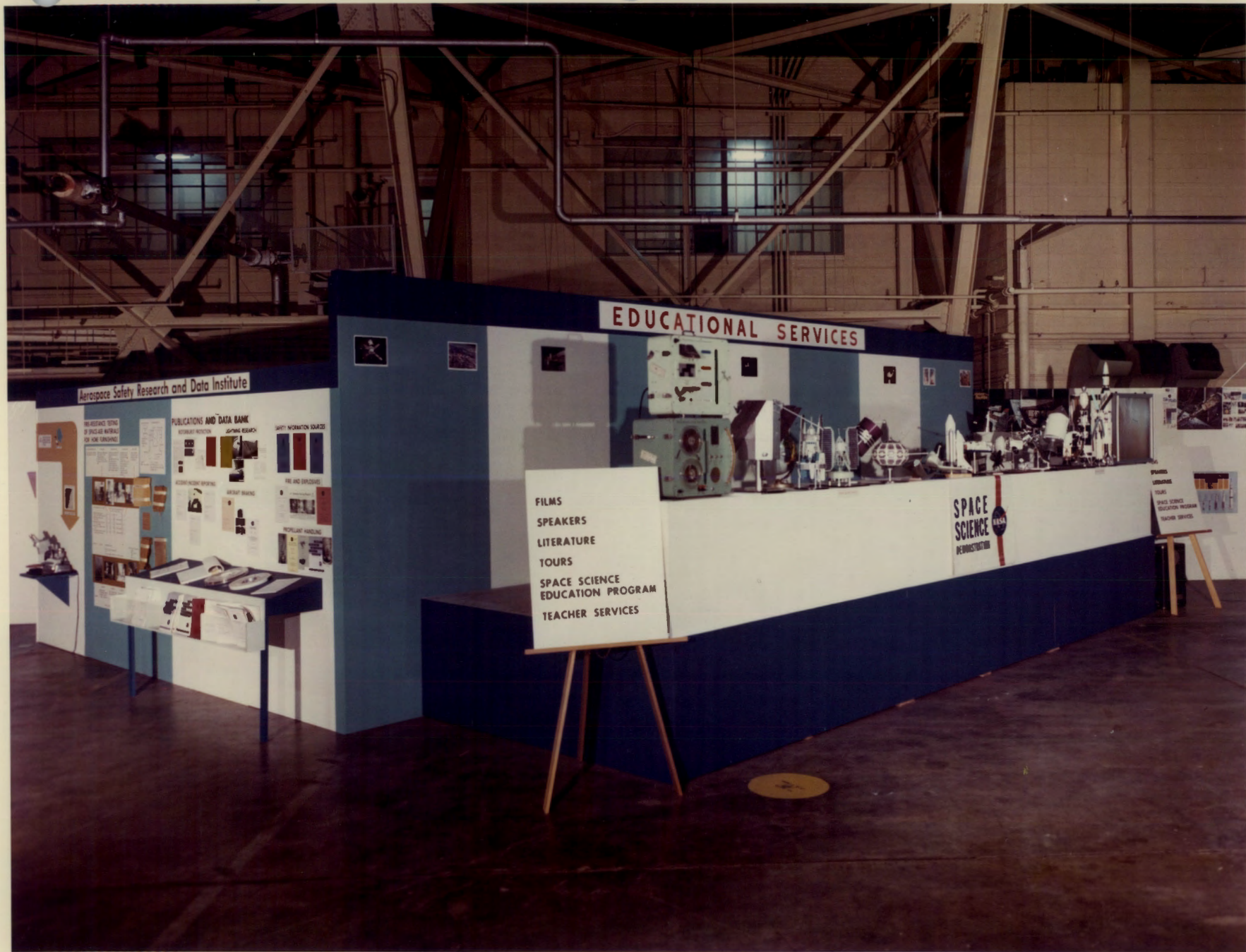
APPLICATIONS FOR QUIET ENGINE TECHNOLOGY

- BETTER CURRENT AND FUTURE CIVIL AIRCRAFT
 - 50% NOISE REDUCTION
 - 50% LOWER NOISE LEVELS
 - 50% LOWER TO
 - BETTER INDUSTRIAL GAS TURBINES
 - BETTER AUTOMOBILES
 - BETTER PLANE
- RESULT A QUIETER FUTURE

major corporations

lab





Aerospace Safety Research and Data Institute

REFERENCES TO BE
IN PUBLISHED MATERIAL
FOR USE THROUGHOUT

PUBLICATIONS AND DATA BANK
RESEARCH PROJECTS Ongoing Research

SAFETY INFORMATION SOURCES

ACCIDENT INVESTIGATION

RECENT RESEARCH

FILE AND EXPLOSIVES

PROPERTY HANDLING

EDUCATIONAL SERVICES

- FILMS
- SPEAKERS
- LITERATURE
- TOURS
- SPACE SCIENCE
EDUCATION PROGRAM
- TEACHER SERVICES

SPACE
SCIENCE
EDUCATION PROGRAM

SPACE
SCIENCE
EDUCATION PROGRAM
TEACHER SERVICES

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EARTH RESOURCES AND COMMUNICATIONS

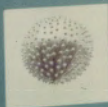
COMMUNICATIONS SATELLITES



WEATHER SATELLITES



JIMSPHERE BALLOON



The JimSphere balloon is a representative example of the type of balloon used in the JIMSPHERE program. It is a large, spherical balloon that is inflated with helium gas. The balloon is attached to a payload of instruments and is launched from the ground. The balloon rises into the atmosphere and carries the instruments to a high altitude. The instruments measure various atmospheric parameters, such as temperature, pressure, and humidity. The data collected by the instruments is transmitted back to the ground station via a radio link. The JimSphere balloon is used for a variety of scientific and engineering experiments. It is a simple and effective way to study the atmosphere and to test new instruments and techniques.

EARTH RESOURCES



DEPLOYABLE TOWER

This deployable tower was developed by Aero Research Corporation as a result of research for NASA's sounding balloon recovery program. The high strength, lightweight structure is used to support the payload of instruments and to provide a means of recovery of the tower in case of an emergency. The tower is made of aluminum and is 100 feet in height when fully extended.

