History

The Surveyor project was assigned to the Jet Propulsion Laboratory (JPL) by NASA in 1960. The Space Systems Division of Hughes Aircraft Company was named as spacecraft systems contractor shortly after the project was approved. Surveyor was initially conceived as an ambitious long-range science-oriented program of discovery and exploration on the Moon, but in 1964 it was curtailed into an exclusively Apollo-support project. Surveyor’s goal was to soft land spacecraft mounted with sensing devices on the surface of the Moon. An intensive NASA review board was held in 1964 regarding the actions of Hughes. However, continuing problems at Hughes necessitated another review board, held in May 1966 and chaired by NASA Assistant Administrator for Industry Affairs and Administration William Rieke.

Surveyor 1 was launched on May 30, 1966, and made the first U.S. soft landing on the Moon on June 1, 1966. From May 1966 to January 1968, seven Surveyor spacecraft were launched, with five of them successfully landing on the Moon.

Of special significance to JPL was Surveyor 3, which landed on April 19, 1967, in the Ocean of Storms (Oceanus Procellarum) on the inner slope of a large crater, named Surveyor Crater. Twenty months after landing, the Surveyor 3 landing site was visited by astronauts from the Apollo 12 mission. Apollo 12 was launched on November 14, 1969 and reached the Moon on November 19. The Lunar Module Intrepid landed only 156 meters (512 feet) away from Surveyor 3. Astronauts Charles “Pete” Conrad and Alan L. Bean made an intensive study of the Surveyor and its surroundings. Various parts of the Surveyor were recovered, including the television camera, soil scoop and assorted pieces, and returned to the Earth. The television camera was given to JPL for evaluation, and eventually given to the Smithsonian Institution’s National Air and Space Museum where it is on display. Oddly enough, terrestrial bacteria were found in the television camera, in the Styrofoam between the inner and outer shells of the camera. The bacteria survived despite significant efforts to sterilize the spacecraft prior to launch. A few other assorted pieces of Surveyor 3 were given to William H. Pickering by NASA at the time of his retirement as JPL Director in 1976. The disposition of the remaining pieces is unknown.

Another Apollo support project was the Lunar Orbiter Project that photographed areas of the Moon’s surface for selection and verification of safe landing sites for the Apollo missions. From August 1966 to August 1967, there were five Lunar Orbiter missions flown. The Lunar Orbiter Project was managed by NASA’s Langley Research Center. JPL provided the Space Flight Operations Facility and the Deep Space Instrumentation Facility (later called the Deep Space Network) in support of the Lunar Orbiter program.

Provenance

The collection originated from Forest S. Gibson, Manager of the Executive Secretariat, Division 10. At some point in time, the collection was transferred from Gibson to the office of Victoria L. Melikan, JPL Legislative Affairs Officer, Section 100. The collection was transferred from Melikan to the Federal Records Center in Laguna Niguel, CA on November 10, 1972. They were transferred from the FRC to the JPL Laboratory Records Center on September 21, 1981, and from the LRC to the JPL Archives on March 16, 1992. There is no evidence that any materials were removed from the collection during these transfers.

Collection Arrangement and Description

The collection consists of documents pertaining to the later stages of development and aftermath of the Surveyor project. Included in the collection are correspondence, memoranda, handwritten notes, and manuscript drafts. The latter half of the collection is a rough draft of a management study conducted by the National Academy of Public Administration (NAPA) of the Surveyor and Lunar Orbiter projects.

There is one folder with documents pertaining to the Surveyor Review Board at Hughes Aircraft Company, held in May 1966. The review board recommended that Hughes should act promptly in making any key personnel changes, and increase top management attention to Surveyor. The Surveyor program at
Hughes was ultimately realigned, with operations consolidated and responsibilities clarified. Included in the folder are memoranda and correspondence, as well as handwritten notes written by Gordon Neiswanger, who at the time of the review board was Assistant to the JPL Deputy Director, Alvin R. Luedecke.

One folder documents the activities of Apollo 12 that photographed and retrieved parts from the Surveyor 3 spacecraft. Represented in the folder is correspondence pertaining to the disposal of the parts recovered from Surveyor 3. Included are correspondence from NASA Administrator Thomas O. Paine, Manned Spacecraft Center Director Robert L. Gilruth, Apollo Program Director Rocco A. Petrone, and Surveyor Returned Materials Program Coordinator Milt Goldfine. Also included is an interoffice memorandum from James D. Burke to Goldfine requesting loan of parts from Surveyor 3 for an exhibit at the International Astronomical Union meeting at Newcastle-upon-Tyne, England, in April 1971.

In the early 1970s, the National Academy of Public Administration (NAPA) funded a study to identify and categorize the major management experiences gained through the Surveyor and Lunar Orbiter programs. The study was written by Erasmus H. Kloman, Senior Research Associate at NAPA. Draft copies of Kloman’s study proved to be extremely controversial at JPL. In JPL’s estimation, the drafts were filled with factual and interpretive errors; Kloman lacked an objective approach that would make the study meaningful. An edited study was published as NASA SP-4901, *Unmanned Space Project Management: Surveyor and Lunar Orbiter*, in 1972.

Represented in the collection are revised drafts of Kloman’s studies on Surveyor and Lunar Orbiter. Included in the drafts are comments by Charles W. Craven, Executive Assistant to the Director, at the beginning of the draft, and by James W. McGarrity, Advanced Planetary Missions, Section 201, throughout both of the draft manuscripts. More than one person may have left comments in the text.

**JPL Discreet materials**

Three folders contain documents that are stamped or marked “JPL Discreet.” The original positions of JPL Discreet material in the collection have been marked with separation sheets. The material has been moved to a box at the end of the collection. Two of the three documents involve the Kloman draft of the management history of Surveyor and Lunar Orbiter.

**Conservation/Preservation**

Standard preparations of documents for long term storage were completed.

**Separation Statement**

An original accession (1992-36) was split up into three separate collections: the Surveyor Project Document Collection (this collection), the JPL Significant Event Reports Collection (JPL 177), and the Forest Gibson Collection (JPL 179).

**Finding Aids**

No other finding aids exist for the collection.

**FILE FOLDER LIST**

**Box 1 of 2**

Fld. 4  Surveyor 3 Parts Taken from Moon, correspondence, 1969-1971.
Fld. 6  Erasmus H. Kloman, revised draft of NAPA Surveyor study, with comments, December 1970. [folder 1 of 2]
Fld. 7  [folder 2 of 2]
Fld. 8  NAPA Study of Lunar Orbiter, correspondence, 1971.
Fld. 9  Erasmus H. Kloman, revised draft of NAPA Lunar Orbiter study, with comments, January 1971.

Box 2 of 2 – JPL Discreet Material
JPL Discreet Material; 3 folders.

CATALOG DESCRIPTION

Surveyor Project Document Collection, 1966-1971
0.3 cu. ft. (12 folders)
The collection consists of documents pertaining to the later stages of development and aftermath of the Surveyor project. Included in the collection are correspondence, memoranda, handwritten notes, and manuscript drafts. There are folders documenting the Rieke Committee Review Board at Hughes Aircraft, and the recovery of parts from Surveyor 3 by the crew of Apollo 12. The latter half of the collection is a rough draft of a management study conducted by the National Academy of Public Administration (NAPA) concerning the Surveyor and Lunar Orbiter projects. There are three folders of material labeled “JPL Discreet.”

Tracings
Jet Propulsion Laboratory – History
National Aeronautics and Space Administration
National Academy of Public Administration
Hughes Aircraft Company
Surveyor Lunar Probes
Surveyor Project
Surveyor 3 Lunar Probe
Lunar Orbiter
Apollo Project
Apollo 12 Flight
Kloman, Erasmus H.
Pickering, William H., 1910-
Hall, R. Cargill, 1937-
Craven, Charles W., 1920-
McGarrity, James W.
Parks, Robert J., 1922-
Neiswanger, Gordon
Petrone, Rocco A., 1926-
Goldfine, Milton