



FILMS LIST 29p.

Nov 1965

III.1

NASA MOTION PICTURE FILM SERVICE AREA FIVE
Alabama - Kentucky - Louisiana - Mississippi - Tennessee

Residents within the above listed area, who are representatives of educational, civic, industrial, professional, youth activity, and government organizations are invited to borrow films from the Marshall Space Flight Center film library.

There is no rental charge, but the requester must pay return postage and insurance costs.

Because of wear and tear from repeated projections, films are loaned for group showings and not for screening before individuals or in homes. Films are loaned on a short-term basis.

Films cannot be loaned to minors.

Television stations may order films, unless otherwise noted in the individual film listing, for unsponsored public service or sustaining telecasts.

A minimum of two weeks notice is required for scheduling purposes.

FILMS LISTED HEREIN ARE ORIENTED
TOWARD THE NATIONAL SPACE PROGRAM AND RELATED TOPICS

General Interest Films ---	Page	1
Technical Films -----	Page	15
Historical Films -----	Page	25

SATURN HISTORY DOCUMENT
University of Alabama Research Institute
History of Science & Technology Group
Date ----- Doc. No. -----



REQUESTING FILMS

1. Address requests to:
Public Affairs Office
Community Services Branch
Marshall Space Flight Center
Huntsville, Alabama 35812

Telephone: 876-0210/0219
Area Code: 205
2. Always specify the date film is needed, and, if possible, specify an alternate date.
3. It is advisable to select a substitute film, indicating that it is requested only if your first choice is unavailable.
4. When you receive the film cannister, a return label will be enclosed.
5. Always return films as soon as possible.
6. If the return label is lost, mail cannisters to:

Photographic Branch, TS-P
Marshall Space Flight Center
Huntsville, Alabama 35812
7. Protect the films. Use qualified projectionists.

GENERAL INFORMATION

All films are 16mm and use optical sound tracks. Most of the films are in color. Running times are indicated.

Films listed under "General Interest" are usually interesting to the general public, while the technical list contains films interesting only to specialized audiences.

Films cannot be copied or cut.

ALLOW A MINIMUM OF TWO WEEKS NOTICE IN REQUESTING FILMS

November, 1965

This films list supersedes all other Marshall Center lists and is subject to revision and change.

GENERAL INTEREST FILMS

- MC-7 X-15 - DOCUMENTARY - 1960 - 27 minutes, sound, color.
- Portrays maiden flight of X-15 along with good action shots of research and development. Several launches are shown and include glide and landing action. Events in film outdated by recent developments, but action and camerawork are good.
- MC-8 PROJECT ECHO - 27 minutes, sound, color. Produced by Jet Propulsion Laboratory, Pasadena, California.
- Tells the story of Echo I, a 100 foot sphere in orbit as a passive communications satellite. Echo was placed in orbit Aug. 12, 1960, by a Thor-Delta II launch vehicle.
- MC-11 TIROS II, EXPERIMENTAL WEATHER SATELLITE - 1961 - 12 minutes, sound, color. Produced by RCA, Inc.
- Film shows launch of Tiros I, April 1, 1961, and summarizes results of first three months' operation. Cloud cover pictures are shown. Preparations for expanded Tiros III are outlined.
- MC-15 ECHO IN SPACE - 1961 - 14 minutes, sound, color.
- Shorter version of "Project Echo," MC-8.

MC-20 UNMANNED SPACECRAFT - 1961 - 14 minutes, sound, color.

NASA Deputy Administrator Dr. Hugh L. Dryden outlines the aims of the U. S. space program. Successful launches of 1959 and 1960 are shown. Dr. Homer E. Newell, Associate Administrator for Space Science and Applications, shows models of the Ranger, Surveyor, and Mariner spacecraft,

MC-23 SATURN SUPER ROCKET - 13 minutes, sound, color.
Produced by Marshall Space Flight Center.

Research and development of Saturn I from the drawing board to the first launch from Cape Kennedy, Oct. 27, 1961.

MC-25 FATHER OF THE SPACE AGE - 1961 - 18 minutes, sound, B&W.
Produced by Hearst Metrotone News - Screen News Digest.
Note: Not for TV or Theater use.

Traces the development of Dr. Goddard's "moon rocket" research from his early manhood through his final efforts in development of liquid fueled guided rockets, including commentaries by Mrs. Goddard. Original motion picture coverage of Dr. Goddard's rocket tests, scenes of the dedication of Goddard Space Flight Center and the posthumous presentation of the coveted Langley Medal award in 1959.

MC-31 STEPS TO SATURN - 1962 - 22 minutes, sound, color.
Produced by Marshall Space Flight Center.

Depicts background and development of the Saturn program. The historic change from rocket weapon to rocket space vehicle is noted, with the NASA role documented. The historic decision of President Kennedy to set the manned moon flight as a national priority goal is shown. Film ends on the recorded words of the President, which follow the actual sounds of a Cape Kennedy countdown.

MC 32 FRIENDSHIP 7 - 1962 - 58 minutes, sound, color.
Produced by NASA-Manned Spacecraft Center

Depicts the day Astronaut John Glenn orbited the earth three times. Project Mercury is broadly documented, including a close look at the several international tracking stations around the world.

MC 33 THE MASTERY OF SPACE - 1962 - 58 minutes, sound, color.

Traces in detail the development of Project Mercury, U. S. man-in-space program and documents in depth the orbital flight of John Glenn on February 20, 1962.

MC 34 MA-6 MANNED ORBITAL FLIGHT - 18 minutes, sound, color.

This is a shorter version of the documentary coverage of the John Glenn flight in Mercury Atlas 6. Film shows actual launch and recovery.

MC-37 SATURN PROPULSION SYSTEMS - 1962 - 15 minutes, sound, color.
Produced by Marshall Space Flight Center

Describes the theory of reaction engines in a quick and general manner, then shows the application of the theory in the Saturn propulsion system. A good, simplified explanation for schools and non-technical groups.

MC-39 BEFORE SATURN - 1962 - 15 minutes, sound, color.
Produced by the Marshall Space Flight Center

The fascinating history of the development of rockets from early Chinese use up to and including the giant Saturn launch booster.

MC-44 AURORA 7 - 30 minutes, sound, color.

Scott Carpenter rides Aurora 7 spacecraft for three earth orbits on May 24, 1962.

MC-50 SATURN - GIANT STEP TO THE MOON - 1962 - 15 minutes, sound, color. Produced by Marshall Space Flight Center.

Film follows the Saturn SA-1 booster on its trip by barge to Cape Kennedy and shows its erection and launch from Complex 34. The launch of SA-2 and project "High Water" are included.

MC-51 PATHS OF VENUS - 13 minutes, sound, color.

Tells the story of Pioneer V, placed in orbit around the Sun to probe for data from the solar system. Excellent simulated animation studies of the solar system point the way to future space explorations. Includes the spectacular launch that sent Pioneer V on its way to orbit.

MC-54 PROJECT GEMINI - MISSION CONCEPT - 21 minutes, sound, color.

Orbital rendezvous and docking and launch timing and phasing -- important missions in the Gemini Project -- are depicted in simple, animated scenes.

MC-55 F-1 THE MIGHTIEST ROCKET ENGINE - 12 minutes, sound, color.

Development of the F-1 engine, used in the first stage of the Saturn V, is graphically depicted from basic research through prototype development and full duration static firing of a test model. Good film all audiences.

MC-57 THE JOHN GLENN STORY - 1963 - 31 minutes, sound, color.

Jack Webb narrates this inspiring biography of John Glenn. American ideals, as exemplified in the life of Astronaut Glenn, are stressed, including physical, mental, and moral values. Glenn's youth, his career through World War II and Korea, and his famous adventure as the first American to orbit the earth are dramatically documented. The film is introduced with a message from President Kennedy. Recommended for all ages.

MC-58 SIGMA 7 - 15 minutes, sound, color.

On October 3, 1962, Walter Schirra orbited the earth six times in his Sigma 7 spacecraft. Film describes the flight.

MC-60 UNIVERSE - 1960 - 28 minutes, sound, black & white,
Produced by National Film Board of Canada. (Cleared
for ETV use only)

Explores the solar system and beyond by animation and special effects, effectively telling the story of the vastness of the Universe. Good for all ages, especially students and non-technical audiences.

MC-63 TIROS, EXPERIMENTAL WEATHER SATELLITE - 1960
13 minutes, sound, color.

Development of the TIROS family of meteorological satellites and their mission in weather forecasting is explained.

MC-64 CLOUDS OF VENUS-1963 - 27 minutes, sound, color.
Produced by Jet Propulsion Laboratory

A dramatic portrayal of the events during the Mariner II fly-by of the planet Venus. This film is excellent for use by all ages, uses animated portions for simplified descriptions and presents its story in an interesting fashion.

MC 66 MOON MISSION - 1963 - 10 minutes, sound, color.
Produced by MSFC.

An animated description of how U. S. astronauts will accomplish a moon landing and return safely to earth aboard the Saturn V/ Apollo launch vehicle and spacecraft. Dr. Wernher von Braun, Director of the Marshall Center, sets the scene for this unprecedented event with opening remarks about the moon landing.

MC 67 MICHOU D OPERATIONS - 10 minutes, sound, color.
Produced by MSFC.

Orientation film on development of Michoud Operations, the site in New Orleans where Saturn boosters are being produced. Shows early work on fabrication of Saturn first stages. (Note: There has been additional construction since this film was made.)

MC 68 JOHN GLENN SPEAKS TO YOUNG AMERICANS - 1963 - 11 minutes,
sound, color.

America's famed astronaut addresses science fair winners and answers their questions about space exploration. Glenn's message is a challenge to young people to prepare for important responsibilities in the Space Age.

MC-70 ARIEL - THE FIRST INTERNATIONAL SATELLITE - 1963
13 minutes, sound, color.

Narrated by Basil Rathbone and Fredric March, film describes the sun's effects on the earth's ionosphere and how this, in turn, affects radio transmission. The importance of international cooperation in space is stressed. Ariel was the first satellite to be launched as an international venture, between the United Kingdom and the United States. An excellent film showing satellite development and launch.

MC-71 CELESTIAL MECHANICS AND THE LUNAR PROBE - 1958
12 minutes, sound, color, produced by the Advanced Research Projects Agency and NASA.

Describes, through animation, the orbits of the earth and the moon, the earth's rotation, and how these factors must all be considered in guiding a spaceship on a lunar probe. A good instructional film for all ages.

MC-88 A VOICE FOR MERCURY - 1961 - 14 minutes, sound, color.
Produced by Western Electric Company, Inc.

Describes the construction and equipping of NASA's vast Mercury tracking network around the world, graphically illustrating its use in a Mercury launch and orbit.

MC-89 ALOUETTE - CANADA'S FIRST SATELLITE - 1963
14 minutes, sound, black & white, produced by Defense Research Board of Canada.

International cooperation in space is emphasized in this excellent film describing the successful launch by NASA of a Canadian built and designed satellite. The ALOUETTE is launched into a polar orbit to investigate the ionosphere. (For ETV use only.)

MC-90 MARSHALL IN-HOUSE CAPABILITIES - 10 minutes, sound, color. Produced by MSFC.

Film presents examples of Marshall Center in-house efforts. It illustrates the variety and technical complexity of the work being carried out by the technical laboratories for hardware design, fabrication, assembly, testing, and associated research.

MC-93 PROJECT APOLLO - MANNED FLIGHT TO THE MOON
13 minutes, sound, color.

Describes the principle steps necessary to place men on the moon and get them safely back to earth and principal features of the Apollo spacecraft and Saturn launch vehicles. The Gemini project is also described.

MC-95 ORBITING SOLAR OBSERVATORY - 1962 - 26 minutes, sound, color. Produced by Goddard Space Flight Center.

This excellent film opens with general facts about the sun and leads into the Orbiting Solar Observatory explanation. The launch by a Thor-Delta vehicle, and data transmitted back to earth are covered. Good all ages.

MC-97 THE FLIGHT OF FAITH SEVEN - 29 minutes, sound, color.

Film covers astronaut Cooper's orbital launch. It describes part of the training he received and depicts the last few days prior to the launch, showing countdown and recovery.

MC-99

NO ROOM FOR ICARUS - 8 minutes, sound, color.

This title stems from the Greek hero who flew too near the sun on wax-bonded wings made from bird feathers and fell into the sea. Using special effects (by permission) from a prize-winning Canadian film "UNIVERSE" the audience is taken on a swift trip through the solar system, Milky Way, and other galaxies. The object of the film is to emphasize the great size of space and point up the need for good reliability discipline.

(NOTE: "ICARUS" is not cleared for general showing or for TV use, but may be shown to NASA prime contractors and subcontractors, engineering societies, technical seminars and panel meetings, when a NASA man is present.)

MC 103

AMERICA IN SPACE - 1963 - 14 minutes, sound, color.

Brief overview of NASA's first five years, showing growth of the U. S. space effort, ranging from Explorer I to the early phases of the lunar expedition program.

MC 113

SIXTH LAUNCH OF SATURN I VEHICLE - 8 minutes, sound, color.
Produced by MSFC.

Shows ignition, lift-off, tracking (including onboard camera) and stage separation of Saturn SA-6 on May 28, 1964.

MC 114

ARIEL II - 26 minutes, sound, color.

Describes the second international satellite and how it was developed and placed into orbit by America and the United Kingdom. The film covers research and development of the experiments in England and assembly testing and evaluation in the United States.

MC-116 RANGER VII PHOTOGRAPHS OF THE MOON - 7 minutes,
sound, black & white. Produced by Jet Propulsion Laboratory.

This is a series of photographs taken by Ranger VII's "A" camera as it approaches the moon. The step-printed sequence gives audience a passenger's eye view as Ranger VII zooms in toward impact on the lunar surface.

MC-118 MANNED SPACE FLIGHT 1964 - 14 minutes, sound, color.

A report of the National Aeronautics and Space Administration's manned flight programs. The two-man Gemini earth-orbital and three-man Apollo lunar landing missions are described.

MC-119 POWER FOR PROGRESS - 15 minutes, sound, color.
Produced by Manned Spacecraft Center

Depicts NASA family of boosters and progress made in booster technology in the past five years.

MC-120 LUNAR BRIDGEHEAD - 29 minutes, sound, black & white.
Produced by Jet Propulsion Laboratory.

An excellent film depicting Ranger VII project through launch tracking, mid-course maneuver, camera turn-on, picture, reception, and lunar impact. Block-house scenes are realistic.

MC-123 THE FOURTH RING OF SATURN - 1964 - 26 minutes,
sound, color. Produced by MSFC.

A presentation of the logistic requirements in transporting and bringing together all elements of the Saturn launch vehicle at Cape Kennedy and other widespread test and research sites. A good film for all audiences high school and above, it presents an excellent overall picture of the Saturn program.

MC-124 THE WORLD BEYOND ZERO- 1964 - 29 minutes, sound,
color. Produced by Goddard Space Flight Center.

This is the story of a satellite and the cooperative efforts of the world-wide network tracking stations linking the space scientists and engineers with the satellite. Viewer is taken on a world-wide visit of tracking stations. Cooperation between nations in the exploration of space is stressed.

MC-125 ELECTRIC PROPULSION - 1965 - 24 minutes, sound,
color.

Film shows, in non-technical terms, what electric propulsion is, how it works, why it is needed, its status of development, and how it may be used for both manned and unmanned space missions. Film is of particular interest to audiences concerned with advanced concepts of space propulsion, particularly high school and college physics classes and science clubs. It is understandable at junior high school level.

MC 126 SPACEPORT - 1965 - 7 minutes, sound, color. Produced
by Kennedy Space Center.

A filmed tour of construction progress at the Kennedy Space Center, including animated sequences depicting launch complex 39 and showing how the Apollo/Saturn V will begin its journey to the moon.

MC-127

A MOMENT IN HISTORY - 1964 - 13 minutes, sound, color.
Produced by Goddard Space Flight Center.

Film shows the presentation of honorary U. S. citizenship to Winston Churchill by President Kennedy on April 9, 1963. Live television transmission was sent via Relay satellite from the White House to Europe.

MC-128

SPACE QUEST - 1964, 26 minutes, sound, color.

Major NASA Cape Kennedy launches of 1964 are shown and their missions explained. Included are scenes of the Titan-Gemini, Saturn/Apollo, Atlas Centaur, Atlas Agena, Thor, Ranger, and Mariner. Facilities under construction at the new "moonport" are also shown.

MC-129

STEP INTO SPACE - 1965 - 11 minutes, sound, color.

Major phases of astronaut training is depicted, including the briefing for an actual flight mission. Good film for high school audiences and above.

MC-130

OFFICE OF MANNED SPACE FLIGHT, QUARTERLY REPORT - sound, color.

Every three months a fresh report on the progress of all phases of America's manned space flight program is presented. The narrated reports usually run about 15 minutes and include construction, testing, manufacturing, and launching scenes.

MC-131

GEMINI RENDEZVOUS MISSIONS - 1964 - 15 minutes, sound, color.

Six different earth orbital rendezvous and docking missions, to be attempted and evaluated during manned Gemini flights, are explained in simple animation. Launch scenes of both the Titan and Atlas launch vehicles are shown and excellent drawings of the Gemini spacecraft are included.

MC 132 THE ESSENTIAL COMPONENT Manned Flight Awareness Film
Your Role In The Saturn Apollo Program, 14 minutes, sound, color.

A film designed for use in employee motivation programs such as Zero Defects and Manned Flight Awareness. The accent is on doing food work because the lives of the Apollo astronauts depend upon reliable space carrier vehicles. Typical examples of how various types of employees can cut down on errors by being aware of their personal responsibility are given.

MC 134 THE SHAPE OF THINGS TO COME - 1965 - 20 1/2 minutes, sound, color.

What kind of research is going on today? Where will this take us ten or fifteen years from now? This film deals with the methods of conducting advanced research at NASA.

MC 136 THE FOUR DAYS OF GEMINI 4 - 1965 - 28 minutes, sound, color.
Produced by NASA Manned Spacecraft Center.

A documentary film covering the spectacular Gemini-Titan 4 mission of Astronauts James A. McDivitt and Edward H. White. Includes beautiful color sequences of pre-launch and launch activities, Astronaut White's spectacular "Space-Walk," and many other experiments conducted on the four day mission, including photographs of the earth, using both narration and the actual voice communications of the astronauts inside the spacecraft. The film also depicts the pre-flight training of McDivitt and White, and takes a detailed look at White's EVA suit and "space-gun."

TECHNICAL FILMS

MC-1 CHEMISTRY OF METEOR VAPORIZATION - 1960 - 29 minutes, sound, color.

Mr. C. Frederick Hansen of NASA Ames Research Center lectures on effects of objects entering earth's atmosphere. This is a lecture-type film.

MC-2 MISSILES, ROCKETS, AND SATELLITES (NEXT 100 YEARS SERIES) 1959 - 27 minutes, sound, black and white. (NOT FOR TV USE)

Discussion of flight of Pioneer III, including portion on the past history and future promise of rocket power. Narrative-lecture type film.

MC-3 AERODYNAMIC HEATING AND DECELERATION DURING ENTRY INTO PLANETARY ATMOSPHERES - 1958 - 29 minutes, sound, black and white.

A discussion of methods and problems connected with entering the various planetary atmospheres.

MC-10 EXPLORER XII - 17 minutes, sound, color, produced for Goddard Center.

Technical explanation of check-out of components in S-3 spacecraft (Explorer XII) and nature of experiments conducted in measuring radiation in outer space.

MC-17 ABOVE AND BEYOND - 19 minutes, sound, color.
Produced by MSFC.

Describes soldering techniques used in the George C. Marshall Space Flight Center's Quality Division Soldering School.

MC-18 SATURN SPACE METAL INTERSTAGE FAIRING - 11 minutes,
sound, black & white. Produced by MSFC.

Describes research and development of an interstage fairing structure for the Saturn launch vehicle.

MC-22 DECONTAMINATION OF SPACE VEHICLES - 1961 - 18 minutes,
sound, color. Produced by MSFC.

A discussion of the biological problems concerned in the need for decontamination of space vehicles. Different methods of achieving decontamination are explained.

MC-24 PROVING SATURN'S STRENGTH - 21 minutes, sound, color.
Produced by MSFC.

Various tests and checkouts of Saturn electrical, mechanical, pneumatic, and hydraulic systems are shown in the Marshall Center's Quality Division. This is a good, semi-technical presentation.

MC-27 THE CHEMISTRY OF LIFE - 1961 - 19 minutes, sound, color.

Dr. Melvin Calvin of University of California, Berkeley, describes the chemical building blocks of life, and discusses his experiments with meteorites as a possible environment for the production of life.

MC-28 HOW DID LIFE BEGIN? - 1961 - 20 minutes, sound, color.

Dr. Sidney Fox of Florida State University lectures on the evolutionary relationships of various protein molecules, tracing his synthesis of artificial protein.

MC-30 SATURN VEHICLE SCALE MODEL - 15 minutes, sound, color.
Produced by MSFC.

The planning, building, and firing of the fold-up scale model cluster of eight engines is shown, including firing in the wind tunnel at Tullahoma, Tenn.

MC-37 SATURN PROPULSION SYSTEMS - 1962 - 15 minutes, sound, color, produced by MSFC.

Describes the theory of reaction engines in a quick and general manner, then shows the application of the theory in the Saturn propulsion system. Good all audiences, including students.

- MC-41 EXOBIOLOGICAL SAFETY - 1962 - 12 minutes, sound, color,
produced by U.S. Army Chemical Corps.
- Describes research in the field of sterilization of unmanned
and manned space vehicles designed to land on other planets.
Animation effects and laboratory experiments are shown.
- MC-42 LIFE ON OTHER PLANETS - 1961 - 21 minutes, sound, color.
- Dr. Joshua Lederberg of Stanford University discusses the
possibility of life existing on other planets, describing methods
of detecting and investigating these theories.
- MC-45 EXPLORING THE MAGNETOSPHERE AND BEYOND - 28 minutes,
sound, color.
- An interesting film explaining in detail the experiments carried
into space by Explorer XII and the results obtained with the
experiments.
- MC-47 PERFORMANCE OF LONG RANGE HYPERVELOCITY VEHICLES
1958 - 29 minutes, sound, black & white.
- Mr. A. J. Eggers, Jr., of Ames Aeronautical Laboratory,
explains the design of simple, efficient rocket engine vehicles
for use at high speeds and long ranges. Trajectories and the
concept of man-carrying space vehicles are also explained.

MC-56 SATURN BASE HEATING - 14 minutes, sound, color.
Produced by MSFC.

Problems of exhaust heating and shielding are discussed.

MC-59 HIGH TEMPERATURE MATERIALS - 1958 - 27 minutes,
sound, color. Produced by NASA Headquarters.

Tests of various materials at elevated temperatures to
determine their suitability for high temperature applications.

MC-61 SATURN LAUNCHER HOLDDOWN ARMS - BLOCK II -
12 minutes, sound, color. Produced by MSFC.

Technical description of holddown arms for Saturn I. Complete
description of testing is included, covering stress and strain
measurements.

MC-87 SOUND PROPAGATION AND SUPPRESSION - 1962 - 16 minutes,
sound, color. Produced by MSFC.

Explains research at the Marshall Space Flight Center on
suppression of noise during static testing of rocket engines
and stages.

MC-91 SELF SERVICE SUPPLY - 10 minutes, sound, color.
Produced by MSFC.

Describes the methods by which technical materials are issued to research and development segments of the Marshall Center.

MC-92 SATURN S-IC BULKHEAD FABRICATION - 13 minutes,
sound, color. Produced by MSFC.

Development and manufacturing report on the bulkhead fabrication of the first stage of Saturn V as of June, 1963.

MC-96 WIND TUNNEL TESTING - 14 minutes, sound, color.
Produced by MSFC.

Engineering report on wind tunnel testing at the Marshall Center during development of the Saturn family of space vehicles. Includes scenes of Saturn launch. An interesting film.

MC-100 TEST FOR SUCCESS - 28 minutes, sound, black & white,
produced by NASA Headquarters.

Dr. John C. New, head of satellite testing and evaluation at the Goddard Space Flight Center, conducts a tour. Methods of testing satellites in simulated space conditions are explained. The camera takes viewers inside huge chambers and through the microscope. Special test films show high speed vibration and spin tests.

- MC 107 SATURN I - BLOCK II - SWING ARM SYSTEM - 20 minutes,
sound, color. Produced by MSFC.
- Describes the fundamentals of the Saturn I launch vehicle holddown swing arm system by use of animation and live photography. Shows details of testing and operation of the holddown system.
- MC 108 WIND, WEATHER, AND SPACE BOOSTERS - 19 minutes, sound,
color. Produced by NASA Headquarters.
- Describes the importance of gathering meteorological data before a launch.
- MC 110 HAZARDS OF TIRE HYDROPLANING TO AIRCRAFT OPERATION
1963 - 15 minutes, sound, color. Produced by Langley Research Center.
- Film explains the phenomena of tire hydroplaning, under what conditions it occurs, and the resulting hazards. Based on Langley Center tire studies, film identifies and draws particular attention to a wet runway hazard that is not yet fully appreciated. A good training film.

- MC-111 EXTERNAL MIXING SPRAY GUN NOZZLE - 1963 - 4 1/2 minutes,
sound, color. Produced by Langley Research Center.
- Demonstrates the useful properties of a paint mixing device for spray guns, the patent for which is the property of a NASA employee. Colors do not have to be premixed. The shade desired can be regulated by a simple hand adjustment.
- MC-112 OPTICAL COMMUNICATIONS DEVICE (Retrometer) - 1963
5 1/2 minutes, sound, color. Produced by Langley Research Center.
- Film explains an optical communications device based upon the unique properties of corner reflector. One of the reflector sides is replaced with mylar film which can modulate a light beam emitted by a power source. The system is not based on electromagnetic principles and cannot be detected by normal listening procedures.
- MC-121 FLAT CONDUCTOR CABLE - 1965 - 18 minutes, sound, color.
Produced by the Marshall Center.
- This is a status of development report on advancements in flat conductor cable technology and how it compares with round wire systems. The film shows how to prepare and assemble the systems, newly developed machines, and the characteristics of flat cable systems.
- MC-122 PROPELLANT DISPERSION MODEL TANK TEST - 15 minutes,
sound, color. Produced by MSFC.
- Films show series of dispersion destruct tests on tanks filled with liquid oxygen and RP-1 and the subsequent evaluation resulting in a destruction system for use on the Saturn I, Block II. Both internal and external systems were tested. Tests were conducted by the Marshall Center's Propulsion and Vehicle Engineering Lab.

MC 133 THE HARD ONES - 1965 - 16 minutes, sound, color.

Depicts engineering difficulties encountered in conceiving, designing, building, testing, flying, and operating scientific satellites. Produced for NASA's Office of Space Science and Applications. Program centers around OGO but touches upon Vanguard, Echo, Ranger, Syncom, Relay, Telstar, OAO, and Nimbus as well.

MC 135 TRIAL BALANCE - 1965 - 25 minutes, sound, color.

Shows, primarily through animation, the scientific achievements of NASA's space programs. Emphasizes the knowledge that has been gained from studies of upper atmosphere physics, solar physics, and planetology. Produced for the Office of Space Science and Applications.

MC 137 THE NASA BIO-SATELLITE PROGRAM (Between The Atom and The Star) - 1965 - 28 minutes, sound, color.

Shows why NASA needs to put living organisms into space for an extended period of time, and how we are going to conduct these experiments.

HISTORICAL FILMS

Films listed in this section contain parts which have been outdated. However, because of continuing requests they will be retained on the available list as long as the limited number of copies remain in a usable condition. Audiences should be notified of the historical status of the films.

MH-1 NOSE CONE VOYAGER - 12 minutes, sound, color.

A documentary film telling of the biomedical experiment performed when the Jupiter IRBM missile was launched on May 28, 1959, with two monkeys riding in the nose cone. Monkeys were Able, an American-born rhesus monkey, and Baker, a South American squirrel monkey.

MH-2 SATURN ROCKET - 1960 - 14 minutes, sound, color.
Produced by MSFC.

Documentary with good photography, non-technical language depicting research and development of Saturn booster. Some technical facts outdated.

MH-4 PROBE INTO SPACE - 13 minutes, sound, color.

A documentary film telling the story of the Army's Pioneer IV space probe.

MH-5 EXPLORER VII - 13 minutes, sound, color or black & white.

This film shows research and development of Explorer VII launched by the Juno II.

MH-7 SPACE TODAY AND TOMORROW - 15 minutes, sound, color.

Film is of a discussion between Major General J. B. Medaris (Ret.) and Dr. Wernher von Braun in which they explain the organization and mission of the Army Ordnance Missile Command including weapons systems and space programs.

-25-

Historical

(Pages 23 and 24 omitted)

- MH-8 THE SATURN WORKHORSE - 13 minutes, sound, color.
Produced by MSFC.
- Movie is documentary film telling the history, research, and development of the Saturn booster. Film was made in 1961.
- MH-10 TIME AND SPACE - 1959 - 27 minutes, sound, color.
Produced by Jet Propulsion Laboratory, Pasadena, Calif.
- Describes Pioneer IV space probe and launching of Juno II. Film makes good use of cartoon-type drawings and explanations.
- MH-11 COUNTDOWN FOR SPACE - 13 minutes, sound, color.
- A documentary film telling the story of the Army's Pioneer III space probe.
- MH-12 DEDICATION OF GEORGE C. MARSHALL SPACE FLIGHT CENTER
20 minutes, sound, color. Produced by MSFC.
- Documentary film showing Dr. von Braun, as master of ceremonies, with President Dwight Eisenhower, as principal speaker, formally dedicating the George C. Marshall Space Flight Center on September 8, 1960.
- MH-13 THE SATURN - 13 minutes, sound, color. Produced by MSFC.
- Assembly, fabrication, static firing of Saturn SA-1. Launch not included. Facts outdated.
- MH-15 PROJECT SATURN - 21 minutes, sound, color.
Produced by MSFC.
- Tells the story of assembly and fabrication of Saturn I. This film is actually a revision of "The Saturn" film which is MH-13 on this list.

- MH 21 OUR MAN IN SPACE - 22 minutes, sound, color.
- Documentary film concerning the nation's first man in space flight, Alan Shepard. Good film all audiences, although first part has some technical language.
- MH 22 MR-2 - 14 minutes, sound, color.
- Tells the story of Mercury-Redstone 2 and the preparation of Ham for his flight into space.
- MH 23 ASTRONAUT SHEPARD REPORTS ON SPACE - 1961 - 20 minutes, sound, color.
- This film shows Astronaut Alan B. Shepard receiving the NASA Distinguished Service Medal from President Kennedy at the White House, May 8, 1961. Shepard's press conference later that day is also shown, illustrated by film of his flight.
- MH 24 YOUR SHARE IN SPACE - 1962 - 28 minutes, sound, color.
- Describes many areas of U. S. space research, including booster evolution, payload development and instrumentation, final launch and data acquisition processes, and X-15 rocket plane testing.
- MH 25 THE BIG REACH - 25 minutes, sound, color.
- Pioneer I probe is launched in 1958 from Cape Kennedy by a Thor-Able I booster, traveling 70,700 miles before returning to earth. It makes first observations of earth's magnetic field and first measurements of micrometeorite density.