



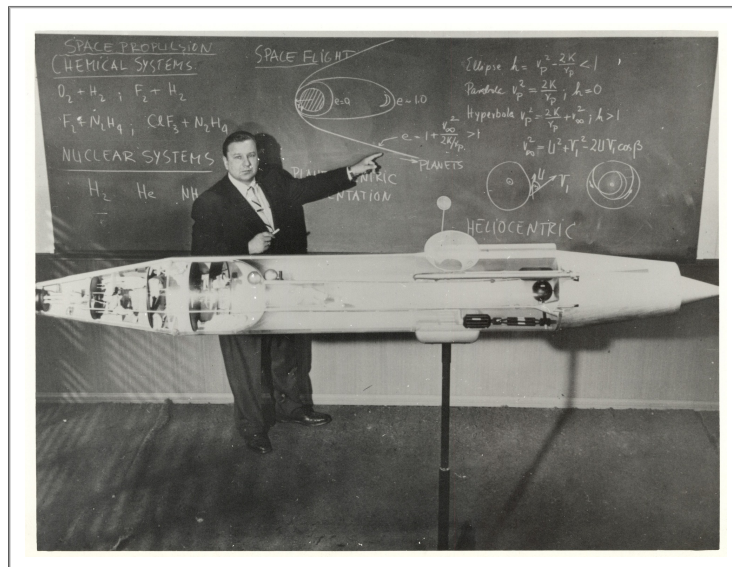
Smithsonian

National Air and Space Museum

Krafft Arnold Ehricke Papers

Paul Silbermann

2014



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Collection Overview

Repository:	National Air and Space Museum Archives
Title:	Krafft Arnold Ehrlicke Papers
Date:	1949-1984
Identifier:	NASM.2003.0025
Creator:	Ehrlicke, Krafft, 1917-1984
Extent:	124.9 Cubic feet
Language:	English .
Summary:	This collection is composed of Krafft Ehrlicke's files including Ehrlicke's published and unpublished papers as well as papers and works by others that Ehrlicke gathered, presumably as reference material.

Administrative Information

Acquisition Information

Ingeborg M. Ehrlicke, Gift, 2003

Processing Information

All metal fasteners (paper clips, staples, binder clips, etc) have been removed from the collection due to the significant amount of rust present. When materials in a single folder were originally fastened together in groups these groups have been separated within the folder by half-width sheets of legal paper (4¼"x14"). Newsprint and thermofax documents have been photocopied for preservation. Folded oversized materials have been flattened and filed separately in appropriately-sized containers in the same order. Multiple copies of documents in different files are identified as copy 1, copy 2, etc.

Some materials, mainly relating to nuclear space propulsion, carry security classification markings. These documents have been reviewed and declassified by the National Archives and Records Administration's National Declassification Center and appropriately marked. All such documents have been returned to NASM's custody.

Preferred Citation

Krafft A. Ehrlicke Papers, Accession 2003-0025, National Air and Space Museum, Smithsonian Institution.

Restrictions

No restrictions on access.

Conditions Governing Use

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Biographical Note

Krafft Arnold Ehricke (1917-1984) was an engineer and scientist who made vital contributions to the American space program. Ehricke was considered "one of the few philosophers of astronautics" by the early 1960s (note 1) and until his death remained a visionary and public champion of the cause of space exploration and colonization.

Ehricke was born in Berlin, Germany on 24 March 1917. He was inspired by Fritz Lang's 1929 science fiction film *Frau im Mond (Woman in the Moon)* and attempted to join the German rocket society, Verein für Raumschiffahrt (VfR), but, denied membership due to his youth, he instead conducted his own experiments. He spent two years (1936-1938) fulfilling military service requirements in Germany's new Panzer Corps, then earned an Aeronautical Engineering degree (MS equivalent) from the Technical University of Berlin (1938-1940). With World War II underway, Ehricke was recalled to service and was wounded during the Blitzkrieg on the Western Front in 1940. While recuperating from his wound he took graduate courses in Celestial Mechanics and Nuclear Physics from the University of Berlin (1940-1941). He returned to duty in 1941 as an officer to participate in the German attack on Russia. In 1942 he was again wounded, but his earlier engineering work had come to the attention of Wernher von Braun and he was recruited into von Braun's rocket development team, a move he later credited with saving his life. Ehricke spent the next two years (1942-1944) as a propulsion engineer at Peenemünde, then became an ordnance lecturer in Köslin, Germany (now Koszalin, Poland) until the end of the war. In January 1945 Ehricke married Ingeborg Maria Mattull. As the Third Reich collapsed in May he returned to her in Berlin and went into hiding to escape being "recruited" by the Soviet Union. He was finally located by an American officer in 1946 and was reunited with von Braun and the other *Operation Paperclip* (note 2) scientists under United States Army auspices.

In January 1947 Ehricke began work as a Research Engineer for the Research and Development Service of the United States Army Ordnance Corps at Ft. Bliss, TX, moving to Huntsville, AL, in 1950 when the Army transferred missile development from Ft. Bliss to Redstone Arsenal, AL. In 1952 Ehricke was recruited by Walter Dornberger (note 3), left government service for private industry, and moved to Buffalo, NY, to work as a Design Specialist at Bell Aircraft. For the next two years he worked on Bell's Orbital Glider project, a precursor to *Project Dyna-Soar*, the Air Force reusable boost-glide weapon system that itself prefigured NASA's Space Shuttle.

In November 1954 Ehricke moved to San Diego, CA, to begin a decade-long career with what was then the Convair Division of General Dynamics. For several years he was a key figure in the development of the Convair's SM-65 Atlas ICBM and Atlas launch vehicle. NASA used the man-rated Atlas LV-3 for the orbital flights of the Mercury Program and as of this writing the Atlas V family of Evolved Expendable Launch Vehicles remains a mainstay of the United States launch vehicle inventory. Between 1959 and 1962 Ehricke directed the development of the Centaur booster, the first high-energy upper stage powered by liquid hydrogen. Although Centaur was not successfully launched until 1965, it eventually served as the upper stage for Atlas, Titan, and Delta launch vehicles and was the last stage for the Viking (Mars) and Voyager (Outer Planets) missions. During this time he also authored *Space Flight*, a two-volume textbook on celestial mechanics and launch vehicle design (note 4). In 1962 Ehricke became the director of the Advanced Projects Department of General Dynamics Astronautics, where he directed and contributed to studies of next-generation (Post-Saturn) launch vehicles and propulsion systems, planetary exploration programs, and post-Apollo space activities.

At the end of October 1965 Ehricke left General Dynamics to become the assistant director of Astrionics at the Autonetics Division of North American Aviation (note 5), later rising to become Chief Scientist in the Advanced Systems Department of North American Rockwell's Space Division (1968-1973) and Chief Scientific Advisor for Rockwell International's North American Space Operations (1973-1977). While at North American Ehricke was involved in some aspects of the Space Shuttle program but primarily worked advanced project studies, including studies relating to NASA's space station and deep space exploration programs, and culminating in a multi-year study of space industrialization which began in 1976. During this time he also acted as scientific advisor to the abortive Satellite Power Corp (1974-1976), which proposed using satellites to generate and transmit electrical power to the Earth.

Ehrlicke retired from Rockwell in July 1977 and established Space Global Company with himself as president. Space Global was, in essence, a vehicle to promote space exploration and to promulgate his vision of a future space civilization, a concept he originally called the "Extraterrestrial Imperative" but later referred to as the "Open World Synthesis." The basic concept was relatively straightforward: because Earth's resources, although great, are limited, they place a limit on mankind's development. The only way to escape that limit is to move beyond the Earth and exploit the resources available in space. It was an argument for space exploration and colonization that Ehrlicke developed during the 1950s and 1960s, and finally crystallized in a manuscript he co-authored with Elizabeth Miller. Doubleday planned to publish the book in 1971, but then cancelled the project. Ehrlicke managed to get facets of the idea published in a number of technical journals, most notably in a four-part article in the *Journal of the British Interplanetary Society* (1979-1981), and gave numerous lectures on the topic, but *The Extraterrestrial Imperative* never appeared in the general media. Described as a "warm, witty man" and "a popular lecturer," he kept up an active speaking career until his health began to fail in 1984. He died of complications from leukemia on 11 December 1984.

During his life Ehrlicke wrote over 200 scientific and technical papers, contributed to a number of dictionaries and encyclopedias, and authored or co-authored several books. His final book *The Seventh Continent: Industrialization and Settlement of the Moon* (published in German as *Der Siebente Kontinent – Die Industrialisierung und Besiedlung des Mondes* (München: Thiemig Verlag, 1984)) was being edited for English publication at the time of his death. He was awarded an Honorary Doctorate of Humane Letters by the National College of Education (note 6) (1961) and received numerous awards including the International Astronautical Federation's Guenther Loeser Medal (1956), the American Rocket Society's Astronautics Award (1957) and Edward J. Pendray Award (1963), the New York Academy of Sciences' I. B. Laskowitz Award (1972), the American Institute of Aeronautics and Astronautics' Goddard Astronautics Award (1984), and was inducted into the Aerospace Hall of Fame (1966).

Notes:

- 1) Dandridge M. Cole to Krafft Ehrlicke, 12 February 1964.
- 2) Operation Paperclip was a program by the United States Office of Strategic Services (OSS) to bring German scientists to the United States in the immediate aftermath of World War II. More than 1500 scientists and engineers and nearly 4000 members of their families had entered the US by the end of 1947.
- 3) Walter Robert Dornberger (1895-1980) was a German artillery officer and engineer. In 1942 he was placed in charge of coordinating V-1 and V-2 development at Peenemünde. Captured by the British in 1945, he participated in Britain's *Operation Backfire* before being brought to the United States as part of *Operation Paperclip*, working on guided missile development for the United States Air Force. Between 1950 and 1965 he worked for Bell, eventually becoming a Vice President of the company. According to some stories he was responsible for poaching several *Paperclip* scientists away from the Army's Huntsville team for USAF projects.
- 4) Krafft A. Ehrlicke, *Space Flight*, Vol. I – *Environment and Celestial Mechanics* (Princeton (NJ): D. Van Norstrand, 1960) and Krafft A. Ehrlicke, *Space Flight*, Vol. II – *Dynamics* (Princeton (NJ): D. Van Norstrand, 1962)
- 5) In September 1967 North American Aviation merged with Rockwell Standard and was renamed North American Rockwell. In 1973 North American Rockwell merged with Rockwell Manufacturing to form Rockwell International.
- 6) In 1990 National College of Education (NCE, est. 1886) expanded and reorganized into the National Louis University (NLU), headquartered in Chicago, IL, with NCE becoming one of the NLU's three colleges.

Chronology

1917 Mar 24	born (Berlin, Germany)
1923-1926	Grammar School (Berlin, Germany)
1927-1936	Gynasium (Berlin, Germany)
1936-1938	German Army (military service, Panzer Corps)

1938-1941 Berlin Technical University (Aeronautical Engineering Diploma, 1941)

1940 German Army (Sergeant, Panzer Corps) – Western Front

1941-1942 University of Berlin (Nuclear Physics and Celestial Mechanics; predoctoral studies)

1942 German Army (Lieutenant, Panzer Corps) – Eastern Front, wounded

1942-1944 Peenemünde Research and Development Center (Development Engineer and Assistant to Director, Propulsion Development)

1944-1945 Köslin, Germany (Lecturer, Army Ordnance)

1945 Jan 19 married Ingeborg Maria Mattull (Berlin, Germany)

1947-1950 Ft Bliss, TX (Research Engineer)

1950-1952 Redstone Arsenal, Huntsville, AL (Thermodynamics Research Engineer, Chief of Gas Dynamics Dept)

1952-1954 Bell Aircraft Corp, Buffalo, NY (Preliminary Design Specialist)

1954-1955 General Dynamics/Convair, San Diego, CA (Design Specialist)

1956-1958 General Dynamics/Convair, San Diego, CA (Chief of Preliminary Design and Systems Analysis)

1956 received Gunther Loesler Medal (International Astronautics Federation)

1957 received Astronautics Award (American Rocket Society)

1958-1959 General Dynamics/Convair, San Diego, CA (Assistant to Chief Engineer)

1959-1962 General Dynamics/Convair, San Diego, CA (Director, Centaur Development)

1959-1961 NASA Research Advisory Committee on Electric Energy Systems (Chairman)

1961 awarded Honorary Doctorate of Humane Letters (National College of Education, Evanston, IL)

1962-1965 General Dynamics/Convair, San Diego, CA (Director, Advanced Studies Dept/Astronautics Division)

1963 received Edward Pendray Award (American Rocket Society)

1965-1968 North American Aviation, Anaheim, CA (Assistant Director, Astrionics Division)

1966 inducted into Aerospace Hall of Fame (San Diego, CA)

1968-1973 North American Aviation / Rockwell International, Anaheim, CA (Chief Scientist, Advanced Systems Department, Space Division)

1972 received I. B. Laskowitz Award (New York Academy of Sciences)

1973-1977 Rockwell International, Anaheim, CA (Chief Scientific Advisor, North American Space Operations)

1977-1984 Space Global Co (President)

1981 received Space Systems Award (IAA)

1984 received Goddard Astronautics Award (American Institute of
Aeronautics and Astronautics)

1984 Dec 11 died of complications from leukemia (La Jolla, CA)

Partial Bibliography of Papers, Reports, Lectures, and Interviews by Krafft Ehrlicke:

- "1990 A.D. and Man's Flight to the Planets" (extract from Ehrlicke & Betty A. Miller, *Exploring the Planets* (Morristown (NJ): Silver Burdett, 1969))
- "Absolute Comparisons of Management Systems" (no date)
- *Accuracy Improvement of Martian Probe by Post-Escape Correction and Improved Determination of the Astronomical Constant* (Convair report AZM-049; 1 Aug 1958)
- "Acquisition of Geospace" (Nov 1968)
- "Acquisition of the Solar System" (presented to "Contemporary Americans in an Intricate Society – 1969", The Hackley School Program for a Special Senior Conference, 19-29 May 1969)
- "Advanced Nuclear Reactor Propulsion Concepts" (AIAA Lecture Series – Advanced Propulsion Systems for Space Applications, 6 Apr 1965)
- "Aero-Thermodynamics of Descending Orbital Vehicles" (*Astronautica Acta* 2, fasc.1 (1956))
- "Aerojet-General Nucleonics Non-Chemical Propulsion Program" (presented to USAF, 11 Feb 1966)
- "Aerospace and National Economic Development" (Feb 1976)
- "Aerospace Contribution to Solving the Energy and Pollution Crisis" (delivered to luncheon meeting of Capital Section of AIAA, 27 Jun 1973)
- "Aerospace Transportation" (Jun 1966)
- "Aerospace Transportation – Concepts and Advanced Systems" (Jun 1966)
- "Air Traffic in the Coming Space Age" (published as "Toward Aviation's New Infinities", *Jet Tales* 1/81)
- *An der Schwelle des Industriellen Raumzeitalters* (report E75-9-1, Sep 1975)
- "Analysis of a New Orbital Supply System and Optimization of Satellite Orbits for Interplanetary Flight" (presented to ARS 8th Annual Meeting, 2-4 Dec 1953; published as "A New Supply System for Satellite Orbits", *Jet Propulsion* 24, No.5 (Sep-Oct 1954) : 302-309 and No.6 (Nov-Dec 1954) : 369-373)
- "Analysis of Orbital Systems" (1st edition, Feb 1954)
- "Analysis of Orbital Systems" (2nd edition; presented to IAF 5th International Astronautical Congress, 5-7 Aug 1954)
- "Analysis of Transportation Systems Flight Performance" (1970)
- "Anthropology of Astronautics (The)" (*Astronautics* 2 no.4 (Nov 1957) : 26-29, 65-68; reprinted in *Astronautics and the Future*)
- Apollo 11 Flight [5th] Anniversary "Town Hall Talk" (circa 1974)
- "Apollo and the Future" (delivered to Industrial Management Club of Reading and Berks County, Reading, PA, 25 Mar 1971)
- *Ascent and Descent of Rocket Vehicles* (Convair report AZP-071; no date)
- "Ascent of Orbital Vehicles" (published in *Astronautica Acta* 2 fasc.4 (1956))
- "Aspects Concerning the Impact of Manned Heliocentric Mission on Space Station and Space Shuttle" (NR report PD70-5; Jan 1970)
- "Aspects of Deep Space Probes Requiring Cryogenic Engineering Solutions" (University of California, Engineering X428GHI, Lecture 14, 14-17 May 1962)
- "Astro-ecology and the Human Environment" (no date)
- "Astrogenic Environments – The Effect of Stellar Spectral Classes in the Evolutionary Pace of Life" (*Space Flight* 14 no.1 (Jan 1972); NR report SD71-716)
- "Astronautical and Space-Medical Research with Automatic Satellites" (presented to the Franklin Institute; Jun 1956)
- "Astronautical Vehicles" (no date)
- "Astronautical Vehicles" (*Colliers Encyclopedia Year Book*, 1960)
- "Astronautics" (San Diego State College course, Physics 131, Fall Semester 1960)
- "Astropolis and Androcell / Thermonuclear Power Generation Satellite / Lunar Productivity Center" (extracts from papers and testimony, 1972-1975; SG reprint SG578-1R, May 1978)

- "Astropolis and Androcell – The Psychology and Technology of Space Utilization and Extraterrestrialization" (presented to Session 2, International Space Hall of Fame Dedication Conference, 3-9 Oct 1976)
- "Astropolis: The First Space Resort" (*Playboy*, Nov 1968 : 96-98, 222)
- "Atlas Family of Spacecraft & Preliminary Data on 990000 and 2x106 lb 3-Stage System with O₂/H₂ Second and Third Stage" (30 Sep 1958)
- *Atmosphere Braking Entry and Associated Technologies* (NR report X6-624/3061, 1968)
- "Aufstieg und Abstieg von Raketengeräten" (published as Chapter 8 of *Handbuch der Astronautik* (Karl Schütte and Hans K. Kaiser, eds; Akademische Verlagsgesellschaft Athenaion, 1958), pp.235-254; also Convair report AZP-071, circa 1958)
- "Ausbeutung des Roten Planeten" (with unidentified "German author", circa Oct 1975)
- "Ballistic Ascent to Satellite Orbits" (no date)
- *Beyond Earth: The Story of Astronautics* (with Betty A. Miller, 1970 [not published])
- "Beyond the First Space Stations" (Jan 1971; presented to Alabama AIAA Meeting, 20 Jan 1971)
- "Blaue Planet hat doch eine Zukunft (Der)" (*Die Welt*, 29 Jun 1974)
- "Brief Outline of Steps for Commercial Development of Solar Power Systems on Earth and Power Transmission Through Space" (no date)
- "Brief Study of the Application of Three Nerva Engine Models to Comparatively Modern Manned Interplanetary Missions Such as Capture in an Elliptic Orbit around Venus in 1975 and Return to Earth" (with B. Brown, B. Oman, and W. Strobl; GDA report GDA 63-1223, 20 Nov 1963)
- Будущее Космической Индустрии (Москва: Машиностроение, 1979) [*The Future of Space Industry* (Moscow: Mashinostroenie, 1979)]
- "Buck Stops Here (The)" (Viewpoint column; *Fusion*, Sep 1981)
- "Busy World of Outer Space (The)" (*Discovery*; ABC TV, aired 28 Jan 1968; includes Ehricke interview)
- "Calculations on a Manned Nuclear Propelled Space Vehicle" (ARS paper 532-57; presented at ARS 12th Annual Meeting, 2-5 Dec 1957)
- "Case for Space (A)" (presented to the Citizen's Campaign for Space, Sponsored by The Center of American Living Inc, New York City, NY, 17-18 Feb 1970; NR report SD70-65; Feb 1970)
- "Case for Space" [II] (presented to unidentified meeting, 27 Jun 1970; also to California State Polytechnical College, Aerospace Education Workshop, 14 Jul 1970)
- "Case for the Space Station (The)" (circa Feb 1970)
- CBS News Interview (Krafft Ehricke/Walter Cronkite, Sep 1966)
- "Changing Role of Technology (The) – Yesterday Today and Tomorrow" (presented to 8th Space Congress, 19-23 Apr 1971; NR SD71-536)
- "Circular Satellite Orbits" (no date)
- "Cislunar Operations" (ARS paper 467-57; presented at ARS Semi-Annual Meeting, 10-13 Jun 1957)
- *Cislunar Orbits* (Convair report AZP-004, 30 Mar 1957)
- "Comments on Space Station Paper by R Gilruth" (presented to 5th AIAA Annual Meeting, 21-25 Oct 1968; response to Robert R. Gilruth, "Manned Space Stations - Gateway to Our Future in Space," presented at the Orbital Laboratory Symposium of the International Academy of Astronautics, 18 Oct 1968)
- "Comments on the Question of the Usefulness of the Scramjet to Boost and Reentry Vehicle Program" (no date)
- "Communications and the New Life Style" (address to Public Broadcasting System Annual Meeting, 1972)
- *Comparison of Advanced Propulsion Systems: Solar-Heating, Arc Thermo-dynamics and Arc Magneto Hydrodynamics* (Convair report AZK-002, 1 Dec 1957)
- "Comparison of One-Way Transfers and the Effect of Specific Impulse I_{sp} and Mass Fraction x on Gross Payload Fraction" (no date)
- "Comparison of Propellants and Working Fluids for Rocket Propulsion (A)" (Sep 1952; published in *Journal of ARS* 23, no.5 (Sep/Oct 1953))
- "Comparison of Rocket Propulsion at Constant Thrust and Constant Acceleration (A)" (Jun 1951; published in *Rocket Science* 5, no.3 (Sep 1951))

- "Computation of Number of Binary Bits of Information for Venus Radar Mapping" (no date)
- "Concept of Shuttle Stations and Their Functions in Geolunar Space Utilization (The)" (NR report PD70-4, 15 Jan 1970, revised Jan 1970)
- "Contributions of Space Reflection Technology to Food Production, Local Weather Manipulation and Energy Supply, 1985-2020" (presented to 17th European Space Symposium, 4-6 Jun 1980; published in *JBIS Space Technology* 34 no.12, Dec 1981))
- "Cost Reductions in Energy Supply through Space Operations" (IAF paper IAF-A-76-25; presented to the Sixth International Cost Reduction in Space Operations Symposium II, session 34 of the IAF 27th International Astronautical Congress, 10-16 Oct 1976)
- "Cost Reductions in Transportation to Geosynchronous and Lunar Orbit" (presented to IAF 23rd International Astronautical Congress, 8-15 Oct 1972, 5th Lunar International Laboratory Symposium; NR report SD72 SA-0174, Sep 1972; published as "Cost Reduction in Transportation to Geosynchronous and Lunar Orbit in a Swing Station" (*Raumfahrtforschung* 17 no.3 (May/June 1973) : 126-135)
- "Cost Reductions in Transportation to Geosynchronous and Lunar Orbit in a Swing Station" (*Raumfahrtforschung* 17 no.3 (May/June 1973) : 126-135; NR report SD72-SA-0174, Sep 1972; presented to IAF 23rd International Astronautical Congress, 8-15 Oct 1972, 5th Lunar International Laboratory Symposium as "Cost Reduction in Transportation to Geosynchronous and Lunar Orbit")
- *Delta* (California Museum of Science and Industry, TV Pilot, Jun 1974; Ehricke included in on-screen interview)
- "Destination Mankind – Proposal for a Saturn V-Apollo Mission into Geosynchronous Orbit" (19 May 1972)
- *Development of a Basic Planetary Transportation System Model, Interim Report* (GDA report, circa 1964)
- "Development of Large Earth Orbital Space Station" (presented to IAF 21st International Astronautical Congress, 4-10 Oct 1970; NR report SD 70-641, Nov 1970)
- *Early Manned Interplanetary Missions, Intermediate Report No. 1 – Missions and Operations Studies* (GDA report AOK 62-0001, 30 Jul 1962)
- "Earth Environment and Resources Management from Space" (presented to IAF 22nd International Astronautical Congress, 20-24 Sep 1971; NR report SD 71-734, Sep 1971)
- *Earth's Seventh Continent – Industrialization and Settling of the Moon* (in preparation for publication, 1984)
- "Earth-Moon Transportation" (presented to AAS 16th Annual Meeting, 8-10 Jun 1970; NR report SD70-338)
- "Earth-Space Meta-Environment and the Future of Man 1970-2070" (presented to ISF 1971 Conference on International Science Policy with the International Meta-University, Sep 1971)
- "Economy of Large Launch Vehicles including Labor Costs" (*Journal of Spacecraft and Rockets* 1, no.6 (Nov 1964) : 611-619; originally presented as part of "Nexus – Concept of a Large Reusable Launch Vehicle"; AIAA Summer Meeting, paper 63-277, 17-20 Jun 1963; originally titled "Economy of Saturn V and Post-Saturn Vehicles with Consideration of Orbital Labor Cost")
- "Economy of Saturn V and Post-Saturn Vehicles with Consideration of Orbital Labor Cost" (originally presented as part of "Nexus – Concept of a Large Reusable Launch Vehicle"; AIAA Summer Meeting, paper 63-277, 17-20 Jun 1963; published as "Economy of Large Launch Vehicles including Labor Costs", *Journal of Spacecraft and Rockets* 1, no.6 (Nov 1964) : 611-619)
- *Effective Initial Contributions of a Manned Space Station* (report KAE-11, 6 Nov 1970)
- "Electric Propulsion Systems Model" (no date)
- "Electromagnetic Propulsion" (*McGraw-Hill Encyclopedia of Science and Technology*, vol. 4 (NY: McGraw-Hill, 3rd Ed., 1971))
- *Elements of Rocket Science* (unpublished textbook, no date)
- "ELV Comparison and Evaluation Methodology" (Summer 1963)
- *EMPIRE Follow-On Final Report, Vol. I – Condensed Summary Report* (GDA report AOK 64-006, 1 Jan 1964)
- *EMPIRE Follow-On Final [Third] Presentation* (GDA report AOK 64-002, 28 Jan 1964)

- *EMPIRE Follow-On – Parametric Mission Analysis* (GDA report AOK 63-024, 30 Aug 1963)
- "Energy and the Shuttle Compatible Space Energy Test (SET) Facility Briefing, September 25, 1974"
- "Engineering and Space Operations" (presented to Space Station Utilization Conference, NASA/Ames Research Center; 9-10 Sep 1970)
- "Engineering Problems of Manned Space Flight" (presented to USC Symposium on the 75th anniversary of the University and 59th Anniversary of the Engineering Dept, Apr 1955)
- "Engineering the Reality of Lunar Industrialization" (presented to CSU Northridge School of Engineering and Computer Science Colloquium, 24 Feb 1983)
- "Erde und Raum als Integrale Aktionsumwelt des Menschen" (no date)
- *Error Analysis of Keplerian Flights Involving a Single Central Force Field and Transfer Between Two Central Force Fields Spacecraft Orbits* (Convair report AZM-7-551; 17 Jan 1958)
- "Error Analysis of Single and Two-Force Field Spacecraft Orbits" (Ehrlicke; presented to Franklin Institute Lecture Series on Space Flight, Mar 1958; Convair report AZM-054, 22 Sep 1958)
- "Evolution of Interstellar Operations" (presented to AAS Joint National Meeting, Denver, Colorado, 17-20 Jun 1969; NR report SD69-420, Jun 1969)
- "Evolution of Space Flight" (no date)
- *Evolution of the Space Ship* (not published)
- "Ex Mens[is] – 1: On the Integrated Plan" (15 Feb 1970)
- "Ex Mens[is] – 2: Perspective" (no date)
- Excerpts of Chapter 7 "Low Thrust Space Flight" of *Space Flight, Vol. II "Dynamics"* (Convair report KE62/1, no date)
- *Exoindustrial Productivity – The Extraterrestrial Imperative of Our Time* (report E75-5-1, May 1975)
- "Exoindustrialization as a System" (no date)
- *Exoindustry: A Macro-System Analysis* (report E76-1-1, Jan 1976)
- *Exploration of the Solar System* (with Betty A. Miller; published as *Exploring the Planets* (Learning Corp, 1969))
- "Exploration of the Solar System and Interstellar Space" (presented to 2nd International Conference on Planetology and Space Mission Planning, NY Academy of Science, 26-27 Oct 1967; NR report X7-3215/060)
- *Exploration of the Solar System and Interstellar Space* (with Elizabeth A. Miller, 1971 [not published])
- *Exploring the Planets* (with Betty A. Miller; (Learning Corp, 1969); originally titled *Exploration of the Solar System*)
- "Extraterrestrial Contamination, Pollution and Waste Disposal" (published as "Space Dumping – Extraterrestrial Contamination, Pollution and Waste Disposal" in *The Environment This Month* 1 no.1 (Jul 1972) : 36-45)
- "Extraterrestrial Imperative" (published as "The Extraterrestrial Imperative – Grow and Live", *NY Times*, 23 May 1972)
- *Extraterrestrial Imperative (The)* (with Elizabeth A. Miller, 1971 (first version), not published)
- *Extraterrestrial Imperative (The)* (with Elizabeth Miller, 1974 (second version), not published)
- *Extraterrestrial Imperative (The), Part I – Evolutionary Logic* (SG report SG1078-1, Oct 1978)
- "Extraterrestrial Imperative (The), Part II – Productive Earth Orbits – New Partnership Through Pressures and Promise" (*JBIS* 32 no.11 (November 1979) : 410-418)
- "Extraterrestrial Imperative (The), Part III – New Earth-Space Energy Metabolism, I – Energy Demand Model, Near-Term Space Assist, Space Disposal of Nuclear Waste" (*JBIS* 33 no.11 (November 1983) : 379-390; SG report SG779-1, Jul 1979)
- *Extraterrestrial Imperative (The), Part IV – Evolution II* (SG report SG-OW-9ET-4-182, Jan 1982)
- "Extraterrestrial Imperative (The)" (*Air University Review* 29 no.2 (Jan-Feb 1978) : 2-20)
- "Extraterrestrial Imperative (The)" (*Futures* 13 no.2 (Apr 1981) : 107-114; originally titled "The Extraterrestrial Imperative – Evolutionary Perspective and a Cosmopolitan Strategy")
- "Extraterrestrial Imperative (The)" (*Bulletin of the Atomic Scientists* 27 no.9 (Nov 1971) : 18-26; reprinted in *New Worlds* 2 no.2 (Feb 1972) : 12-23)
- "Extraterrestrial Imperative (The) – Evolutionary Logic and Realistic Promise" (SG report SG678-1; submitted to *Smithsonian*, circa 1978)

- "Extraterrestrial Imperative (The) – Evolutionary Perspective and a Cosmopolitan Strategy" (published as "The Extraterrestrial Imperative", *Futures* 13 no.2 (Apr 1981) : 107-114)
- "Extraterrestrial Imperative (The) – Grow and Live" (*NY Times*, 23 Mar 1972)
- "Extraterrestrial Imperative – Road Into the Future" (presented to SYNCON '72, 17-21 May 1972; NR report SD72 SA-0120, Jun 1972)
- "Extraterrestrial Imperative (The) – The Logic of Social and Realistic Promise" (CSU Northridge extension course SOC X496G/X896G, 30 Jan-14 May 1980)
- "Extraterrestrial Imperative (The): Why Mankind Must Colonize Space" (*Fusion* (English language edition) 5 no.6 (Dec 1982) : 18-24)
- "Extraterrestrial Imperative and Lunar Development" (originally presented to NASA Symposium, Lunar Bases and Space Activities of the 21st Century, 29-31 Oct 1984 as "Lunar Industrialization and Settlement – Birth of Polyglobal Civilization")
- "Extraterrestrial Imperatives" (presented to Future Oriented Activities in the United Nations, 30 Nov 1972)
- "Extraterrestrial Industry – A Challenge to Growth Limitation" (Jun 1972)
- "Extraterrestrial Industry – A Challenge to Growth Limitation" (presented to The Conference Board, The Essential Resources Conference, 16 Apr 1973; NR report SD 73-SH-0134, Apr 1973)
- "Extraterrestrial Nuclear Mining" (no date)
- "Fast Flight Profiles for Manned Helionautical Missions" (presented to 4th International Symposium on Bioastronautics and the Exploration of Space, 24-27 Jun 1968, San Antonio, TX))
- "Flight Profiles and Navigation of Interorbital Transports in Geolunar Space" (presented to ION National Space Meeting, 23-25 Feb 1971; NR report SD71-475, Mar 1971)
- "For a Synergistic Space Program – Excerpts from Material Presented to the Advanced Aerospace Projects Office, NASA Langley Research Center, on July 16, 1970" (16 Jul 1970)
- Forward to *Into the Unknown* (Don Dwiggin; San Carlos (CA): Golden Gate Junior Books, 1971)
- *Foundations of Interplanetary Flight* (unpublished textbook, no date)
- "Four Objectives – The Fundamental Principles of Our Commitment to Space" (5 Jul 1970; published as "Our Commitment to Space", *Spaceflight* 13 no.3 (Mar 1971) : 82)
- "From Closed to Open World" (presented to NASA Study Group on "Outlook for Space", 23-24 Oct 1974)
- *From Dust to Stars: The Evolution of Space Flight* (with Elizabeth Miller and J. Sentovic, 1967)
- "Further Analyses of the Slide Lander and of Drop Delivery Systems for Improved Lunar Surface Access" (IAF paper IAA-82-216; presented IAF 33rd International Astronautical Congress, 12th International Symposium on Space Economics and Benefits: Socio-Economics Benefits of Space Operations, 27 Sep-3 Oct 1982)
- "Further Comments on the Power Relay Satellite Concept" (Jan 1974)
- "Future in Space" (presented to Air Command and Staff College, Maxwell AFB, AL, 18 May 1972)
- *Future of Space Industry (The)* (Moscow: Mashinostroenie, 1979) [Будущее Космической Индустрии (Москва: Машиностроение, 1979)]
- "Geolunar Industrial Transportation for Low Propellant Expenditure with New Energy Management Concepts for Lunar Access, Part I" (IAF paper 79-120, presented to IAF 30th International Astronautical Congress 16-22 Sep 1979; SG report SG779-1, Jul 1979)
- *Geospace Development – Presentation to C. W. Mathews, Deputy Associate Administrator, Office of Manned Space Flight, NASA Headquarters, Washington, DC* (NR report PD70-24; Mar 1970)
- "Good Heavens, Santa!" (television script with Leon Leonidoff and Elizabeth A. Miller, 20 Jul 1978)
- "Government, Industry and Research Responses to Space Exploration" (presented to ARDC 7th Annual Science and Engineering Symposium, 29-30 Nov 1960)
- *Guidance and Navigation Approach to Lifting Reentry Vehicle Missions* (NA report T6-2580/060, Oct 1966)
- "Habeus Extraterrestrium – Kultur und Technik im gesetz Jenseits der Erde" (no date)
- *Hard and Soft Power Relay Satellite Systems – Technical, Financial and Development-Related Aspects of Beamed Power Transmission Over Great Distances* (SG reprint SG879-2R, Aug 1979; reprint of *Technical, Financial and Development-Related Aspects of Beamed Power Transmission Systems Using a Power Relay Satellite (PRS)*; report E74-12-1, Dec 1974)

- "Harenodynamic Cooling: The Use of Lunar Sand as a Cooling Medium" (published in *Acta Astronautica* 11 no.6 (Jun 1984) : 319-325)
- "Helionautics in the Year 2000" (no date)
- *Helionauts (The)* (proposed TV series, circa 1966; also titled *The Infinauts*)
- "Heritage of Apollo – Presentation to the Town Hall of California (The)" (report E74-7-1, 16 Jul 1974)
- "How Do We Get There From Here?" (presented to Los Angeles Council of Engineers and Scientists [LACES], 3 Apr 1975)
- "I Can Get Us There by 1966" (*Space World* 1 no.2 (Jul 1960) : 16-19, 48-49)
- "Identification of Manned Space Activities Beyond Apollo at Modest Orbital Work, Attractive to Scientific Community" (n.d)
- "In-Depth Exploration of the Solar System and Its Utilization for the Benefit of Earth" (presented to 3rd Conference on Planetology and Space Mission Planning, New York Academy of Sciences, 28-29 Oct 1970; NR report SD 71-290, Jan 1971)
- "Industrial Productivity as a New Overarching Goal of Space Development" (Oct 1975)
- "Industrialisierung des Mondes (Die) – Der erste Schritt in eine Neue Offene Welt" (*Fusion* (German language edition) 3 no.2 (Mar 1982) : 38-51 and *Fusion* (German language edition) 3 no.3 (May 1982) : 40-50)
- "Industrialization of Space" (presented to the Wisconsin American Institute of Aeronautics and Astronautics, Milwaukee, WI, 28 Apr 1978)
- "Industrializing the Moon – The First Step into a New Open World" (*Fusion* (English language edition) 5 no.2 (Dec 1981) : 21-31 and *Fusion* (English language edition) 6 no.1 (May-Jun 1984) : 46-55)
- "Industrielle Evolution und Revolution im Geolunaren Raum 1980-2010" (presented to 21 Raumfahrttagung der HOG, Garmisch-Partenkirchen, 28 Sep-1 Oct 1972; NR report SD72-0173, Sep 1972)
- *Infinauts (The)* (proposed TV series, circa 1966; originally titled *The Helionauts*)
- "Instrumented Comets – Astroanautics of Solar and Planetary Probes" (ARS paper 493-57; presented to IAF 8th International Astronautical Congress, 6-12 Oct 1957)
- *Integrated Geolunar Transportation and Occupation System Using Space Station Modules in Highly Eccentric Orbits* (report KAE-4, 18 Nov 1969)
- "Interplanetary Maneuvers in Manned Helionautical Missions" (AIAA paper 65-695; presented to the AIAA/ION Astrodynamics Specialist Conference, 16-17 Sep 1965; reprinted in *Progress in Astronautics*, Vol. 17, *Methods in Astrodynamics and Celestial Mechanics* (NY: Academic Press, 1966))
- *Interplanetary Mission Profiles* (GDC report AZM-023, 30 Apr 1958)
- *Interplanetary Mission Profiles – Pt. II* (report KE60/2, 1 Dec 1960; published as part of *Space Flight*, Vol. II – Dynamics)
- "Interplanetary Probes: Three Problems" (*Astronautics*, Jan 1959 : 20-22, 42, 44, 46)
- "Ion Propulsion" (*McGraw-Hill Encyclopedia of Science and Technology*, vol. 7 (NY: McGraw-Hill, 3rd Ed., 1971))
- *Ion Propulsion System for Orbital Stabilization of Satellites, Especially of Several Satellites in Closely Similar Orbits (Pt. 1)* (Convair report ASM-2, 13 Sep 1957)
- *Kraftsoletta – Eine Industrie-Sonne für Europa* (SG report SG1177-1, Nov 1977)
- "Künstliche Kometen – Eine Analyse der Enforschung der Interplanetaren Raums mit hyperbolischen Sonden" (no date)
- "Large Scale Processing of Lunar Material" (presented to LSI 7th Lunar Science Conference "Utilization of Lunar Materials and Expertise for Large Scale Operations in Space", 15-19 Mar 1976; report E76-3-1, Mar 1976)
- *Light and Shadow Distribution in a Circular Satellite Orbit with and without Precession* (Convair report ZP-7-019; 3 Nov 1953)
- "Long-Range Perspective and Some Fundamental Aspects of Interstellar Evolution (A)" (Apr 1975; published in *JBIS* 28, no.11 (Nov 1975); report E75-6-1, Jun 1975)
- "Low Cost Commercial Space Traffic Operations and the Swing Station" (presented to IAF 24th International Astronautical Congress, 7-13 Oct 1973; report E73-10-2, Oct 1973; published in *Raumfahrtforschung* 18 no.4 (Jul/Aug 1974) : 173-182)

- "Lunar Atmospheric Research by Lunar Satellite and the Landing of Lunar Probes Within Pressurized Structures" (circa 1960)
- "Lunar Bases – Complexes for Exploration and Colonization of the Moon" (with Betty Ann Miller, pp.1380-1391 of unidentified publication)
- "Lunar Industrialization and Settlement – Birth of Polyglobal Civilization" (presented to NASA Symposium, Lunar Bases and Space Activities of the 21st Century, 29-31 Oct 1984; later retitled "Extraterrestrial Imperative and Lunar Development")
- "Lunar Industries and Their Value for the Human Environment on Earth" (presented to IAF 23rd International Astronautical Congress, 8-15 Oct 1972; NR report SD72-SA-0176, Sep 1972; published in *Acta Astronautica* 1 no. 5 (May 1974): 585-622)
- "Lunar Settlements and Their Value for the Human Environment on Earth" (*Acta Astronautica* 1, no.5-6 (May-Jun 1974) : 585-622; originally titled "Permanent Lunar Settlements and Their Value for the Human Environment on Earth")
- "Lunetta System Analysis" (IAF paper 80-A-11: presented at IAF 31st International Astronautical Congress, Symposium on Space and Energy; possibly SG report SG-OW-21-182)
- "Magnetogas Dynamics" (*McGraw-Hill Encyclopedia of Science and Technology*, vol. 8 (NY: McGraw-Hill, 3rd Ed., 1971))
- *Magnificent Heritage – Missions to New Worlds and the New Solar System (The)* (documentary; with Elizabeth Miller, Jul 1970)
- "Man Can Use Interstellar Space" (*Los Angeles Times*, 28 Jun 1972)
- "Man, Resources and Planets" (presented to IAF 19th International Astronautical Congress, 13-19 Oct 1968; NR report X8-2233/060)
- "Maneuvers and Navigation in Manned Helionautics" (presented to ION National Space Meeting, 23-25 Feb 1971; NR report SD 71-474, Mar 1971)
- "Manned Orbital and Lunar Space Vehicles" (presented to 2nd International Symposium on the Physics and Medicine of the Atmosphere and Space, 10-12 Nov 1958; Convair report AZM-059, 25 Nov 1958; reprinted in Southwest Research Institute, *The Physics and Medicine of the Atmosphere and Space* (John Wiley, 1960))
- "Manned Planetary Spacecraft Commonality with Space Station" (with A. L. Jones; presented to AAS 16th Annual Meeting, 8-10 Jun 1970; NR report SD70-342, Jun 1970)
- *Manned Space Service Program* (report KAE-16, Nov 1968)
- "Manned Spaceflight in the Seventies, Part I – Alternatives for Manned Spaceflight in the Seventies" (Jan 1971)
- "Manned Versus Unmanned Spaceflight" (Oct 1968)
- "Material on Space Industrialization Presented to J. T. Murphy, NASA-MSFC, 31 Aug 1976"
- "Mehr Mut, die Brücke in eine große Zukunft zu betreten" (*Die Welt* no.304, 31 Dec 1982)
- "Mensch, Umwelt, Technik und Wachstum – Dem 'Klub von Rom' zum Zehnten ins Stammbuch" (no date)
- "Metaprobe – A Concept for Regional Exploration of the Solar System and a Means to Develop International Teamwork in Space Research" (presented to IAF 19th International Astronautical Congress (Oct 13-19, 1968). NR report X-2209/060; originally presented to 5th AIAA Annual Meeting, 21-25 Oct 1968 as "Metaprobe – A Tool for the Synoptic Exploration of Space", NR report X-2291/060)
- "Metaprobe – A Tool for the Synoptic Exploration of Space" (presented to 5th AIAA Annual Meeting, 21-25 Oct 1968; NR report X-2291/060; also presented to IAF 19th International Astronautical Congress (Oct 13-19, 1968) as "Metaprobe – A Concept for Regional Exploration of the Solar System and a Means to Develop International Teamwork in Space Research" (NR report X-2209/060))
- "Method of High-Speed Spacecraft Ejection from the Solar System (A)" (published as "Saturn-Jupiter Rebound – A Method of High-Speed Spacecraft Ejection from the Solar System", *JBIS* 25 no.10 (Oct 1972) : 561-571)
- "Method of Using Small Orbital Carriers for Establishing Satellites" (ARS paper 69-52, Dec 1952)
- *Methodology of Mission and Systems Synthesis of Manned Planetary Flights with Particular Emphasis on Venus and Mars as Target Planets* (GD report AOK-63-019, 1 Jul 1963)

- "Methods of Minimizing Shuttle-Based High- and Low-Thrust Transportation Costs to Geosynchronous Orbit" (IAF paper A74-03; presented to IAF 25th International Astronautical Congress, 30 Sep-5 Oct 1974)
- "Mission Analysis of Fast Manned Flights to Venus and Mars" (presented to Interplanetary Mission Conference, AAS 9th Meeting, 15-17 Jan 1963)
- *Mission Map Parameters: Hyperbolic Excess Velocity, Inclination, Path Angle, Perihelion Distance, and Transfer Angle, Vol. II – Earth-Mars-Earth 1972-1985* (GD report AOK63-0005, 20 Jan 1963)
- "Missions Between Planets and to Selected Asteroids of this Solar System, Covering the Period of 1973 to 2000" (presented to AIAA National Meeting, Washington, DC, 28 Jun-2 Jul 1964)
- "Morphological Analysis and Comparison of Nuclear Pulse Drive Mechanization Concepts" (presented to AIAA 5th Joint Propulsion Specialist Conference, 9-13 Jun 1969)
- "New Cosmos and Homo Extraterrestriis (The)" (delivered to AIAA Symposium: "Our Extraterrestrial Heritage – from UFOs to Space Colonies", 28 Jan 1978)
- "New Growth in an Open World at the Threshold of the First Cosmopolitan Millenium – Collected Works of K. A. Ehricke, 1939 through 1980" (introduction to SG "OpenWorld" document series)
- "New Growth in an Open World: Evolutionary Perspective and a Cosmopolitan Strategy" (IAF paper IAA-81-234, Aug 1981; presented to IAF 32rd International Astronautical Congress, 11th International Symposium on Space Economics and Benefits II, 6-12 Sep 1981)
- "New Supply System for Satellite Orbits (A) – Part 1" (*Jet Propulsion* 24 No.5 (Sep-Oct 1954) : 302-309)
- "New Supply System for Satellite Orbits (A) – Part 2" (*Jet Propulsion* 24 No.6 (Nov-Dec 1954) : 369-373)
- "Nexus – Concept of a Large Reusable Earth Launch Vehicle (with Freeman D'Vincent; presented at AIAA Summer Meeting, 17-20 Jun 1963; GDA report 63-0065; AIAA paper 63-277)
- "Nexus Concept (The)" (with Freeman D'Vincent; *Astronautics and Aerospace* 2 no.1 (Jan 1964))
- *Non-relativistic Interstellar Mission Performance Analysis to Alpha Centauri* (report KAE-19, circa 1971)
- "Notwendigkeit der Weltraumfahrt (Die) – Der Extraterrestriischel Imperativ" (published in *Fusion* (German language edition) 4 no.4 (Fall 1983) : 29-41)
- "Offene Neue Welt" (no date)
- *Omni* Interview (*Omni* 3 no.12 (Sep 1981) : 87-91, 124)
- "On Bounding the Problem of Growth" (17 Jul 1972)
- "On the Application of Solar Power in Space Flight" (presented to IAF 7th International Astronautical Congress, 17-22 Sep 1956)
- "On the Commercial Satellite Project" (no date)
- "On the Descent of Winged Orbital Vehicles" (*Astronautica Acta* 1, fasc.3 (1955))
- "On the Mechanics of Descent to a Celestial Body" (presented to ARS Annual Meeting, Dec 1954; *Journal of Astronautics* 2 no.4 (Winter 1955) : 137-144)
- "On the Need for New Launch Vehicles" (session paper for "Do We Need New Propulsion Systems (Post Saturn) for Lunar and Planetary Flight?", panel for AIAA Annual Meeting, 29 Nov-2 Dec 1966 (chaired by Ehricke); NA report X7-158/060)
- "On Space Dynamics at Moderately Low Accelerations" (no date)
- "Öppen värld med obegränsad tillväxt (En)" (*Energi and Utveckling*, no date, 50-58)
- "Orbit Change at Moderate Infra G Acceleration" (no date)
- "Our Commitment to Space" (*Spaceflight* 13 no.3 (Mar 1971) : 82; originally titled "Four Objectives – The Fundamental Principles of Our Commitment to Space" (5 Jul 1970))
- "Our Philosophy of Space Missions", (*Aero/Space Engineering* 17 no.5 (May 1958) : 38-43; originally titled "Philosophy of Our Space Mission")
- "Out There ... Why Not?" (no date)
- "Outer Atmosphere Research Program" (Jan 1954)
- "Outlook for Space 1980-2000" (6 Sep 1974)
- "Outlook for Space, Economy of Infinity and Economy of Durability" (extract from *Extraterrestrial Industry - A Challenge to Growth Limitations*, Proceedings of the Essential Resources Conference, The Conference Board)
- *Parametric Mission Analysis* (GDA report AOK 63-024, 30 Aug 1963)

- "Passive Power Relay Satellite (The) – Concept and Appraisal of Extraterrestrial Means to Contribute to Overcoming the Energy Confrontation" (circa 1974)
- "Passive Power Relay Satellites for Global Energy Distribution" (presented to 10th Annual Space Congress, 11-13 Apr 1973; RI report SD73-SA-0016, Feb 1973)
- "Peenemünde: The Coming of the Future" (CSULB-Nova; Ehrlicke interviewed for program; possibly aired as "Hitler's Secret Weapon", *NOVA*, 5 Jan 77)
- "Peenemuende Rocket Center" (3 Jan 1950)
- "Permanent Lunar Settlements and Their Value for the Human Environment on Earth" (published as "Lunar Settlements and Their Value for the Human Environment on Earth"; *Acta Astronautica* 1 no.5-6 (May-Jun 1974) : 585-622)
- "Perspective and Systems Engineering of Manned Planetary Flight" (presented to AAS 16th Annual Meeting, 8-10 Jun 1970; NR report SD70-339, Jun 1970)
- "Pesticides, Fungicides, Oxides of Nitrogen = Recognized Environmental Hazards" (no date)
- *Philosophy and Outline of Long-Range Space Planning for the Needs of This Nation and Mankind* (NR report PD71-16; Jul 1971)
- "Philosophy of Our Space Mission" (published as "Our Philosophy of Space Missions", *Aero/Space Engineering* 17 no.5 (May 1958) : 38-43)
- "Planning Space Stations for Long Range Utilization" (presented to Short Course in Space Station Utilization, University of Tennessee, Tullahoma, Mar 1971; NR report SD 71-473, Mar 1971)
- "Planning Space Stations for Long Range Utilization of Space for Earthians" (presented to von Karman Institute for Fluid Dynamics, Brussels, during the Short Course on Space Station Technology and Utilization, Sep 1971; NR report SD 71-562, Sep 1971)
- *Pollution of the Future (The)* (SG report SG879-1, Aug 1978)
- *Post-Nova Launch Vehicles, Intermediate Report No.1, Advanced Concepts, Extraterrestrial Operation Models and Launch Vehicle Requirements* (GDA report AOK62-0005, 5 Sep 1962)
- *Post-Nova Launch Vehicles, Intermediate Report No.2, Extraterrestrial Options, Concept Selections and Schedule* (GDA report AOK62-0012, 13 Nov 1962)
- *Power Relay Satellite (The) – A Means of Global Distribution of Electricity from Large Remotely Located Energy Factories Processing Solar, Nuclear or Other Sources of Primary Energy* (report E74-11-1, Nov 1974)
- *Power Relay Satellite (The) – A Means of Global Energy Transmission Through Space, Part I: Technology, Operation, Performance and Economics of the Power Relay System* (report E74-3-1, Mar 1973)
- *Power Relay Satellite (The) – A Means of Global Energy Transmission Through Space, Part II: The Power Relay Satellite Concept in the Framework of the Overall Energy Picture and Complete Terrestrial Energy Systems* (report E74-6-1, Jun 1974)
- "Power Relay Satellite (The) – A Means of World Electrification through Space Transmission" (Aug 1973; presented to IAF 24th International Astronautical Congress, Symposium on Cost Reduction in Space Operations, 7-13 Oct 1973)
- "Power Relay Satellite (The) – Problem Areas" (circa Jan 1974)
- *Power Relay Satellite (PRS) Concept in the Framework of the Overall Energy Picture (The)* (report E73-12-1, Dec 1973)
- "Powered Ascension Path of Satellite Vehicles" (no date)
- "Powered Flight Without Atmosphere" (published as Chapter 6.1 of *Handbook of Astronautical Engineering* (H.H. Koelle, ed, McGraw-Hill, 1961); Convair report AE61-0199, 19 Mar 1961)
- "Powered Flyby" (no date)
- "Practical Approach to the Disposal of Highly Toxic and Long-Lived Spent Nuclear Fuel Waste Between Venus and Earth (A)" (presented to 10th International Symposium on Space Economics and Benefits II: Socio-Economic Benefits of Space Operations, 31st International Astronautical Congress, 22-27 Sep 1980; published in *Acta Astronautica* 10 no.11 (Nov 1983))
- "Producing Advanced Fusion Fuel on the Moon" (*Fusion* (English language ed.), Sep 1982)
- "Profitability of Manufacturing in Space in View of Lunar Industrial Development and Geo-Socio-Economic Benefit" (presented to ASME Winter Meeting – Manufacturing in Space, Boston 17-18 Nov 1983; published in L. Kops, Ed. *Manufacturing in Space* [PED Vol.11] (NY: ASME, 1983), pp.183-198)

- *Programmatic Comparison of Initial Manned Missions to Venus and Mars (A)* (GDA report AOK 63-031, 16 Oct 1963)
- "Project Orbital Carrier" (1st edition, May 1952)
- "Project Orbital Carrier" (2nd edition, Aug 1952)
- "Propellant for Booster of a Two-Stage Missile" (PGAF Memorandum #3, 1 Feb 1949)
- "Propulsion System for Fast Manned Reconnaissance Flights to Mars and Venus" (presented to IAS National Flight Propulsion Meeting, 6 Mar 1959; Convair report AZM-068)
- "Propulsion Systems Comparison and Evaluations for Space Missions" (published as Chapter 18 of *Jet, Rocket, Nuclear, Ion, and Electric Propulsion – Theory and Design*, W. H. T. Loh, ed. (Springer-Verlag, 1968); NA report X7-626/060, Mar 1967)
- "Raumfahrtziele und Weltraumtechnik von Morgen" (presented at Industry Fair, Hannover, 26-27 Apr 1971; published in *Astronautik* 8 no.3/4 (Aug-Dec 1971) : 95-109; *Technische Möglichkeiten von Morgen III* (Düsseldorf and Vienna: Econ Verlag, 1971); *Junkers Nachrichten* 14 no.2 (Mar-Apr 1972) : 3-5; no.3 (May-Jun 1972) : 5-7; no.4 (Jul-Aug 1972) : 4-6; no.5 (Sep-Oct 1972) : 4-6; no.6 (Nov-Dec 1972) : 4-6)
- *Re-entry Characteristics of Recoverable Spherical Satellites, Satteloids and Lunar Vehicles* (Convair report AZP 001, 25 Jun 1957)
- "Re-entry of Spherical Bodies Into the Atmosphere at Very High Speeds" (presented to ARS 12th Annual Meeting, Dec 1957)
- "Regional and Global Energy Transfer Via Passive Power Relay Satellites" (presented to 10th Annual Space Congress, 11-13 Apr 1973; RI report SD73-SH-0117, Apr 1973)
- "Regional Power Distribution Via Power Relay Satellite" (presented to 1st Greater Los Angeles Area Energy Symposium, 3 Apr 1975)
- "Rescue from Space by a Secondary Vehicle" (presented to 2nd International Symposium on the Physics and Medicine of the Atmosphere and Space, 10-12 Nov 1958)
- "Response to Questions by the Subcommittee on Energy (Congressman Mike McCormack, Chairman) and the Subcommittee on Space Science and Applications (Congressman James W. Symington, Chairman) Following Testimony Before Both Subcommittees on 24 May 1973" (23 Jul 1973)
- "Restricted 3-Body Systems Flight Mechanics in Cislunar Space and the Effect of Solar Perturbation" (presented to American Mathematical Society for Orbit Symposium, January 1957; Convair report AZM-013, Mar 1957)
- "Review and Evaluation of Solar Central Power Stations for Use in the U.S., Mideast and Japan and Associated Solar Engineering Business Development (A)" (19 Jul 1974)
- "Review of Important Aspects Concerning the Use of Power Relay Satellite for Icelandic Energy Export by Means of Beamed Microwave Transmission (A)" (no date)
- *Review of Future Space Applications for House Science and Astronautics Committee* (RI report SSV74-41; 25 Sep 1974)
- "Role of the Army in Space" (presented to Association of the United States Army "Rockwell Night", 24 Feb 1970)
- "Safety Aspects in Planning Manned Interplanetary Missions" (submitted to AIAA 4th Annual Meeting, 1967)
- "Satellite Orbits for Interplanetary Flight" (*Jet Propulsion* 24, No. 6 (Nov-Dec 1954): 381)
- "Satelliten zur irdischen Energie-Übertragung Technische und sozio-ökonomische Untersuchungen" (presented at HOG 23rd Raumfahrtkongreß, Jun 1974; published in *Astronautik* 12 no.2 (1975) : 19-25)
- "Satelloid (The)" (presented to IAF 6th International Astronautical Congress, Copenhagen, 1-6 Aug 1955; *Astronautica Acta* 2 no.2 (1956) : 63-100)
- "Saturn-Jupiter Rebound – A Method of High-Speed Spacecraft Ejection from the Solar System" (originally titled "A Method of High-Speed Spacecraft Ejection from the Solar System", *JBIS* 25 no.10 (Oct 1972) : 561-571)
- "Science Policy and the Extraterrestrial Imperative" (adapted and excerpted from *Extraterrestrial Imperative* (1971); presented to Congressman G. P. Miller, Chairman, Committee on Science and Astroanotics, US House of Representatives, Feb 1972; later identified as report KE72-1-1, Jan 1972)

- *Selection of Promising Initial Planetary Missions and Mission Modes* (GDA report ASO 63/24, 18 Sep 1963)
- "Shuttle and Apollo – The Nature of their Differences" (circa 1971)
- *Shuttle Station as Element of Low-Cost Geospace Transportation to Geosynchronous Orbit, Interlinking with Earth-Space Shuttle* (NR report PD70-24, Feb 1970)
- "Sidereal Civilization" (no date)
- *Siebente Kontinent (Der) – Die Industri Alisierung und Besiedlung des Mondes* (München: Thiemig Verlag, 1984)
- "Significance of Earth-To-Low-Orbit Shuttle for the Cost Effectiveness of Space Operations (The)" (presented to IAF 22nd International Astronautical Congress, 20-24 Sep 1971; NR report SD 71-780, Sep 1971; published in *Raumfahrtforschung* 16 no.2 (Mar/Apr 1972) : 65-77)
- "Social Relevance" (*Skyline* 30 no.2 (1972) : 50-55)
- "Socio-Economic Determinants of a Program for Lunar Industrialization In Support of Space Light Development Lunetta and Soletta" (IAF paper IAF-A-77-66; presented to the Seventh Symposium on Cost Effectiveness in Space Operations, at the IAF 28th International Astronautical Congress, 25 Sep-1 Oct 1977)
- "Socio-Economic Evaluation of the Lunar Environment and Resources (A) – I. Principles and Overall System Strategy" (IAF paper 78-A-40; presented to the Symposium on Space Economics and Benefits, IAF 29th International Astronautical Congress, Dubrovnik, Yugoslavia, 1-8 Oct 1978; published in *Acta Astronautica* 8 no.11-12 (Nov-Dec 1981) : 1389-1433; SG report SG778-1, Jul 1978)
- "Socio-Economic Evaluation of the Lunar Environment and Resources (A) – II. Energy for the Selenosphere" (IAF paper 79-A-16, presented to IAF 30th International Astronautical Congress, Symposium on Space Economics and Benefits); published in *Acta Astronautica* 8 no.11-12 (Nov-Dec 1981) : 1407-1433; SG report SG779-3, Jul 1979)
- "Socio-Economic Evaluation of the Lunar Environment and Resources (A) – III. Selenospheric Economics and Cislunar/Terrestrial Market Analysis" (IAF paper IAA-82-235; presented IAF 33rd International Astronautical Congress, 27 Sep-3 Oct 1982, 12th International Symposium on Space Economics and Benefits: Socio-Economics Benefits of Space Operations; published in *Acta Astronautica* 11 no.2 (Feb 1984)
- "Solar Energy" (*McGraw-Hill Encyclopedia of Science and Technology*, vol. 12 (NY: McGraw-Hill, 3rd Ed., 1971))
- *Solar Option (The) – A Study* (report E74-4-1, Apr 1974)
- "Solar Power from Space" (circa 1973)
- "Solar Power Module Concept and Data Summary" (no date)
- "Solar Powered Space Ship (The)" (ARS paper 310-56; presented to ARS Semi-Annual Meeting, 18-20 Jun 1956)
- "Solar Transportation" (presented to AAS 4th Goddard Memorial Symposium, 15-16 Mar 1966; NA report X6 661/3061, Mar 1966 rev. May 1996)
- "Some Basic Aspects of Operation in Cislunar and Lunar Space" (no date)
- "Space" (*Young People's Science Encyclopedia* (Edited by the Staff of the National College of Education, Chicago: Children's Press, 1970))
- "Space – 1980" (circa 1970)
- "Space and a World Society Under Law" (no date)
- "Space and Energy Sources" (presented to the World Electrotechnical Congress, Moscow, USSR, June 21-25, 1977; RI report, May 1977)
- "Space and Human Dividends" (no date)
- "Space Applications for Earth-to-Low-Orbit Shuttle Vehicles" (presented as the University of Tennessee, Tullahoma Short Course in Reusable Launch and Re-Entry Vehicles for Space Flight, Oct 1970; and Von Karman Institute for Fluid Dynamics Lecture Series in the Technology of Space Shuttle Vehicles, Nov 1970; NR report SD70-637, Nov 1970)
- "Space Applications for Low Cost Ferry Vehicles" (presented at the Space Institute of the University of Tennessee Tullahoma Short Course in Reusable Launch and Re-Entry Vehicles for Space Flight Technology and Applications, 18-22 Aug 1969; NR report SD70-66, Feb 1970)

- "Space Dumping – Extra-terrestrial Contamination, Pollution and Waste Disposal" (*The Environment This Month* 1 no.1 (Jul 1972) : 36-45; originally titled "Extraterrestrial Contamination, Pollution and Waste Disposal")
- "Space Engineering" (no date)
- *Space Flight*, Vol. I – *Environment and Celestial Mechanics* (Princeton: D Van Nostrand Co, 1960)
- *Space Flight*, Vol. II – *Dynamics* (Princeton: D Van Nostrand Co, 1962)
- *Space Flight*, Vol. III – *Missions, Operations, Vehicles and Planning* (not published)
- "Space Industrial Productivity – New Options for the Future" (Jul 1975; presented to the Committee on Science and Technology and the Subcommittee on Space Science and Applications, Hearings on Future Space Flight, 22-30 Jul 1975)
- "Space Industrialization – New Growth Through An Open World" (presented to AIAA 13th Annual Meeting; Jan 1977)
- *Space Industrialization – Statement to the Committee on Science and Technology Hearing on Future Space Projects, US House of Representatives* (SG report SG178-1, Jan 1978)
- "Space Light: Space Industrial Enhancement of the Solar Option" (published in *Acta Astronautica* 6 no.12 (Dec 1979) : 1515-1633; SG report SG812-1, Feb 1981)
- "Space Light – The Enhanced Solar Option" (published in *Swann Oil Energy Digest* 2 no.17 (24 Aug 1977); SG report SG777-1)
- *Space Light Illumination from Sun-Synchronous Orbits* (SG report SG278-2, Feb 1978)
- "Space Medicine" (*Young People's Science Encyclopedia* (Edited by the Staff of the National College of Education, Chicago: Children's Press, 1970))
- "Space Pilot" (*Young People's Science Encyclopedia* (Edited by the Staff of the National College of Education, Chicago: Children's Press, 1970))
- "Space Planning Methodology" (circa 1969)
- *Space Shuttle – The Timing is Right* (RI report E73-4-1, Apr 1973)
- "Space Shuttle and the Energy Crisis" (no date)
- "Space Shuttle and the Power Crisis" (no date)
- "Space Shuttle May Point the Way to Safe Disposal of Atomic Waste" (*Huntsville Times*, 30 Jun 1972)
- "Space Station" (*Young People's Science Encyclopedia* (Edited by the Staff of the National College of Education, Chicago: Children's Press, 1970))
- *Space Station Accessibility and Launch Complex Selection* (Convair report KE-59/3, 15 Sep 1959)
- *Space Station Accessibility and Launch Complex Selection* (Convair report KE-59/4, rev. 25 Feb 1960)
- *Space Station for Development and Orbital Flight Training* (Convair report KE-59/2, 12 May 1959)
- "Space Stations – Symbols and Tools of New Growth in an Open World" (keynote address to Session 1 (International Space Stations) of the International Space Hall of Fame Dedication Conference, 3-9 Oct 1976; RI report SD 76-SA-0200)
- "Space Stations – Tools of New Growth in an Open World" (5th IAF Invited Lecture, presented to IAF 25th International Astronautical Congress, 30 Sep-5 Oct 1974; later report E74-9-1, Sep 1974)
- *Space Technology and Energy – Presentation to the Space Science and Applications and the Energy Subcommittee of the Committee of Science and Astronautics, US House of Representatives* (RI report SD 73-SH-139, 24 May 1973)
- Space Technology Course – "Interplanetary Operations" (UCLA course, Engineering X461, , 1958)
- "Space Tourism" (AAS paper 67-127; presented to AAS 13th Annual Meeting, 1-3 May 1967)
- "Space Transportation Lecture" (presented to 3rd Conference on Engineering for Executives, University of Texas; NA report BR6-802/3061, Mar 1966)
- "Space Travel" (*Young People's Science Encyclopedia* (Edited by the Staff of the National College of Education, Chicago: Children's Press, 1970))
- "Space Vehicles" (published as Chapter 24.1, "Advanced Launch and Carrier Vehicle", *Handbook of Astronautical Engineering* (H.H. Koelle, ed, McGraw-Hill, 1961))
- "Space Vehicles" (*Young People's Science Encyclopedia* (Edited by the Staff of the National College of Education, Chicago: Children's Press, 1970))
- "Space Vehicles Prototypes" (published as Chapter 24.18, "Advanced Space Vehicle Prototypes", *Handbook of Astronautical Engineering* (H.H. Koelle, ed, McGraw-Hill, 1961))

- "Spacecraft" (presented to 3rd Jet Age Conference, 26-28 Feb 1958; Convair report AZM-020, 25 Feb 1958)
- "Spacecraft Propulsion" (*McGraw-Hill Encyclopedia of Science and Technology*, vol. 12 (NY: McGraw-Hill, 3rd Ed., 1971))
- "Spacecraft Propulsion, Fusion Propulsion" (*McGraw-Hill Encyclopedia of Science and Technology*, vol. 12 (NY: McGraw-Hill, 3rd Ed., 1971))
- "Spacecraft Propulsion, Nuclear Pulse Propulsion" (*McGraw-Hill Encyclopedia of Science and Technology*, vol. 12 (NY: McGraw-Hill, 3rd Ed., 1971))
- "Spacelab – Model for International Teamwork" (presented to 12th Space Congress, 9-11 Apr 1975)
- "Sprung In Die Unendlichkeit – Der Flug Des Pioneer Zum Jupiter" (circa 1974)
- "STEPP, A Computerized System for Space Technology Evaluation and Program Planning" (no date)
- "Statement of Krafft A. Ehricke , Chief Scientific Adviser to the Space Division of Rockwell International, Before the Committee on Aeronautical and Space Sciences, United States Senate" (RI report, 31 Oct 1973)
- "Statement of Krafft A. Ehricke, Scientific Advisor, North American Space Operations, Rockwell International Corporation, before the Committee on Interior and Insular Affairs, United States Senate" (RI report, 27 Jun 1974)
- "Statement of Krafft A. Ehricke , Space Division, Rockwell International, Before the Space Science and Applications and the Energy Subcommittees of the House Science and Astronautics Committee" (25 May 1973)
- "Statement to Subcommittee on Science, Technology and Space; Committee on Commerce, Science and Transportation, Symposium on the Future of Space, US Senate" (SG report SG278-1, Feb 1978)
- "Statement to the Committee of Science and Astronautics, House of Representatives, Congress of the United States" [1973 NASA Authorization, 92nd Congress, Second Session] (Jan 1972)
- "Strategic Approach to Interplanetary Flight (A)" (presented to 4th International Symposium on Bioastronautics and The Exploration of Space, 24-27 Jun 1968, San Antonio, TX; NR report X8-1689/060)
- "Strategic Approach to the Development of Geolunar Space (A)" (presented to IAA Orbiting International Laboratory and Space Sciences Conference, Oct 1969; NR report SD69-710, Oct 1969)
- *Study of Interplanetary Missions* (GDA report, circa Jan 1964)
- *Study of Interplanetary Missions to Mercury through Saturn with Emphasis on Manned Missions to Venus and Mars 1973/82 Involving Capture* (GDA report GDA 63-0916, 30 Sep 1963)
- *Study of Interplanetary Vehicle Assembly Modes, Part I* (GDA report AOK 63-029, 23 Sep 1963)
- "Summary of Fundamental Rules of Space Navigation" (published as part of *Space Flight* Vol. II, *Dynamics*; Convair report KE61/2, 22 Sep 1961)
- *Summary of Preliminary Data on Earth-to-Orbit Vehicles* (Convair report KE59/1, 4 May 1959)
- "Sun-Synchronous Power Generation and Space Light Systems Lunetta/Soletta" (IAF paper 76-120; presented to session 15 of the IAF 27th International Astronautical Congress, 10-16 Oct 1976)
- *Sun-Synchronous Power Generation Satellite System (The)* (report E76-1-2, Jan 1976)
- "Sun, Wind, and Space (Testimony Before the Senate Interior Committee)" (no date)
- "Synoptic Comparison of Advanced Propulsion Systems for Maneuvering Operations Associated with Several Employment Modes in Geolunar Space" (presented to 5th Symposium on Advanced Propulsion Concepts, 8-10 Apr 1968; NR report X8-1353/060, Apr 1968)
- *System Analysis of a New Concept for Low-Cost Transportation Involving Geosynchronous and Lunar Space* (report KAE-8-1, no date)
- "System Analysis of Fast Manned Flights to Venus and Mars – Part I: Mission Philosophy, Life Support, Scientific Reconnaissance and Prototype Vehicle Layout" (published in *Transactions of the ASME – Journal of Engineering for Industry* 83B no.1 (Feb 1961) : 1-12; Convair report AZM-072, 11 Mar 1959)
- "System Analysis of Fast Manned Flights to Venus and Mars – Part II: Storage of Liquid and Solid Hydrogen on Nuclear Powered Interplanetary Vehicles" (*Transactions of the ASME - Journal of Engineering for Industry* 83B no.1 (Feb 1961) : 13-28)
- *System Concepts for STS Derived Heavy Lift Launch Vehicles, Special Emphasis Task Description* (circa Apr 1975)

- *Systems Integration, Mission-Performance Analysis, Vehicle Comparisons* (with B. H. Ohman; GDA report AOK62-0010, 1 Dec 1962)
- *Technical, Financial and Development-Related Aspects of Beamed Power Transmission Systems Using a Power Relay Satellite (PRS)* (report E74-12-1, Dec 1974; reprinted as *Hard and Soft Power Relay Satellite Systems – Technical, Financial and Development-Related Aspects of Beamed Power Transmission Over Great Distances* (SG reprint SG879-2R, Aug 1979))
- "Technology and Economy of Extraterrestrial Industrialization (The)" (no date)
- "Toward Aviation's New Infinities" (originally titled "Air Traffic in the Coming Space Age", *Jet Tales* 1/81)
- "Toward a 3-Dimensional Civilization" (interview; *Skyline* 28 no.3 (Jul 1970))
- "Ultraplantary Probe (The)" (AAS paper AAS-71-164; presented to AAS 17th Annual Meeting, 28-30 Jun 1971; NA report SD 71-542)
- "Und Wieder wind die Welt gerettet!" (*Die Welt* 106, 7 May 1983); review of Fritjof Capra, *Wendezeit* (Bern/Munich: Scherz Verlag, 1983), originally published as *The Turning Point* (New York: Simon and Schuster, 1982))
- *United Nations and the Power Relay Satellite as Element of Global Energy Development (The)* (report KE75-4-1, 5 Apr 1975)
- "Use of Shuttle in Establishing Large Space Installations" (presented at American Association for the Advancement of Science 7th Annual Meeting, Dec 27-28, 1972; NR report SD 73-SA-0015, Jan 1973)
- "Utilization of Space Environment for Therapeutical Purposes" (with B. D. Newsom; AAS paper 66-19; presented to AAS 12th Annual Meeting, 21-22 Feb 1966; NR report X6-1962/060, August 1966)
- "Vision of Space: We Must Expand to Survive" (Don Barr interviews Ehricke; Los Angeles *Herald Examiner*, 9 Apr 1970)
- "Wachsen in die Offene Welt" (*Die Welt* no.89, 17 Apr 1982)
- "Wachstum als überlebenschance des Modernen Menschen" (published as "Wie ist das eigentlich mit den Grenzen des Wachstums?", *Geistige Welt* 244, 18 Oct 1980)
- "We Must Colonize the Planets" (Don Barr interviews Ehricke; Los Angeles *Herald Examiner*, 10 Apr 1970)
- "Weltraum Technik als Mittel der Produktionssteigerung" (no date)
- "Wie ist das eigentlich mit den Grenzen des Wachstums?" (*Geistige Welt* 244, 18 Oct 1980; originally titled "Wachstum als überlebenschance des Modernen Menschen")
- *Wirtschaft, Weltall und Wachstum* (with E. A. Miller, 1978)
- "World Electrification through Space Transmission (WEST)" (Jan 1973)

Abbreviations:

AAS: American Astronautical Society
ABMA: Army Ballistic Missile Agency
AFOSR: Air Force Office of Scientific Research (USAF)
AFSC: Air Force Systems Command (USAF)
AIAA: American Institute of Aeronautics and Astronautics
ARS: American Rocket Society
ASME: American Society of Mechanical Engineers
AWST: *Aviation Week and Space Technology*
CRS: Congressional Research Service (Library of Congress)
GD: General Dynamics
GD|FW: General Dynamics, Fort Worth
GDA: General Dynamics Astronautics
GDC: General Dynamics Convair
GE: General Electric
HOG: Hermann Oberth Gesellschaft
IAF: International Astronautical Federation
IAS: Institute for Aeronautical Sciences

ION: Institute of Navigation
JBIS: *Journal of the British Interplanetary Society*
JPL: Jet Propulsion Laboratory
LC: Library of Congress
LLL: Lawrence Livermore Laboratory
LSI: Lunar Science Institute
MIT: Massachusetts Institute of Technology
MSC: Manned Spacecraft Center (NASA)
MSFC: Marshall Space Flight Center (NASA)
NA: North American Aviation
NAS: National Academy of Sciences
NASA: National Aeronautics and Space Administration
NIH: National Institutes of Health
NR: North American Rockwell (successor to NA)
ONERA: Office National d'Études et de Recherches Aérospatiale (France)
ONRL: Oak Ridge National Laboratory
PWA: Pratt & Whitney Aircraft Corp
RI: Rockwell International (successor to NR)
SAMSO: Space and Missile Systems Organization (USAF)
SG: Space Global Co
TUB: Technische Universität Berlin
UAC: United Aircraft Corp
UARL: United Aircraft Research Laboratory

Scope and Contents

This collection consists of Krafft Ehrlicke's writings and interviews spanning 1949-1984 and items gathered by Ehrlicke as reference material for his various writing projects. The files on his writings include handwritten manuscripts, typed drafts, publication proofs, and/or final published versions and reprints, and in some cases include correspondences or other documents relating to publication. The collection also includes original paste-up versions of graphics created by or for Ehrlicke to illustrate his writings. The reference material includes technical reports, scientific papers, and newspaper and magazine articles gathered by Ehrlicke during his career.

Arrangement

The collection remained in the possession Ehrlicke's family for nearly two decades after his death and apparently was largely unorganized prior to processing. The material has been arranged in five series, with oversized materials filed at the end of the collection in series order by size.

Series I. Writings (Boxes 1-80) – copies of papers, articles, and lectures by Ehrlicke, including a mix of manuscript (MS), typescript (TS), paste-up, and published copies. Reports written by Ehrlicke as part of a study conducted as part of his professional duties are filed in Series IV as part of the "Studies and Projects" section of each subject group (see below). The materials are organized chronologically with different versions of the same work filed together by date of publication (if published) or completion. Ehrlicke rarely labeled MS or TS pages by title, generally wrote on the similar topics, and often cut finished text blocks or figures

from one paper to use in another, a process he referred to cannibalization. As a result, although efforts have been made to organize loose MS and TS pages by their final works these assignments must be considered tentative and some pages have been left unassigned due to lack of sufficient information.

Series II. Graphics (Boxes 81-94) – copies of original and paste-up graphics (charts, graphs, illustrations) designed or created by Ehricke. Because these materials were mainly found in their original folders, they have been filed consistent with their original labeling. As a result they fall into groups roughly corresponding to Ehricke's tenures at General Dynamics, North American Rockwell, and Space Global.

Series III. Company Files (Boxes 94-104) – files and materials relating to business activities at the various companies for which Ehricke worked, organized by company in chronological order of Ehricke's tenure. Within each company, materials are organized by named files (filed alphabetically) and proposals and related material (filed chronologically). The proposals filed in this series represent studies or programs for which no other documentation exists in the collection.

Series IV. Reference Files (Boxes 104-253) – files and documents arranged by broad subject areas, based upon the subject organization for Ehricke's existing lecture transparencies. Within each subject area files are organized into three groups: named files (arranged alphabetically); studies (arranged chronologically by the start of the study); and other reports (arranged chronologically). Named files usually contain a variety of papers, reports, and articles and sometimes include items written by Ehricke. Studies often include correspondence, papers, or reports by Ehricke in addition to documents by other members of the study team; items by Ehricke have been filed in this series, rather than in Series I to preserve the context in which they were created and used. Other reports are generally filed chronologically by date of publication unless it could be clearly established that Ehricke acquired the material significantly later than its publication date (for instance: in cases where order forms attached to document bundles show that Ehricke had requested copies of the documents a decade after they were published). The subject areas are:

Subseries:

- 1) General (Boxes 104-108)
- 2) Vehicle Technology (Boxes 108-154)
- 3) Planets and Planetary Missions (Box 154-203)
- 4) Transportation Systems (Boxes 204-208)
- 5) Space Habitation and Human Factors (Boxes 208-219)
- 6) Space and Lunar Industry (Boxes 219-229)
- 7) Earth / Resources / Open World Synthesis (Boxes 229-234)
- 8) Energy (Boxes 234-249)
- 9) Space Light (Boxes 249-250)
- 10) Information Services (Boxes 250-253)

Unfortunately, there is significant overlap between these subject areas, especially between subseries 2, 3, 4, and 5; subseries 5, 6, and 9; and subseries 7, 8, and 9. Researchers are cautioned to examine several subject areas.

Series V. Miscellaneous Personal and Posthumous Materials (Boxes 253-254) – files and documents not otherwise related to Ehricke's research and writing or which post-date his death.

Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

Centaur Rocket
Interplanetary voyages
Launch vehicles (Astronautics)
Rocket engines
Space colonies

Space industrialization
Space scientists
Space stations
V-2 rocket

Types of Materials:

Articles
Audiotapes -- Open reel
Illustrations
Newspaper clippings
Notes
Papers, technical
Photographic prints
Sketches
VHS (videotape format)
Videotapes

Names:

Bell Aircraft Corporation
Convair (Consolidated Vultee Aircraft Corp)
Dornberger, Walter, 1895-
North American Aviation, Inc.
Rockwell International
Space Global
Von Braun, Wernher, 1912-1977

Container Listing

Series 1: Writings, Lectures, Appearances

80 Boxes

Arrangement: This series consists of files relating to Dr. Ehrlicke's writings, lectures, and other public appearances, except as noted below. Materials include drafts (both in manuscript, MS, or typescript, TS), proofs, and final printed or published versions of the works, as well as correspondence and other information relating to the publication of the work or the conference at which Ehrlicke presented the paper. Materials are filed chronologically by (1) date of presentation at conference, (2) date of publication, or (3) date of completion for unpublished works. Materials are filed by the earliest applicable date in order, so that a paper delivered at conference is filed under that date, regardless of later publication or prior completion. Undated materials follow the dated materials in alphabetical order.

Box 1, Folder 1	Information - list of writing projects, filing system
Box 1, Folder 2	[List of Papers by Ehrlicke]
	1949
Box 1, Folder 3	"Propellant for Booster of a Two-Stage Missile" (PGAF Memorandum #3, 1 Feb 1949)
	1950
Box 1, Folder 4	"Peenemuende Rocket Center" (3 Jan 1950)
	1951
Box 1, Folder 5	"A Comparison of Rocket Propulsion at Constant Thrust and Constant Acceleration" (Jun 1951; published in Rocket Science 5, No.3 (Sep 1951))
	1952
Box 1, Folder 6	"Project Orbital Carrier" (1st edition, May 1952)
Box 1, Folder 7	"Project Orbital Carrier" (2nd edition, Aug 1952)
Box 1, Folder 8	"A Comparison of Propellants and Working Fluids for Rocket Propulsion" (Sep 1952; published in Journal of the American Rocket Society 23 no.5 (Sep/Oct 1953))
	1953
	"Analysis of a New Orbital Supply System and Optimization of Satellite Orbits for Interplanetary Flight" (presented to ARS 8th Annual Meeting,

	2-4 Dec 1953; published as "A New Supply System for Satellite Orbits," Jet Propulsion 24 no.5 (Sep-Oct 1954) : 302-309 and no.6 (Nov-Dec 1954) : 369-373) [5 folders]
Box 1, Folder 9	TS, correspondence
Box 1, Folder 10	TS
Box 1, Folder 11	Part I, as published (tear sheets)
Box 1, Folder 12	Part I, as published (full issue)
Box 1, Folder 13	as published (reprints)
1954	
Box 1, Folder 14	"Outer Atmosphere Research Program" (Jan 1954)
Box 1, Folder 15	"Analysis of Orbital Systems" (1st edition, Feb 1954)
	"Analysis of Orbital Systems" (2nd edition; presented to IAF 5th International Astronautical Congress, 5-7 Aug 1954) [3 folders]
Box 2, Folder 1	mimeograph
Box 2, Folder 2	reprint from Bericht über den V. Internationalen Astronautischen Kongreß
Box 255, Folder 1	graphics proofs [oversized material]
Box 2, Folder 3	"Satellite Orbits for Interplanetary Flight" (Jet Propulsion 24 no.6 (Nov- Dec 1954): 381)
	"On the Mechanics of Descent to a Celestial Body" (presented to ARS Annual Meeting, Dec 1954; Journal of Astronautics 2 no.4 (Winter 1955) : 137-144) [3 folders]
Box 2, Folder 4	TS
Box 2, Folder 5	Convair blueline
Box 2, Folder 6	as published
1955	
Box 2, Folder 7	"Engineering Problems of Manned Space Flight" (presented to USC Symposium on the 75th anniversary of the University and 59th Anniversary of the Engineering Dept, Apr 1955)

	"The Satelloid" (presented to IAF 6th International Astronautical Congress, Copenhagen, 1-6 Aug 1955; Astronautica Acta 2 no.2 (1956) : 63-100) [4 folders]
Box 2, Folder 8	drafts, graphics
Box 2, Folder 9	notes
Box 2, Folder 10	blueline
Box 2, Folder 11	6th International Astronautical Congress (Copenhagen, Denmark) program, notes, papers
Box 2, Folder 12	"On the Descent of Winged Orbital Vehicles" (Astronautica Acta 1 fasc.3 (1955))
Box 3, Folder 1	Light and Shadow Distribution in a Circular Satellite Orbit With and Without Precession (Convair report ZP-7-019, 3 Nov 1955)
	1956
	"Aero-Thermodynamics of Descending Orbital Vehicles" (Astronautica Acta 2 fasc.1 (1956)) [2 folders]
Box 3, Folder 2	blueline, draft, proofs
Box 3, Folder 3	published copy
Box 3, Folder 4	"Astronautical and Space-Medical Research with Automatic Satellites" (presented to the Franklin Institute, Jun 1956)
	"The Solar Powered Space Ship" (ARS paper 310-56; presented to ARS Semi-Annual Meeting, 18-20 Jun 1956) [2 folders]
Box 3, Folder 5	blueline
Box 3, Folder 6	ARS print
	"On the Application of Solar Power in Space Flight" (presented to IAF 7th International Astronautical Congress, 17-22 Sep 1956) [2 folders]
Box 3, Folder 7	blueline
Box 3, Folder 8	reprint from Proceedings of the VII International Astronautical Congress
Box 3, Folder 9	"Ascent of Orbital Vehicles" (Astronautica Acta 2 fasc.4 (1956) [complete issue]

1957

Box 3, Folder 10	"Restricted 3-Body Systems Flight Mechanics in Cislunar Space and the Effect of Solar Perturbation" (presented to American Mathematical Society for Orbit Symposium, January 1957; Convair report AZM-013, Mar 1957)
Box 3, Folder 11	Cislunar Orbits (Convair report AZP-004, 30 Mar 1957)
Box 3, Folder 12	2639 Air Force Reserve Center Research and Development Course (Spring 1957)
Box 3, Folder 13	"Cislunar Operations" (ARS paper 467-57; presented at ARS Semi-Annual Meeting, 10-13 Jun 1957)
	"Basic Analysis of Global Weapon Systems & Space Weapon Systems" (Ehricke to Distribution; Convair Memo ASM-1, 21 Jun 1957) [2 folders]
Box 4, Folder 1	blueline
Box 4, Folder 2	global weapon system - miscellaneous graphs
Box 4, Folder 3	Re-entry Characteristics of Recoverable Spherical Satellites, Satteloids and Lunar Vehicles (Convair report AZP-001, 25 Jun 1957)
Box 4, Folder 4	Ion Propulsion System for Orbital Stabilization of Satellites, Especially of Several Satellites in Closely Similar Orbits (Pt. 1) (Convair report ASM-2, 13 Sep 1957)
Box 4, Folder 5	"Instrumented Comets - Astronautics of Solar and Planetary Probes" (ARS paper 493-57; presented to IAF 8th International Astronautical Congress, 6-12 Oct 1957)
	"The Anthropology of Astronautics" (Astronautics 2 no.4 (Nov 1957) : 26-29, 65-68) [2 folders]
Box 4, Folder 6	as published (photocopy)
Box 4, Folder 7	as reprinted in Astronautics and the Future
Box 4, Folder 8	"Re-entry of Spherical Bodies Into the Atmosphere at Very High Speeds" (presented to ARS 12th Annual Meeting, Dec 1957)
Box 4, Folder 9	Comparison of Advanced Propulsion Systems: Solar-Heating, Arc Thermo-dynamics and Arc Magneto Hydrodynamics (Convair report AZK-002, 1 Dec 1957)
Box 4, Folder 10	"Calculations on a Manned Nuclear Propelled Space Vehicle" (ARS paper 532-57; presented at ARS 12th Annual Meeting, 2-5 Dec 1957)

Box 4, Folder 11	San Diego State College [correspondence and documents, 1957-1961]
	1958
Box 4, Folder 12	Error Analysis of Keplerian Flights Involving a Single Central Force Field and Transfer Between Two Central Force Fields Spacecraft Orbits (Convair report AZM-7-551; 17 Jan 1958)
Box 4, Folder 13	"Spacecraft" (presented to 3rd Jet Age Conference, 26-28 Feb 1958; Convair report AZM-020, 25 Feb 1958)
Box 4, Folder 14	"Error Analysis of Single and Two-Force Field Spacecraft Orbits" (presented to Franklin Institute Lecture Series on Space Flight, Mar 1958; Convair report AZM-054, 22 Sep 1958)
	Interplanetary Mission Profiles (GDC report AZM-023, 30 Apr 1958) [2 folders]
Box 5, Folder 1	MS, background material
Box 5, Folder 2	printed report
Box 5, Folder 3	"Philosophy of Our Space Mission" (published as "Our Philosophy of Space Missions", Aero/Space Engineering 17 no.5 (May 1958) : 38-43)
Box 5, Folder 4	Accuracy Improvement of Martian Probe by Post-Escape Correction and Improved Determination of the Astronomical Constant (Convair report AZM-049; 1 Aug 1958)
Box 5, Folder 5	"Rescue from Space by a Secondary Vehicle" (presented to 2nd International Symposium on the Physics and Medicine of the Atmosphere and Space, 10-12 Nov 1958)
	"Manned Orbital and Lunar Space Vehicles" (presented to 2nd International Symposium on the Physics and Medicine of the Atmosphere and Space, 10-12 Nov 1958, Convair report AZM-059, 25 Nov 1958) [2 folders]
Box 5, Folder 6	Convair report
Box 5, Folder 7	reprint from Southwest Research institute, The Physics and Medicine of the Atmosphere and Space (John Wiley, 1960) (2 copies)
	Evolution of the Space Ship (not published), 1958 [2 folders]
Box 5, Folder 8	correspondence, book proposal
Box 5, Folder 9	TS

Box 5, Folder 10	Space Technology Course - Interplanetary Operations [UCLA course, Engineering X461, 1958]
Box 5, Folder 11	"Aufstieg und Abstieg von Raketengeräten" (published as Chapter 8 of Handbuch der Astronautik (Karl Schütte and Hans K. Kaiser, eds; Akademische Verlagsgesellschaft Athenaion, 1958), pp.235-254; Convair report AZP-071, circa 1958)
1959	
Box 5, Folder 12	"Interplanetary Probes: Three Problems" (Astronautics, Jan 1959 : 20-22, 42, 44, 46)
Box 5, Folder 13	"Propulsion System for Fast Manned Reconnaissance Flights to Mars and Venus" (presented to IAS National Flight Propulsion Meeting, 6 Mar 1959; Convair report AZM-068)
Box 5, Folder 14	Summary of Preliminary Data on Earth-to-Orbit Vehicles (Convair report KE59/1, 4 May 1959)
Box 6, Folder 1	Space Station for Development and Orbital Flight Training (Convair report KE59/2, 12 May 1959)
Box 6, Folder 2	Space Station Accessibility and Launch Complex Selection (Convair report KE59/3, 15 Sep 1959); Space Station Accessibility and Launch Complex Selection (Convair report KE59/4, rev. 25 Feb 1960)
1960	
Box 6, Folder 3	"I Can Get Us There by 1966" (Space World 1 no.2 (Jul 1960) : 16-19, 48-49) [photographic copy]
Box 6, Folder 4	Astronautics (Physics 131, San Diego State College, Fall Semester 1960) [Final Exam Answers]
Box 6, Folder 5	"Government, Industry and Research Responses to Space Exploration" (presented to ARDC 7th Annual Science and Engineering Symposium, 29-30 Nov 1960)
Box 6, Folder 6	Interplanetary Mission Profiles - Pt. II (Convair report KE60/2, 1 Dec 1960; published as part of Space Flight, Vol. II - Dynamics)
Box 6, Folder 7	Colliers Encyclopedia Year Book - "Astronautical Vehicles" [MS, TS, correspondence; 1 of 2 folders]
Box 6, Folder 8	Colliers Encyclopedia Year Book - "Astronautical Vehicles" [MS, TS, correspondence; 2 of 2 folders]
Box 6, Folder 9	Space Flight - Capt. Merrill correspondence, outlines (1953-1956)

Space Flight, Vol. I - Environment and Celestial Mechanics (Princeton: D Van Nostrand Co, 1960) [5 folders, total]

Box 6, Folder 10	[equations; 1 of 2 folders]
Box 6, Folder 11	[equations; 2 of 2 folders]
Box 6, Folder 12	"Vectorial Derivation of Motion in a Central Force Field" (Amendment to Space Flight, Vol.1, Chapter 4, pp.300-302) [photocopy]
Box 6, Folder 13	errata sheets to 1st printing
Box 6, Folder 14	orbital data for asteroids, meteor streams, and comets - selected photocopies from Chapter 3
Box 6, Folder 15	"Lunar Atmospheric Research by Lunar Satellite and the Landing of Lunar Probes Within Pressurized Structures" (circa 1960)
1961	
	"System Analysis of Fast Manned Flights to Venus and Mars" [3 folders, total] Notes: <ul style="list-style-type: none"> • Part I - "Mission Philosophy, Life Support, Scientific Reconnaissance and Prototype Vehicle Layout" (published in <i>Transactions of the ASME - Journal of Engineering for Industry</i> 83B no.1 (Feb 1961) : 1-12; Convair report AZM-072, 11 Mar 1959) • Part II - "Storage of Liquid and Solid Hydrogen on Nuclear Powered Interplanetary Vehicles" (<i>Transactions of the ASME - Journal of Engineering for Industry</i> 83B no.1 (Feb 1961) : 13-28)
Box 6, Folder 16	Convair report (blueline), Part I
Box 7, Folder 1	published copy, Parts I & II
Box 7, Folder 2	reprint, Part II
Box 7, Folder 3	"Powered Flight Without Atmosphere" (Convair report AE61-0199, 19 Mar 1961; published as Chapter 6.1 of Handbook of Astronautical Engineering (H.H. Koelle, ed, McGraw-Hill, 1961))
	"Summary of Fundamental Rules of Space Navigation" (Convair report KE61/2, 22 Sep 1961; published as part of Space Flight, Vol. II - Dynamics) [2 folders]
Box 7, Folder 4	blueline
Box 7, Folder 5	photocopy

Box 7, Folder 6	Starten und Fliegen - Das Buch der Luftfahrt und Raumfahrt, Hans-Joachim Luz (ed.) [notes, TS, correspondence with editor]
Box 7, Folder 7	"Space Vehicles" (published as Chapter 24.1, "Advanced Launch and Carrier Vehicle", Handbook of Astronautical Engineering (H.H. Koelle, ed, McGraw-Hill, 1961)) [list of figures and illustrations]
Box 7, Folder 8	"Space Vehicles Prototypes" (published as Chapter 24.18, "Advanced Space Vehicle Prototypes", Handbook of Astronautical Engineering (H.H. Koelle, ed, McGraw-Hill, 1961)
1962	
Box 7, Folder 9	"Aspects of Deep Space Probes Requiring Cryogenic Engineering Solutions" (Lecture 14, Engineering X428GHI (UCal), 14-17 May 1962)
	Space Flight, Vol. II - Dynamics (Princeton: D Van Nostrand Co, 1962) [8 folders, total]
Box 7, Folder 10	[equations]
Box 7, Folder 11	notes and derivations
Box 7, Folder 12	"Deflected Powered Trajectories" (Vol. II, Chapter 6)
Box 7, Folder 13	Appendix A, Appendix C
Box 8, Folder 1	Appendix A, Appendix C
Box 8, Folder 2	Appendix D
Box 8, Folder 3	Solutions to Problems (circa 1963) [1 of 2 folders]
Box 8, Folder 4	Solutions to Problems (circa 1963) [2 of 2 folders]
Box 8, Folder 5	Krafft Ehrlicke to D. E. Koelle (circa 1962)
Box 8, Folder 6	Excerpts of Chapter 7 "Low Thrust Space Flight" of Space Flight, Vol. II "Dynamics" (Convair report KE62/1, circa 1962) (2 copies) [1 of 2 folders]
Box 8, Folder 7	Excerpts of Chapter 7 "Low Thrust Space Flight" of Space Flight, Vol. II "Dynamics" (Convair report KE62/1, circa 1962) (2 copies) [2 of 2 folders]
1963	
Box 8, Folder 8	"Mission Analysis of Fast Manned Flights to Venus and Mars" (presented to Interplanetary Mission Conference, AAS 9th Meeting, 15-17 Jan 1963)
	"Nexus - Concept of a Large Reusable Earth Launch Vehicle" (with Freeman D'Vincent; AIAA paper 63-277, presented at AIAA Summer

	Meeting, 17-20 Jun 1963; General Dynamics report 63-0065) [4 folders, total]
Box 8, Folder 9	blueline (General Dynamics report; copy 1 of 2)
Box 9, Folder 1	blueline (General Dynamics report; copy 2 of 2)
Box 9, Folder 2	conference print
Box 9, Folder 3	reprint (2 copies)
Box 9, Folder 4	Study of Interplanetary Missions to Mercury through Saturn with Emphasis on Manned Missions to Venus and Mars 1973/82 Involving Capture (General Dynamics report GDA 63-0916, 30 Sep 1963)
Box 9, Folder 5	A Programmatic Comparison of Initial Manned Missions to Venus and Mars (General Dynamics report AOK 63-031, 16 Oct 1963) (2 copies)
Box 9, Folder 6	Planetary Paper (circa 1963)
	1964
	"The Nexus Concept" (with Freeman D'Vincent; Astronautics and Aerospace 2 no.1 (Jan 1964)) [2 folders]
Box 9, Folder 7	complete issue
Box 9, Folder 8	reprint (2 copies)
Box 9, Folder 9	"Missions Between Planets and to Selected Asteroids of this Solar System, Covering the Period of 1973 to 2000" (presented to AIAA National Meeting, Washington, DC, 28 Jun-2 Jul, 1964) [abstract]
Box 9, Folder 10	"Economy of Saturn V and Post-Saturn Vehicles with Consideration of Orbital Labor Cost" (originally presented as part of "Nexus - Concept of a Large Reusable Launch Vehicle"; AIAA Summer Meeting, paper 63-277, 17-20 Jun 1963; published as "Economy of Large Launch Vehicles including Labor Costs", Journal of Spacecraft and Rockets 1 no.6 (Nov 1964) : 611-619) (2 copies)
	1965
	Space Flight, Vol. III - Missions, Operations, Vehicles and Planning (not published) [3 folders]
Box 9, Folder 11	outline (10 Apr 1965)
Box 9, Folder 12	table of contents
Box 9, Folder 13	Vol III Material

Box 9, Folder 14	"Advanced Nuclear Reactor Propulsion Concepts" (AIAA Lecture Series - Advanced Propulsion Systems for Space Applications, 6 Apr 1965) (3 partial copies) [1 of 2 folders]
Box 9, Folder 15	"Advanced Nuclear Reactor Propulsion Concepts" (AIAA Lecture Series - Advanced Propulsion Systems for Space Applications, 6 Apr 1965) (3 partial copies) [2 of 2 folders]
	"Interplanetary Maneuvers in Manned Helionautical Missions" (AIAA paper 65-695; presented to the AIAA/ION Astrodynamics Specialist Conference, 16-17 Sep 1965) [3 folders]
Box 10, Folder 1	blueline
Box 10, Folder 2	paste-up for Progress in Astronautics, Vol. 17: Methods in Astrodynamics and Celestial Mechanics (NY: Academic Press, 1966) (photocopy)
Box 10, Folder 3	reprint from Progress in Astronautics, Vol. 17 Conference on Planetology and Space Mission Planning (New York Academy of Sciences, 3-4 Nov 1965) [2 folders]
Box 10, Folder 4	correspondence
Box 10, Folder 5	correspondence, notes
Box 10, Folder 6	Ehricke to "Wernher" [von Braun?] (circa 1965)
	1966
Box 10, Folder 7	Aerojet-General Nucleonics Non-Chemical Propulsion Program (presented to USAF, 11 Feb 1966) "Utilization of Space Environment for Therapeutical Purposes" (with B. D. Newsom; AAS paper 66-19, presented to AAS 12th Annual Meeting, 21-22 Feb 1966; NA report X6-1962/060, August 1966) [2 folders]
Box 10, Folder 8	NA report
Box 10, Folder 9	graphics "Solar Transportation" (presented to AAS 4th Goddard Memorial Symposium, 15-16 Mar 1966; NA report X6-661/3061, Mar 1966 rev. May 1996) [4 folders, total]
Box 10, Folder 10	NA report (incomplete copy)
Box 10, Folder 11	NA report (2 cannibalized copies) [1 of 2 folders]

Box 10, Folder 12	NA report (2 cannibalized copies) [2 of 2 folders]
Box 256, Folder 1	"Repairmen in Space Could Save Millions" (I. M. Levitt, The Philadelphia Inquirer, 22 May 1966 [oversized material tipped into report])
	Space Transportation Lecture (presented to 3rd Conference on Engineering for Executives, University of Texas; NA report BR6-802/3061, Mar 1966) [2 folders]
Box 10, Folder 13	paper
Box 10, Folder 14	correspondence and notes on conference
Box 10, Folder 15	"Aerospace Transportation - Concepts and Advanced Systems" (Jun 1966)
	"Aerospace Transportation" (Jun 1966) [4 folders]
Box 10, Folder 16	modification copy
Box 11, Folder 1	miscellaneous pages
Box 11, Folder 2	final TS
Box 11, Folder 3	"Addition to Section 3.6 Advanced Applications"
	CBS News Interview (Krafft Ehricke/Walter Cronkite) [3 folders]
Box 11, Folder 4	"CBS News Interview-Ehricke/Cronkite Interview Requirements" (Bill. A. Wheeler to R. P. Lytle; NA Internal Letter, 14 Sep 1966)
Box 11, Folder 5	Pictures (KA Ehricke) [negatives]
Box 11, Folder 6	Dr Krafft Ehricke - Walter Conkite TV Interview [photos, humorous captions]
Box 11, Folder 7	Guidance and Navigation Approach to Lifting Reentry Vehicle Missions (NA report T6-2580/060, Oct 1966) (photocopy)
	"Do We Need New Propulsion Systems (Post Saturn) for Lunar and Planetary Flight?" (panel for AIAA Annual Meeting, 29 Nov-2 Dec 1966, chaired by Ehricke) [3 folders, total]
Box 11, Folder 8	background material
	"On the Need for New Launch Vehicles" (session paper for AIAA panel; NA report X7-158/060) [2 folders]

Box 11, Folder 9	mechanical (NA report)
Box 11, Folder 10	printed copy (NA report)
Box 11, Folder 11	The Helionauts / The Infinauts (Proposed TV series, circa 1966) [treatment]
	1967
Box 11, Folder 12	Ehrlicke and Sauers Briefing on Lifting Body to Martin Baltimore, February 1967 [photocopy of briefing charts]
	Jet, Rocket, Nuclear, Ion, and Electric Propulsion - Theory and Design (UCLA Short Course, 27 Feb-10 Mar 1967) [21 folders, total]
Box 11, Folder 13	correspondence
Box 11, Folder 14	miscellaneous calculations of Isp
	"Propulsion Systems Comparison and Evaluations for Space Missions" (NA report X7-626/060, Mar 1966) [9 folders, total]
Box 11, Folder 15	TS
Box 12, Folder 1	edited photocopy
Box 12, Folder 2	mechanical [1 of 3 folders]
Box 12, Folder 3	mechanical [2 of 3 folders]
Box 12, Folder 4	mechanical [3 of 3 folders]
Box 12, Folder 5	master print [1 of 3 folders]
Box 12, Folder 6	master print [2 of 3 folders]
Box 12, Folder 7	master print [3 of 3 folders]
Box 13, Folder 1	printed copy
	"Propulsion Systems Comparison and Evaluations for Space Missions" (NA report X7-626/060, Mar 1967; published as Chapter 18 of Jet, Rocket, Nuclear, Ion, and Electric Propulsion - Theory and Design, W. H. T. Loh, ed. Springer-Verlag, 1968) [7 folders, total]
Box 13, Folder 2	master print copy 1 [1 of 3 folders]
Box 13, Folder 3	master print copy 1 [2 of 3 folders]

Box 13, Folder 4	master print copy 1 [3 of 3 folders]
Box 13, Folder 5	master print copy 2 [1 of 3 folders]
Box 13, Folder 6	master print copy 2 [2 of 3 folders]
Box 14, Folder 1	master print copy 2 [3 of 3 folders]
Box 14, Folder 2	printed copy of NA report
	Appendix to Chapter 18 of Jet, Rocket, Nuclear, Ion, and Electric Propulsion - Theory and Design [3 folders]
Box 14, Folder 3	TS
Box 14, Folder 4	paste-up
Box 14, Folder 5	blueline
	"Space Tourism" (AAS paper 67-127; presented to AAS 13th Annual Meeting, 1-3 May 1967) [3 folders]
Box 14, Folder 6	paste-up
Box 14, Folder 7	preprint (2 copies)
Box 14, Folder 8	"Commercial Utilization of Space - An Overview" (AAS, 13 Dec 1966; framing document for AAS 13th Annual Meeting, Dallas/Ft. Worth, 1-3 May 1967)
Box 255, Folder 2	"Fun and Games in Outer Space" (Dick Adler, Los Angeles Times, West Magazine, 9 Jul 1967 : 37-40; interview with Ehrlicke) [oversized material]
	"Exploration of the Solar System and Interstellar Space" (presented to 2nd International Conference on Planetology and Space Mission Planning, NY Academy of Science, 26-27 Oct 1967; NR report X7-3215/060, 26 Oct 1967) [8 folders, total]
Box 14, Folder 9	2nd version (TS)
Box 14, Folder 10	3rd version (TS)
Box 15, Folder 1	paste-up
Box 15, Folder 2	final TS
Box 15, Folder 3	notes from Second Conference on Planetology and Space Mission Planning

Box 15, Folder 4	Excerpts from Exploration of Space, Etc for Maj. Jackson (January 1968)
Box 15, Folder 5	printed copy [2 copies; 1 of 2 folders]
Box 15, Folder 6	printed copy [2 copies; 2 of 2 folders]
Box 15, Folder 7	"Safety Aspects in Planning Manned Interplanetary Missions" (abstract for submission to AIAA 4th Annual Meeting, 1967)
Box 15, Folder 8	From Dust to Stars: The Evolution of Space Flight (Ehricke, Miller, and J. Sentovic) [1 of 2 folders]
Box 15, Folder 9	From Dust to Stars: The Evolution of Space Flight (Ehricke, Miller, and J. Sentovic) [2 of 2 folders]
1968	
Box 15, Folder 10	"The Busy World of Outer Space" (Discovery; ABC TV, aired 28 Jan 1968) [script]
Box 15, Folder 11	"Synoptic Comparison of Advanced Propulsion Systems for Maneuvering Operations Associated with Several Employment Modes in Geolunar Space" (presented to 5th Symposium on Advanced Propulsion Concepts, 8-10 Apr 1968; NR report X8-1353/060, Apr 1968)
University of Texas Engineering for Executives Program [2 folders]	
Box 16, Folder 1	correspondence
Box 16, Folder 2	notes
Box 16, Folder 3	"A Strategic Approach to Interplanetary Flight" (presented to 4th International Symposium on Bioastronautics and The Exploration of Space, 24-27 Jun 1968, San Antonio, TX; NR report X8-1689/060) [paste-up; 1 of 2 folders]
Box 16, Folder 4	"A Strategic Approach to Interplanetary Flight" (presented to 4th International Symposium on Bioastronautics and The Exploration of Space, 24-27 Jun 1968, San Antonio, TX; NR report X8-1689/060) [paste-up; 2 of 2 folders]
Box 16, Folder 5	"Fast Flight Profiles for Manned Helionautical Missions" (presented to 4th International Symposium on Bioastronautics and the Exploration of Space, 24-27 Jun 1968, San Antonio, TX) [abstract]
Box 16, Folder 6	"Identification of Manned Space Activities Beyond Apollo at Modest Orbital Work, Attractive to Scientific Community" (not dated; sent to D. L. Williams, 29 Aug 1968)

Box 16, Folder 7	"Manned Versus Unmanned Spaceflight" (Oct 1968)
	"Man, Resources and Planets" (presented to IAF 19th International Astronautical Congress, New York, NY, 13-19 Oct 1968; NR report X8-2233/060) [3 folders]
Box 16, Folder 8	printed copy
Box 16, Folder 9	19th International Astronautical Congress program
Box 255, Folder 3	mechanical [oversized material]
Box 16, Folder 10	"Comments on Space Station Paper by R Gilruth" (presented to 5th AIAA Annual Meeting, 21-25 Oct 1968) [response to Robert R. Gilruth, "Manned Space Stations - Gateway to Our Future in Space," presented at the Orbital Laboratory Symposium of the International Academy of Astronautics, 18 Oct 1968]
	"Metaprobe - A Tool for the Synoptic Exploration of Space" (presented to 5th AIAA Annual Meeting, 21-25 Oct 1968; NR report X-2291/060; also presented to IAF 19th International Astronautical Congress (Oct 13-19, 1968) as "Metaprobe - A Concept for Regional Exploration of the Solar System and a Means to Develop International Teamwork in Space Research" (NR report X-2209/060)) [2 folders]
Box 16, Folder 11	printed copy
Box 255, Folder 4	mechanical [oversized material]
	"Acquisition of Geospace" (Nov 1968) [2 folders]
Box 16, Folder 12	TS
Box 16, Folder 13	"What is the most important contribution of the Space Station Program" (photocopy)
	"Astropolis: The First Space Resort" (Playboy, Nov 1968 : 96-98, 222) [2 folders]
Box 16, Folder 14	tear sheets and full issue
Box 16, Folder 15	artwork (photographic copies)
	Manned Space Service Program (report KAE-16, Nov 1968) [3 folders, total]
Box 16, Folder 16	draft (2 drafts) [1 of 2 folders]
Box 16, Folder 17	draft (2 drafts) [2 of 2 folders]

Box 16, Folder 18	final TS
	Atmosphere Braking Entry and Associated Technologies (NR report X6-624/3061, 1968) [2 folders]
Box 16, Folder 19	MS
Box 16, Folder 20	printed copy (2 copies)
	1969
Box 17, Folder 1	"Acquisition of the Solar System" (presented to "Contemporary Americans in an Intricate Society - 1969", The Hackley School Program for a Special Senior Conference, 19-29 May 1969)
	"Morphological Analysis and Comparison of Nuclear Pulse Drive Mechanization Concepts" (presented to AIAA 5th Joint Propulsion Specialist Conference, 9-13 Jun 1969) [7 folders]
Box 17, Folder 2	Nuclear Pulse Drive Study (notes, MS pages)
Box 17, Folder 3	Nuclear Pulse Study Material (notes, MS pages)
Box 17, Folder 4	abstract; TS
Box 17, Folder 5	correspondence, printed copy
Box 17, Folder 6	printed copy
Box 17, Folder 7	graphics (photocopies)
Box 17, Folder 8	edited print
	"Evolution of Interstellar Operations" (presented to AAS Joint National Meeting, Denver, Colorado; 17-20 Jun 1969; NR report SD69-420, Jun 1969) [2 folders]
Box 17, Folder 9	TS, mechanicals
Box 17, Folder 10	printed copy
	"Space Applications for Low Cost Ferry Vehicles" (presented at the Space Institute of the University of Tennessee Tullahoma Short Course in Reusable Launch and Re-Entry Vehicles for Space Flight Technology and Applications, 18-22 Aug 1969; NR report SD70-66, Feb 1970) [4 folders]
Box 18, Folder 1	printed copy
Box 18, Folder 2	Corrected Print

Box 18, Folder 3	Corrected & Added Copy
Box 18, Folder 4	Printed Copy Suitable for Cut-up
	"A Strategic Approach to the Development of Geolunar Space" (presented to IAA Orbiting International Laboratory and Space Sciences Conference, Oct 1969; NR report SD69-710, Oct 1969) [2 folders]
Box 18, Folder 5	paste-up
Box 18, Folder 6	cannibalized copy
Box 18, Folder 7	Integrated Geolunar Transportation and Occupation System Using Space Station Modules in Highly Eccentric Orbits (report KAE-4, 18 Nov 1969)
	Exploring the Planets (with Betty A. Miller; Morristown (NJ): Silver Burdett [Learning Corp], 1969) [6 folders, total]
Box 18, Folder 8	Silver Burdett - Detailed Outline
Box 18, Folder 9	"Exploration of the Solar System" - "AA-BB" version
Box 18, Folder 10	"Exploration of the Solar System" - Master final (2/21/69) [1 of 2 folders]
Box 18, Folder 11	"Exploration of the Solar System" - Master final (2/21/69) [2 of 2 folders]
Box 18, Folder 12	author biographies
Box 18, Folder 13	Royalty Statement (25 Dec 1972)
Box 19, Folder 1	"1990 A.D. and Man's Flight to the Planets" (extract from Exploring the Planets, circa 1969)
Box 19, Folder 2	"Space Planning Methodology" (circa 1969)
	1970
	The Concept of Shuttle Stations and Their Functions in Geolunar Space Utilization (NR report PD70-4) [6 folders, total]
Box 19, Folder 3	original issue (15 Jan 1970), cannibalized
Box 19, Folder 4	as revised Jan 1970 (3 copies) [1 of 3 folders]
Box 19, Folder 5	as revised Jan 1970 (3 copies) [2 of 3 folders]

Box 19, Folder 6	as revised Jan 1970 (3 copies) [3 of 3 folders]
Box 19, Folder 7	as revised Jan 1970 (2 cannibalized copies) [1 of 2 folders]
Box 19, Folder 8	as revised Jan 1970 (2 cannibalized copies) [2 of 2 folders]
	Aspects Concerning the Impact of Manned Heliocentric Mission on Space Station and Space Shuttle (NR report PD70-5; Jan 1970) [4 folder, total]
Box 19, Folder 9	printed copy (3 copies) [1 of 3 folders]
Box 19, Folder 10	printed copy (3 copies) [2 of 3 folders]
Box 19, Folder 11	printed copy (3 copies) [3 of 3 folders]
Box 20, Folder 1	cannibalized copy
Box 20, Folder 2	Shuttle Station as Element of Low-Cost Geospace Transportation to Geosynchronous Orbit, Interlinking with Earth-Space Shuttle (NR report PD70-24, Feb 1970)
Box 20, Folder 3	"Ex Mens[is] - 1: On the Integrated Plan" (15 Feb 1970)
	"A Case for Space" (presented to the Citizen's Campaign for Space, Sponsored by The Center of American Living Inc, New York City, NY, 17-18 Feb 1970; NR report SD70-65, Feb 1970) [3 folders]
Box 20, Folder 4	paste-up
Box 20, Folder 5	cannibalized copy
Box 255, Folder 5	photolith [oversized material]
Box 20, Folder 6	"Role of the Army in Space" (presented to Association of the United States Army "Rockwell Night", 24 Feb 1970)
Box 20, Folder 7	"The Case for the Space Station" (circa Feb 1970) [edited photocopy]
	Geospace Development - Presentation to C. W. Mathews, Deputy Associate Administrator, Office of Manned Space Flight, NASA Headquarters, Washington, DC (NR report PD70-24; Mar 1970) [2 folders]
Box 20, Folder 8	printed copy
Box 20, Folder 9	cannibalized copy
Box 20, Folder 10	"Ex Mens[is] - 2: Perspective" [photocopy]

Los Angeles Herald Examiner articles [2 folders]

- Notes:
- "Vision of Space: We Must Expand to Survive" (Don Barr interviews Ehricke; 9 Apr 1970)
 - "We Must Colonize the Planets" (Don Barr interviews Ehricke; 10 Apr 1970)

Box 20, Folder 11	[reduced size reference copies]
Box 256, Folder 2	[oversized originals]
	"Earth-Moon Transportation" (presented to AAS 16th Annual Meeting, 8-10 Jun 1970; NR report SD70-338) [3 folders]
Box 20, Folder 12	paste-up
Box 20, Folder 13	printed copy
Box 20, Folder 14	cannibalized copy
	"Perspective and Systems Engineering of Manned Planetary Flight" (presented to AAS 16th Annual Meeting, 8-10 Jun 1970; NR report SD70-339, Jun 1970) [3 folders]
Box 20, Folder 15	paste-up
Box 20, Folder 16	printed copy
Box 20, Folder 17	corrected reference copy
Box 20, Folder 18	"Manned Planetary Spacecraft Commonality with Space Station" (with A. L. Jones; presented to AAS 16th Annual Meeting, 8-10 Jun 1970; NR report SD70-342, Jun 1970)
Box 20, Folder 19	"Case for Space" [II] (presented to unidentified meeting, 27 Jun 1970; also to California State Polytechnical College, Aerospace Education Workshop, 14 Jul 1970)
	The Magnificent Heritage - Missions to New Worlds and the New Solar System (with Elizabeth Miller, documentary; Jul 1970) [3 folders, total]
Box 21, Folder 1	1st draft [1 of 2 folders]
Box 21, Folder 2	1st draft [2 of 2 folders]
Box 21, Folder 3	"4. The Dissimilar Twins - Venus and Earth"
Box 21, Folder 4	"Toward a 3-Dimensional Civilization" (Ehricke interview; Skyline 28 no.3 (Jul 1970))

Box 21, Folder 5	"For a Synergistic Space Program - Excerpts from Material Presented to the Advanced Aerospace Projects Office, NASA Langley Research Center, on July 16, 1970" (16 Jul 1970)
Box 21, Folder 6	"Engineering and Space Operations" (presented to Space Station Utilization Conference, NASA-Ames Research Center; 9-10 Sep 1970) "Space Applications for Earth-to-Low-Orbit Shuttle Vehicles" (presented to University of Tennessee, Tullahoma Short Course in Reusable Launch and Re-Entry Vehicles for Space Flight, Oct 1970; and Von Karman Institute for Fluid Dynamics Lecture Series in the Technology of Space Shuttle Vehicles, Nov 1970; NR report SD70-637, Nov 1970) [3 folders]
Box 21, Folder 7	paste-up; printed copy
Box 21, Folder 8	cannibalized copy
Box 255, Folder 6	mechanical [oversized material] "Development of Large Earth Orbital Space Station" (presented to IAF 21st International Astronautical Congress, 4-10 Oct 1970; NR report SD 70-641, Nov 1970) [6 folders]
Box 21, Folder 9	edit copy
Box 21, Folder 10	IAF print
Box 21, Folder 11	paste-up (NR report)
Box 21, Folder 12	cannibalized copy
Box 21, Folder 13	correspondence
Box 255, Folder 7	mechanical [oversized material] "In-Depth Exploration of the Solar System and Its Utilization for the Benefit of Earth" (presented to 3rd Conference on Planetology and Space Mission Planning, New York Academy of Sciences, 28-29 Oct 1970; NR report SD 71-290, Jan 1971) [5 folders, total]
Box 21, Folder 14	notes
Box 22, Folder 1	TS
Box 22, Folder 2	original charts
Box 22, Folder 3	Third Conference on Planetology and Space Mission Planning (Annals of the New York Academy of Science 187 (25 Jan 1972) (2 copies) [1 of 2 folders]

Box 22, Folder 4	Third Conference on Planetology and Space Mission Planning (Annals of the New York Academy of Science 187 (25 Jan 1972) (2 copies) [2 of 2 folders]
Box 22, Folder 5	Effective Initial Contributions of a Manned Space Station (report KAE-11, 6 Nov 1970)
Box 22, Folder 6	"Analysis of Transportation Systems Flight Performance" (1970)
	Beyond Earth: The Story of Astronautics (with Betty A. Miller, 1970 - not published) [22 folders, total]
Box 23, Folder 1	Material for Beyond Earth
Box 23, Folder 2	Sketches - Illustrations [1] [1 of 2 folders]
Box 23, Folder 3	Sketches - Illustrations [1] [2 of 2 folders]
Box 23, Folder 4	[Sketches - Illustrations 2]
Box 23, Folder 5	[Sketches - Illustrations 3]
Box 23, Folder 6	[Sketches - Illustrations 4]
Box 23, Folder 7	[photos]
Box 23, Folder 8	correspondence, drafts
Box 23, Folder 9	Supporting Material
Box 23, Folder 10	table of contents
Box 23, Folder 11	"Space Flight and Our World" (Chapter 1); "Charting Space" (Chapter 2) [TS]
Box 23, Folder 12	"Space Flight and Our World" (Chapter 1); "Space Launch Vehicles" (Chapter 7) [MS]
Box 255, Folder 8	"Space Flight and Our World" (Chapter 1); "Space Launch Vehicles" (Chapter 7) [oversized material from end of file]
Box 23, Folder 13	"Fundamentals of Astronautics" (Chapter 3) [MS]
Box 23, Folder 14	"Fundamentals of Astronautics" (Chapter 3) [TS]
Box 24, Folder 1	"Flight Paths in Space" (Chapter 4)
Box 24, Folder 2	"Flight Paths in Space" (Chapter 5); Chapter 10 [pp 10-19 to 10-27 only]

Box 24, Folder 3	"Stairway to the Stars and Wings Across Space" (Chapter 5)
Box 24, Folder 4	"Propulsion" (Chapter 6); "Geospace Applications Satellites" (Chapter 8)
Box 24, Folder 5	2nd draft [1 of 3 folders]
Box 24, Folder 6	2nd draft [2 of 3 folders]
Box 24, Folder 7	2nd draft [3 of 3 folders]
Young People's Science Encyclopedia (Edited by the Staff of the National College of Education, Chicago: Children's Press, 1970) [8 folders]	
Box 25, Folder 1	correspondence
Box 25, Folder 2	original text (photocopy)
Box 25, Folder 3	"Space" (rewrites)
Box 25, Folder 4	"Space Medicine" (rewrites)
Box 25, Folder 5	"Space Pilot" (rewrites)
Box 25, Folder 6	"Space Station" (rewrites)
Box 25, Folder 7	"Space Travel" (rewrites)
Box 25, Folder 8	"Space Vehicles" (rewrites)
Box 25, Folder 9	"Space - 1980" (circa 1970)
1971	
"Beyond the First Space Stations" (Jan 1971; presented to Alabama AIAA Meeting, 20 Jan 1971) [3 folders]	
Box 25, Folder 10	incomplete TS
Box 25, Folder 11	AIAA Meeting, Huntsville, AL, 20 Jan 1971 (notes)
Box 255, Folder 9	photolith [oversized material]
"Manned Spaceflight in the Seventies" [4 folders, total]	
Box 25, Folder 12	notes, graphics [1 of 2 folders]
Box 25, Folder 13	notes, graphics [2 of 2 folders]

Part I - "Alternatives for Manned Spaceflight in the Seventies" (Jan 1971) [2 folders]

Box 25, Folder 14	TS
Box 25, Folder 15	photocopy
	"Maneuvers and Navigation in Manned Helionautics" (presented to ION National Space Meeting, 23-25 Feb 1971; NR report SD 71-474, Mar 1971) [2 folders]
Box 26, Folder 1	paste-up
Box 26, Folder 2	printed copy
	"Flight Profiles and Navigation of Interorbital Transports in Geolunar Space" (presented to ION National Space Meeting, 23-25 Feb 1971; NR report SD71-475, Mar 1971) [2 folders]
Box 26, Folder 3	paste-up
Box 26, Folder 4	printed copy
Box 26, Folder 5	Proceedings of the ION National Space Meeting on Space Shuttle-, Space Station-, Nuclear Shuttle Navigation (Institute of Navigation, 1971)
	"Our Commitment to Space" (Spaceflight 13 no.3 (Mar 1971) : 82) [2 folders]
Box 26, Folder 6	TS ["Four Objectives - The Fundamental Principles of Our Commitment to Space" (5 Jul 1970)]
Box 26, Folder 7	as published
	"Planning Space Stations for Long Range Utilization" (presented to Short Course in Space Station Utilization, University of Tennessee, Tullahoma, Mar 1971; NR report SD 71-473, Mar 1971) [3 folders]
Box 26, Folder 8	paste-up
Box 26, Folder 9	printed copy
Box 26, Folder 10	cannibalized copy
Box 26, Folder 11	"Apollo and the Future" (speech delivered to Industrial Management Club of Reading and Berks County, Reading, PA, 25 Mar 1971) [correspondence]

"The Changing Role of Technology - Yesterday Today and Tomorrow" (presented to 8th Space Congress, 19-23 Apr 1971; NR report SD71-536) [2 folders]

Box 26, Folder 12	TS, edited copy
Box 26, Folder 13	edited photocopy
"Raumfahrtsziele und Weltraumtechnik von Morgen" (presented at Industry Fair, Hannover, 26-27 Apr 1971) [4 folders]	
Box 27, Folder 1	TS
Box 27, Folder 2	as published in Astronautik 8 no.3/4 (Aug-Dec 1971) : 95-109
Box 27, Folder 3	as published in Technische Möglichkeiten von Morgen III (Düsseldorf and Vienna: Econ Verlag, 1971)
Box 27, Folder 4	as published in Junkers Nachrichten 14 no.2 (Mar-Apr 1972) : 3-5; Junkers Nachrichten 14 no.3 (May-Jun 1972) : 5-7; Junkers Nachrichten 14 no.4 (Jul-Aug 1972) : 4-6; Junkers Nachrichten 14 no.5 (Sep-Oct 1972) : 4-6; Junkers Nachrichten 14 no.6 (Nov-Dec 1972) : 4-6
"The Ultrplanetary Probe" (AAS paper AAS-71-164; presented to AAS 17th Annual Meeting, 28-30 Jun 1971; NR report SD 71-542, Jun 1971) [2 folders]	
Box 27, Folder 5	AAS preprint
Box 27, Folder 6	AAS 17th Annual Meeting [correspondence]
"Philosophy and Outline of Long-Range Space Planning for the Needs of This Nation and Mankind" (NR report PD71-16; Jul 1971) [3 folders]	
Box 27, Folder 7	printed copy
Box 27, Folder 8	uncorrected version
Box 27, Folder 9	work copy for additions and updates
"Earth-Space Meta-Environment and the Future of Man 1970-2070" (presented to ISF 1971 Conference on International Science Policy with the International Meta-University, Sep 1971) [3 folders]	
Box 27, Folder 10	MS
Box 27, Folder 11	TS

Box 27, Folder 12	corrected copy
	"The Significance of Earth-To-Low-Orbit Shuttle for the Cost Effectiveness of Space Operations" (presented to IAF 22nd International Astronautical Congress, 20-24 Sep 1971; NR report SD 71-780, Sep 1971) [2 folders]
Box 27, Folder 13	printed copy
Box 27, Folder 14	as published in Raumfahrtforschung 16 no.2 (Mar-Apr 1972) : 65-77
	"Planning Space Stations for Long Range Utilization of Space for Earthians" (presented to von Karman Institute for Fluid Dynamics, Brussels, during the Short Course on Space Station Technology and Utilization, Sep 1971; NR report SD 71-562, Sep 1971) [2 folders]
Box 28, Folder 1	paste-up
Box 28, Folder 2	cannibalized copies (2 copies)
Box 28, Folder 3	HOG 20th Astronautical Congress (Bremen, Germany; Sep 1971) [participant list]
	"The Extraterrestrial Imperative" (Bulletin of the Atomic Scientists 27 no.9 (Nov 1971) : 18-26; reprinted in New Worlds 2 no.2 (Feb 1972) : 12-23) [4 folders]
Box 28, Folder 4	TS
Box 28, Folder 5	TS, paste-up, graphics
Box 28, Folder 6	as published in Bulletin of the Atomic Scientists
Box 28, Folder 7	photocopy of Bulletin of the Atomic Scientists
	Forward to Don Dwiggins, Into the Unknown (San Carlos (CA): Golden Gate Junior Books, 1971) [2 folders]
Box 28, Folder 8	correspondence, TS, MS of forward
Box 255, Folder 10	proof of main text of book [oversized material]
	Exploration of the Solar System and Interstellar Space (with Elizabeth A. Miller, 1971 - not published) [26 folders, total]
Box 28, Folder 9	background material
Box 28, Folder 10	"The Solar System and Interstellar Space" (Chapter 1)
Box 28, Folder 11	"Methods" (Chapter 2.3)

Box 28, Folder 12	"Interstellar Mission Concepts" (Chapter 7)
Box 28, Folder 13	"Interstellar Mission Concepts" (Chapter 7), from section titled "Near Interstellar Space Vehicle"
Box 28, Folder 14	"Exploration of Interstellar Space" (Chapter 7) [1 of 2 folders]
Box 28, Folder 15	"Exploration of Interstellar Space" (Chapter 7) [2 of 2 folders]
Box 29, Folder 1	"Exploration of Interstellar Space" (Chapter 7) - edited photocopy
Box 29, Folder 2	"Exploration of Interstellar Space" (Chapter 7) - incomplete photocopy
Box 29, Folder 3	miscellaneous pages [1 of 4 folders]
Box 29, Folder 4	miscellaneous pages [2 of 4 folders]
Box 29, Folder 5	miscellaneous pages [3 of 4 folders]
Box 29, Folder 6	miscellaneous pages [4 of 4 folders]
Box 30, Folder 1	Excess Illustrations [1 of 2 folders]
Box 30, Folder 2	Excess Illustrations [2 of 2 folders]
Box 30, Folder 3	Chapters 1-5 - TS [1 of 3 folders]
Box 30, Folder 4	Chapters 1-5 - TS [2 of 3 folders]
Box 30, Folder 5	Chapters 1-5 - TS [3 of 3 folders]
Box 30, Folder 6	Chapters 6-7 - TS [1 of 3 folders]
Box 31, Folder 1	Chapters 6-7 - TS [2 of 3 folders]
Box 31, Folder 2	Chapters 6-7 - TS [3 of 3 folders]
Box 31, Folder 3	Long Version - TS [1 of 5 folders]
Box 31, Folder 4	Long Version - TS [2 of 5 folders]
Box 31, Folder 5	Long Version - TS [3 of 5 folders]
Box 31, Folder 6	Long Version - TS [4 of 5 folders]
Box 31, Folder 7	Long Version - TS [5 of 5 folders]

	Extraterrestrial Imperative (with Elizabeth Miller; First Version, 1971 - not published) [7 folders, total]
Box 32, Folder 1	Synopsis (photocopy)
Box 32, Folder 2	Synopsis ("Extraterrestrial Imperative - The New Global Development", notes)
Box 32, Folder 3	"Environment" (Chapter 2) - TS (photocopy) (2 copies) [1 of 2 folders]
Box 32, Folder 4	"Environment" (Chapter 2) - TS (photocopy) (2 copies) [2 of 2 folders]
Box 32, Folder 5	From Dust to Stars - TS [1 of 3 folders]
Box 32, Folder 6	From Dust to Stars - TS [2 of 3 folders]
Box 32, Folder 7	From Dust to Stars - TS [3 of 3 folders]
Box 32, Folder 8	"Extraterrestrial Imperative" (Film Proposal, circa 1971)
	McGraw-Hill Encyclopedia of Science and Technology (NY: McGraw-Hill, 3rd Ed., 1971) [10 folders]
Box 32, Folder 9	correspondence
Box 32, Folder 10	original texts
Box 33, Folder 1	"Electromagnetic Propulsion" (vol. 4; rewrite)
Box 33, Folder 2	"Ion Propulsion" (vol. 7; rewrite)
Box 33, Folder 3	"Magnetogas Dynamics" (vol. 8; rewrite)
Box 33, Folder 4	"Solar Energy" (vol. 12; new article)
Box 33, Folder 5	"Spacecraft Propulsion" (vol. 12; galley proof)
Box 33, Folder 6	"Spacecraft Propulsion, Fusion Propulsion" (vol. 12; new article)
Box 33, Folder 7	"Spacecraft Propulsion, Nuclear Pulse Propulsion" (vol. 12; new article)
Box 33, Folder 8	tear sheets
Box 33, Folder 9	"The Long-Term Economic Impact of Space Research and Development Technology" (circa 1971)

Box 33, Folder 10	"Non-relativistic Interstellar Mission Performance Analysis to Alpha Centauri" (report KAE-19, circa 1971)
Box 33, Folder 11	"Shuttle and Apollo - The Nature of their Differences" (circa 1971)
Box 33, Folder 12	"Shuttle Economics" (circa 1971)
1972	
	"Astrogenic Environments - The Effect of Stellar Spectral Classes in the Evolutionary Pace of Life" (Space Flight 14 no.1 (Jan 1972) : 2-14; NR report SD71-716) [3 folders]
Box 33, Folder 13	final edit copy
Box 33, Folder 14	mechanical (NR report)
Box 33, Folder 15	as published in Space Flight 14 no.1 (Jan 1972) : 2-14
	"Statement to the Committee of Science and Astronautics, House of Representatives, Congress of the United States" [1973 NASA Authorization, 92nd Congress, Second Session] (Jan 1972) [2 folders]
Box 33, Folder 16	paste-up
Box 33, Folder 17	cannibalized copy
Box 33, Folder 18	"Science Policy and the Extraterrestrial Imperative" (adapted and excerpted from Extraterrestrial Imperative (1971); presented to Congressman G. P. Miller, Chairman, Committee on Science and Astronautics, US House of Representatives, Feb 1972; later identified as report KE72-1-1, Jan 1972) (3 copies; one copy identified as report KE72-1-1) [1 of 2 folders]
Box 33, Folder 19	"Science Policy and the Extraterrestrial Imperative" (adapted and excerpted from Extraterrestrial Imperative (1971); presented to Congressman G. P. Miller, Chairman, Committee on Science and Astronautics, US House of Representatives, Feb 1972; later identified as report KE72-1-1, Jan 1972) (3 copies; one copy identified as report KE72-1-1) [2 of 2 folders]
	"The Extraterrestrial Imperative - Grow and Live" (New York Times, 23 May 1972) [3 folders]
Box 34, Folder 1	photocopy [draft, "Extraterrestrial Imperative"]
Box 34, Folder 2	final draft
Box 34, Folder 3	photocopy

Box 34, Folder 4	"Social Relevance" (Skyline 30 no.2 (1972) : 50-55) [complete issue]
Box 34, Folder 5	"Destination Mankind - Proposal for a Saturn V-Apollo Mission into Geosynchronous Orbit" (19 May 1972) (2 copies) [1 of 2 folders]
Box 34, Folder 6	"Destination Mankind - Proposal for a Saturn V-Apollo Mission into Geosynchronous Orbit" (19 May 1972) (2 copies) [2 of 2 folders]
	"Extraterrestrial Imperative - Road Into the Future" (presented to SYNCON '72, 17-21 May 1972; NR report SD72-SA-0120, Jun 1972) [8 folders, total]
Box 34, Folder 7	paste-up (NR report)
Box 34, Folder 8	printed copy (NR report) (2 copies) [1 of 2 folders]
Box 34, Folder 9	printed copy (NR report) (2 copies) [2 of 2 folders]
Box 34, Folder 10	cannibalized copies (2 copies) [1 of 2 folders]
Box 34, Folder 11	cannibalized copies (2 copies) [2 of 2 folders]
Box 34, Folder 12	Syncon '72 - notes, correspondence
Box 34, Folder 13	Syncon '72 - Barbara Hubbard correspondence
Box 34, Folder 14	Syncon '72 - correspondence
Box 34, Folder 15	"Future in Space" (presented to Air Command and Staff College, Maxwell AFB, AL, 18 May 1972) [correspondence only]
	"Space Shuttle May Point the Way to Safe Disposal of Atomic Waste" (The Huntsville Times, 30 Jun 1972) [2 folders]
Box 34, Folder 16	[reduced size reference copies]
Box 256, Folder 3	[oversized original materials]
Box 34, Folder 17	"Extraterrestrial Industry - A Challenge to Growth Limitation" (Jun 1972) (2 copies) [1 of 2 folders]
Box 34, Folder 18	"Extraterrestrial Industry - A Challenge to Growth Limitation" (Jun 1972) (2 copies) [2 of 2 folders]
Box 34, Folder 19	"On Bounding the Problem of Growth" (17 Jul 1972)
Box 34, Folder 20	"Space Dumping - Extra-terrestrial Contamination, Pollution and Waste Disposal" (The Environment This Month 1 no.1 (Jul 1972) : 36-45)

Box 34, Folder 21-23	"Industrielle Evolution und Revolution im Geolunaren Raum 1980-2010" (presented to 21 Raumfahrt-tagung der HOG, Garmisch-Partenkirchen, Germany, 28 Sep-1 Oct 1972; NR report SD72-0173, Sep 1972) [3 folders]
Box 34, Folder 21	print on vellum
Box 34, Folder 22	printed copy
Box 34, Folder 23	corrected version (submitted for publication)
	"Saturn-Jupiter Rebound - A Method of High-Speed Spacecraft Ejection from the Solar System" (JBIS 25 no.10 (Oct 1972) : 561-571) [4 folders]
Box 34, Folder 24	paste-up ("A Method of High-Speed Spacecraft Ejection from the Solar System", NR report)
Box 34, Folder 25	printed copy ("A Method of High-Speed Spacecraft Ejection from the Solar System", NR report)
Box 34, Folder 26	edit copy ("A Method of High-Speed Spacecraft Ejection from the Solar System", NR report)
Box 35, Folder 1	as published in JBIS
	"Cost Reductions in Transportation to Geosynchronous and Lunar Orbit" (presented to IAF 23rd International Astronautical Congress, 8-15 Oct 1972, 5th Lunar International Laboratory Symposium; NR report SD72-SA-0174, Sep 1972) [6 folders]
Box 35, Folder 2	corrections copy (NR report)
Box 35, Folder 3	corrected copy (NR report)
Box 35, Folder 4	print on vellum (NR report)
Box 35, Folder 5	printed copy (NR report)
Box 35, Folder 6	corrected copy (NR report) and cannibalized copy
Box 35, Folder 7	as published in Raumfahrtforschung 17 no.3 (May/June 1973) : 126-135 ["Cost Reduction in Transportation to Geosynchronous and Lunar Orbit in a Swing Station"]
	"Lunar Industries and Their Value for the Human Environment on Earth" (presented to IAF 23rd International Astronautical Congress, 8-15 Oct 1972; NR report SD72-SA-0176, Sep 1972) [6 folders]
Box 35, Folder 8	print on vellum (NR report)

Box 35, Folder 9	NR report [2 copies (notes tipped into copy 2); 1 of 2 folders]
Box 35, Folder 10	NR report [2 copies (notes tipped into copy 2); 2 of 2 folders]
Box 35, Folder 11	paste-up of figures for Acta Astronautica
Box 35, Folder 12	as published in Acta Astronautica 1 no. 5 (May 1974): 585-622
Box 35, Folder 13	photocopy of Acta article
Box 35, Folder 14	"Extraterrestrial Imperatives" (presented to Future Oriented Activities in the United Nations, 30 Nov 1972) [flyer, notes]
Box 35, Folder 15	"Voyage Beyond Apollo" - Conference on the Total Environment and the Future of Civilization (aboard S.S. Statendam, 4-13 Dec 1972) [program]
	"Use of Shuttle in Establishing Large Space Installations" (presented at American Association for the Advancement of Science 7th Annual Meeting, Dec 27-28, 1972; NR report SD 73-SA-0015, Jan 1973) [5 folders]
Box 35, Folder 16	preliminary copy
Box 35, Folder 17	final copy
Box 35, Folder 18	cannibalized copy [1-2 of 3 copies; 1 of 2 folders]
Box 35, Folder 19	cannibalized copy [1-2 of 3 copies; 2 of 2 folders]
Box 36, Folder 1	cannibalized copy [3 of 3 copies (references cannibalized)]
Box 36, Folder 2	"Communications and the New Life Style" (address to Public Broadcasting System Annual Meeting, 1972)
	1973
Box 36, Folder 3	"World Electrification through Space Transmission (WEST)" (Jan 1973)
Box 36, Folder 4	"Space Shuttle - The Timing is Right" (report E73-4-1, Apr 1973)
	"Passive Power Relay Satellites for Global Energy Distribution" (presented to 10th Annual Space Congress, 11-13 Apr 1973; NR report SD 73-SA-0016, Feb 1973) [6 folders]
Box 36, Folder 5	notes, MS, TS [includes Ehrlicke, "The Passive Power Relay Satellite - Concept and Appraisal of Extraterrestrial Means to Contribute to Overcoming the Energy Confrontation" (no date)]
Box 36, Folder 6	preliminary copy

Box 36, Folder 7	paste-up
Box 36, Folder 8	correction copy
Box 36, Folder 9	corrected copy
Box 36, Folder 10	10th Space Congress [correspondence]
	"Regional and Global Energy Transfer Via Passive Power Relay Satellites" (presented to 10th Annual Space Congress, 11-13 Apr 1973; NR report SD73-SH-0117, Apr 1973) [3 folders]
Box 36, Folder 11	miscellaneous MS, notes, calculations
Box 36, Folder 12	edit copy
Box 36, Folder 13	master
	"Extraterrestrial Industry - A Challenge to Growth Limitation" (presented to The Conference Board, The Essential Resources Conference, 16 Apr 1973; NR report SD 73-SH-0134, Apr 1973) [7 folders, total]
Box 36, Folder 14	June 1972 version for mark-up
Box 36, Folder 15	paste-up
Box 37, Folder 1	cannibalized copy
	Essential Resources (The Conference Board conference, 16 Apr 1973) [4 folders]
Box 37, Folder 2	correspondence, Jul 1972
Box 37, Folder 3	background papers
Box 37, Folder 4	correspondence, program
Box 37, Folder 5	Essential Resources (The Conference Board, Papers from the Essential Resources Conference, Reprinted for the International Industrial Conference, 1973)
	"Statement of Krafft A. Ehricke , Space Division, Rockwell International, Before the Space Science and Applications and the Energy Subcommittees of the House Science and Astronautics Committee" (25 May 1973) [2 folders]
Box 37, Folder 6	paste-up
Box 37, Folder 7	print

"Space Technology and Energy - Presentation to the Space Science and Applications and the Energy Subcommittee of the Committee of Science and Astronautics, US House of Representatives" (RI report SD 73-SH-139, 24 May 1973) [3 folders]

Box 37, Folder 8 paste-up (RI report)

Box 37, Folder 9 print (RI report)

Box 37, Folder 10 "Space Technology and Energy" (Appendix) (24 May 1973)

"Aerospace Contribution to Solving the Energy and Pollution Crisis" (presented to luncheon meeting of AIAA National Capital Section, 27 Jun 1973) [2 folders]

Box 37, Folder 11 abstract

Box 37, Folder 12 AIAA National Capital Section Luncheon Meeting, 27 Jun 1973
[correspondence]

"Response to Questions by the Subcommittee on Energy (Congressman Mike McCormack, Chairman) and the Subcommittee on Space Science and Applications (Congressman James W. Symington, Chairman) Following Testimony Before Both Subcommittees on 24 May 1973" (23 Jul 1973) [3 folders]

Box 37, Folder 13 original testimony ["Space Technology and Energy - Presentation to the Space Science and Applications and the Energy Subcommittee of the Committee of Science and Astronautics, US House of Representatives" (RI report SD 73-SH-139, 24 May 1973), see also Box 37, Folders 8-10 above], questions by committee

Box 38, Folder 1 paste-up

Box 38, Folder 2 photocopy

DGLR [Deutsche Gesellschaft für Luft- und Raumfahrt e.V.] 6th Annual Meeting / ÖGFT [Österreichischen Gesellschaft für Weltraumforschung und Flugkörpertechnik] 11th Annual Meeting (Innsbruck, Austria, 24-28 Sep 1973) [correspondence; 2 folders]

Box 38, Folder 3 [correspondence]

Box 256, Folder 4 [oversized material]

"Low Cost Commercial Space Traffic Operations and the Swing Station" (presented to IAF 24th International Astronautical Congress, Baku, USSR, 7-13 Oct 1973; report E73-10-2, Oct 1973) [3 folders]

Box 38, Folder 4 paste-up

Box 38, Folder 5	print
Box 38, Folder 6	as published in Raumfahrtforschung 18 no.4 (Jul/Aug 1974) : 173-182
	"The Power Relay Satellite - A Means of World Electrification through Space Transmission" (Aug 1973; presented to IAF 24th International Astronautical Congress, Symposium on Cost Reduction in Space Operations, Baku, USSR, 7-13 Oct 1973) [6 folders, total]
Box 38, Folder 7	Baku Abstract [includes: "Space Shuttle and the Power Crisis" (no date); "The Power Relay Satellite - A Means of World Electrification Through Space Transmission" (photocopy of abstract); "The Passive Power Relay Satellite - Concept and Appraisal of Extraterrestrial Means to Contribute to Overcoming the Energy Confrontation" (photocopy)]
Box 38, Folder 8	preliminary paste-up 24th International Astronautical Congress [4 folders]
Box 38, Folder 9	correspondence [1 of 3 folders]
Box 38, Folder 10	correspondence [2 of 3 folders]
Box 38, Folder 11	correspondence [3 of 3 folders]
Box 38, Folder 12	program "Statement of Krafft A. Ehrlicke, Chief Scientific Adviser to the Space Division of Rockwell International, Before the Committee on Aeronautical and Space Sciences, United States Senate" (RI report, 31 Oct 1973) [3 folders]
Box 38, Folder 13	original draft (TS)
Box 38, Folder 14	print
Box 38, Folder 15	transcript and committee report (photocopy)
Box 38, Folder 16	"The Power Relay Satellite (PRS) Concept in the Framework of the Overall Energy Picture" (3rd version; report E73-12-1, Dec 1973)
Box 38, Folder 17	"Space Shuttle and the Energy Crisis" (circa 1973) "Space Shuttle and the Power Crisis" (circa 1973) [2 folders]
Box 39, Folder 1	mechanical

Box 39, Folder 2	edit copy
	1974
Box 39, Folder 3	"The Power Relay Satellite (PRS) Concept in the Framework of the Overall Energy Picture" (4th version; Jan 1974)
	"Further Comments on the Power Relay Satellite Concept" (Jan 1974) [2 folders]
Box 39, Folder 4	JPL review ["Regional and Global Energy Transfer Via Passive Power Relay Satellites - A Review of 'Regional and Global Energy Transfer via Passive Power Relay Satellites'" (R. L. Phen, G. L. Parker, T. O. Thatesen, W. P. Williams; JPL, no date)], notes, MS
Box 39, Folder 5	print
Box 39, Folder 6	"The Power Relay Satellite - Problem Areas" (circa Jan 1974)
	"The Power Relay Satellite - A Means of Global Energy Transmission Through Space, Part I: Technology, Operation, Performance and Economics of the Power Relay System" (report E74-3-1, Mar 1973) [5 folders, total]
Box 39, Folder 7	paste-up [1 of 2 folders]
Box 39, Folder 8	paste-up [2 of 2 folders]
Box 39, Folder 9	Originals of Tables for PRS Pt.I
Box 39, Folder 10	print
Box 39, Folder 11	corrected copy
	"The Solar Option - A Study" (report E74-4-1, Apr 1974) [4 folders]
Box 40, Folder 1	notes; graphics
Box 40, Folder 2	paste-up
Box 40, Folder 3	print
Box 40, Folder 4	cannibalized copy
Box 40, Folder 5	"Permanent Lunar Settlements and Their Value for the Human Environment on Earth" (published as "Lunar Settlements and Their Value for the Human Environment on Earth"; Acta Astronautica 1 no.5-6 (May-Jun 1974) : 585-622) [photocopy of proofs]

"The Power Relay Satellite - A Means of Global Energy Transmission Through Space, Part II: The Power Relay Satellite Concept in the Framework of the Overall Energy Picture and Complete Terrestrial Energy Systems" (report E74-6-1, Jun 1974) [3 folders]

Box 40, Folder 6	paste-up
Box 40, Folder 7	print
Box 40, Folder 8	cannibalized copy
	"Satelliten zur irdischen Energie-Übertragung Technische und sozio-ökonomische Untersuchungen" (presented at HOG 23rd Raumfahrtkongreß, Jun 1974) [3 folders]
Box 40, Folder 9	MS
Box 40, Folder 10	paste-up
Box 40, Folder 11	as published in Astronautik 12 no.2 (1975) : 19-25
Box 41, Folder 1	Delta (California Museum of Science and Industry, TV Pilot, Jun 1974) [correspondence, script (11 Jun 1974, for Ehrlicke on-screen interview)]
Box 41, Folder 2	"Statement of Krafft A. Ehrlicke, Scientific Advisor, North American Space Operations, Rockwell International Corporation, before the Committee on Interior and Insular Affairs, United States Senate" (RI report, 27 Jun 1974)
	"Der blaue Planet hat doch eine Zukunft" (Die Welt, 29 Jun 1974) [3 folders]
Box 41, Folder 3	edited TS (photocopy)
Box 41, Folder 4	as published
Box 256, Folder 5	[overized material]
Box 41, Folder 5	"The Heritage of Apollo - Presentation to the Town Hall of California" (report E74-7-1, 16 Jul 1974)
Box 41, Folder 6	"A Review and Evaluation of Solar Central Power Stations for Use in the U.S., Mideast and Japan and Associated Solar Engineering Business Development" (19 Jul 1974) (2 copies) [1 of 2 folders]
Box 41, Folder 7	"A Review and Evaluation of Solar Central Power Stations for Use in the U.S., Mideast and Japan and Associated Solar Engineering Business Development" (19 Jul 1974) (2 copies) [2 of 2 folders]

Box 41, Folder 8	"Energy and the Shuttle Compatible Space Energy Test (SET) Facility Briefing, September 25, 1974" [outline]
Box 41, Folder 9	"Review of Future Space Applications for House Science and Astronautics Committee" (RI report SSV74-41; 25 Sep 1974)
	"Methods of Minimizing Shuttle-Based High- and Low-Thrust Transportation Costs to Geosynchronous Orbit" (IAF paper A74-03; presented to IAF 25th International Astronautical Congress, Amsterdam, Netherlands, 30 Sep-5 Oct 1974) [2 folders]
Box 41, Folder 10	paste-up
Box 41, Folder 11	preprint
	"Space Stations - Tools of New Growth in an Open World" (5th IAF Invited Lecture, presented to IAF 25th International Astronautical Congress, Amsterdam, Netherlands, 30 Sep-5 Oct 1974) [9 folders, total]
Box 41, Folder 12	TS for address
Box 41, Folder 13	TS draft
Box 41, Folder 14	reduced version for publication
Box 41, Folder 15	IAF proof (photocopy)
Box 41, Folder 16	paste-up as report E74-9-1
Box 41, Folder 17	printed copy of report E74-9-1
Box 41, Folder 18	cannibalized copy of report E74-9-1
	25th International Astronautical Congress (Amsterdam, Netherlands) [2 folders]
Box 41, Folder 19	program
Box 42, Folder 1	abstracts
	"From Closed to Open World" (presented to NASA Study Group on "Outlook for Space", 23-24 Oct 1974) [8 folders, total]
Box 42, Folder 2	graphics [1 of 5 folders]
Box 42, Folder 3	graphics [2 of 5 folders]
Box 42, Folder 4	graphics [3 of 5 folders]

Box 42, Folder 5	graphics [4 of 5 folders]
Box 42, Folder 6	graphics [5 of 5 folders]
Box 42, Folder 7	introduction
Box 42, Folder 8	correspondence (Sep-Oct 1974)
Box 42, Folder 9	correspondence (Sep 1974; photocopies)
Box 42, Folder 10	"The Power Relay Satellite - A Means of Global Distribution of Electricity from Large Remotely Located Energy Factories Processing Solar, Nuclear or Other Sources of Primary Energy" (report E74-11-1, Nov 1974)
	"Technical, Financial and Development-Related Aspects of Beamed Power Transmission Systems Using a Power Relay Satellite (PRS)" (report E74-12-1, Dec 1974) [2 folders]
Box 42, Folder 11	TS
Box 42, Folder 12	SG reprint: "Hard and Soft Power Relay Satellite Systems - Technical, Financial and Development-Related Aspects of Beamed Power Transmission Over Great Distances" (SG report SG879-2R, Aug 1979)
Box 42, Folder 13	Unused part of letter to Jim Hartz (Dec 1974)
	The Extraterrestrial Imperative (with Elizabeth Miller, second version, 1974 - not published) [101 folders, total]
Box 42, Folder 14	Summary (The Extraterrestrial Imperative - From Closed to Open World) (2 copies)
Box 42, Folder 15	Synopsis (The Extraterrestrial Imperative - From Closed to Open World) (TS, 2 copies) [1 of 2 folders]
Box 42, Folder 16	Synopsis (The Extraterrestrial Imperative - From Closed to Open World) (TS, 2 copies) [2 of 2 folders]
Box 42, Folder 17	Reference Material I
Box 43, Folder 1	organizational notes, draft pages
Box 43, Folder 2	Preface [MS]
Box 43, Folder 3	Preface [TS]
Box 43, Folder 4	Introduction [TS; edit copy]

Box 43, Folder 5	draft pages (Chapter 1) [MS]
Box 43, Folder 6	"The Anthropology of The Extraterrestrial Imperative" (Chapter 1) [TS]
Box 43, Folder 7	"Evolutionary Logic and Realistic Promise" (Chapter 3) [TS]
Box 43, Folder 8	Chapter 3 Outs [MS, TS]
Box 43, Folder 9	"World Metabolism and the Terrestrial Biosphere" (I/6) [TS (photocopy)]
Box 43, Folder 10	Part I [partial MS, TS]
Box 43, Folder 11	Part I [partial MS, TS]
Box 43, Folder 12	Part I [MS, TS]
Box 43, Folder 13	Prologue, parts eliminated from quasi-final version to be used in Pt II or III
Box 43, Folder 14	Typed Sections (miscellaneous pages)
Box 43, Folder 15	"A Lonely Beginning - The Cerebral Revolution" (II/1) [TS]
Box 44, Folder 1	"Emancipation from the Biosphere - The Process of Humanization" (II/3) [TS]
Box 44, Folder 2	"Milestones in the Humanization Phase" (chart)
Box 44, Folder 3	"Civilization and Technology" (II/4) [TS]
Box 44, Folder 4	"A Systems Model of the First Great Crisis and the Necessity of Its Solution by Growth" (II/5) [MS]
Box 44, Folder 5	"The Crisis of the Closed World" (II/6); "The Population Factor" (III/4) [TS, miscellaneous graphics]
Box 44, Folder 6	"The Anatomy of Human Society" (Chapter 8) / "The Vanishing Options" (Chapter 9) - to be part of II/7 [TS (photocopy)]
Box 44, Folder 7	Part II [MS, TS]
Box 44, Folder 8	Material for Extraterrestrial Imperative 3 [notes]
	"Open World Development - Integration of Space Development Into Overcoming the Second Great Crisis" (III/1) [3 folders]
Box 44, Folder 9	MS

Box 44, Folder 10	miscellaneous graphics
Box 44, Folder 11	TS
Box 44, Folder 12	"Open World Development - Growth With Conservation" (III/6) [TS]
Box 44, Folder 13	"Open World Development - A Global Concensus Gentium [sic] for Human Development in a Commonwealth of Earth" (III/8) [MS]
Box 44, Folder 14	"Open World Development - A Global Concensus Gentium [sic]" (III/7) [TS]
Box 44, Folder 15	"The Open World – A New Natural Balance" (III/8, to III/9) [edited TS]
Box 44, Folder 16	"The Androsphere" (Chapter 4, to III/3) [TS, MS]
Box 45, Folder 1	"The Androsphere" (II/2) [MS]
Box 45, Folder 2	"The Androspheric Macro-Environment" (III/3) [MS]
Box 45, Folder 3	III/4 [miscellaneous graphics]
Box 45, Folder 4	"The Human Factor - To Grow or Not to Grow" (III/6) [TS]
Box 45, Folder 5	"Space Industry Class E - Space Lights" (III/7) [TS (photocopy)]
Box 45, Folder 6	"Space Industry Class E - Space Lights" (III/7) [edited TS]
Box 45, Folder 7	"The Energy Confrontation" (III/8) [TS (photocopy)]
Box 45, Folder 8	"Socio-Economics in Confrontation and Transition" (III/19) [MS]
Box 45, Folder 9	"Socio-Economics in Confrontation and Transition" (III/9) [TS]
Box 45, Folder 10	"Metal Confrontation" (Chapter 10) [MS]
Box 45, Folder 11	"Metal Confrontation" (Chapter 10) [MS, TS, notes]
Box 45, Folder 12	"Metal Confrontation" (III/10) [edited TS]
Box 45, Folder 13	"Space Industry Class E - The Power Relay Satellite (III/11) [TS]
Box 45, Folder 14	"Space Industry Class E - Space Power Generation" (III/12) [MS]
Box 46, Folder 1	"The New Growth" (III/16) [TS/MS]
Box 46, Folder 2	"Androspheric Economics - The Economics of the Open World" (III/) [MS]

Box 46, Folder 3	"Androspheric Economics - The Economics of the Open World" (III/17) [MS]
Box 46, Folder 4	"Androspheric Economics - The Economics of the Open World" (III/17) [TS]
Box 46, Folder 5	"From Biosphere to Androsphere - The Achievement of Whole and Lasting Civilization" (III/18) [TS]
Box 46, Folder 6	"Perspective II" (III/20) [TS]
Box 46, Folder 7	Part III [unidentified section] [MS]
Box 46, Folder 8	Part III Chapters [MS/TS]
Box 46, Folder 9	Part III [MS/TS] [1 of 3 folders]
Box 46, Folder 10	Part III [MS/TS] [2 of 3 folders]
Box 47, Folder 1	Part III [MS/TS] [3 of 3 folders]
Box 47, Folder 2	"Space Light - The Lunetta" (IV/4) [TS]
Box 47, Folder 3	"Basics of Space Transportation" (IV/12) [MS]
Box 47, Folder 4	"Basics of Space Transportation" (IV/12) [MS, miscellaneous pages]
Box 47, Folder 5	"Basics of Space Transportation" (IV/12) [MS/TS]
Box 47, Folder 6	"Basics of Space Transportation" (IV/12) [cannibalized TS]
Box 47, Folder 7	"Economics of Commercial Space Transportation" (IV/13) [MS]
Box 47, Folder 8	"Economics of Space Transportation" (IV/13)
Box 47, Folder 9	"The Human Aspects of Building the Androsphere" (III/19) [MS/TS]
Box 47, Folder 10	"New Growth - The Human Aspects of Building the Androsphere" (IV/) [TS]
Box 47, Folder 11	"New Growth - The Human Aspects of Building the Androsphere (IV/15) [TS]
Box 47, Folder 12	Part IV [MS/TS] [1 of 2 folders]
Box 47, Folder 13	Part IV [MS/TS] [2 of 2 folders]
Box 48, Folder 1	Original Figures

Box 48, Folder 2	Illustrations / Layouts
Box 48, Folder 3	miscellaneous pages [1 of 21 folders]
Box 48, Folder 4	miscellaneous pages [2 of 21 folders]
Box 48, Folder 5	miscellaneous pages [3 of 21 folders]
Box 48, Folder 6	miscellaneous pages [4 of 21 folders]
Box 48, Folder 7	miscellaneous pages [5 of 21 folders]
Box 48, Folder 8	miscellaneous pages [6 of 21 folders]
Box 48, Folder 9	miscellaneous pages [7 of 21 folders]
Box 48, Folder 10	miscellaneous pages [8 of 21 folders]
Box 48, Folder 11	miscellaneous pages [9 of 21 folders]
Box 48, Folder 12	miscellaneous pages [10 of 21 folders]
Box 48, Folder 13	miscellaneous pages [11 of 21 folders]
Box 48, Folder 14	miscellaneous pages [12 of 21 folders]
Box 48, Folder 15	miscellaneous pages [13 of 21 folders]
Box 48, Folder 16	miscellaneous pages [14 of 21 folders]
Box 48, Folder 17	miscellaneous pages [15 of 21 folders]
Box 48, Folder 18	miscellaneous pages [16 of 21 folders]
Box 48, Folder 19	miscellaneous pages [17 of 21 folders]
Box 49, Folder 1	miscellaneous pages [18 of 21 folders]
Box 49, Folder 2	miscellaneous pages [19 of 21 folders]
Box 49, Folder 3	miscellaneous pages [20 of 21 folders]
Box 49, Folder 4	miscellaneous pages [21 of 21 folders]
Box 256, Folder 6	miscellaneous pages [21 of 21 folders] [oversized material]
Box 49, Folder 5	notes [1 of 4 folders]

Box 49, Folder 6	notes [2 of 4 folders]
Box 49, Folder 7	notes [3 of 4 folders]
Box 256, Folder 7	notes [4 of 4 folders] [oversized material]
Box 49, Folder 8	"Earth, The Astronaut's Planet in the Solar System" [photocopy of graphic]
Box 49, Folder 9	Apollo 11 Flight [5th] Anniversary "Town Hall Talk" (circa 1974)
Box 49, Folder 10	"Open World and New Growth" [story outline]
	"The Passive Power Relay Satellite - Concept and Appraisal of Extraterrestrial Means to Contribute to Overcoming the Energy Confrontation" (circa 1974) [2 folders]
Box 49, Folder 11	paste-up, print
Box 49, Folder 12	photocopy
Box 49, Folder 13	"Sprung In Die Unendlichkeit - Der Flug Des Pioneer Zum Jupiter" (circa 1974)
	1975
Box 49, Folder 14	"How Do We Get There From Here?" (presented to Los Angeles Council of Engineers and Scientists, 3 Apr 1975)
Box 49, Folder 15	"Regional Power Distribution Via Power Relay Satellite" (presented to 1st Greater Los Angeles Area Energy Symposium, 3 Apr 1975) [correspondence]
Box 50, Folder 1	Q=E3 - The Future is Now - Greater Los Angeles Area Energy Symposium, 3 Apr 1975 (Los Angeles Council of Engineers and Scientists [LACES], Proceedings Series 1 (1975))
	"The United Nations and the Power Relay Satellite as Element of Global Energy Development" (report KE75-4-1, 5 Apr 1975) [3 folders]
Box 50, Folder 2	paste-up
Box 50, Folder 3	print
Box 50, Folder 4	SG reprint, Jul 1978
	"Spacelab - Model for International Teamwork (presented to 12th Space Congress, 9-11 Apr 1975) [2 folders]

Box 50, Folder 5	paper
Box 50, Folder 6	12th Space Congress (9-11 Apr 1975) [preliminary programs, correspondence]
	"Exoindustrial Productivity - The Extraterrestrial Imperative of Our Time" (report E75-5-1, May 1975) [8 folders, total]
Box 50, Folder 7	print [1 of 3 folders]
Box 50, Folder 8	print [2 of 3 folders]
Box 50, Folder 9	print [3 of 3 folders]
Box 50, Folder 10	miscellaneous pages for corrections
Box 50, Folder 11	erratta/reference copy [1 of 2 folders]
Box 50, Folder 12	erratta/reference copy [2 of 2 folders]
Box 51, Folder 1	cannibalized copy [1 of 2 folders]
Box 51, Folder 2	cannibalized copy [2 of 2 folders]
	"Space Industrial Productivity - New Options for the Future" (Jul 1975; presented to the Committee on Science and Technology and the Subcommittee on Space Science and Applications, Hearings on Future Space Flight, 22-30 Jul 1975) [15 folders, total]
Box 51, Folder 3	cannibalized copies (2 copies) [1 of 2 folders]
Box 51, Folder 4	cannibalized copies (2 copies) [2 of 2 folders]
Box 51, Folder 5	Appendix (Jul 1975)
Box 51, Folder 6	correspondence (Jun-Nov 1975)
Box 51, Folder 7	draft correspondence [Ehrlicke to Pirek, Ehrlicke to Humphrey]
Box 51, Folder 8	Ehrlicke to Rep. Don Fuqua, Chairman of the Subcommittee on Space Science and Applications, Committee on Science and Technology, US House of Representatives. (14 Aug 1975) (6 copies; box 51 folder 9 includes copies of Ehrlicke's statements) [1 of 4 folders]
Box 51, Folder 9	Ehrlicke to Rep. Don Fuqua, Chairman of the Subcommittee on Space Science and Applications, Committee on Science and Technology, US House of Representatives. (14 Aug 1975) (6 copies;

	box 51 folder 9 includes copies of Ehricke's statements) [2 of 4 folders]
Box 51, Folder 10	Ehricke to Rep. Don Fuqua, Chairman of the Subcommittee on Space Science and Applications, Committee on Science and Technology, US House of Representatives. (14 Aug 1975) (6 copies; box 51 folder 9 includes copies of Ehricke's statements) [3 of 4 folders]
Box 51, Folder 11	Ehricke to Rep. Don Fuqua, Chairman of the Subcommittee on Space Science and Applications, Committee on Science and Technology, US House of Representatives. (14 Aug 1975) (6 copies; box 51 folder 9 includes copies of Ehricke's statements) [4 of 4 folders]
	Future Space Programs 1975 [3 folders]
Box 52, Folder 1	Vol. I - Report of the Subcommittee on Space Science and Applications Prepared for the Committee on Science and Technology, US House of Representatives, Ninety-fourth Congress, First Session [committee print]
Box 52, Folder 2	Vol. II - A Compilation of Papers Prepared for the Subcommittee on Space Science and Applications Prepared for the Committee on Science and Technology, US House of Representatives, Ninety-fourth Congress, First Session [committee print]
Box 52, Folder 3	Vol. III - Hearings Before the Subcommittee on Space Science and Applications Prepared for the Committee on Science and Technology, US House of Representatives, Ninety-fourth Congress, First Session, July 22, 23, 24, 29, and 30, 1975 [committee print]
Box 52, Folder 4	SG reprint SG378-1R (Mar 1978) [cover paste-up]
Box 52, Folder 5	SG reprint SG378-1R (Mar 1978) [printed copy]
Box 255, Folder 11	paste-up of presentation graphics [oversized material]
Box 52, Folder 6	"Peenemünde: The Coming of the Future" (CSULB-Nova) [Ehricke interviewed for program; possibly aired as "Hitler's Secret Weapon", NOVA, 5 Jan 77]
	"An der Schwelle des Industriellen Raumzeitalters" (report E75-9-1, Sep 1975) [5 folders, total]
Box 52, Folder 7	notes [1 of 2 folders]
Box 52, Folder 8	notes [2 of 2 folders]

Box 52, Folder 9	TS drafts
Box 52, Folder 10	final TS
Box 52, Folder 11	paste-up
Box 53, Folder 1	Deutsche Gesellschaft für Luft- und Raumfahrt e.v. [DGLR] 8th Annual Meeting, 16-18 Sep 1975
	26th International Astronautical Congress (21-27 Sep 1975) [2 folders]
Box 53, Folder 2	abstracts
Box 53, Folder 3	Notes
	"Industrial Productivity as a New Overarching Goal of Space Development" (Oct 1975) [31 folders, total]
Box 53, Folder 4	MS, beginning at "Lunar Industry" (pp.87-118A)
Box 53, Folder 5	MS, beginning at "Lunar Science"
Box 53, Folder 6	final TS (pp.3A-8)
Box 53, Folder 7	final TS (pp.8A+) [1 of 2 folders]
Box 53, Folder 8	final TS (pp.8A+) [2 of 2 folders]
Box 53, Folder 9	final TS, for insertion before "Extractive Methods" (pp.117+)
Box 53, Folder 10	edited photocopy, beginning at "Lunar Industry" (pp.105-166)
Box 53, Folder 11	edited photocopy (pp.119-128)
Box 53, Folder 12	edited photocopy, beginning at "Lunar Industry" (final pp.105+)
Box 53, Folder 13	edited photocopy, pp.24-38 (final pp.113+)
Box 54, Folder 1	edited photocopy, beginning at "The Lunar Industrial Factor in Geolunar Transportation" (final pp.137+)
Box 54, Folder 2	edited photocopy, beginning at "Transportation in Lunar Space" (final pp.143+)
Box 54, Folder 3	edited photocopy, beginning at "Transportation" (pp.148-157)
Box 54, Folder 4	edited photocopy, beginning at "Space Light" (pp.47-104)

Box 54, Folder 5	edited photocopy, beginning at "Lunar Industry" (pp.105-124)
Box 54, Folder 6	edited photocopy, beginning at "Transportation in Lunar Space" (pp.143+)
Box 54, Folder 7	loose page "Orbitron Construction in Circumlunar Orbit" (p.152)
Box 54, Folder 8	paste-up [1 of 3 folders]
Box 54, Folder 9	paste-up [2 of 3 folders]
Box 54, Folder 10	paste-up [3 of 3 folders]
Box 54, Folder 11	cannibalized edit copy ["KAE II"]
Box 55, Folder 1	photocopy with cover photo (copies 1-3 of 5; 2 folders each) [1 of 6 folders]
Box 55, Folder 2	photocopy with cover photo (copies 1-3 of 5; 2 folders each) [2 of 6 folders]
Box 55, Folder 3	photocopy with cover photo (copies 1-3 of 5; 2 folders each) [3 of 6 folders]
Box 55, Folder 4	photocopy with cover photo (copies 1-3 of 5; 2 folders each) [4 of 6 folders]
Box 55, Folder 5	photocopy with cover photo (copies 1-3 of 5; 2 folders each) [5 of 6 folders]
Box 55, Folder 6	photocopy with cover photo (copies 1-3 of 5; 2 folders each) [6 of 6 folders]
Box 56, Folder 1	photocopy with cover photo (copies 4-5 of 5; 2 folders each) [1 of 4 folders]
Box 56, Folder 2	photocopy with cover photo (copies 4-5 of 5; 2 folders each) [2 of 4 folders]
Box 56, Folder 3	photocopy with cover photo (copies 4-5 of 5; 2 folders each) [3 of 4 folders]
Box 56, Folder 4	photocopy with cover photo (copies 4-5 of 5; 2 folders each) [4 of 4 folders]
Box 56, Folder 5	"Ausbeutung des Roten Planeten" (with unidentified "German author", circa Oct 1975)

	"A Long-Range Perspective and Some Fundamental Aspects of Interstellar Evolution" (Apr 1975) [4 folders]
Box 56, Folder 6	TS (without illustrations)
Box 56, Folder 7	markup TS (report E75-6-1)
Box 56, Folder 8	as published in JBIS 28, no.11 (Nov 1975)
Box 56, Folder 9	paste-up using cannibalized copy of JBIS article
	"Solar Power Module Concept and Data Summary" (circa 1975) [2 folders]
Box 57, Folder 1	TS
Box 57, Folder 2	photocopy
	1976
	"Exoindustry: A Macro-System Analysis" (report E76-1-1, Jan 1976) [6 folders]
Box 57, Folder 3	master
Box 57, Folder 4-5	printed copies [2 copies; 2 folders]
Box 57, Folder 6-8	cannibalized copies [3 copies; 3 folders]
	"The Sun-Synchronous Power Generation Satellite System" (report E76-1-2, Jan 1976) [3 folders]
Box 58, Folder 1	paste-up
Box 58, Folder 2	printed copy
Box 58, Folder 3	cannibalized copy
Box 58, Folder 4	Marshall Space Flight Center, Alabama [9 Jan 1976; travel itinerary]
Box 58, Folder 5	Fellows Dinner - AIAA/AIAA Banquet/AIAA Congress - Washington, DC [28 Jan 1976]
	"Aerospace and National Economic Development" (Feb 1976) [2 folders]
Box 58, Folder 6	Proposed Discussion Outline for Presentation and Seminar - Lapan - Jakarta - Indonesia - February 1976 [includes paste-up of "Aerospace and National Economic Development"]

Box 58, Folder 7	photocopy
	"Large Scale Processing of Lunar Material" (presented to LSI 7th Lunar Science Conference "Utilization of Lunar Materials and Expertise for Large Scale Operations in Space", 15-19 Mar 1976; report E76-3-1, Mar 1976) [7 folders, total]
Box 58, Folder 8	MS
Box 58, Folder 9-11	7th Lunar Science Conference (correspondence) [3 folders, total]
Box 47, Folder 9	correspondence, Dec 1975
Box 58, Folder 10	correspondence, Feb-Mar 1976
Box 58, Folder 11	correspondence, Mar 1976
	Lunar Utilization - Abstracts of Papers Presented at a Special Session of the Seventh Annual Lunar Science Conference, 16 Mar 1976 (LSI/JSC, Sep 1976) [3 folders]
Box 58, Folder 12	[1 of 3 copies]
Box 59, Folder 1-2	[2-3 of 3 copies; 2 folders]
	"A Review of Important Aspects Concerning the Use of Power Relay Satellite for Icelandic Energy Export by Means of Beamed Microwave Transmission" (no date) [6 folders, total]
Box 59, Folder 3	edit copy
Box 59, Folder 4	printed copy
Box 59, Folder 5-6	Iceland [2 folders]
Box 59, Folder 7	Kröfluvirkjun: Krafla Geothermal Power Plant (Krafla Geothermal Project Executive Committee brochure; Jul 1976)
Box 59, Folder 8	Supporting Calculations and Excess Material
Box 59, Folder 9	International Academy of Astronautics Programme Review Committee (Ehrlicke to L. I. Sedov, 19 Sep 1976) [correspondence]
	"Space Stations - Symbols and Tools of New Growth in an Open World" (keynote address to Session 1 (International Space Stations) of the International Space Hall of Fame Dedication Conference, 3-9 Oct 1976; RI report SD 76-SA-0200) [4 folders, total]
Box 60, Folder 1	RI report

Box 60, Folder 2-3	edited copy (1) of RI report and 2 copies [2 folders]
Box 60, Folder 4	edited copy (2) of RI report
Box 60, Folder 5	"Astropolis and Androcell - The Psychology and Technology of Space Utilization and Extraterrestrialization" (presented to Session 2, International Space Hall of Fame Dedication Conference, 3-9 Oct 1976)
Box 60, Folder 6	Space Hall of Fame, Alamogordo [correspondence]
	"Cost Reductions in Energy Supply through Space Operations" (IAF paper IAF-A-76-25; presented to the Sixth International Cost Reduction in Space Operations Symposium II, session 34 of the IAF 27th International Astronautical Congress, 10-16 Oct 1976) [3 folders]
Box 60, Folder 7	paste-up
Box 60, Folder 8	print
Box 60, Folder 9	partial photocopy
Box 60, Folder 10	"Sun-Synchronous Power Generation and Space Light Systems Lunetta/Soletta" (IAF paper 76-120; presented to session 15 of the IAF 27th International Astronautical Congress, 10-16 Oct 1976) [Material for IAF Paper]
	27th International Astronautical Congress, Anaheim, CA, 10-16 Oct 1976 [6 folders, total]
Box 60, Folder 11-12	correspondence [2 folders]
	Large Energy Systems in Space, Session 15 of the IAF 27th International Astronautical Congress (Krafft Ehrlicke, chairman) [3 folders]
Box 61, Folder 1	"Space and Energy" (Ivan Bekey; IAF paper 76-121) [correspondence, advanced copy]
Box 61, Folder 2-3	"Using the Orbital Tower to Launch Earth-Escape Payloads Daily" (Jerome Pearson; IAF paper 76-123) [correspondence, advanced copy] [2 folders]
	6th International Cost Reduction in Space Operations Symposium II, Session 34 of the IAF 27th International Astronautical Congress (Krafft Ehrlicke, chairman) [1 folder]
Box 61, Folder 4	"Economy of In-Orbit Manufacturing and Processing" (G. Gregor; IAF paper A-76-25) [correspondence]

1977

Box 61, Folder 5	"Space Industrialization - New Growth Through An Open World" (presented to AIAA 13th Annual Meeting; Jan 1977)
Box 61, Folder 6	AIAA Mini Symposium (22 Mar 1977)
Box 61, Folder 7	AWA Conference, 2 May 1977 - correspondence (Edward G. Tripp to Ehrlicke; 25 Apr 1977)
Box 61, Folder 8	Future in Space - Itinerary (Maxwell AFB, 25 May 1977) "Space and Energy Sources" (presented to the World Electrotechnical Congress, Moscow, USSR, June 21-25, 1977; RI report, May 1977) [9 folders, total]
Box 61, Folder 9	RI report
Box 61, Folder 10	Moscow Superslides
Box 61, Folder 11	viewgraphs
Box 61, Folder 12	graphics (1)
Box 61, Folder 13-14	graphics (2) (2 folders)
Box 61, Folder 15	graphics (3) World Electrotechnical Congress (Moscow, USSR) [2 folders]
Box 61, Folder 16	correspondence
Box 61, Folder 17	program
Box 62, Folder 1	"Space Light - The Enhanced Solar Option" (published in Swann Oil Energy Digest 2 no.17 (August 24, 1977); SG report SG777-1, Jul 1977) [SG report]
Box 62, Folder 2	HOG 26th Raumfahrtkongreß (Berlin, Germany) [program] "Socio-Economic Determinants of a Program for Lunar Industrialization In Support of Space Light Development Lunetta and Soletta" (IAF paper IAF-A-77-66; presented to the 7th Symposium on Cost Effectiveness in Space Operations, IAF 28th International Astronautical Congress, 25 Sep-1 Oct 1977) [10 folders, total]
Box 62, Folder 3	paste-up (IAF preprint)

Box 62, Folder 4	IAF preprint
Box 62, Folder 5	IAF preprint for cannibalization
	28th International Astronautical Congress (Prague, Czechoslovakia) [5 folders, total]
Box 62, Folder 6-8	correspondence [3 folders]
Box 62, Folder 9	program
Box 62, Folder 10	abstracts
	7th International Symposium on Cost Effectiveness in Space Operations I [2 folders]
Box 62, Folder 11	correspondence (1976)
Box 62, Folder 12	correspondence (Apr-Jun 1977)
Box 62, Folder 13	"Kraftsoletta - Eine Industrie-Sonne für Europa" (SG report SG1177-1, Nov 1977)
Box 62, Folder 14	Space Museum Meeting Paper (Guggenheim Lecture, NASM, 16 Nov 1977)
Box 62, Folder 15	Oppenheim - Acta Article - correspondence (1977; title of article not given)
	McGraw-Hill Encyclopedia of Science and Technology (NY: McGraw-Hill, 4th Ed., 1977) [5 folders, total]
Box 62, Folder 16	correspondence
	"Solar Energy" [4 folders, total]
Box 62, Folder 17	correspondence
Box 62, Folder 18-19	TS [2 folders]
Box 62, Folder 20	rewrite TS, illustrations, proofs
1978	
Box 62, Folder 21	"The Extraterrestrial Imperative" (Air University Review 29 no.2 (Jan-Feb 1978) : 2-20)

"Space Industrialization - Statement to the Committee on Science and Technology Hearing on Future Space Projects, US House of Representatives" (SG report SG178-1, Jan 1978) [2 folders]

Box 63, Folder 1	paste-up; graphics
Box 63, Folder 2	reference copy
	"The New Cosmos and Homo Extraterrestris" (presented to AIAA Symposium: Our Extraterrestrial Heritage - from UFOs to Space Colonies, 28 Jan 1978) [5 folders, total]
Box 63, Folder 3	MS, annotated TS, speaking copy
	Our Extraterrestrial Heritage - from UFOs to Space Colonies (AIAA Symposium, Jan 1978) [4 folders]
Box 63, Folder 4	proceedings, pp.1-38
Box 63, Folder 5	proceedings, pp.39-54
Box 63, Folder 6	proceedings, pp.55+
Box 63, Folder 7	proceedings, pp.39-52 (Ehrlicke paper; cannibalized)
Box 63, Folder 8	"Space Light Illumination from Sun-Synchronous Orbits" (SG report SG278-2, Feb 1978)
	Symposium on the Future of Space Science and Space Applications - Hearing Before the Subcommittee on Science, Technology, and Space of the Committee on Commerce, Science and Transportation, United States Senate, Ninety-Fifth Congress, Second Session (USGPO, Serial 95-58, 7 Feb 1978) [2 folders]
Box 63, Folder 9	photocopies of selected pages
Box 63, Folder 10	"Statement to Subcommittee on Science, Technology and Space; Committee on Commerce, Science and Transportation, Symposium on the Future of Space, US Senate" (SG report SG278-1, Feb 1978)
Box 63, Folder 11	"Industrialization of Space" (presented to the Wisconsin American Institute of Aeronautics and Astronautics, Milwaukee, WI, 28 Apr 1978) [brochure]
Box 63, Folder 12	"Astropolis and Androcell" / "Thermonuclear Power Generation Satellite" / "Lunar Productivity Center" (SG reprint SG578-1R, May 1978)
Box 63, Folder 13	"Extraterrestrial Imperative - Evolutionary Logic and Realistic Promise" (SG report SG678-1; submitted to Smithsonian)

Box 63, Folder 14	"Space Industrial Productivity - New Options for the Future" / "Space Light" (extracts from testimony, 22-30 Jul 1975; SG reprint SG778-1R, Jul 1978)
	Good Heavens, Santa! (Leon Leonidoff, Elizabeth A. Miller, and Krafft A. Ehricke; proposed television show, registered 20 Jul 1978) [2 folders]
Box 64, Folder 1	show outline & treatment
Box 64, Folder 2	correspondence
	"A Socio-Economic Evaluation of the Lunar Environment and Resources - I. Principles and Overall System Strategy" (IAF paper 78-A-40; presented to the Symposium on Space Economics and Benefits, IAF 29th International Astronautical Congress, Dubrovnik, Yugoslavia, 1-8 Oct 1978) [4 folders]
Box 64, Folder 3	IAF submission draft
Box 64, Folder 4	paste-up (SG report SG778-1, Jul 1978)
Box 64, Folder 5	print (SG report SG778-1, Jul 1978)
Box 64, Folder 6	as published in Acta Astronautica 8 no.11-12 (Nov-Dec 1981) : 1389-1433; print of SG report SG778-1, Jul 1978
Box 64, Folder 7	Wirtschaft, Weltall und Wachstum (with E. A. Miller, 1978) [book proposal, correspondence]
	1979
Box 64, Folder 8	"The Pollution of the Future" (SG report SG879-1, Aug 1979)
Box 64, Folder 9	"Geolunar Industrial Transportation for Low Propellant Expenditure with New Energy Management Concepts for Lunar Access, Part I" (IAF paper 79-120, presented to IAF 30th International Astronautical Congress 16-22 Sep 1979; SG report SG779-1, Jul 1979)
	"A Socio-Economic Evaluation of the Lunar Environment and Resources - II. Energy for the Selenosphere" (IAF paper 79-A-16, presented to Symposium on Space Economics and Benefits, IAF 30th International Astronautical Congress) [3 folders]
Box 65, Folder 1	paste-up (SG report SG779-3, Jul 1979), working copy, misc pages
Box 65, Folder 2	as published in Acta Astronautica 8 no.11-12 (Nov-Dec 1981) : 1407-1433 [reprint]
Box 65, Folder 3	30th International Astronautical Congress (17-22 Sep 1979) [program, abstracts]

"Space Light: Space Industrial Enhancement of the Solar Option" [4 folders, total]

Box 65, Folder 4	as published in Acta Astronautica 6 no.12 (Dec 1979) : 1515-1633
Box 65, Folder 5-6	SG report SG812-1, Feb 1981 [paste-up, notes] [2 folders]
Box 255, Folder 12	paste-up of charts [oversized material]
Box 65, Folder 7	Будущее Космической Индустрии (Москва: Машиностроение, 1979) [The Future of Space Industry (Moscow: Mashinostroenie, 1979)]
"The Extraterrestrial Imperative" (1979) [10 folders, total]	
Box 65, Folder 8	Part 1 - "Evolutionary Logic" (SG report SG1078-1, Oct 1978) [TS]
	Part 3 - "New Earth-Space Energy Metabolism", I - "Energy Demand Model, Near-Term Space Assist, Space Disposal of Nuclear Waste" (SG report SG779-1, Jul 1979) [4 folders]
Box 65, Folder 9	MS
Box 65, Folder 10	paste-up, photocopy
Box 65, Folder 11	SG print
Box 65, Folder 12	graphics, miscellaneous loose pages
Box 66, Folder 1	Part 4 - "Evolution II" (SG reprint SG-OW-9ET-4-182, Jan 1982)
Box 66, Folder 2	miscellaneous Space Global graphics [copies]
Box 66, Folder 3	Requests Relating to Extraterrestrial Imperative [correspondence]
	as published in JBIS [2 folders]
Box 66, Folder 4	proofs - "Part II, Productive Earth Orbits - New Partnership Through Pressures and Promise" (JBIS 32 no.11 (November 1979) : 410-418); "Part III, New Earth-Space Metabolism I" (JBIS 33 no.11 (November 1983) : 379-390)
Box 66, Folder 5	published copy
Extraterrestrial Imperative Lecture Series [23 folders, total]	
Box 66, Folder 6	lecture series outline
Box 66, Folder 7-9	transparencies [3 folders]

Box 66, Folder 10	overhead transparencies - Interplanetary
Box 66, Folder 11	overhead transparencies - unlabeled folder (1) [1 of 2 folders]
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Box 68, Folder 1	McGraw-Hill Encyclopedia of Science and Technology (NY: McGraw-Hill, 5th Ed, 1979 & 6th Ed 1984)
1980	
	Los Alamos Scientific Laboratory (presentation, 22 Jan 1980) [2 folders]
Box 68, Folder 2	[newsclippings]
Box 256, Folder 8	[oversized materials]
	"The Extraterrestrial Imperative - The Logic of Social and Realistic Promise" (CSU Northridge extension course SOC X496G/X896G, 30 Jan-14 May 1980) [7 folders]

Box 68, Folder 3	catalog
Box 68, Folder 4	staff paperwork; expense records
Box 68, Folder 5	course outline; miscellaneous correspondence
Box 256, Folder 9	course outline; miscellaneous correspondence [oversized material]
Box 68, Folder 6	final exam, grades, "follow-on" course preferences, student lists
Box 68, Folder 7	newsclippings
Box 256, Folder 10	newsclippings [oversized materials]
	"Contributions of Space Reflection Technology to Food Production, Local Weather Manipulation and Energy Supply, 1985-2020" (presented to 17th European Space Symposium, 4-6 Jun 1980) [3 folders]
Box 68, Folder 8	correspondence
Box 68, Folder 9	paste-up
Box 68, Folder 10	as published in JBIS Space Technology 34 no.12, Dec 1981
	"Lunetta System Analysis" (IAF paper 80-A-11; presented to Symposium on Space and Energy, IAF 31st International Astronautic Congress, 22-27 Sep 1980) [2 folders]
Box 68, Folder 11	correspondence, abstracts & graphics
Box 68, Folder 12	TS, paste-up
	"A Practical Approach to the Disposal of Highly Toxic and Long-Lived Spent Nuclear Fuel Waste Between Venus and Earth" (presented to 10th International Symposium on Space Economics and Benefits II: Socio-Economic Benefits of Space Operations, 31st International Astronautical Congress, 22-27 Sep 1980) [3 folders, total]
Box 69, Folder 1	TS, MS
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	"Wachstum als Überlebenschance des Modernen Menschen" [3 folders]
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Box 256, Folder 11	[oversized material]
Box 69, Folder 6	Erhöhung der Wirtschaftlichkeit im Luftverkehr (Saint-Paul-de-Vence, France, 26-29 Oct 1980) [program, correspondence]
Box 69, Folder 7	Flow General [correspondence regarding consulting]
1981	
Box 69, Folder 8	"Air Traffic in the Coming Space Age" (published as "Toward Aviation's New Infinities", Jet Tales 1/81)
Box 69, Folder 9	1981 Cal Space Conference (California Space Institute, La Jolla, CA, 24-25 Mar 1981) [pre-conference documentation]
Box 69, Folder 10	Omni Space Prospectus "The Extraterrestrial Imperative - Evolutionary Perspective and a Cosmopolitan Strategy" (published as "The Extraterrestrial Imperative", Futures 13 no.2 (Apr 1981) : 107-114) [2 folders]
Box 69, Folder 11	drafts, correspondence
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Box 69, Folder 13	Fusion Energy Foundation Conference "America's Next 20 Years in Space" [MS; FEF Special Report]
Box 69, Folder 14	"New Growth in an Open World at the Threshold of the First Cosmopolitan Millenium - Collected Works of K. A. Ehrlicke, 1939 through 1980" [introduction to SG "Open World" documents series]
Box 69, Folder 15	Omni Interview (Omni 3 no.12 (Sep 1981) : 87-91, 124)
Box 69, Folder 16	"The Buck Stops Here" (Viewpoint column; Fusion, Sep 1981) [proof] "New Growth in an Open World: Evolutionary Perspective and a Cosmopolitan Strategy" (IAF paper IAA-81-234, August 1981; presented to 11th International Symposium on Space Economics and Benefits II, IAF 32rd International Astronautical Congress, 6-12 Sep 1981) [7 folders]
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Box 70, Folder 3	photocopy of paste-up (miscellaneous pages)
Box 70, Folder 4	SG reprint SG-OW-1-881 ("corrected copy")

Box 70, Folder 5	SG reprint SG-OW-1-881 ("reference copy")
Box 70, Folder 6	SG reprint SG-OW-1-881
Box 70, Folder 7	"En öppen värld med obegränsad tillväxt" (Energi and Utveckling, no date, 50-58) [Swedish]
	"Industrializing the Moon - The First Step into a New Open World" (Fusion (English language edition) 5 no.2 (Dec 1981) : 21-31 and Fusion (English language edition) 6 no.1 (May-Jun 1984) : 46-55) [5 folders]
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Box 70, Folder 13	Commentary on Keyworth Dec 81 [response to report in "The National Scene", Astronautics & Aeronautics, Dec 1981]
	1982
	"Mensch, Umwelt, Technik und wachstum - Dem 'Klub von Rom' zum Zehnten ins Stammbuch" [2 folders]
Box 70, Folder 14	TS
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	"Wachsen in die Offene Welt" (Die Welt no.89, 17 Apr 1982) [2 folders]
Box 70, Folder 16	TS
Box 70, Folder 17	as published (photocopy)
Box 70, Folder 18-19	"Producing Advanced Fusion Fuel on the Moon" (Fusion (English language ed.), Sep 1982) [2 copies; 2 folders]
Box 71, Folder 1	"Further Analyses of the Slide Lander and of Drop Delivery Systems for Improved Lunar Surface Access" (IAF paper IAA-82-216; presented to 12th International Symposium on Space Economics and Benefits:

Socio-Economics Benefits of Space Operations, IAF 33rd International Astronautical Congress, 27 Sep-3 Oct 1982)

"A Socio-Economic Evaluation of the Lunar Environment and Resources - III. Selenospheric Economics and Cislunar/Terrestrial Market Analysis" (IAF paper IAA-82-235; presented to 12th International Symposium on Space Economics and Benefits: Socio-Economics Benefits of Space Operations, IAF 33rd International Astronautical Congress, 27 Sep-3 Oct 1982) [3 folders]

Box 71, Folder 2 paste-up; as published in Acta Astronautica 11 no.2 (Feb 1984)

Box 71, Folder 3 cannibalized copy

Box 71, Folder 4 33rd International Astronautical Congress [notes from 12th International Symposium on Space Economics and Benefits]

Box 71, Folder 5 Scientists' Institute for Public Information [correspondence]

"The Extraterrestrial Imperative: Why Mankind Must Colonize Space" (Fusion (English language edition) 5 no.6 (Dec 1982) : 18-24) [2 folders]

Box 71, Folder 6 proofs (Ehrlicke biographical note)

Box 71, Folder 7 published copy

"Mehr Mut, die Brücke in eine große Zukunft zu betreten" (Die Welt no.304, 31 Dec 1982) [2 folders]

Box 71, Folder 8 [reduced-size reference copies]

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Box 71, Folder 14 Ehrlicke to "Frau Bitterlich" (?) [MS]
Language: German.

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	"Engineering the Reality of Lunar Industrialization" (presented to CSU Northridge School of Engineering and Computer Science Colloquium, 24 Feb 1983) [9 folders, total]
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	"Wendezeit von Fritjof Capra" [review of Fritjof Capra, Wendezeit (Bern/Munich: Scherz Verlag, 1983), originally published as Fritjof Capra, The Turning Point (New York: Simon and Schuster, 1982)] [3 folders]
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	Beam Defense - An Alternative to Nuclear Destruction (Fusion Energy Foundation; Falbrook (CA): Aero Publishers, 1983) [2 folders]
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	"Die Notwendigkeit der Weltraumfahrt - Der Extraterrestrische Imperativ" (Fusion (German language edition) 4 no.4 (Fall 1983) : 29-41) [2 folders]
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Box 255, Folder 17	IAF 34th International Astronautical Congress, Session 56 ["Competition in Space: Government vs Industry" (Paul D. Maley, Chairman)] [correspondence - oversized material]
Box 72, Folder 14	"Profitability of Manufacturing in Space in View of Lunar Industrial Development and Geo-Socio-Economic Benefit" (presented to ASME Winter Meeting - Manufacturing in Space, Boston 17-18 Nov 1983; published in L. Kops, Ed. Manufacturing in Space [PED Vol.11] (NY: ASME, 1983), pp.183-198)
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Box 72, Folder 15	IAA [International Academy of Astronautics] correspondence (Jeremy Grey to Ehrlicke, 10 Jan 1984)
Box 72, Folder 16	"Harenodynamic Cooling: The Use of Lunar Sand as a Cooling Medium" (published in Acta Astronautica 11 no.6 (Jun 1984) : 319-325) "Lunar Industrialization and Settlement - Birth of Polyglobal Civilization" (presented to NASA Symposium, Lunar Bases and Space Activities of the 21st Century, 29-31 Oct 1984) [5 folders]
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Box 73, Folder 2	Earth's Seventh Continent - Industrialization and Settling of the Moon Der Siebente Kontinent - Die Industri Alisierung und Besiedlung des Mondes (Muchen: Thiemig Verlag, 1984) [16 folders, total]
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Box 74, Folder 7	"Ascent and Descent of Rocket Vehicles (Convair report AZP-071; no date)
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Box 79, Folder 14	AA Log Nos. 878 and 884: "The Space Elevator - 'Thought Experiment' - or Key to the Universe?" (Arthur C. Clarke; presented to 30 IAC, 20 Sep 1979; Log 878); "The Minos System" (J. Cahceux, R. Torossian, and M. Do-Mau-Lam; presented to 30 IAC, 16-22 Sep 1979; IAF preprint 79-68; Log 884)
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Box 79, Folder 22	AA Log No. 1107: "A Socio-Economic Evaluation of the Lunar Environment and Resources, Part 2 - Energy for the Selenosphere" (Krafft Ehricke; presented to 30 IAC, Sep 1979; IAF preprint A16-79)
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Series 2: Graphics

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Series 3: Company Files

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Arrangement: This series consists of files pertaining to business-related activities of the companies for which Ehrlicke worked. The materials are organized by company; within each company folders are organized into General Files, arranged alphabetically, and Proposals, arranged chronologically by study start date.

General Dynamics Files	
Box 94, Folder 7	Advanced Applications - Function (W. C. Strobl; GDC briefing, no date)
Box 94, Folder 8	Advanced Studies Planning (Ehrlicke to R. C. Sebold; GDC memo, 27 May 1965)
Box 94, Folder 9	Convair Material
Box 94, Folder 10	Prepared Statements before Congress
Box 94, Folder 11	Slide Lists for Lectures
Box 94, Folder 12	Suggested Division-Level Information on Projects as Presented to the Division Staff (G. M. Robertson; GDA briefing, 12 Jun 1962)
Box 94, Folder 13	Unofficial Planning & Predictions
Box 94, Folder 14	US-European Conference Visit to GDA, 7 May 1965
General Dynamics Proposals	
Study for the Determination of Approximate Transfer Function for Flexible Boosters	
Box 94, Folder 15	Proposal (R. J. Konrad and A. F. Schmitt; Convair report AZP-125, 21 Oct 1959)
Design, Fabrication, & Test of High-Energy Propellant Tankage	
Box 94, Folder 16	Proposal (J. A. Fager; GDA report AE60-0482I P.I.N. 60-688, 20 May 1960)
Apollo Command-Service Module [CSM]	
Box 94, Folder 17	RPF (NASA; 28 Jul 1961)
Preliminary Design of a Mars Mission Earth Re-Entry Module (NASA)	
Box 95, Folder 1	Proposal (GD report AOK63-016, 15 May 1963)

	Voyager Design Studies (NASA) [Voyager Venus/Mars 1973]
Box 95, Folder 2	RFP (NASA RFP 10-929); GD Internal Correspondence (Mar 1963); Proposal (GD report AOK63-0010, 23 Mar 1963)
	Study of Electrically Propelled Cargo Vehicle for Sustained Lunar Supply Operations (NASA)
Box 95, Folder 3-4	Proposal (GD report GD A-AOK64-004, 3 Feb 1964) (2 copies; 2 folders)
	Orbital Launch Facility Studies (NASA) [2 folders]
Box 95, Folder 5	Statement of Work (MSFC DCN 1-4-21-01024-01)
Box 95, Folder 6	Technical Proposal (GD report GD A-AOK64-014, 6 May 1964)
	Orbital Tanker Design Data Study (NASA)
Box 95, Folder 7	Statement of Work (MSFC)
	Study of Ballistic Orbital Support Operations (NASA)
Box 95, Folder 8	Proposal (GD report GD A-AOK64-019, 15 Jun 1964)
	Study of Interplanetary Mission Support Requirements (NASA) [2 folders]
Box 95, Folder 9	Statement of Work (MSC, 23 Mar 1964)
Box 95, Folder 10	Proposal (GD report GD A-AOK64-017, 1 Jun 1964) [to p.55 only]
	Mars Surface Operations Studies (NASA)
Box 95, Folder 11	Statement of Work (MSFC DCN 1-4-21-01023-01, circa Apr 1964)
	Spacecraft Propulsion Study for Manned Mars and Venus Missions (NASA) [2 folders]
Box 95, Folder 12	RFP (NASA RFP 10-3041, 24 Apr 1964)
Box 95, Folder 13	Proposal (GD report GD A-AOK64-016, 27 May 1964)
	Conjunction Class Manned Mars Trips (NASA)
Box 95, Folder 14	Statement of Work (no date)
	Chamber Technology for Space Storable Propellants (NASA)

Box 95, Folder 15	Statement of Work (circa 1964)
	Voyager Spacecraft System [Voyager Venus/Mars 1973] (NASA) [2 folders]
Box 95, Folder 16	Proposal, Vol. I - Technical Proposal (GDC report GDC PIN 65-056; 23 Mar 1965)
Box 95, Folder 17	"Guidelines and Ideas for Program Personnel" (E. G. Czamecki, Boeing memo 2-5951-1-0-109, 30 Nov 1965)
	Lunar Orbital Survey Missions [for Apollo Extension Systems] (NASA)
Box 95, Folder 18	Statement of Work (MSC ASTD, Jul 1965)
	Trajectories and Upper Stage Requirements for Exploration of Solar System (NASA)
Box 95, Folder 19	Proposal, Vol. I - Technical Proposal (GD FW report FZP-693-1, 25 May 1965)
	Early Lunar Shelter Design and Comparison Study (NASA)
Box 95, Folder 20	Statement of Work (MSFC ASO P-163, Jul 1965)
	Mission Modes and Systems Analysis for Lunar Exploration (NASA)
Box 95, Folder 21	Statement of Work (MSFC ASO P-150, 15 Jul 1965)
	Scientist Astronaut Mission Training (GD)
Box 96, Folder 1-2	Mock RFP [2 folders]
	North American / North American Rockwell / Rockwell International Files
Box 96, Folder 3	A. I. Review Material (1974)
Box 96, Folder 4	BCR - Business Contact Records (1975-1976)
Box 96, Folder 5	BF [miscellaneous notes and correspondence] (circa 1969)
Box 96, Folder 6	Biographies (K. A. Ehrlicke)
Box 96, Folder 7	Corporate briefing (1 Sep 1966)
Box 96, Folder 8-9	Correspondence - Space Division (1969-1973) [2 folders]
Box 96, Folder 10	Debit Memorandum (20 Jun 1977)

Box 96, Folder 11	"Establishment of Advanced Programs Division" (NR SD Executive Bulletin No.25, 24 Jun 1968)
Box 96, Folder 12	Heliocentric Transportation System Briefing
Box 96, Folder 13	Industry Organization Charts (1970-1972)
Box 96, Folder 14	IR&D Briefing (c 1968)
Box 96, Folder 15	IR&D Project Descriptions (c 1972)
Box 96, Folder 16	Job Description for Chief Scientist, NR Space Division
Box 96, Folder 17	Krafft A. Ehricke, Scientific Advisor, Space Shuttle Development
Box 96, Folder 18	"Long Range Planning Activity Report" (E. R. Kennedy to J. E. Franklin, NR Internal Letter, 14 Jul 1969)
Box 97, Folder 1-2	Long Range Plans (1976) [2 folders]
Box 97, Folder 3	Long Range Plans - Divisional Presentations (1976)
Box 97, Folder 4	Miscellaneous [orders for literature, 1976]
	National Goals Briefing (Management Staff Meeting Material, 1966) [2 folders]
Box 97, Folder 5	charts (TS)
Box 97, Folder 6	charts (negatives)
Box 97, Folder 7	"North American Space Operations 1975 Strategic Plan" (J. P. McNamara, 15 Jul 1975)
Box 97, Folder 8-10	Ordering Books & Reports Information (1972-1974) [3 folders]
Box 97, Folder 11	Personal (K. A. Ehricke) [NR personnel matters]
Box 98, Folder 1	Plans - Long Range (1975)
Box 98, Folder 2	Plans - Strategic (1975)
Box 98, Folder 3	"Preparation of IR&D Reports on Work Performance in CFY'72" (P. L. Wickham to Those Concerned; NR Internal Letter, 13 Jul 1972)
Box 98, Folder 4	Requests for Release of Information / Information Release Requests [permission for Ehricke to speak at conferences, 1970-1973]
Box 98, Folder 5	Resume

Box 98, Folder 6	Rocketdyne Strategic Plan
Box 98, Folder 7	Rockwell International - El Segundo Telephones (Jun 1976)
Box 98, Folder 8	Rockwell International - Long Range Planning (1976)
Box 98, Folder 9	Rockwell Strategic Plans (CFY1975)
Box 98, Folder 10	Science Center IR&D Progress Highlights (1 Apr 1976)
Box 98, Folder 11	Secret Log [log of classified documents issued to Ehricke, 1966-1973]
Box 99, Folder 1	Space Division - New Business Objectives & Outlook (NR report PD69-4, Jan 1969) [sent by T. A. Gibson to List (NR Internal Letter AP-LRP-69-007, 27 Jan 1969)]
Box 99, Folder 2	Strategy of Bidding (Mar 1966)
Box 99, Folder 3	Technical Paper Log [recipients of papers by Ehricke]
Box 99, Folder 4	Technical Papers & Presentation Information (1965-1970)
Box 99, Folder 5-7	Testimony Before Senate & Congress & Reprints (3 folders)
Box 99, Folder 8	Who's Who Information (K. A. Ehricke)
North American / North American Rockwell / Rockwell International Proposals	
Study of the Economic Benefits and Implications of Space Station Operations (NASA)	
Box 99, Folder 9	RFP (NASA RFP 10-9768) [sent by John G. Meitner, Stanford Research Institute, to Ehricke, 8 Nov 1966]
Planetary Surface Sample Return Probe for Manned Mar/Venus Reconnaissance/Retrieval Missions (NASA)	
Box 99, Folder 10	RFP (NASA RFP BG721-28-7-528P, 3 Aug 1967)
Study of One-Man Lunar Flying Vehicle (NASA)	
Box 99, Folder 11	RFP (NASA RFP BG721-28-9-18P, 31 Jul 1968)
Astronaut Maneuvering Equipment for Experiment M-509 (NASA)	
Box 100, Folder 1	Addendum to Technical & Management Proposal (NR report SD 68-800-1, 7 Mar 1969)

User Requirements Study - Experimental Saturn V Television Broadcast Satellite System (NASA)

Box 100, Folder 2	Technical Proposal (NR report SD 69-33, 26 Feb 1969)	
	System Requirements Study - Experimental Saturn V Television Broadcast Satellite System (NASA)	
Box 100, Folder 3	Technical Proposal (NR report SD 69-32, 26 Feb 1969)	
	Information Transfer Satellite Concept Study (NASA) [2 folders]	
Box 100, Folder 4	Technical Proposal (NR report SD69-182-1, 9 May 1969)	
Box 100, Folder 5	Business Management Proposal (NR report SD69-182-2, 9 May 1969)	
	Lunar Photographic Science Systems Study (NASA)	
Box 100, Folder 6	Proposal (NR report SD69-161, 28 Apr 1969)	
	Integrated Plan Propulsion Module Phase A Feasibility and Definition Study (NASA)	
Box 100, Folder 7	Statement of Work (NASA MSC, revised draft, 9 Oct 1969)	
	Pre-Phase A Study for an Analysis of a Reusable Space Tug (NASA)	
Box 100, Folder 8	RFP (NASA RFP MSC-JC421-M68-0-109P, Mar 1970)	
	Engineering and Architectural Study for Extraterrestrial Architectural Design (NASA)	
Box 100, Folder 9-10	Technical Proposal (NR report SD 70-53, 5 Mar 1970) (2 copies; 2 folders))	
	Study of a Jupiter Atmosphere Probe Mission (NASA)	
Box 100, Folder 11	Proposal Notes:	Missing Title: <ul style="list-style-type: none"> • Vol. I - <i>Technical Proposal</i> (NR report SD 70-30-1, 4 Feb 1970) • Vol. II - <i>Management Proposal</i> (NR report SD 70-30-2, 4 Feb 1970)
	Lunar Orbit Space Station (LOSS) Phase A Feasibility and Definition Study (NASA) [2 folders]	
Box 100, Folder 12	Proposed Statement of Work (NASA MSC, 2nd draft, 14 Oct 1969)	

Box 100, Folder 13	Technical Proposal (NR SD 70-95, 22 Apr 1970)
	Advanced Study of Mission Requirements for ERTS E & F Emphasizing Global Oceanography (NASA)
Box 101, Folder 1	Technical Proposal (NR report SD 70-363, Aug 1970)
	Reusable Nuclear Stage Advanced Structure Development (NASA)
Box 101, Folder 2	Technical Proposal (NR report SD 71-281, 2 Feb 1971)
	Space Shuttle Thermal Protection System (NASA) [2 folders]
Box 101, Folder 3	Cost and Contractual Proposal (NR report SD 71MA1560, 10 Apr 1971)
Box 101, Folder 4	Technical Proposal (NR report SD 71-130, 10 Apr 1971)
	Identification and Interpretation of Tectonic Features from ERTS-A Imagery (NASA)
Box 101, Folder 5	Management and Cost Proposal (NR report SD-71-479-2, 12 Apr 1971)
	Window System Design and Test Program for Space Shuttle Orbiter (NASA) [2 folders]
Box 101, Folder 6	Technical Proposal (NR report SD 71-134-1, 16 Apr 1971)
Box 101, Folder 7	Business and Management Proposal (NR report SD 71-134-2, 16 Apr 1971)
	Orbital Operations Study (NASA)
Box 101, Folder 8	Cost and Contractual Proposal (NR report SD71-MA-2753, 20 May 1971)
	Space Tug Economic Analysis (NASA) [2 folders]
Box 101, Folder 9	Technical Proposal (NR report SD 71-501-1, 18 May 1971)
Box 101, Folder 10	Phase A Study Plan (NR report SD 71-501-3, 18 May 1971)
	Phenomenological Approach to Space Radiation Dose Evaluation (USAF)
Box 101, Folder 11	Technical and Management Proposal (NR report SD 71-304, 12 Feb 1971)

	Preliminary Design of a Shuttle Docking and Cargo Handling System (NASA)
Box 102, Folder 1	Proposal, Vol.III - Study Program Plan (NR report SD 71-491-2, 27 Apr 1971)
	Space Station Experiment Data Ground Processing Study (NASA)
Box 102, Folder 2	Technical Proposal (NR report SD 71-737, 4 Oct 1971)
	Methods for Structural Design at Elevated Temperatures (NASA)
Box 102, Folder 3	Technical Proposal (NR report SD 71-774, 23 Nov 1971)
	Research Study to Identify Technology Requirements for Advanced Earth Orbit Transportation Systems (NASA)
Box 102, Folder 4	Technical Proposal (RI report SD 75-SA-0011-1, 3 Mar 1975)
	Central Receiver Solar Thermal Power Station (ERDA)
Box 102, Folder 5	Phase I RFP (ERDA RFP 75-124, Mar 1975)
	Study of System Concepts for STS Derived Heavy Lift Launch Vehicles (NASA) [3 folders]
Box 102, Folder 6	Statement of Work (JSC, FPO, Mar 1975)
Box 102, Folder 7	"Special Emphasis Task Description" (Ehrlicke, proposed work-up for proposal, circa Apr 1975)
Box 102, Folder 8	Study Plan (RI report SD 75-SA-0042-2, 30 Apr 1975)
	Study of Space-Based Power Conversion and Relay Systems (Preliminary Analysis of Alternative System) (NASA)
Box 102, Folder 9	Request for Quotations (NASA RFQ 8-1-5-31-00409 AP14, 24 Apr 1975)
	Space Station Systems Analysis (NASA) [10 folders, total]
Box 102, Folder 10	background questions for Jeffs/Krafft discussion
Box 102, Folder 11	RFP (NASA RFP 8-1-6-PP-00500)
Box 102, Folder 12	"Space Station RFP Proposal" (DBA)
	Technical Proposal (RI report SD 75-SA-0201-1, 6 Feb 1976) [3 folders]

Box 102, Folder 13	photocopy of annotated draft
Box 102, Folder 14	printed copy 1 of 2
Box 103, Folder 1	printed copy 2 of 2
Box 103, Folder 2	Study Plan (RI report SD 75-SA-0201-3, 6 Feb 1976)
	"contributions by KAE" [2 folders]
Box 103, Folder 3	Technical Proposal (RI report SD 75-SA-0201-1, 6 Feb 1976) [partial photocopy]
Box 103, Folder 4	Study Plan (RI report SD 75-SA-0201-3, 6 Feb 1976) [partial photocopy]
Power Satellite Corp / Space Power Corp Files	
Box 103, Folder 5	Power Satellite Corp (1)
Box 103, Folder 6	notes on business [photocopy; notes not in Ehrlicke's hand]
Box 103, Folder 7-8	Power Satellite Corp (2) [2 folders]
Box 103, Folder 9-10	Power Satellite Corp (3) [2 folders]
Box 104, Folder 1	Power Satellite Corp (4)
Box 104, Folder 2	Power Satellite Corp (5)
Box 104, Folder 3	Satellite Power Corp - Correspondence (B. K. Wickstrum to Ehrlicke, 29 Mar 1976)
Box 104, Folder 4-5	Space Power Corp [2 folders]
Miscellaneous Reference Materials	
1920	
Box 179, Folder 6	Forschungsarbeiten auf dem Gebiete des Ingenieurwesens, Heft 224 (1920) Notes: <ul style="list-style-type: none"> Missing Title: • "Der heutige Stand der Schnierungsfrage" (Gümbel) • "Zur numerisch Integration gewöhnlicher Differentialgleichungen I. und II. Ordnung" (G. Duffing)

1930

Box 179, Folder 7 Raketenfahrt (Max Valier, München: R. Oldenbourg, 1930) [p.227+ only]

1950

Box 179, Folder 8 "Perturbations of a Satellite Orbit" (Lyman Spitzer, JBIS 9, no.3 (May 1950) : 131-136) [reprint]

Box 179, Folder 9 Minutes of the Upper Atmosphere Rocket Research Panel (7-8 Sep 1950)

1951

Box 179, Folder 10 "Application of the General Trajectory Equations" (George F. Forbes, JBIS 10, no.5 (Sep 1951)) [reprint]

1954

Box 179, Folder 11 "Die Bahnbestimmung aus dem Vektor der Bahngeschwindigkeit und der Einfluß einer Änderung desselben auf die Bahnelemente" (Karl Schütte, presented to IAF 4th International Astronautical Congress; published in Weltraumfahrt Oct 1953 & Jan 1954) [reprint]

Box 179, Folder 12 "Fundamentals of Space Navigation" (Derek F. Lauden, JBIS 13, no.2 (Mar 1954) : 87-101) [reprint]

Box 179, Folder 13 "Correction of Interplanetary Orbits" (Derek F. Lauden, JBIS 13, no.4 (Jul 1954) : 215-223) [reprint]

1955

Box 179, Folder 14 "The Case for H₂O Clouds on Venus" (Donald H. Manzel and Fred L. Whipple, Publications of the Astronomical Society of the Pacific 67 no.396 (Jun 1955) : 161-168) [reprint]

Box 179, Folder 15 Acta Astronautica 1 fasc. 1, 4 (1955)

Box 179, Folder 16 papers by George F. Forbes [reprints, 1950-1955]

1956

Box 179, Folder 17 "Relativistische Raketenmechanik" (H. G. L. Krause, Astronautica Acta 2 fasc.1 (1956) [reprint]

Box 179, Folder 18 Lunar Instrument Carrier - Landing Factors (H. A. Long, RAND report RM-1725, ASTIA doc AD 112403, 4 Jun 1956)

Box 179, Folder 19	Artificial Satellites of the Moon (Robert W. Buchheim, RAND report P-873, 14 Jun 1956)
Box 179, Folder 20	"Revised Computer Equations for the Interim Impact Predictor and Their Constants" (G. J. Mealey and C. R. Morrison to Distribution, Convair memo PSL-39, 8 Aug 1956)
	Papers presented to IAF 7th International Astronautical Congress, 17-22 Sep 1956 [7 folders]
Box 179, Folder 21	"Chemische Analyse von in Tiefsiedimenten gefundenen mikroskopischen Kugeln vermutlich kosmischen ursprunges" (F. Hecht and R. Patzak, published in Astronautica Acta 3 (1957) : 42-45) [reprint]
Box 179, Folder 22	"On the Application of the Method of Variation of Elliptic Orbit Elements in Case of a Satellite Vehicle" (J. M. J. Kooy, published in Astronautica Acta 3 (1957) : 46-70) [reprint; 2 copies]
Box 179, Folder 23	"Satellite Librations" (Wolfgang B. Klemperer and Robert M. L. Baker Jr) [conference print]
Box 179, Folder 24	"One-Year Exploration-Trip Earth-Mars-Venus-Earth" (G. A. Crocco) [conference print]
Box 179, Folder 25	"Studies of a Minimum Orbital Unmanned Satellite of the Earth (MOUSE) - Part IV: Radiation Equilibrium and Temperature" (D. T. Golden and S. F. Singer) [conference print]
Box 179, Folder 26	"The Ecosphere in the Solar Planetary System" (Hubertus Strughold) [conference print]
Box 179, Folder 27	"The Effect of the Earth's Oblateness and Atmosphere on a Satellite Orbit" (John De Nike) [conference print]
Box 179, Folder 28	"Diamonds, Meteorites, and the Origin of the Solar System" (Harold C. Very, Astrophysical Journal 124 no.3 (Nov 1956) : 623-637) [reprint]
	1957
Box 180, Folder 1	"Space Flight Program" - Draft of August 23, 1957 (Space Flight Technical Committee of the American Rocket Society)
	1958
Box 180, Folder 2	Satellite Re-Entry Flight Mechanical Discussion (ABMA report DA-TN-183, 6 Feb 1958)

Box 180, Folder 3	Ascent of SM-65 Boosted Satellites into Various Circular Orbits (Frank M. Perkins, Convair report ASM-6 rev.2, 11 Mar 1958)
Box 180, Folder 4	"An Analytical Solution for Flight Times of Satellites in Eccentric and Circular Orbits" (F. M. Perkins, Astronautica Acta 4 fasc.2 (1958) : 113-134) [reprint]
Box 180, Folder 5	"Techniques for Departure and Return in Interplanetary Flight" (Karel J. Bossart, presented to IAS 1958 Midwestern Meeting, 14 May 1958)
Box 180, Folder 6	Lifetime of Satellites in Circular Orbit Using Smithsonian Atmosphere based Upon Sputnik Observations (GD report ASM-11, circa Jun 1958)
Box 180, Folder 7	[Martian Telescope] ("Don" [Robey?] to Ehrlicke, 22 Jul 1958)
Box 180, Folder 8	Satellite Re-Entry Dive with Constant Lift Program (ABMA report DA-TN-41-58, 22 Jul 1958)
Box 180, Folder 9	Proceedings of the American Astronautical Society Western Regional Meeting, August 18-19, 1958, Palo Alto, CA (AAS, 1958)
Box 180, Folder 10	A Rocket Borne Video Telescope for Observing Mars (D. H. Robey, Convair report ASM-14, 8 Sep 1958)
Box 180, Folder 11	"Interplanetary Trajectories with Excess Energy" (W. E. Moeckel, presented to IAF 9th International Astronautical Congress, 25-30 Aug 1958)
	Cold Re-Entry of Space Vehicles at Meteor Speeds (D. H. Robey, Convair report ASM-15, 23 Oct 1958) [2 folders]
Box 180, Folder 12	Convair report
Box 180, Folder 13	as published in Astronautica Acta 5 fasc.3-4 (1959) [reprint]
Box 180, Folder 14	"Error Analysis of the Venusian Probe" (W.A. Daly to F. A. Ford, Convair memo PDSA#144; 21 Nov 1958)
Box 180, Folder 15	An Analysis of Trajectories and Performance of a 1960 Mars Probe (Paul A. Penzo and R. G. Frayer, Convair report AZP-053, Nov 1958)
Box 180, Folder 16	Far Satellite: Ascent Trajectory & Preliminary Error Analysis (L. Rider, Convair report OR-33, 9 Dec 1958)
Box 180, Folder 17	Generalized Trajectories for Free-Falling Bodies of High Drag (R. D. Turnacliff and J. P. Hartnett, Heat Transfer Laboratory, University of Minnesota; circa 1958)

Box 180, Folder 18	"Time Dilation in a Manned Space Rocket" (G. Gamow, circa 1958)
	1959
Box 181, Folder 1	JBIS 17 no. 1 (Jan-Feb 1959)
	Papers presented to ASME Aviation Conference, 8-12 Mar 1959 [2 folders]
Box 181, Folder 2	"Analysis of the Aerodynamic Heating for a Re-Entrant Space Vehicle" (M. J. Beunner, ASME paper 59-AV-5) [conference preprint]
Box 181, Folder 3	"The Penetration of Planetary Atmospheres" (Carl Gazley, Jr, ASME paper 59-AV-27) [conference preprint]
Box 181, Folder 4	Nature of the Moon's Surface and Suggested Measurements with Instrumented Landing Capsules (Donald H. Robey, Convair report AZM-071, 15 Mar 1959)
Box 181, Folder 5	Initial Azimuths and Times for Ballistic Lunar-Impact Trajectories (W. C. Riddell, Convair report AZM-070, 16 Mar 1959)
Box 181, Folder 6	"Comparison of Several Propulsion Systems for a Mars Mission" (R. S. Kraemer and V. R. Larson, Rocketdyne report R-1479, 20 Mar 1959) [reprint of ASME paper 59-AV-46, presented to ASME Aviation Conference]
Box 181, Folder 7	"Ion Propulsion Mission Requirements and Their Effect on Ion Engine Design" (Vincent W. Shiel, WADC Tech Note 59-156, ASTIA document 215829, Mar 1959)
Box 181, Folder 8	Orbital and Dynamic Elements for Simplified Two Body Problems (Wayne Tempelman, Convair report OR-56, Mar 1959)
Box 181, Folder 9	Survey of Apogee Designation Paths (Wayne Tempelman, Convair report OR-59, Mar 1959)
Box 181, Folder 10	Survey of Minimum Energy Paths (Wayne Tempelman, Convair report OR-57, Mar 1959)
Box 181, Folder 11	"Flight Mechanics of Low Thrust Space Craft" (Frank M. Perkins, Aerospace Sciences 26, no.5 (May 1959) : 291-297)
Box 181, Folder 12	Tables of Data Concerning Geocentric Circular Orbits and Acceleration Due to Gravity (Walter D. Davis, GDC report, circa Jul 1959)
Box 181, Folder 13	Tables of Data Concerning Planetary and Lunar Circular Orbits (M. Stapleton, Convair report PDSA 120-59, 8 Jul 1959)

Box 181, Folder 14	launch parameter reports by W. C. Riddell Notes: <ul style="list-style-type: none"> • <i>Launch Parameters for Space Flights</i> (W. C. Riddell, Convair report AG780, no date) • <i>Launch Azimuths and Times for the Initiation of Interplanetary Missile Flights</i> (W. C. Riddell, Convair report ZN-7-362, 9 Jul 1959)
Box 181, Folder 15	"Round Trip Trajectories for Mars Observation" (Paul G. Johnson and Roger L. Smith, presented to AAS 2nd Annual Western Regional Meeting, 4-5 Aug 1959)
Box 181, Folder 16	The Kinematics of Orbit-to-Orbit Ballistic Rendezvous (L. Rider, Convair report OR-65, 24 Aug 1959)
Box 182, Folder 1	Error Analysis for Ballistic Intercept Originating from Circular Orbit (W. K. Tempelman, Convair report OR-64, Sep 1959)
Box 182, Folder 2	"High Precision Stellar Navigator for Interplanetary Guidance" (C. D. Bock, ARMA Engineering Sep-Oct 1959[?] : 12-15)
1960	
Box 182, Folder 3	"Ice in Space" (Donald H. Robey, JBIS 17 (1960) : 205-217)
Box 182, Folder 4	"An Astro Vehicle Rendezvous-Guidance Concept" (R. S. Swanson, N. V. Peterson, and L. R. Hoover, Western Aviation Feb 1960 : 12-15, 31)
Box 182, Folder 5	"Himmelsmechanische Probleme der Raumfahrt" (Karl Schütte, part 1 published in Flugkörper 1 no.10 (Dec 1959) : 311-317; part 3 published in Flugkörper 2 no.2 (Feb 1960) : 52-53)
Box 182, Folder 6	"Propulsion Requirements for Rendezvous in Orbit" (E. Levin, presented at IAS National Flight Propulsion Meeting, 10-11 Mar 1960; RAND report P-1908, 11 Feb 1960)
Box 182, Folder 7	"Ascent from Inner Circular to Outer Co-Planar Elliptic Orbits" (L. Rider, ARS Journal 30 No.3 (Mar 1960) : 254-258) [reprint]
Box 182, Folder 8	"Selected Problems in Interstellar Navigation" (Robert Cornag, Navigation 7, no. 2-3 (Summer-Autumn 1960) : 99-105) [reprint]
Box 182, Folder 9	Astrodynamical Notation and Usage (Samuel Herrick, Maud W. Malemson, and Mary P. Francis, ARDC Astrodynamical Report No.10, 15 Jul 1960 (preliminary))
Box 182, Folder 10	"Die Ersten und Zweiten Differentialquotienten in der Elliptischen Bewegung als Funktionon des Geschwindigkeitsvektors" (Karl Schütte, Astronautica Acta 6 fasc.2-3 (1960) : 144-150) [reprint]

Box 182, Folder 11	Some Dynamical Properties of the Natural and Artificial Satellites (Su-Shu Huang, GSFC, NASA Technical Note D-502, Sep 1960)
Box 182, Folder 12	"Are Space Probes Worth It?" (Lloyd V, Berkner, Space Digest Nov 1960 : 88-94)
1961	
Box 182, Folder 13	"Costing Methodology and the Program Costs for a Manned Lunar Landing and Return Mission - Project MALLAR" (T. E. Dolan, W. G. Long, and R. H. Lundberg, AAS paper 61-32; presented to 7th AAS Annual Meeting, 16-18 Jan 1961) [conference preprint]
Box 182, Folder 14	"A Study of Nuclear-Rocket Missions to Mars" (S. C. Himmel, J. F. Dugan Jr, R. W. Luidens, and R. J. Weber, Aerospace Engineering Jul 1961 : 18-19, 51-58)
Box 182, Folder 15	"Injection Schemes for Obtaining a Twenty-Four Hour Orbit" (Rudolf F. Hoelker and Robert Silber, Aerospace Engineering Jan 1961 : 28-29, 76-84)
Box 182, Folder 16	"Über Untersuchungen an linearen Stoßentladungen" (W. Frie, H. Maecker, A. Michel, H. Motschmann, and H. Schindler, Zeitschrift für Naturforschung 16a (1961) : 121-126)
Box 182, Folder 17	"Project Phoenix Aims at Economical Super Space Probes" (Aviation Week (27 Mar 1961) : 50-56, 61)
Box 182, Folder 18	"Stellar-Inertial System Looks Best for Interplanetary Midcourse Guidance" (Hildrey I. Bement, Space/Astronautics May 1961 : 128-132)
Box 182, Folder 19	Results of the First U. S. Manned Suborbital Space Flight - Proceedings of a Conference (Joint NASA/NIH/NAS publication, 6 Jun 1961)
Box 182, Folder 20	Project SPAN [Space Program Application of Nerva] - Solar Monitor (GD report AE61-0582, 17 Jul 1961)
Box 182, Folder 21-22	A Parametric Study Conducted by GD/Astronautics and Rocketdyne to Optimize the Lunar Landing/Launch for the Apollo Mission (D. J. Jones, Convair report PDSA 101-61, 14 Sep 1961 (preliminary)) (2 folders)
	"The Solar Monitor - A Nuclear Rocket Mission" (B. E. Thompson, J. H. Guill, and H. Radd, ARS paper 2043-31; presented to ARS Spaceflight Report to the Nation, 9-15 Oct 1961) [2 folders]
Box 183, Folder 1	draft

Box 183, Folder 2	ARS preprint
Box 183, Folder 3	"Astrostats for Astrophysical Research in Space" (Russel A. Nidey, §13 of Space Astrophysics, William Liller (ed) (NY: McGraw-Hill, 1961))
Box 183, Folder 4	Organic Matter and the Moon (Carl Sagan, National Academy Sciences-National Research Council publication 757, 1961) [reprint]
1962	
Box 183, Folder 5	articles from Missiles and Rockets, 8 Jan 1962: Notes: Missing Title: <ul style="list-style-type: none"> • "NASA Plans to Get Three-Stage Nova (Hal Taylor, p.13) • "First Design of Apollo Lunar Craft and Gemini: Two-Man Capsule Shown (pp.14-15) • "Expedition to Saturn: Can Man Come Back From the Outer Planets?" (Robert L. Forward, pp.16-17, 38-39)
Box 183, Folder 6	A Summary of the Characteristics of Ballistic Interplanetary Trajectories, 1962-1977 (Victor C. Clarke Jr, JPL report TR 32-209, 15 Jan 1962)
Box 183, Folder 7	On the Epistemological Interrelations of Electrostatics, Electromagnetism, Quantum-, Wave-, and Classical Mechanics (F. W. A. Knoll, Hughes report TIC 62-9, 19 Jan 1962)
Box 183, Folder 8	"The Twins' - Most Hospitable of Outer Planets?" (Robert L. Forward, Missiles and Rockets (22 Jan 1962) : 34-36, 45)
Box 183, Folder 9	"Survey of Meteoroid Hazard" (Warren H. Straly, MSFC Internal Note IN-P&VE-F-62-1, 12 Feb 1962)
Box 183, Folder 10	"Project Ranger" (p.47-58 of unidentified publication, circa Feb 1962)
Box 183, Folder 11	Constants of Astronomy and Geodesy (F. W. A. Knoll, Hughes report TAD 62-38, 10 Mar 1962)
Box 183, Folder 12	Preliminary Study of Fast Manned Scientific Nuclear-Rocket Missions to Mars - Progress Report No. 3 (NASA MSC report, Apr 1962)
Box 183, Folder 13	Three-Dimensional Sphere of Influence Analysis of Interplanetary Trajectories to Mars (Gerald Kemp Jr and Charles L. Zola, NASA Technical Note D-1199, May 1962)
Box 183, Folder 14	"A General Solution for Linear Sampled Data Control" (Gene F. Franklin and Thomas L. Gunkel II, ASME paper 62-JACC-11;

	presented to 1962 Joint Automatic Control Conference, 27-29 Jun 1962)
Box 183, Folder 15	Optimum Midcourse Plane Changes for Ballistic Interplanetary Trajectories (W. R. Fimple, UAC Research Laboratories report A-110058-3, Jun 1962)
Box 183, Folder 16	"The Manned Lunar Mission" (Robert R. Gilruth and Maxime A. Faget, ARS paper 2464-62; presented to ARS Lunar Missions Meeting, 17-19 Jul 1962) [photocopy]
Box 183, Folder 17-18	Interplanetary Flight Departure and Arrival Parameters, Vol. I (GDA report AG-1212, 27 Jul 1962) (2 folders)
Box 183, Folder 19	Model Atmospheres in Trajectory Design (L. T. Gregg, GDA report AG-1219, 15 Aug 1962)
	Papers presented to AFOSR-GE Symposium on Dynamics of Manned Lifting Planetary Entry, 29-31 Oct 1962 [11 folders]
Box 183, Folder 20	"Aerothermoelastic Analysis of a Simple Leading Edge Structure" (Maurice A. Brull)
Box 184, Folder 1	"Critical Review of Experiment and Theory for Flutter of Aerodynamically Heated Panels" (L. D. Guy and Sidney C. Dixon)
Box 184, Folder 2	"Dynamics and Flight Environment of Lifting Vehicles Entering the Atmospheres of Earth, Mars and Venus" (Philip Levine)
Box 184, Folder 3	"Effect of a Thermosphere on the Martian Atmospheric Density at High Altitudes" (Donald N. Vachon)
Box 184, Folder 4	"Engineering Model Atmosphere of Mars" (Gerhard F. Schilling)
Box 184, Folder 5	"Inductive MHD Generator for Re-entry" (J. R. Randal)
Box 184, Folder 6	"Martian Entry Capsule: Design Considerations for Terminal Deceleration" (J. C. McMullen and A. M. Smith)
Box 184, Folder 7	"Microwave Diagnostics of Arc-Heated Plasmas" (R. Warder, W. L. Nighan, M. Brodwin, and Ali Bulent Cambel)
Box 184, Folder 8	"On Range and Aerodynamic Heating Optimality for Lifting Planetary Entry in a Class of Hypervelocity Orbits" (C. R. Cavoti)
Box 184, Folder 9	"Reduction of Aerodynamics Heating by Slot Injection of Helium into an Air Stream" (C. A. Kemper and G. A. Brown)

Box 184, Folder 10	"Variation in the Earth's Atmospheric Structure, 30 to 250 Km" (G. V. Groves and D. P. McDermott)
Box 184, Folder 11	articles from General Precision Aerospace Technical News Bulletin 5 no.4 (4th Q 1962): Notes: <ul style="list-style-type: none"> • "Voyage of Discovery" (pp.4-11) • "The Interplanetary and Interstellar Communication Potential of the Laser" (Donald S. Bagley, pp.12-17)
Box 184, Folder 12	"A Comprehensive Analytical Basis for Long-Range Planning Decisions in Future Manned Space and Lunar-Base Programs" (Dean P. Joy and David Schnebly, ARS paper 2714-62, presented to ARS 17th Annual Meeting, 13-18 Nov 1962) [photocopy of thermofax original]
Box 184, Folder 13	Advanced Decision/Data Systems (Management Methods Corp briefing for GDA, circa 1962) [photocopy]
Box 184, Folder 14	The Space Race - From Sputnik to Apollo ... and Beyond (Donald W. Cox, Philadelphia and New York: Chilton Rock, circa 1962) [photocopies of selected pages]

1963

Space Flight Handbooks [10 folders, total]	
Vol.2 - Lunar Flight Handbook (Martin Marietta; NASA report SP-34, 1963) [9 folders, total]	
Box 184, Folder 15-16	original report [1-2 of 3 folders]
Box 185, Folder 1	original report [3 of 3 folders]
Box 185, Folder 2	Part 1 - Background Material (Martin Marietta, NASA report SP-34 Part 1, 1963) [photocopy]
Box 185, Folder 3-4	Part 2 - Lunar Mission Phases (Martin Marietta, NASA report SP-34 Part 2, 1963) [print from NASA microfiche N63-21105] [2 folders]
Box 185, Folder 5	Part 3 - Mission Planning (Martin Marietta, NASA report SP-34 Part 3, 1963) [print from NASA microfiche N63-21106]
Box 185, Folder 6-7	Detailed Technical Report (Martin report ER13550-III, Dec 1964) [print from NASA microfiche N65-20752] [2 folders]

Box 186, Folder 1	Vol.3 - Planetary Flight Handbook (Lockheed, NASA report SP-35 Part 1, 1963)
Box 186, Folder 2	"Über die Kosten Bemannter Marsflüge" (Harry O. Ruppe, doctoral dissertation, TUB, 7 Jan 1963)
	Papers presented to AAS 9th Annual Meeting/Interplanetary Missions Conference, 15-17 Jan 1963 [4 folders]
Box 186, Folder 3	"Aerodynamic Force Coefficients and Equilibrium Surface Temperatures in Free Molecule Flow" (Kirk Irwin)
Box 186, Folder 4	"Influence of Shape on Aerodynamics Damping of Oscillatory Motion During Planet Atmosphere Entry and Measurement of Pitch Damping at Large Oscillation Amplitudes" (Bain Dayman, Jr, James M. Brayshaw, Jr, Duane A. Nelson, and Terry L. Babineaux)
Box 186, Folder 5	"Effects of Shape on Total Radiative and Convective Heat Inputs at Hyperbolic Entry Speeds" (Percy J. Bobbitt, AAS preprint 63-15)
Box 186, Folder 6	"New Approach to the Hypervelocity Impact Theory" (S. W. Yuan and C. N. Scully, AAS preprint 63-30)
Box 186, Folder 7	"On Asymptotic Stability in the Restricted Three-Body Problem" (Paul B. Richards, Icarus 1 no.4 (Jan 1963)) [reprint]
Box 186, Folder 8	"Orbit Determination Using Kalman's Method" (Thomas L. Gunkel II, prepared for ION Convention, 16 Apr 1963; published in Journal of the Institute of Navigation 10, no.3 (Autumn 1963) : 273-291)
Box 186, Folder 9	Mission Analysis for Controlled Fusion Propulsion System (Richard L. Verga and Robert F. Cooper, ASD Propulsion Lab, AFSC Technical Documentary Report ASD-TDR-62-696, Apr 1963)
	Voyager Design Studies
Box 186, Folder 10	Final Report [?] (Avco, c 1965) [pp.147-192 only; related to instrument payloads for Voyager Venus/Mars 1973]
Box 186, Folder 11	"A Method for Determining Orbital Launch Windows for Interplanetary Trajectories - Including Data Illustrating the Application for a Typical Example" (John W Brice, 2 Jul 1963)
Box 187, Folder 1	Guidance, Control, and Communications (NASA TM X-50120; presentations at the Manned Planetary Mission Technology Conference, Lewis Research Center, Cleveland, Ohio, May 21-23, 1963) [print from NASA microfiche N71-70106 through N71-70114]

	Early Manned Interplanetary Missions - Follow-on Contract (NAS8-5024) Notes: Lockheed contract
Box 187, Folder 2	First Presentation - August 6, 1963 at Marshall Space Flight Center (Lockheed report 8-32-63-2, 6 Aug 1963)
Box 187, Folder 3	"Future Unmanned Exploration of the Solar System" (Maxwell W. Hunter II, presented to Executive Secretary, National Aeronautics and Space Council, Sep 1963)
	Mission Oriented Advanced Nuclear System Parametric Study (NAS8-5371)
Box 187, Folder 4	Phase I Report (STL report 8423-6001-TL-000, 29 Oct 1963)
Box 187, Folder 5	A Compilation of Recent Research Related to the Apollo Mission (NASA TM X-890, Oct 1963)
Box 187, Folder 6	An Unsolicited Proposal for Evaluation of Midcourse Correction Requirements for Lunar Missions (GDA report GDA 63-1193, 22 Nov 1963 for submission to MSFC)
Box 187, Folder 7	Fuel Conservation Systems Analysis
Map-case 24x36 Dwr, Folder 2003-0025-2436-0001	"Saturn V Apollo Lunar Orbital Rendezvous Mode" (MSFC drawing M-CP-P-5006, 15 Jun 1963) [oversized material; 24"x36"]
	1964
Box 187, Folder 8	"The Application of Advanced Propulsion Systems to Deep-Space Vehicles" (R. G. Cruddace, presented to 2nd European Symposium of Space Technology, Paris, 18-20 Jun 1962) [photocopy from JBIS 19 (1963-64) : 133-147]
Box 187, Folder 9	articles from Space Digest (Feb 1964): Notes: <ul style="list-style-type: none"> • "Exploding Galaxies - How Stable is Our Own Milky Way?" (Sir Bernard Lovell, pp.63-65) • "Prospects and Problems of Lunar Communications" (Boris Kit, pp.66-72)
	Orbital Burden Rates for Manned Space Missions (H. Hermann Koelle, FPO/MSFC report; Feb 1964) [2 folders]
Box 187, Folder 10	draft
Box 187, Folder 11	comments by Ehricke

Box 187, Folder 12	Survey of Velocity Requirements and Reentry Flight Mechanics for Manned Mars Missions (E. Brian Pritchard, LRC report, 12 Mar 1964)
Box 187, Folder 13	NASA Reprogramming Model (W. M. Faucett and C. B. Moore, GD FW report FZM-4082, 13 Mar 1964)
	Initial Concepts of Lunar Exploration Systems for Apollo (NASw-792) [2 folders, total]
	Final Report [2 folders]
Box 187, Folder 14	Vol. I - Summary (Boeing, NASA contractor report CR-35, Mar 1964)
Box 187, Folder 15	Vol. V - Summary Digest (Boeing, NASA contractor report CR-39, Mar 1964)
	Planetary Transportation System Model (NAS8-11057)
Box 187, Folder 16	Nine-Month Summary (July 1963 thru March 1964) (Martin Co, NASA contractor report NASA-CR-64-35; Apr 1964)
	Earth-Mars-Earth Ballistic Trajectory Data, 1975-1986 [5 folders, total]
Box 188, Folder 1-3	Vol. V: Mission-Map Data, 1982 Opposition Period (S. W. Wilson, Jr, GD FW report FZM-4163-5, 5 Jun 1964) [3 folders]
Box 188, Folder 4-5	Vol. VI: Mission-Map Data, 1984 Opposition Period (S. W. Wilson, Jr; GD FW report FZM-4163-6, 5 Jun 1964) [2 folders]
Box 188, Folder 6	"Lunar Post-Apollo Mission Status" (R. E. Bradley to J. W. Petre, GDA Memo, 16 Jun 1964)
Box 188, Folder 7	"Die Amerikanische Luft- und Raumfahrtindustrie 1963/64 - Rückblick und Vorshau" (Flugwelt 1964 no.7 : 555)
Box 188, Folder 8	"Statement of the Space Science Board of the National Academy of Sciences on National Goals in Space, 1971-1985" (28 Oct 1964)
Box 188, Folder 9	Onboard Orbital Navigation Using Unknown Landmarks (J. J. Fischer and K. C. Kochi, NA report T4-1855/311, 18 Nov 1964)
Box 188, Folder 10	Project Apollo - Man To The Moon (Tom Alexander, New York: Harper & Row, 1964) [photocopy of selected pages]

1965

Box 188, Folder 11	"Studies of the Problem Solving Process in Engineering Design" (Thomas J. Allen, presented to Institution of Electrical Engineers' Conference on Electronics Design, London; 8 Feb 1965)
Box 189, Folder 1	"On Future Scientific and Manned Space Flight Projects" (Abraham Hyatt, 1965 Minta Martin Lecture, MIT, 10 Feb 1965)
Box 189, Folder 2	"Transferts Orbitaux Économiques" (Jean-Pierre Marec, published in La Recherche Aérospatiale 105 (Mar-Apr 1965) : 11-21; ONERA report T.P.No.246 (1965))
	"Manned Interplanetary Exploration Capability Using Nuclear Pulse Propulsion" (Paul R. Shipps, presented to 2nd Space Congress, 5-7 Apr 1965; General Atomics report GA-6224, 19 Mar 1965) [2 folders]
Box 189, Folder 3	complete copy and cannibalized copy
Box 189, Folder 4	photocopy
Box 189, Folder 5	"Methoden der Simulation und Analyse mit dem Elektronenrechner beim Entwurf zuverlässiger Schaltungen" (W. Hochwald, K. F. McQuade, and H. S. Scheffler, presented to NTG-Tagung "Zuverlässigkeit", Apr 1965) [photocopy]
Box 189, Folder 6	Project Ares - Manned Mars Mission - A Design Study for a Course in Systems Engineering (Peter Benjamin and James Hester, ed, MIT, Spring Semester 1965)
Box 189, Folder 7	NASA Authorization for Fiscal Year 1966 - Hearings Before the Committee on Aeronautical and Space Sciences, United States Senate, Eighty-Ninth Congress, First Session - Appendixes, Pt 3 - Post Apollo Planning Documents and Information Relating to the Fiscal Year 1965 Authorization (circa Apr 1965)
Box 189, Folder 8	"The Use of High Energy Upper Stages for Space Research" (James B. Vendrick, presented to AAS 11th Annual Meeting, 3-6 May 1965)
Box 189, Folder 9	"Application of Saturn/S-IVB/Apollo Systems to Planetary Exploration" (M. W. Root, presented to AAS Symposium Post-Apollo Space Exploration, 4-6 May 1965; Douglas Engineering paper PD-3645)
Box 189, Folder 10	"Advanced Studies Planning" (Ehricke to R. C. Sebold, GDC Memo, 27 May 1965)
Box 189, Folder 11	Analysis of Mars Entry with Considerations of Separation and Line-of-Sight Relay Communications for Bus-Capsule Combinations (E. Brian Pritchard and Edwin F. Harrison, NASA Technical Note D-2841, May 1965)

Box 189, Folder 12	"Lunar Results from Rangers 7 to 9" (Gerard P. Kuiper, Special Supplement to Sky & Telescope (May 1965) : 293-308)
	Conjunction Class Manned Mars Trips (NASA contract NASw-1028)
Box 189, Folder 13	Summary (Douglas report SM-48661, Jun 1965)
Box 189, Folder 14	"Solar System Exploration Study Planned" (Irving Stone, Aviation Week and Space Technology, 12 Jul 1965 : 87-89+ (incomplete))
Box 189, Folder 15	A Procedure to Measure the Worth of Space Programs (H. H. Koelle, Technische Universität Berlin report TUB-I R 1965/2, 15 Jul 1965)
	Small Interplanetary Probe Experiments Spacecraft (NASA contract NASw-1355)
Box 189, Folder 16	Final Report (Bendix report BSR 1347, 8 Aug 1965) [photocopies of selected pages]
	Discussion of a Space Program Model (GDC report AOK65-003, 22 Aug 1965) [5 folders, total]
Box 190, Folder 1-2	printed version [2 folders]
Box 190, Folder 3-4	blueline [2 folders]
Box 190, Folder 5	photocopy
Box 190, Folder 6	"Weltraumforschung und Raumflugtechnik in der Europäischen Zusammenarbeit" (Günther Bock, presented at 6th Europ[ä]ischen Luftfahrtkongreß, 1-4 Sep 1965)
Box 190, Folder 7	Post Apollo Programs (NA report SID 65-1217, 167 Sep 1965)
Box 190, Folder 8	Gravity-Assisted Trajectories for Unmanned Space Exploration (R. F. Porter, R. G. Luce, and D. S. Edgecombe, Battelle Memorial Institute report BMI-NLVP-FTR-65-1, 23 Sep 1965) [photocopy]
Box 190, Folder 9	Project Surveyor - Report of the Subcommittee on NASA Oversight of the Committee on Science and Astronautics, U.S. House of Representatives, Eighty-Ninth Congress, First Session [photocopy of committee print]
Box 190, Folder 10	The Rotation of the Planet Mercury (Giuseppe Colombo and Irwin I. Shapiro, SAO Research in Space Special Report 188R, 13 Oct 1965 rev. 15 Nov 1965)
Box 191, Folder 1	"Die Bedeutung von Geschwindigkeitsänderungen für das Rendezvous Manöver" (Karl Schütte, Astronautik 1965, no.6 : 143-154) [reprint]

Box 191, Folder 2	Missions to the Comets (F. Harin, D. L. Roberts, and P. M. Pierce, IIT Research Institute report M-9, Dec 1965)
Box 191, Folder 3	Spaceflight, Index to Vol.7 (1965)
Box 191, Folder 4-5	MSFC Space Program Model (circa 1965) (2 folders)
Box 191, Folder 6	Scientific Space Program (circa 1965) [photocopy]
1966	
Box 191, Folder 7	Efficient Planetary Parking Orbits with Examples for Mars (Roger W. Luidens and Brent A. Miller, NASA Technical Note D-3220, Jan 1966)
Box 191, Folder 8	"Technique Ranks Space Objectives" (William S. Beller, Missiles and Rockets, 7 Feb 1966 : 22-24)
Box 191, Folder 9	"Application of the Saturn-Apollo Systems" (William B. Taylor, AAS paper 66-9, presented to AAS 12th National Meeting, 21-23 Feb 1966)
Mission Engineering Study of Electrically Propelled Manned Planetary Vehicles	
Box 191, Folder 10	Proposal, Vol. 1 - Technical Proposal (Hughes report SSD 60087P, Mar 1966)
Box 191, Folder 11	Boost and Reentry Vehicle Flight in the Earth's Atmosphere 1975-1985 (AVCO presentation to USAF Systems Command, 23 May 1966)
Box 191, Folder 12	Speeches by Edward C. Welsh (Feb-May 1966)
Box 191, Folder 13	Astronautica Acta 12 no.3 (May-Jun 1966)
Box 191, Folder 14	"Nth Country Considers Its Post Manned Lunar Landing Space Program" (Nicholas E. Golovin, Office of Science and Technology, Office of the President, 16 Jun 1966)
Box 192, Folder 1	"Einfache Rendezvous-Manöver" (Karl Schütte, Astronautik 1966 no.3 : 63-73) [reprint]
Trajectories and Upper Stage Requirements for Exploration of Solar System (NAS2-2928)	
Box 192, Folder 2-4	Final Report (UARL report E-910352-9, 15 Jul 1966) [photocopy] (3 folders)
Box 192, Folder 5	Astronautik 3 no.4 (Jul-Aug 1966)

Box 192, Folder 6	"Fixed Point Simulation of Onboard Orbit Determination" (T. L. Gunkel II and J. C. Eisey, presented to AIAA Guidance & Control Conference, 15-17 Aug 1966; NA report X6-1199/3111, 17 Jul 1966)
Box 192, Folder 7	"What Comes After Apollo?" (John Rhea, Electronics (22 Aug 1966) : 141-143)
Box 192, Folder 8	articles from the San Diego Union, 15 Sep 1966 Notes: Missing Title: <ul style="list-style-type: none"> • "Gemini Leaves Vital Legacy for Apollo Program" • "Software Concern Sets Rapid Pace" (Carl Plain, p.D-2)
Box 192, Folder 9	"Lunar Orbiter Mission A" [brochure, circa Sep 1965]
Box 192, Folder 10	"Considerations in the Design of a Guidance and Control System for Advanced Interplanetary Missions" (Rudy R. Mueller, T. L. Gunkel II and C. H. Genrikson, presented to 17th International Astronautical Congress, 10-15 Oct 1966; NA report X6-2418/060)
Box 192, Folder 11	"NAA Outlines Post-Apollo Space Goal Proposal - II (A Special Report)" (Space Daily (11 Oct 1966) : 218-219)
Box 192, Folder 12	Space Technology Review (Martin Co report, 19 Oct 1966)
Box 192, Folder 13	Weltraumfahrt 17, no.4 (4th Quarter 1966)
	Large Space Structures Experiments for AAP (NAS8-18118)
Box 192, Folder 14	Study Plan (GDC report GDC-DCL66-001, 4 Nov 1966)
Box 192, Folder 15	"Manned Interplanetary Program Planning" (Franklin P. Dixon, presented to the National Conference on the Management of Aerospace Programs, University of Missouri, 16 Nov 1966)
Box 192, Folder 16	"Einfache Rendezvous-Manöver Bei Elliptischer Zielbahn" (Karl Schütte, Astronautik 1966 no.6 (Nov-Dec 1966) : 171-175) [reprint]
Box 192, Folder 17	"Lunar Orbiter-2 Reveals Crater Details" (Aviation Week and Space Technology, 5 Dec 1966)
Box 192, Folder 18	Exploration of Interplanetary Space (5th Fall series Industrial Liaison Symposium, MIT (Boston, MA), 8 Dec 1966) [program]
Box 192, Folder 19	Hyperbolic Transfer (W. C. Riddell, Convair technical note 66-586-154, Dec 1966)
Box 192, Folder 20	"Herleitung der Relativistischen Zeitdilatation aus dem Doppler-Effekt" (R. Becker, Der Mathematische und Naturwissenschaftliche Unterricht 18, no.9 (1965/1966) : 306-307)

Box 193, Folder 1	Statements by Homer E. Newell to Subcommittee on Space Science and Applications, Committee on Science and Astronautics, U. S. House of Representatives (1966)
1967	
articles from Planetary and Space Science 15 no 1 (Jan 1967) [4 folders]	
Box 193, Folder 2	"The Structure of the Solar Plasma Flow Generated by Solar Flares" (S. I. Akasofu and S. Yoshida, pp.39-47)
Box 193, Folder 3	"Measurements of the Depth of Loose and Loosely Bonded Material on the Lunar Surface Based on Ranger VII, VIII and IX Photographs" (Nils Aall Barricelli and Ralph Metcalfe, pp.49-51)
Box 193, Folder 4	"Resonance Effects Due to the Longitude Dependence of the Gravitational Field of a Rotating Primary" (R. R. Allen, pp.53-76) [photocopy]
Box 193, Folder 5	"On Space Manoeuvres with Continuous Thrust" (E. G. C. Burt, pp.103-122)
Box 193, Folder 6	Flight Mechanics and Controls Summer Student Project 1966 (J. Hill, A. Brasse, J. Cline, D. Vogt, and J. Golson, Boeing report D5-13334, 15 Feb 1967)
articles from Planetary and Space Science 15 no 2 (Feb 1967) [2 folders]	
Box 193, Folder 7	"Radiative Relaxation Times for Mars - A Discussion of Martian Atmospheric Dynamics" (Richard Goody and Michael J. S. Belton, pp.247-256)
Box 193, Folder 8	"Rotational Effects on the Distribution of Thermal Plasma in the Magnetosphere of Jupiter" (D. B. Melrose, pp.381-393)
Box 193, Folder 9	The National Space Program - Its Values and Benefits - Staff Study for the Subcommittee on NASA Oversight of Committee on Science and Astronautics, U.S. House of Representatives, Ninetieth Congress, First Session (2 Mar 1967) [committee print]
Box 193, Folder 10	Fifth Goddard Memorial Symposium on "Voyage to the Planets" (14-15 Mar 1963) [papers]
Box 193, Folder 11	"Solar Wind Degradation of Interplanetary Dust" (D. G. Carpenter and Robert R. Pastusek, Planetary & Space Science 15, no.4 (Apr 1967) : 593-598)

Box 193, Folder 12	"A Statistical Analysis of the Martian Wave of Darkening and Related Phenomena" (James B. Pollack, Edward H. Greenberg, and Carl Sagan, Planetary & Space Science 15, no.5 (May 1967) : 817-824)
Box 193, Folder 13	"On the Location In Space of the Zodiacal Dust Particles" (R. D. Wolstoncroft, Planetary & Space Science 15 no 6 (Jun 1967) : 1081-1089)
	Advanced Voyager [?]
Box 193, Folder 14-16	Final Report, Vol. II (Northrop report TR-793-7-205B, Jul 1967) [photocopy] [3 folders]
Box 193, Folder 17	Guidance-Computer Sizing for Linear-Tangent Guidance Equations (F. M. Perkins, Aerospace Corp report TR-0158(3307-01)-1 / AF report SAMSO-TR-67-48, Jul 1967)
	Manned Planetary Flyby Missions Based on Saturn/Apollo Systems (NAS8-18025) [2 folders]
Box 194, Folder 1	[Dummy Proposal] (GDA, circa Apr 1966)
Box 194, Folder 2	Final Briefing (NA report SID 67-549-2, Aug 1967)
Box 194, Folder 3	"The Worth of the Space Program" (President's Forum, AIAA 4th Annual Meeting & Technical Display, 27 Oct 1967)
	articles from Planetary and Space Science 15 no 10 (Oct 1967) [2 folders]
Box 194, Folder 4	"An Approximate Calculation of Radiative Heating and Radiative Equilibrium in the Martian Atmosphere" (Peter Gierasch and Richard Goody, pp.1465-1477)
Box 194, Folder 5	"Lifetimes of Satellites in Large-Eccentricity Orbits" (G. E. Cook and Diana W. Scott, pp.1549-1556)
Box 194, Folder 6	"Preliminary Performance Calculations for SM as a Maneuverable Satellite" (Ehrlicke to D. J. Yockey, NA memo, 2 Nov 1967)
Box 194, Folder 7	Radio Astronomy: A Revision of Chapter 22, Handbook of Geophysics and Space Environments (D. A. Guidice, AF Cambridge Research Laboratories report AFCRL-67-0621, Air Force Surveys in Geophysics No. 199, Nov 1967)
	articles from Planetary and Space Science 15 no 11 (Nov 1967) [3 folders]
Box 194, Folder 8	"On the Constitution of Uranus and Neptune" (W. M. Ramsey, pp.1609-1623)

Box 194, Folder 9	"A Unifying Theory of Galactic Forms and Activity" (J. H. Piddington, pp.1625-1640)
Box 194, Folder 10	"Jupiter's Rotation Period" (R. A. Duncan, pp.1687-1694)
Box 194, Folder 11	Analysis of US Space Program (circa 1967)
	1968
Box 194, Folder 12	Metaprobe Separation Concepts (circa 1968)
Box 194, Folder 13	"Development of Standardized Instrumentation to be Used with the Microprobe/Metaprobe Concept" (G. B. Hallahan to Ehrlicke, NR internal letter, 12 Feb 1968)
	"Grand Tour of Planets Possible Starting October '78" (Don Dwiggins, The Register (evening ed.), 26 Feb 1968, D1)
Box 194, Folder 14	[reduced size reference copy]
Box 255, Folder 21	[oversized original material]
Box 194, Folder 15	"Origin of Lunar Surface Still a Mystery" (George S. Hunter, Aviation Week and Space Technology (22 Apr 1968) : 40-47)
Box 194, Folder 16	"Research and Development: Our Neglected Weapon" (Republican Coordinating Committee, 27 May 1968); under cover of A. J. Montgomery to [blank], NR Internal Letter, 5 Jul 1968)
Box 194, Folder 17	Flight 94 No.3098 (25 Jul 1968) [Space Special Issue]
Box 194, Folder 18	The First United Nations Conference on "The Exploration and Peaceful Uses of Outer Space" - A Personal Description and Reaction (John G. Meitner, prepared for Edward C. Welsh, Stanford Research Institute report, Sep 1968)
Box 195, Folder 1	"Trajectory Analysis of a 1975 Mission to Mercury via an Impulsive Flyby of Venus" (R. Allen Wallace, presented to AAS/AIAA Astrodynamics Specialist Conference, Sept 3-5, 1968)
	Technology Requirements for Atmosphere Breaking to Orbit Around Mars & Venus
Box 195, Folder 2	Final Report, Vol I - Summary (E. M. Repic, NA report SD67-994-1, NASA reprint CR-1131, Sep 1968)
Box 195, Folder 3	George E. Mueller to J. L. Atwood, 2 Oct 1968 [photocopy]

Box 195, Folder 4	Launch Vehicle Space Program Analysis (GDC report AAR-68-004, 3 Oct 1968)
Box 195, Folder 5	"Preparation of NR Position Paper for 1970s United States Space Program, 'The Next Decade in Space'" (E. R. Kennedy to List, NR Internal Letter APK 68-91, 25 Oct 1968 rev. 26 Oct 1968)
Box 195, Folder 6	Large Low-frequency Orbiting Radio Telescope (Hans U. Scherch and John M. Hedgepath, NASA contractors report CR-1201, Oct 1968)
Box 195, Folder 7-8	Multi-Planet Mission (Missions to the Outer Planets) - Presentation Material of Final Study Results (JPL document 131-01, Nov 1968) [3 copies; 2 folders]
Box 195, Folder 9	National Launch Vehicles Required to Support DoD/NASA Unmanned Missions 1969-1979 (Ad Hoc Joint DoD/NASA Launch Vehicle Working Group, Nov 1968) [photocopy]
Box 195, Folder 10	Planetary Astronomy - An Appraisal of Ground-Based Opportunities (National Academy of Sciences publication 1688, 1968) [photocopy]
Box 195, Folder 11	Re-entry and Planetary Entry, Vol.1 (W. H. T. Loh, NY: Springer Verlag, 1968) [Chapter 13 illustrations]
1969	
Box 195, Folder 12-13	The Multiple Outer Planet Mission (Grand Tour) (IIT Research Institute report M-16, Jan 1969) [2 folders]
Box 195, Folder 14	Technology Papers on Mission Analysis Technology for Electric Propulsion Presented at AIAA 7th Electric Propulsion Conference, Williamsburg, Virginia, March 3-5, 1969.
Box 196, Folder 1	Briefing Presentation to U.S. House of Representatives, Committee on Science and Astronautics, Manned Space Flight Subcommittee, Friday, March 14, 1969 (NR SD report AP69-8, 14 Mar 1969; preliminary)
Box 196, Folder 2	Presentation to Manned Space Flight Subcommittee, Committee on Science and Astronautics, United States House of Representatives (NR report SD69-158, 14 Mar 1969)
Box 196, Folder 3	Jupiter and Saturn Orbiter Definition and Jupiter Galilean Moon Mission Performance Analysis (John C. Niehoff, IIT Research Institute briefing, 2 Apr 1969) [photocopy]
Box 196, Folder 4	Lunar Sample Program - Principle Investigators and Investigations (as of 7 Apr 1969) [photocopy]

Box 196, Folder 5	Apollo - CSM Hardware Missions (for NAS9-150 CCA 3355 Rev. A, 18 Apr 1969)
Box 196, Folder 6	Program and Mission Definition - Apollo Lunar Exploration (NASA AMPO/MSC report SPD-9P-052, 15 May 1969) [photocopy]
Box 196, Folder 7	Apollo CSM (NAS9-150) - Contract Change Authorization 3355 rev.B, 26 May 1969 [photocopy]
Box 196, Folder 8	Discussion Paper (5 Jun 1969) [on NASA Planning; photocopy]
Box 196, Folder 9-10	Apollo Lunar Exploration Missions Experiment Instruments Performance and Interface Specification - Block II - CSM (NR report SD69-315, 13 Jun 1969) [2 photocopies; 2 folders]
Box 196, Folder 11	"NASA Goals, Positions, Objectives, and Thrusts Approved by the Planning Steering Group" (received by R. J. Kirby, NR, 17 Jun 1969) papers presented to Joint 15th AAS / 35th Operational Research Society National Meeting, 17-20 Jun 1969 [2 folders]
Box 196, Folder 12	"Accessible Regions Beyond the Solar System" (Maxwell W. Hunter; AAS paper 69-122)
Box 196, Folder 13	"Interstellar Travel, A Round Trip Propulsion System with Relativistic Velocity Capabilities" (Philip C. Norem; AAS paper 69-124)
Box 196, Folder 14	"The Post-Apollo Space Program - An AIAA View" (M. G. Boobar to List, NR Internal Letter AP-NSD-69-006, 20 Jun 1969)
Box 196, Folder 15	"NASA FY 1971 Program" (John E. Naugle to NASA Administrator, memo, 28 Jun 1969)
Box 196, Folder 16	Integrated Space Program for 1970's (briefing, 24 Jun 1969) [photocopy]
Box 196, Folder 17	ALEM [Apollo Lunar Exploration Missions] PDR [Preliminary Design Review] Board No. 4 (NR report AP 69-25, Jun 1969)
Box 197, Folder 1	Radiative Gas Dynamics (Robert J. Goulard, ed., AIAA Selected Reprints, vol. VII, Jun 1969)
Box 197, Folder 2	Integrated Space Program - Manned Planetary Missions for the 1980's (circa Jun 1969) [photocopies of two different documents with this title]
Box 197, Folder 3	NASA Integrated Program of Space Utilization and Exploration - Executive Summary (22 Jul 1969) [photocopy]

Box 197, Folder 4	Planetary Program Model (NR report PD69-66, May 1969)
Box 197, Folder 5-8	Planetary Program Model (NR report PD69-66, May 1969, rev. Jul 1969) [4 copies; 4 folders]
Box 197, Folder 9	Future NASA Space Programs - Hearing Before the Committee on Aeronautical and Space Sciences - United States Senate, Ninety-First Congress - First Session (5 Aug 1969) [photocopy of selected pages on Apollo Applications Program]
Box 197, Folder 10	"Planetary Mission Planning Analysis" (G. O. DeDonato to J. D. Cardall, NR Internal Letter, 5 Aug 1969)
Box 197, Folder 11	articles from Electronic Design 17 (16 Aug 1969): Notes: Missing Title: <ul style="list-style-type: none"> • "New Mars Photos Show a Fourfold Gain in Detail" (p.21) • "Man on the Moon" (Charles D. LaFond, pp.24-28) • "Next: Era of Discovery" (David N. Kaye, pp.30-32) • "The Indispensable Man" (David N. Kaye, pp.40-43) • "Apollo's Success Rubs Off on Earth" (Elizabeth deAtley, pp.44-47)
Box 197, Folder 12	"Scientific Experiments Seminars [ALEM]" (D. W. Patteson to Those Listed, NR Internal Letter, 28 Oct 1969)
Box 197, Folder 13	"Candidate Missions for Manned Flights to Mars and Venus (1971-2000)" (FM8/Advanced Mission Design Branch to Informal Distribution, NASA memo, 29 Aug 1969) [photocopy]
	The Next Ten Years in Space (NR SD report PD69-92, Aug 1969) [3 folders]
Box 197, Folder 14	notes
Box 197, Folder 15	Rough Draft Review Copy, 3 Mar 1969
Box 197, Folder 16	printed report
	Experiment Program for Extended Earth Orbital Missions (NASA report, 1 Sep 1969) [2 folders]
Box 198, Folder 1	Vol. 1 - Science and Applications
Box 198, Folder 2	Vol. 2 - Engineering and Technology

Box 198, Folder 3	The Post-Apollo Space Program: Directions for the Future (Space Task Group Report to the President, Sep 1969)
Box 198, Folder 4	"Zukunft der Raumfahrt in Europa - Ein Informationsschrift zum Projekt Neptun" (Eckart Eisner and Dirk Moelle, Lehrschule u. Institut für Raumfahrttechnik der TU Berlin report TUBIR 69/8, Sep 1969)
Box 198, Folder 5	Apollo 11 - Preliminary Science Report (NASA report SP-214, 31 Oct 1969)
	"Nuclear Engine Key to Mars Flight" (Ed Edelse, San Diego Union (14 Dec 1969) : C-9)
Box 198, Folder 6	[reduced size reference copy]
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Box 199, Folder 1	Apollo 11 Lunar Science Conference (5-8 Jan 1970) [program, abstracts]
Box 199, Folder 2	"Answers to Representative Karth's Questions" (J. E. Franklin to List, NR Internal Letter AP 69?316, 7 Jan 1970)
Box 199, Folder 3	[Answers to Representative Karth's Questions]
Box 199, Folder 4	Science 167 No. 3918 (30 Jan 1970)

Box 199, Folder 5	"Neue Radaruntresuchungen der Marsoberfläche" (Weltraumfahrt 1970 no 1 : 26)
Box 199, Folder 6	"Statement by the President" (Richard Nixon, Office of the White House Press Secretary release, 7 Mar 1970)
Box 199, Folder 7	"NASA Struggles for Funds; Cost Overrides Criticized" (Frank Macomber, San Diego Union (15 Mar 1970) : A-11)
Box 199, Folder 8	articles from San Diego Union, 15 Mar 1970 : A-6 Notes: Missing Title: <ul style="list-style-type: none"> • "US Space Goals Detailed" • "Chief of Third Moon Voyage Hits Quarentine" • "Multiple Warhead Testing Ban Urged"
Experiment Module Concept Study (NAS8-25051)	
Box 199, Folder 9	Status Report Briefing (GDC report, 2 Apr 1970)
Box 199, Folder 10	Advanced Programs Control Book - CFY1970 - Report Period Ending 20 July 1970 (NR report, Jul 1970)
Box 199, Folder 11	Welchen Nutzen hat das Deutsche Weltraumprogramm? - Bussammenfassung der Ergebnisse einer Studie (Institute für Raumfahrttechnik, TUB; Jul 1970)
Box 199, Folder 12	Space Program for the 70's NR View (NR report, 18 Aug 1970)
Box 199, Folder 13	William G. Gisel to Olin E. Teague, 8 Oct 1970 [photocopy]
Box 199, Folder 14	"Integrated Management Control System (IMCS) - Missile and Space Division - Texas - LTV Aerospace Corp" (LTV report, presented to the Joint Meeting of the American Institute of Industrial Engineers/AIIE/ and the Aspr Institute, 21-23 Oct 1970)
Box 199, Folder 15	"Planetary Exploration with Electrically Propelled Vehicles" (Ernst Stuhlinger, presented to NYAS, 20 Oct 1970)
Box 199, Folder 16	"A Theory on the Nature and Origin of Comets with Implications for Space Mission Planning" (Donald H. Robey, AAS paper 70-029, 1970)
Box 199, Folder 17	"Michaelson-Morley-Miller Experiments Before and After 1905" (Lloyd S. Swenson, Journal for the History of Astronomy 1 (1970) : 56-78)
Box 199, Folder 18	"Bemannte Raunfahrt bis an den Rand des Sonnensystems noch in Diesem Jahrhundert" (F. Winterburg, unknown publication, pp.109-117)

Box 199, Folder 19	"Inertial Guidance" (John Goodrum, The American Way [?], circa 1970, pp.30-31)
Box 199, Folder 20	Log of Apollo 11 (NASA Office of Public Affairs publication EP-72, circa 1970)
Box 199, Folder 21-22	"One Giant Leap" (Warner Brothers, motion picture brochure, circa 1970) [2 copies; 2 folders]
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Box 199, Folder 23	articles from The Washington Post, 9 Feb 1971: Notes: Missing Title: <ul style="list-style-type: none"> • "Let Astronauts Explore More, Scientist Urges" • "Longer Stays on Moon Set"
Box 200, Folder 1	Post Skylab Mission Study (MSC briefing, 24 Feb 1971) [photocopy]
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Box 200, Folder 4	"Guidance and Navigation for Comet Rendezvous Mission" (D. C. Frazer, H. L. Malchow, and L. L. Sacket, AAS paper AAS-71-116)
Box 200, Folder 5	"Design of a Probe for Deep Penetration into Jupiter's Atmosphere" (Jack D. Pettus, Douglas B. Cross, John R. Mellin, and Paul G. Rezniecek, AAS paper AAS-71-143)
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Box 200, Folder 7	"Potential Reductions in Cost and Response Time for Shuttleborne Space Experiments" (Michael Bader and Neil H. Farlow, AIAA paper 71-808, presented to AIAA Space Systems Meeting, 19-20 Jul 1971)
Box 200, Folder 8	Space Program Planning for the 1970's - Issues and Alternatives (NR SD report PD71-117, Jul 1971)
Integrated Operations/Payloads/Fleet Analysis (NASA contract NASw-02129 Study A)	

Box 200, Folder 9	Final Report, Vol. V - Mission, Capture and Operations Analysis (Aerospace Corp report ATR-72(7231)-1 volume V, Aug 1971) [photocopy]
Box 200, Folder 10	"Formula for a Poor Man's Space Program" (Theodore B. Dufur, 2 Sep 1971)
Box 200, Folder 11	International Cooperation in Outer Space: A Symposium (Committee on Aeronautical and Space Sciences, United States Senate, US GPO, 1971) [photocopies of selected pages]
Box 200, Folder 12	"Two Former Faces of the Moon" (Don E. Wilhelms and Donald E. Davis, ICARUS 15 no.3 (Dec 1971)) [reprint]
Box 200, Folder 13	Marshal Space Flight Center releases, 1971-1972
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Box 200, Folder 15	Space Notes (NR Space Division releases), 1971-1972
Box 200, Folder 16	Die Gesellschaft für Weltraumforschung - Kurzinformation (Gesellschaft für Weltraumforschung, 1971)
Box 200, Folder 17	"Why Explore Space?" (MSFC release, circa 1971)
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Box 200, Folder 18	A Survey Study of Teleoperators, Robotics and Remote Systems Technology (Arthur D. Alexander III, NASA-OART working paper MC71-1) [sent to Ehrlicke by OAST, 3 Mar 1972]
Box 201, Folder 1	"Another Technology Viewpoint" (Editorial, AWST, 3 Apr 1972; extracts from remarks by Edward E. David, Jr, Science Advisor to President Nixon)
Box 201, Folder 2	"Detecting Life in Space" (William R. Curliss, International Science and Technology Jun 1965, 28-34) [photocopy requested by Ehrlicke from NR TIC, 17 Apr 1972]
papers presented to IAF 23rd International Astronautical Congress, 8-15 Oct 1972 [2 folders]	
Box 201, Folder 3	"The Effect of Space Shuttle Payload Design Technologies on Total Space Program Cost" (Maxwell W, Hunter II)
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Box 201, Folder 5	Kosmos-Kurier (newsletter of Jugendarbeitsgruppe KOSMOS der Astronautischen gesellschaft der DDR [JAGK]), 30 Jun 1973
Box 201, Folder 6	"The Future of Space: The View from Capitol Hill" (Sen. Frank E. Moss (D-UT), address to AIAA/ASME/SAE Space Mission Planning and Executive Meeting, 10 Jul 1973) [photocopy]
Box 201, Folder 7	"Science Policy" (R. H. Sehnert to W. T. Short, RI Internal Letter, 3 Aug 1973)
Box 201, Folder 8-11	Presentation to the Committee on Aeronautical and Space Sciences, United States Senate (RI report SD 73-CE-0004, 27 Sep 1973) [2 copies, photocopies of selected pages; 4 folders]
Box 201, Folder 12	"Optimization of One-Impulse Transfer from the Elliptic Orbit into Hyperbolic One with the Given velocity 'On Infinity'" (V. A. Yegorov, presented to IAF 24th International Astronautical Congress, 7-13 Oct 1973)
Box 201, Folder 13	Planetary Resonances and Solar Activity Cycles (H. Prescott Sleeper Jr, Northrop Service Inc report, circa 1973)
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Box 201, Folder 14-15	"Low Cost Management for Spacelab" (Heinz Stoewer, IAF paper A74-06, presented to IAF 25th International Astronautical Congress, Amsterdam; 30 Sep - 5 Oct 1974) [2 copies; 2 folders]
Box 201, Folder 16	The Economic Impact of Space R&D Activity (RI SD report, Oct 1974)
Box 201, Folder 17	Manned Space Flight Planning (NASA report, circa 1974)
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Box 201, Folder 19	Employment Implications of Alternative Government Programs (T. A. Gibson, RI report, Apr 1975)
Box 201, Folder 20	A National Space Program for Interstellar Exploration (Robert L. Forward, Hughes research report 492, Jul 1972)
Box 201, Folder 21	NSIA Advisory Committees Semi-Annual Project Status Report and Directory (National Security Industrial Association, 1 Jul 1975)
	"Zur Probe ein Luftsprung vom Rücken der Jumbos" (Adalbert Bärwolf, Die Welt, 25 Jul 1975)

Box 201, Folder 22	[reduced size reference copy]
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Box 201, Folder 23	"Shuttle-Launched Multi-Comet Mission 1985" (R. W. Farquhar, D. P. Muhonen, F. I. Menn, W. H. Wooden, and D. K. Yeomens, AAS paper 75-085, presented to AAS/AIAA Astronautics Specialist Conference, Nassau, Bahamas, 28-30 Jul 1975)
Box 201, Folder 24	"Some Applications of a 1-Million-Second Isp Rocket Engine" (T. A. Heppenheimer, JBIS 28 (1975) : 175-181)
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Box 201, Folder 25	United States and Soviet Progress in Space: Summary Data through 1975 and a Forward Look (Charles S. Sheldon II, LC CRS report 76-32 SP, 2 Feb 1976)
Box 201, Folder 26	"Revitalizing the Space Program - By Targeting on One Major, Dramatic Objective with Universal Appeal" ("Alyosha", 1976)
Box 201, Folder 27	"Infrastellar and Interstellar Exploration" (Robert L. Forward, Hughes Research report 503, Seminar presented at JPL, Sep 1976)
	"Bibliography of Interstellar Travel and Communications - August 1975 Update" (Eugene F. Mallone, Robert L. Forward, and Zbigniew Paprotny, JBIS 29 (1976) : 494-517) [2 folders]
Box 201, Folder 28	draft
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Box 201, Folder 30	"Viking: Zwischenbilanz vom Mars - Leben noch nicht widerlegt" (Jesco von Puttkamer, Umschau in Wissenschaft und Technik 77 no. 3 (Feb 1977) : 67-73) [reprint]
Box 202, Folder 1	"A Conservative Approach to Interstellar Flight" (T. A. Heppenheimer, presented to BIS 2nd Conference on Interstellar Travel and Communication, 9 Mar 1977)
Box 202, Folder 2	testimony before Senate Science and Space Subcommittee (Mar-Apr 1977) Notes: Missing Title: • <i>Testimony of Dr T. Stephen Cheston, Associate Dean, Graduate School, Georgetown University, Before the Science and Space Subcommittee, Committee on Commerce, Science and</i>

Transportation, United States Senate, March 17, 1977

- *Statement of Rev. T. Byron Collins, S.J., and Rev. William L. George, S.J., Assistants to the Preseident, Georgetown University, and Dr T. Stephen Cheston, Associate Dean, Graduate School, Georgetown, University [regarding HR488], April 5, 1977*

Box 202, Folder 3	The Mariners and Their Launch Vehicles - No Simple Story (Edward C. Ezell, 2 Apr 1977) [draft]
Box 202, Folder 4	"Trajectory Dynamics in the Earth-Moon System" (T. A. Heppenheimer, presented to AIAA and Princeton University 3rd Conference on Space Manufacturing Facilities, 9-12 May 1977)
Box 202, Folder 5	"Interstellar Applications and Limitations of Several Electrostatic/ Electromagnetic Ion Collection Techniques" (Gregory L. Matloff and Alphonsus Fennelly, JBIS 30 (1977) : 213-222) [reprint]
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Box 202, Folder 9	"The Effect of Scale on Satellite Costing" (J. A. Vandenkercklone, circa 1981)
	1982
Box 202, Folder 10	"The Transcost Model for Launch Vehicle Cost Estimation and its Application for Future Systems Analysis" (Dietrich E. Koelle, IAF paper 82-226; presented to IAF 33rd International Astronautical Congress, 27 Sep-2 Oct 1982)
	1984
Box 202, Folder 11	Space & Astronomy - Matra Space ... 20 Years' Contributions to Scientific Space Programmes (Jan 1984)
	Undated
Box 202, Folder 12	extract from Philco report WDL-TR2366 re mission to Asteroid Eros [photocopy of thermal print from microfiche]

Box 202, Folder 13	"Mars Trapped Particle Belt" (Donald H. Robey, no date)
Box 202, Folder 14	"Rotation Parameters for Mercury and Venus" ("I. L." to Ehrlicke, no date)
Box 202, Folder 15	"Statement of the Problem" / "The AFSC Planning Process - Policies, Procedures and Terminology" (sent to Ehrlicke by Howard A. MacEwen, no date)
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Box 202, Folder 19	miscellaneous chart - "MFSC/FPO Study and Funding as Proposed to NASA HQ for FY 1965/66 Period"
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Series 4: Reference Files

150 Boxes

Arrangement: This series consists of materials relating to specific topics about which Ehrlicke wrote. The materials are organized first by subject, drawn mainly from Ehrlicke's organization of his lecture slides: "General Reference"; "Vehicle Technology"; "Planets and Planetary Missions"; "Space Habitation and Human Factors"; "Transportation Systems"; "Space and Lunar Industry"; "Earth/Resources"; "Energy"; "Space Light"; and "Information Services". Within each subject area materials are arranged in three groups – named files (organized alphabetically), studies (organized chronologically by start date), and miscellaneous reports and materials (organized chronologically by date of receipt by Ehrlicke, if known, or by date of publication).

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Box 104, Folder 11	Engineering Terms, English to German listing (31 Jul 1964) Notes: (computer printout, A-G only)
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Vehicle Technology

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Box 111, Folder 7	Cryogenic Storage in Space
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Box 111, Folder 9	Design
Box 111, Folder 10-11	Electric Drive [2 folders]
Box 111, Folder 12	Electric Propulsion
Box 112, Folder 1	Electronics & Electronic Systems
Box 112, Folder 2	Equilibrium Data
Box 112, Folder 3	Feed Systems
Box 112, Folder 4	Fluorine Compounds
Box 112, Folder 5	Free Radicals [1]
Box 112, Folder 6	Free Radicals [2]
Box 112, Folder 7	Fusion Drive
Box 112, Folder 8	Gas Computations / Equilibrium Calculations
Box 112, Folder 9	Gasdynamics
Box 112, Folder 10	Gaseous Fission Engine
Box 112, Folder 11	GEM/VTO
Box 112, Folder 12	Geometrical Curves
Box 112, Folder 13	Ground & Flight Support Equipment
Box 112, Folder 14	Guidance
Box 112, Folder 15-16	Guidance & Control [2 folders]
Box 112, Folder 17	Heat Transfer

Box 113, Folder 1	Heat Transfer to Liquids
Box 113, Folder 2	High Speed Aircraft
Box 113, Folder 3	Hydrogen
Box 113, Folder 4	H2O2
Box 113, Folder 5	Hypersonic (Intercontinental) Passenger Glider
Box 113, Folder 7	Instrumentation (Vehicle)
Box 113, Folder 8	Ion Drives (1)
Box 113, Folder 9	Ion Drives (2)
Box 113, Folder 6	Hypersonic Research Rocket & Airplane
Box 113, Folder 10-11	Ion Drives (3) [2 folders]
Box 114, Folder 1	Liquid Propellant Rocket Engines
Box 114, Folder 2	Magnetohydrodynamics
Box 114, Folder 3	Materials [1]
Box 256, Folder 17	Materials [1; oversized material]
Box 114, Folder 4	Materials [2]
Box 114, Folder 5	Measurement & Instrumentation
Box 114, Folder 6	Mercury [Spacecraft]
Box 114, Folder 7	Meteorite Protection of Spacecraft
Box 114, Folder 8	Meteorites
Box 114, Folder 9	Missiles Summaries
Box 114, Folder 10-11	NACA / NASA reports [2 folders]
Box 114, Folder 12	NASA & DOD Reports (1) Notes: reports from the NASA Special Committee on Space Technology (1958)
Box 115, Folder 1	NASA & DOD Reports (2)

	Notes:	draft reports from the NASA Research Advisory Committee on Mechanical Power Plant Systems - Recommendations for Research (1959)
Box 115, Folder 2	Nitrogen	
Box 115, Folder 3	Nomad	
Box 115, Folder 4	Nuclear Aircraft	
Box 115, Folder 5	Nuclear and Electric Vehicles	
Box 115, Folder 6	Nuclear Heat Exchanger Systems	
Box 115, Folder 7	Nuclear Physics	
Box 115, Folder 8	Nuclear Propulsion	
Box 115, Folder 9	ORNL Studies - Nuclear APU, Radiation, & Meteor Protection	
Box 115, Folder 10	Oxygen	
Box 115, Folder 11	O3	
Box 115, Folder 12	Performance of Working Fluids	
Box 115, Folder 13	Photovoltaic Systems	
Box 115, Folder 14	Plasma Drive	
Box 115, Folder 15	Power Systems Briefing Charts	
Box 116, Folder 1	Project Studies	
Box 116, Folder 2-3	Propellant Calculations & Propellant Data [2 folders]	
Box 116, Folder 4	Propellant Containers	
Box 116, Folder 5	Propellant Performance - General	
Box 116, Folder 6	Propellant Performance - Analysis	
Box 116, Folder 7	Propellant Performance Calculations	
Box 116, Folder 8	Propellant Storage	
Box 116, Folder 9	Propellants with HNO ₃	
Box 116, Folder 10	Radar	

Box 116, Folder 11	Radiators for Spacecraft
Box 116, Folder 12	Ramjet
Box 116, Folder 13	Solid Propellant Propulsion Systems
Box 255, Folder 20	Spacecraft: Internal Temperature Conditions [oversized material]
Box 116, Folder 14	Spacecraft Propulsion (General)
Box 117, Folder 1	Structural Papers
Box 117, Folder 2	Study of Thrust for R-Motors and Airbreathing Motors
Box 117, Folder 3	Superaerodynamics & Hypersonic Aerodynamics (1)
Box 117, Folder 4	Superaerodynamics & Hypersonic Aerodynamics (2)
Box 117, Folder 5	Systems
Box 117, Folder 6	Systems Analysis
Box 117, Folder 7	Systems Weight Data
Box 117, Folder 8	Tetranitromethane
Box 117, Folder 9	Thermodynamic & Performance Data of Hydrogen
Box 117, Folder 10	[thermodynamic data for liquid oxygen with liquid hydrogen]
Box 117, Folder 11-12	[thermodynamic data for various nitrogen compounds; 2 folders]
Box 118, Folder 1	[thermodynamic data for various gases]
Box 118, Folder 2	Thermonuclear Rocket Power Plant (1)
Studies and Projects	
Global Glider Study (Convair) [10 folders, total]	
Box 118, Folder 3-5	Global Glider Study [3 folders]
Box 118, Folder 6-8	Flight Mechanics - Glider [3 folders]
Box 119, Folder 1-2	Missile & Glider Analysis (Ft. Bliss 1949) [2 folders]
Box 119, Folder 3	Performance & Flight Path of Winged Missiles

Box 119, Folder 4	Satellite Glider (1956)
	Centaur Development (ARPA Project, transferred to NASA 1 Jul 1959) [22 folders, total]
Box 119, Folder 5-6	Centaur [2 folders]
Box 119, Folder 7	"Atlas Family of Spacecraft & Preliminary Data on 990000 and 2x106 lb 3-Stage System with O ₂ /H ₂ Second and Third Stage" (Ehricke, 30 Sep 1958)
Box 119, Folder 8	[thermodynamic calculations for H ₂ fuel] (Ehricke to "Helen")
Box 119, Folder 9	"Overall Zero Gravity Testing Program" (Convair report AZJ-55-008, 10 Nov 1959)
Box 119, Folder 10	"Outline of Proposed Zero-G Test Program" (Convair report AZJ-55-010, 23 Dec 1959)
Box 119, Folder 11	"Payload Capability of Atlas/Centaur for Mariner-A P37 and P38 Missions" (Convair Astronautics report AE61-0170, 20 Feb 1961)
Box 119, Folder 12	"Fuel Losses on a Typical 6.2 Hour Centaur Mission Due to Meteoroid Punctures" (A. H. Jazwinski; Convair Astronautics report AE61-1042, 28 Aug 1961)
Box 119, Folder 13	"Mission Aspects of Evaluating the Surveyor as Centaur Third Stage for Advent Missions" (Ehricke to Distribution, memo, 16 Feb 1962)
Box 119, Folder 14	"First Launch of Centaur Vehicle Scheduled" (NASA News Release 62-66, 3 Apr 1962)
Box 120, Folder 1	Centaur Lunar Targeting Program - II [LTP-II] (GDA report GDA63-0910, 15 Oct 1963)
Box 120, Folder 2	Centaur Precision Targeting Program (GDA report GDA63-1356, 31 Dec 1963)
Box 120, Folder 3	Centaur Technical Handbook (GDA report GD A-BPM64-001, 15 Feb 1964)
Box 120, Folder 4	Centaur Capability Handbook (GDA report GD A-BTD64-119, 15 Jul 1964)
	Progress Report, 21 July to 24 September (W. E. Strobl; GDC report AOK 65-004, no date) [2 folders]
Box 120, Folder 5	TS

Box 120, Folder 6	blueline
Box 120, Folder 7	"Atlas/ γ -Centaur Trajectory Data for Reference Mission" (no date)
Box 120, Folder 8	"Longitude of First Equator Crossing as Function of Launch Azimuth (90 n.m. Parking Orbit Altitude)" (no date)
Box 120, Folder 9	Maneuverable Centaur
Box 120, Folder 10	miscellaneous correspondence
Box 120, Folder 11	Presentation Slides - Gamma Centaur [slides 1-11]
Box 120, Folder 12	Presentation Slides - Atlas-Based Launch Vehicles [slides 12-25]
	NASA Research Advisory Committee on Electrical Power Plant Systems (1959-1960) [5 folders]
Box 121, Folder 1	Minutes of Meeting (24-25 Feb 1960)
Box 121, Folder 2	Lewis Presentation (24-25 Feb 1960)
Box 121, Folder 3	"Electrical Power Generation and Electrical Propulsion Systems for Spacecraft" (1959-60 NASA Research Advisory Committee on Electrical Power Plant System; NASA report E-887, May 1960)
Box 121, Folder 4	"Report of Visit of United States Controlled Thermonuclear Research Team to the USSR" [extracts]
Box 121, Folder 5	Electrical Power Generation and Electrical Propulsion Systems for Spacecraft (1960-61 NASA Research Advisory Committee on Electrical Energy Systems; NASA management report 24-5-1, Dec 1961)
	Study of Post-Nova Launch Vehicles (NASA contract NAS8-5022) [36 folders, total] Notes: (renamed "Study of Post-Saturn Launch Vehicles" circa Jan 1964)
Box 121, Folder 6-7	Proposal (GDA report AE62-0385, 13 Apr 1962) [2 copies; 2 folders]
Box 121, Folder 8	miscellaneous correspondence (Sep 1962)
Box 121, Folder 9-10	Intermediate Report No.1: "Advanced Concepts, Extraterrestrial Operation Models and Launch Vehicle Requirements" (Ehricke; GDA report AOK62-0005, 5 Sep 1962) [2 copies; 2 folders]
Box 121, Folder 11	"Aerodynamic Heating of Post-Nova Vehicle Recoverable Booster" (R. Magnus to Ehricke; memo, 29 Oct 1962)

Box 121, Folder 12-13	[briefing] (GDA report AOK62-0011, 13 Nov 1962) [2 copies; 2 folders]
Box 121, Folder 14-15	Intermediate Report No.2: "Extraterrestrial Options, Concept Selections and Schedule" (Ehrlicke; GDA report AOK62-0012, 13 Nov 1962) [2 copies; 2 folders]
Box 121, Folder 16	"Nuclear Engine (NERVA)" (D. H. Robey to Ehrlicke; GDA memo, 23 Nov 1962)
Box 121, Folder 17	"Minutes of Advanced Nova Meeting - January 29, 30, 1963"
Box 122, Folder 1-2	Intermediate Report No.3: "NEXUS - Concept of a Large Re-Usable Earth Launch Vehicle" (GDA report, circa Mar 1963) [2 folders]
Box 122, Folder 3	Final Report - Propulsion Studies for Post-NOVA Launch Vehicle Study - General Dynamics/Astronautics (Rocketdyne report LAPR 63-36, 7 Mar 1963)
Box 122, Folder 4-5	"Summary Weight Analysis for Nexus Version of Post Nova Study" (G. Jensen; Convair report ASO 63/3, 28 Mar 1963) [2 copies; 2 folders]
Box 122, Folder 6	Phase III Proposal (GD report AOK 63-0012, 29 Mar 1963)
Box 122, Folder 7	miscellaneous notes and graphics (MS)
	Phase I and II Final Report (GD report AOK 63-013, circa Apr 1963) [3 folders]
Box 122, Folder 8	TS
Box 122, Folder 9	§ 7.2 "Theory" (TS)
Box 122, Folder 10	§ 7.2 "Theory" (photocopy; 2 copies)
	Final Summary Report
Box 122, Folder 11	Part Two - The Final Report of the Study of the Nexus Launch Vehicle (GD report AOK 63-013, 1 Apr 1963)
	Phase I & II Final Report (NASA contract NAS8-5021, awarded to Douglas)
Box 123, Folder 1-2	Vol. VI - Operational Plans and Cost Formulation (Douglas report SM-42969, Apr 1963) [2 folders]

Box 123, Folder 3	"Trip Report of Visit to the Nuclear Propulsion Branch of Lewis Research Center at Cleveland, Oct. 31, 1963" (R. E. Mannion to Ehrlicke; GD memo, 8 Nov 1963)
Box 123, Folder 4	Phase III Second Presentation 12 December 1963 at GD/Astronautics (GDA report AOK 63-035, 11 Dec 1963)
Box 123, Folder 5	Launch Vehicle Questionnaire (circa 17 Dec 1963)
Box 123, Folder 6	"Results of Propulsion System Questionnaire" (H. H. Koelle to Ehrlicke; NASA MSFC R-FP-586-64, 17 Dec 1963)
Box 123, Folder 7	W. G. Huber to Ehrlicke; NASA MSFC letter R-FP-592-64, 19 Dec 1963
Box 123, Folder 8	miscellaneous notes
Box 123, Folder 9	Post-Saturn Launch Vehicle illustrations
	Phase III - Class IV Vehicles Final Report [4 folders]
Box 123, Folder 10	Vol. I - Condensed Summary (GD report GD A-AOK 64-009-1, 11 Mar 1964) (2 copies)
Box 123, Folder 11	Vol. II - Summary (GD report GD A-AOK 64-009-2, 25 May 1964)
Box 123, Folder 12	Vol. III - Supplement, Part 2A (GD report GD A-AOK 64-009-3a, 8 Jun 1964)
Box 124, Folder 1	Vol. III - Supplement, Part 2B (GD report GD A-AOK 64-009-3a, 8 Jun 1964)
	Nova Vehicle Systems Study (NASA contract NAS8-5136) [13 folders, total]
Box 124, Folder 2	"Two Stage Nova Performance - Solid Propellant First Stage, Advanced LO2-LH2 Second Stage Engines, Tandem Staging (Category E-1L)" (C. Simons to Distribution, Nova Memo No.518, 5 Dec 1962)
Box 124, Folder 3	Nova Program Study - Presentation to Nova Management Team, National Aeronautics and Space Administration (GDA report, 11 Dec 1962)
Box 124, Folder 4	Nova Program Study - Presentation to Marshall Space Flight Center (GDA report, 13 Dec 1962)
Box 124, Folder 5	Nova memos

	Notes:	<ul style="list-style-type: none"> • "Preliminary Mars Vehicle Reliability Model" (GDA, Nova Memo 167, 31 Oct 1962) • "Preliminary Mars Vehicle Reliability Model" (GDA, Nova Memo 167 Supplement A, 7 Dec 1962) [page 1 missing] • "Probability of Success Versus Number of Launches for Single Capsule Mars Vehicle" (GDA, Nova Memo 167 Supplement B, 19 Dec 1962)
Box 124, Folder 6	"Nova Operational Mission Model Ground Rules" (MSFC FPO, 31 Jan 1963)	
Part I Conceptual Design Study (GDA report AE63-0096) [3 folders]		
Box 124, Folder 7	Vol. 1 - Vehicles Systems Comparison and Selection, Advanced Technology Plan (1 Apr 1963)	
Box 124, Folder 8	Vol. 6 - Category J Vehicle (25 Mar 1963)	
Box 124, Folder 9	Vol. 7 - Unconventional Propulsion (15 Mar 1963)	
Box 124, Folder 10	"Nova Launch Vehicle Design Studies" (Andrew Kalitinsky, draft, 21 May 1963)	
Part II Conceptual Design Study, Final Report (GDA report 63-0844, Sep 1963) [4 folders, total]		
Box 124, Folder 11	Vol. I - Study Summary	
Box 124, Folder 12	Vol. II - Trade-Off and Parametric Studies	
Box 125, Folder 1-2	Vol. III - Functional Support Document [2 folders]	
Advanced Nuclear-Electric Power Generator System (NASA contract NASw-360) [6 folders, total]		
Box 125, Folder 3	Parametric Studies Report - Thermionic Nuclear Space Powerplant (PWA report PWA-2240, 30 Jul 1963)	
Box 125, Folder 4-5	Design Report - Thermionic Nuclear Space Powerplant, Vol. I (PWA report PWA-2224, 5 Sep 1963) [2 folders]	
Box 125, Folder 6-7	Design Report - Rankine Cycle Nuclear Space Powerplant (PWA report PWA-2233, 15 Oct 1964) [2 folders]	
Box 125, Folder 8	Summary (PWA report PWA-2280, 31 Oct 1963)	
Nuclear Pulse Space Vehicle Study (NASA contract NAS8-11053) [19 folders, total]		

Box 126, Folder 1	Proposal, Part I - Technical Proposal (GD report GACP-4302, 7 Jun 1963)
Technical Report [17 folders, total]	
Box 126, Folder 2	Vol I - Summary (GD report GA-5009 vol. I, Jan 1964)
Vol IV - Mission Velocity Requirements and System Comparisons (GD report GA-5009 vol. IV, 31 Aug 1965) [15 folders, total]	
Box 126, Folder 3	§ 5.0-7.0 (MS)
Box 126, Folder 4-5	§ 5.0-7.0 (water damaged blueline) [2 folders]
Box 126, Folder 6-9	unabridged draft (water damaged blueline) [4 folders]
Box 127, Folder 1-3	incomplete final copy [3 folders]
Box 127, Folder 4-6	final copy [3 folders]
Box 127, Folder 7	published copy [1 of 2 folders]
Box 128, Folder 1	published copy [2 of 2 folders]
Box 128, Folder 2	Vol IV - Mission Velocity Requirements and System Comparisons (Supplement) (GD report GA-5009 vol. IV (Supplement), 28 Feb 1966)
Box 128, Folder 3	correspondence with Gulf General Atomic (18 Jun 1969)
Beyond the Horizon (USAF study SCL-6-66-10) [11 folders, total]	
Box 128, Folder 4	"Comments on the Question of the Usefulness of the Scramjet to Boost and Reentry Vehicle Program" (Ehrlicke) (MS)
Box 128, Folder 5	Director's Report (USAF AFSC report, draft of 20 Jul 1966) (photocopy)
Director's Report (USAF AFSC report, draft of 26 Jul 1966) (photocopy) [4 folders]	
Box 128, Folder 6	Vol.1
Box 128, Folder 7	Vol.1 Annex C - Global Transportation
Box 128, Folder 8	Vol.1 Annex D - Vertical Take-off and Landing Vehicles
Box 128, Folder 9	Vol.1 Annex E - Boost and Re-Entry for Space Flight

	Director's Report (USAF AFSC report, draft of 10 Aug 1966) (photocopy) [5 folders]
Box 128, Folder 10	Vol.1 Annex A - Study Method and Organization
Box 128, Folder 11	Vol.1 Annex C - Global Transportation
Box 128, Folder 12	Vol.1 Annex D - Vertical Take-off and Landing Vehicles
Box 128, Folder 13	Vol.1 Annex E - Boost and Re-Entry for Space Flight
Box 128, Folder 14	selected pages from Vol.1 Annex C, D, E
	Nuclear Flight System Definition, Potential Flight Test and Early Operational Payloads (NASA contract NAS8-24975) [36 folders, total]
	Proposal [2 folders]
Box 129, Folder 1	Vol. I - Technical Proposal (NR report SD 69-156-1, 15 Apr 1969)
Box 129, Folder 2	Vol.II - Business Management Proposal (NR report SD 69-156-2, 15 Apr 1969)
Box 129, Folder 3	"Revised Proposal for Task 15.0 - Outer Planet Exploration Missions" (circa Jun 1969)
Box 129, Folder 4	"Information Received from Chuck Guttman, NASA/MSFCM, on Contract NAS8-24975" (E. M. Repic to OPM Personnel, NR Internal Letter ADS/UMS/69-78, 18 Jul 1969)
Box 129, Folder 5	Phase I Review (Tasks 1-10) (NR report PDS 69-101-1, 7 Oct 1969)
Box 129, Folder 6	Phase I, Part B (Outer Planets Exploration Mission) Midterm Briefing (NR report PD69-154, 9 Oct 1969)
Box 129, Folder 7	"Revised Project Directive, Nuclear Flight System Definition Study (Task 1-10), Contract NAS8-24975, Section A" (F. F. Boyd to Those Listed, NR Internal Letter, 29 Oct 1969)
Box 129, Folder 8	Phase I, Part B (Outer Planets Exploration Mission) (NR report SD 69-156, Nov 1969?) [incomplete: from "Nuclear Stage Operational Payload"]
Box 129, Folder 9	"Project Directive TMA 1039, Nuclear Flight Stage (NFS), Advanced Concepts - Phase II" (D. Garcia to Those Listed, NA Internal Letter ADS/LS-69-158, 3 Nov 1969)

Phase I, Part B (Outer Planets Exploration Mission) Final Report [8 folders]

Box 130, Folder 1	Vol. I - Summary (NR report SD 70-32-1, Jan 1970)
Box 130, Folder 2	Vol. II - Mission Objectives and Payloads (NR report SD 70-32-2, Jan 1970)
Box 130, Folder 3	Vol. III - Mission Analysis (NR report SD 70-32-3, Jan 1970), §§ 1-3
Box 130, Folder 4	Vol. III - Mission Analysis (NR report SD 70-32-3, Jan 1970), § 4-Appendix
Box 130, Folder 5	Vol. IV - Conceptual Design (NR report SD 70-32-4, Jan 1970), §§ 1-3
Box 131, Folder 1	Vol. IV - Conceptual Design (NR report SD70-32-4, Jan 1970), § 4-Appendixes
Box 131, Folder 2	Vol. V - Mission & System Evaluation & Implementation (NR report SD 70-32-5, Jan 1970)
Box 131, Folder 3	Vol. VI - Technology Development (NR report SD 70-32-6, Jan 1970)
Box 131, Folder 4	Phase I, Part B (Outer Planets Exploration Mission) Final Briefing (NR report PD70-1(1), Jan 1970)
Box 131, Folder 5	Phase I, Part B (Outer Planets Exploration Mission) Summary Briefing (NR report PD70-1(2), Jan 1970)
Box 131, Folder 6-7	Interim Phase II Review (Tasks 1-10) (NR report PDS 70-207, 28 Jan 1970) [2 copies, 2 folders]
Box 132, Folder 1	Final Phase II Review (NR report SD 70-223, 19 May 1970)
Box 132, Folder 2	"Phase III - NSSD Guidelines and Constraints Document - Ad Hoc Meeting of May 20, 1970" (A. R. Jusak to T. M. Littman, NR Internal Letter 093-440-70-049, 25 May 1970)
Box 132, Folder 3	Phase III - Manned Mars Systems Requirements - Proposal (NR report SD70-336, 11 Jun 1970)
Phase II (Reusable Nuclear Shuttle) Final Report [2 folders]	
Box 132, Folder 4	Vol. III - System Definition (Requirements and System Analysis) (NR report SD 70-117-3, Aug 1970)

Box 132, Folder 5	Vol. V - Program Options and Definition (NR report SD 70-117-5, Aug 1970)
Box 132, Folder 6	Phase III (Reusable Nuclear Shuttle) First Interim Review (NR report PDS 70-242, 2 Sep 1970)
Box 132, Folder 7	"Preliminary Considerations for Navigation, Guidance, and Control of a Nuclear Shuttle With Cooldown Impulses" (K. C. Kochi, NR Internal Letter AP-LPS-RNS-70-23, 15 Oct 1970)
	Phase III (Reusable Nuclear Shuttle) Final Report [8 folders]
Box 133, Folder 1	Vol. I - Executive Summary (NR report SD 71-466-1, Apr 1971)
	Vol. II - Concept and Feasibility Analysis
Box 133, Folder 2	Part B - Baseline System Definition (NR report SD71-466-3, Apr 1971)
Box 133, Folder 3	Part C - System Engineering Documentation (NR SD report 71-466-4, Apr 1971)
Box 133, Folder 4	Vol. III - Program Support Requirements (NR report SD 71-466-5, Apr 1971)
Box 133, Folder 5	Vol. IV - Cost Data (NR report SD71-466-6, Apr 1971)
Box 133, Folder 6	Vol. V - Schedules, Milestones and Networks (NR report SD 71-466-7, Apr 1971)
	Vol. VI - Reliability and Safety Analysis (NR report SD 71-466-8, Apr 1971)
Box 133, Folder 7	copy 1 of 2
Box 134, Folder 1	copy 2 of 2
Box 134, Folder 2	Phase III (Reusable Nuclear Shuttle) Final Review - Executive Summary (NR report SD 71-481-1, 15 Apr 1971)
Box 134, Folder 3	Phase III (Nuclear Shuttle System) Final Review (NR report SD 71-481-2, 15 Apr 1971)
Box 134, Folder 4	miscellaneous trajectory graphics
Box 134, Folder 5	miscellaneous notes
	Solar Electric Propulsion Stage (NASA contract NAS8-27360) [8 folders, total]

Box 134, Folder 6	Technical Proposal (NR report SD71-463-1, 26 Mar 1971; response to NASA RFQ DCN 1-1-20-00076)
Final Report [3 folders, total]	
Box 134, Folder 7	Vol I - Executive Summary (NR report SD72-SA-0011-1, 27 Mar 1972)
Vol II - Concepts and Feasibility Analysis [2 folders]	
Box 134, Folder 8	Part 1 - Mission Analysis (NR report SD72-SA-0011-2-1, 27 Mar 1972)
Box 134, Folder 9	Part 2 - Concept Development (NR report SD72-SA-0011-2-2, 27 Mar 1972)
Box 135, Folder 1	Extended Definition Feasibility Study - Expected Environments for the Solar Electric Propulsion Stage (NR report SD 72-SA-0129, Sep 1972)
Feasibility Study of a Solar Electric Propulsion Stage for Geosynchronous Equatorial Mission - Final Report [2 folders]	
Box 135, Folder 2	Vol.I - Executive Summary (NR report SD 72-SA-0199-1, 23 Feb 1973)
Vol.II - Concept and Feasibility Analysis	
Box 135, Folder 3	Part 2 - Concept Analysis (NR report SD 72-SA-0199-2, 23 Feb 1973)
Box 135, Folder 4	Extended Definition Feasibility Study - Final Briefing (RI report SD 73-SA-0133, 8 Jan 1974)
Space Shuttle Orbiter Design (NASA contract NAS9-14000) [29 folders, total]	
Box 135, Folder 5	Space Shuttle - Keystone for Tomorrow (NR release SP-17, circa 1971)
Box 135, Folder 6	"Blueprint for the Future" (NR brochure, Pub 3540-S, Apr 1972) [2 copies]
Box 135, Folder 7-8	Space Shuttle System Summary (NR report SSV 72-2, Oct 1972) [2 copies, 2 folders]
Box 135, Folder 9-11	Space Shuttle - Service to Mankind - Earth Resources Development Review (NR report SSV72-4, Nov 1972) [3 copies; 3 folders]

Box 136, Folder 1	Solid Rocket Booster for the Space Shuttle - Second Quarterly Review (Aerojet Solid Propulsion Co report SRB-114, 14 Dec 1972)
Box 136, Folder 2	Space Shuttle - Keystone for Tomorrow (NR release SP-17, rev.8 Mar 1973)
Box 136, Folder 3	Rockwell International Space Division Presentation to Manned Space Flight Subcommittee of House Science and Astronautics Committee (RI report MS 73-2, 23 Mar 1973)
Box 136, Folder 4	GO Presentation [Presentation to HR Science and Astronautics Committee, Subcommittee on Manned Space Flight, Visit to Space Division, Rockwell International - Downey, California, 23 Mar 1973]
Box 136, Folder 5	Solid Rocket Booster - The Low Cost Approach to the Space Shuttle (Aerojet Solid Propulsion Co report SRB-118A, 23 Mar 1973)
Box 136, Folder 6	"Testimony by G. W. Rathjens before the Committee on Appropriations, United States Senate, April 9, 1973, and the Committee on Aeronautical and Space Sciences, United States Senate, April 10, 1973"
Box 136, Folder 7	"Testimony Submitted to the Senate Committee on Aeronautical and Space Sciences" (Thomas Gold, 10 Apr 1973)
Box 136, Folder 8	"Statement of James J. Harford, Executive Secretary, AIAA: Accompanied by Dr Jerry Grey, Administrator of Technical Activities, AIAA; and Mr J. Preston Layton, Senior Research Engineer and Lecturer, Princeton University; before the Subcommittee on HUD-Space-Science-Veterans, Committee on Appropriations, United States Senate, 93rd Congress, First Session" (11 Apr 1973)
Box 136, Folder 9	Congressional Record (House), 23 May 1973
Box 136, Folder 10	"Space Shuttle Orbiter and Subsystems" (E. P. Smith, RI report SD 73-SH-0144, Jun 1973, for presentation to AIAA/ASME/SAE Space Mission Planning and Execution Meeting, Denver, CO, 10-12 Jul 1973)
Box 136, Folder 11	PALE [Pelvis and Legs Elevating] Seat
Box 136, Folder 12	"Looking Out For Our Earth with the Space Shuttle Transportation System" (script, circa 1975)
Box 136, Folder 13	Space Shuttle System Summary (RI report SSV74-32(R), May 1975)
Box 136, Folder 14	Space Shuttle Transportation System (RI report, Sep 1975)

Box 136, Folder 15	"Rockwell International Exhibit Plans for U.S. Bicentennial Exposition on Science and Technology - NASA Kennedy Space Center, 31 May through 6 September 1976"
Box 136, Folder 16	Space Shuttle System Summary (RI report SSV 78-1, Jan 1978)
Box 137, Folder 1	Shuttle / Navstar Press Kits (19 Apr 1978) [cannibalized]
Box 137, Folder 2-3	Press Information - Space Shuttle Transportation System (RI, Feb 1981) [2 folders]
Box 137, Folder 4	STS-1 Flight Data File - Crew Activity Plan (JSC report JSC-12799, 2 Mar 1981)
Box 137, Folder 5	miscellaneous Space Shuttle photos (circa 1973)
Box 137, Folder 6	miscellaneous Space Shuttle photos (circa 1976)

Miscellaneous Reference Materials

1947

Box 137, Folder 7	"Introduction to the Problem of Rocket-Powered Aircraft Performance" (H. Reese Ivey, Edward N. Bowen Jr and Lester F. Oborny, NACA TN 1401, Dec 1947)
Box 137, Folder 8	"Notes & Tables for Use in the Analysis of Supersonic Flow" (NACA TN 1428, Dec 1947)

1949

Box 137, Folder 9	"Investigation of Aircraft Heaters, XXX - Nocturnal Irradiation as a Function of Altitude and Its Use in Determination of Heat Requirements of Aircraft" (L. M. K. Boelter, H. Poppendiek, G. Young, and J. R. Anderson, NACA TN 1454, Jan 1949)
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1950

Box 137, Folder 10	"Tables of Thermodynamic Functions for Analysis of Aircraft Propulsion Systems" (Vearl N. Huff and Sanford Gordon; NACA TN 2161, Aug 1950)
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1951

Box 137, Folder 11	"Method for Calculation of Ram-Jet Performance" (John R. Henry and J. Buel Bennet, NACA TN 2357, Jun 1951)
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1952

Box 137, Folder 12	"Transition Caused by the Laminar Flow Separation" (T. Maekawa and S. Atsumi, NACA TN 1352, Sep 1952)
Box 137, Folder 13	"The Laminar BL in Slip Flow" (T. Nonweiler, College of Aeronautics Cranfield report 62, Nov 1952)
Box 137, Folder 14	"Radiant-Interchange Configuration Factors" (D. C. Hamilton and W. R. Morgan, NACA TN 2836, Dec 1952)
1953	
	"The Effect of Dissociation on the Thermodynamic Properties of Pure Diatomic Gases" (Harold W. Woolley, NBS report 1884, 1 May 1953 and NACA TN 3270, Apr 1955) [2 folders]
Box 137, Folder 15	NBS report
Box 138, Folder 1	NACA report
Box 138, Folder 2	"The Determination of Skin Temperatures Attained in High Speed Flight" (F. V. Davies and R. J. Monaghan, RAE report 14,990 (Aero 2454), Feb 1952, UK Aeronautical Research Council report CP No 123, 1953)
1954	
Box 138, Folder 3	"Propellants for Rockets and Space Ships" (Johan G. Tschinkel; Chemical and Engineering News 32, no.26 (28 Jun 1954) : 2582-2587) (reprint)
	Papers presented to IAF 5th International Astronautical Congress, 5-7 Aug 1954 [3 folders]
Box 138, Folder 5	"Possibilities of Electrical Space Ship Propulsion" (E. Stuhlinger, reprint)
Box 138, Folder 6	"Über die aerodynamische Erwärmung von kegelförmigen Flugkörpern im Bereich extrem hoher machzahlen" (H. Ruppe, reprint)
Box 138, Folder 4	"Gesinterte Hochtemperaturwerkstoffe" (R. Kieffer and F. Binesovsky, reprint)
Box 138, Folder 7	Curves of Shockwave, Expansion Wave and Skin Friction Data for Hypersonic Speeds (M. F. Romig, Convair report A-Atlas-103, 15 Dec 1954)
Box 138, Folder 8	"On the Structure of Symmetric Periodic Solutions of Conservative Systems with Applications" (R. De Vogelaere, Dept of Mathematics, University of Notre Dame du Lac report TR No.2, Dec 1954)

1955

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| Box 138, Folder 9 | Journal of the British Interplanetary Society 14 No.1 (Iss.No.62; Jan-Feb 1955) |
| Box 138, Folder 10 | "Über die Wirtschaftlichkeit von Wasserdampftraketen als Horizontal-Starthilfen" (H. H. Kölle, Forschungsinstitut für Physik der Stahlantriebe, e.v. report Nr.2, Mar 1955) |
| Box 138, Folder 11 | "On Some Problems in Free Molecule-Slip Flow Regimes" (M. Z. Krzywoblocki, Acta Physica Austriaca 9, no.3-4 (1955) : 216-257) (reprint; 2 copies) |
| Box 138, Folder 12 | Technical Information on Guided Missiles (GE Reprint letter #1, 1955) |

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| Box 138, Folder 13 | Journal of the British Interplanetary Society 15 No.3 (Iss.No.70, May-Jun 1956) |
| Box 138, Folder 14 | Rocket Newsletter 1 No.3 (Jun 1956) |
| | Papers presented to IAF 7th International Astronautical Congress, 17-22 Sep 1956 [6 folders] |
| Box 138, Folder 15 | "The Payload-Ratios of Small-Thrust Space-Vehicles" (M. Vertregt) |
| Box 138, Folder 16 | "Einige Betrachtungen zur Theorie der raumfahrzeugeantriebe" (H. Ruppe) |
| Box 138, Folder 17 | "Ueber Systeme mit Chemisch Reagureiden Komponenten im Gleichgewicht" (H. J. Kaeppler and G. Bauman) |
| Box 138, Folder 18 | "Bemerkungen zur Frage der Stufenraketen" (Rolf Enge) |
| Box 138, Folder 19 | "Considerazioni Sul Problema Della Utilizzazione Dell'Energia Nucleare in Astronautica" (I. C. Corbetta) |
| Box 138, Folder 20 | "Procedimento Di Accleramento Con Possibilita Di Eventuale Utilizzazione Dopo Esaurimento Delle Normali Cariche Propulsive Di Un Razzo" (A. Jona) |
| Box 138, Folder 21 | "Trip Report to Boston Nov 14-21, 1956" (W. L. Lee to Ehrlicke, Convair memo PSL #68) |
| Box 139, Folder 1 | "Beitrag zur Theorie der Wasserdampftrakeete" (H. Bednarczyk, Astronautica Acta 1956 : 23-41) |

1957

Box 139, Folder 2	Vertical Recovery - Feasibility of the Physical Recovery of Scientific Research Payloads from Very-High-Altitude Near-Vertical Trajectories (R. T. Patterson, Martin Co report ER9225, Mar 1957)
Box 139, Folder 3	"The Case for the Low Acceleration Spaceship" (H. F. Michielsen, <i>Astronautica Acta</i> 3 fasc.2 (1957) : 130-152) (reprint)
Box 139, Folder 4	"Thermodynamic & Transport Properties of Dissociated Hydrogen Mixtures" (Martin J. Reisfeld, Los Alamos Scientific Lab report LA-2123, 8 Apr 1957)
Box 139, Folder 5	Plasma Flow Facility Engineering Study Report (Preliminary Copy) (N. W. O'Rourke, Convair report AZP-014, 1 Jul 1957)
	Papers presented to IAF 8th International Astronautical Congress, 6-12 Oct 1957 [2 folders]
Box 139, Folder 6	"Recovery of a Circum-Lunar Instrument Carrier" (Carl Gazley Jr and David J. Massan, RAND report P-1119, 19 Aug 1957)
Box 139, Folder 7	"Design and Performance Data of Space Ships with Ionic Propulsion Systems" (Ernst Stuhlinger, ARS paper 509-57)
Box 139, Folder 8	"Use of a Balloon or Parachute to Obtain Low Re-entry Velocities" (R. D. Linnell, Convair Scientific Research Laboratory memorandum, Oct 1957)
Box 139, Folder 9	"Rocket Propulsion with Nuclear Energy" (M. H. Rosenblum, W. T. Rinehart, and T. L. Thompson, ARS paper 559-57, presented to ARS 12th Annual Meeting, 2-5 Dec 1957)
Box 139, Folder 10	"Über eine Möglichkeit zur Erhöhung der Ausströmgeschwindigkeit bei Raketentriebwerken" (W. Reschka, <i>Astronautica Acta</i> 3 (1957) : 15-22) (reprint)
Box 139, Folder 11	"Nonlinear Wave Motion in Magneto-Hydrodynamics" (K. O. Friedrichs, circa 1957)

1958

Box 139, Folder 12	"Relativistic Treatment of Rocket Kinematics and Propulsion" (Paul F. von Handel and Herbert Knothe, Air Force Missile Development Center report AFMDC TR 53-8, Jan 1958)
Box 139, Folder 13	Nuclear Auxiliary Power Unit for Satellites (Engineering Dept, Convair Ft. Worth report FZK-102, 10 Feb 1958)

Box 139, Folder 14	"Some Fundamental Considerations Relating to Advanced Rocket Propulsion Systems" (J. H. Huth, B. W. Augenstein, and R. D. Holbrook, RM-2194, 11 Mar 1958)
Box 139, Folder 15	"Stochastic Theory of Transport Phenomena in a Reacting Plasma at Extreme Temperatures" (H. J. Kaeppler, Forschungsinstitut für Physik der Strahlantriebe e.v., report. 15, Mar 1958)
Box 139, Folder 16	"What's Coming in Rockets" (Hubert O. Johansen, Popular Science, Mar 1958 : 94-98, 244, 246)
Box 139, Folder 17	Satellite Nuclear Auxiliary Power Unit (Convair report FZM-1701A, 18 Jun 1958)
Box 139, Folder 18	A National Integrated Missile and Space Vehicle Development Program (Working Group on Vehicular Program, Special Committee on Space Technology, NACA)
Box 139, Folder 19	"Der Einfluß der Genauigkeit des Geschwindigkeitsvektors auf kreisförmige Bahnen künstlicher Satelliten" (Karl Schütte, presented to IAF 9th International Astronautical Congress, 25-30 Aug 1958) (reprint from Proceedings of 9th International Astronautical Congress; 3 copies)
Box 139, Folder 20	"Structures for Spacecraft" (Paul E. Sandorff, ARS paper 733-58, presented to ARS 13th Meeting, 17-21 Nov 1958) (photocopy of preprint)
1959	
Box 139, Folder 21	Missiles and Rockets, 9 Feb 1959 Notes: Annual Electronics and Guidance Issue
Box 139, Folder 22	Study of Upper Stage Liquid O ₂ /H ₂ Rocket Engine Applications (briefing, Pratt & Whitney report)
Box 139, Folder 23	"Engineering and Scientific Problems of Ion Propulsion" (Stanton L. Eilenberg and Albert L. C. Huebrer, ARS paper 880-59, presented at ARS Semi-Annual Meeting, San Diego, CA, 8-12 Jun 1959)
Box 140, Folder 1	Convair-Chrysler Space Nuclear Power Unit (Convair report FZM-1819, 15 Jun 1959)
Box 140, Folder 2	"Radiation Shield Insulation with Application to Cryogenic Tanks in Space" (E. H. Christensen, Convair report AZJ-55-003)
Box 140, Folder 3	"Thermal Insulation of Space Vehicles" (E. H. Christensen, Convair report AZJ-55-055)

Box 140, Folder 4	Space Nuclear Power Unit Development Program (GD Convair report FZM-1842, 4 Aug 1959)
Box 140, Folder 5	"Solid Propellants for Multimillion-Pound Boosters" (John Gustavson, Grand Central Rocket Co report AC-8, 28 Aug 1959; for presentation to ARS 14th Annual Meeting, Washington, DC, 16-20 Nov 1959)
Box 140, Folder 6	"Beamed Electromagnetic Power as a Propulsion Energy Source" (Martin I. Willinski, ARS Journal Aug 1958)
Box 140, Folder 7	"Weight Estimate of Nuclear Rocket Engines" (R. F. A. Lem, Rocketdyne report R-1903)
Box 140, Folder 8	"Electric Space Propulsion" (John C. Edward, AIEE paper 59-1229, 12 Oct 1959) (preprint)
Box 140, Folder 9	"Advanced Reactor Concepts for Nuclear Propulsion" (Frank E. Rom, Astronautics Oct 1959 : 20-22, 46-50)
Box 140, Folder 10	Status of Space-Vehicle Shielding Work at Convair-Fort Worth (Convair report FZM-1908, 19 Nov 1959)
Box 140, Folder 11	"Interplanetary Navigation and Communication System 'INCA'" (C. Bartos, Convair report PDSA 234-59, 31 Dec 1959)
Box 140, Folder 12	ARS Journal 29 no. 12 (Dec 1959)
Box 140, Folder 13	"Economy and Techniques of Large Missile Booster Recovery" (H. H. Koelle, Western Aviation Dec 1959 : 46-49)
1960	
Box 140, Folder 14	"Advantages of High-Thrust Space Vehicles" (M. W. Hunter and J. M. Tschirgi, Astronautics Feb 1960 : 28-30, 99-102)
Box 140, Folder 15	"Aerodynamically Heated Surfaces - A Chemical Analysis" (Howard Myers, Aero/Space Engineering Feb 1960 : 34-38)
Box 140, Folder 16	"How Useful Are Low-Thrust Space Vehicles?" (Ernst Stuhlinger, Astronautics Feb 1960 : 24-26, 95-97)
Box 140, Folder 17	"Manned Nuclear Space Systems, Part II - Low-Thrust Nuclear Systems" (R. F. Trapp, M. W. Hunter, AFIAS, and E. B. Konecci, Aero/Space Engineering Feb 1960 : 49-54)
Box 140, Folder 18	"Evaluation of Thermal Problems at Relatively Low Orbital Altitudes" (Laurence D. Wing, Aero/Space Engineering Mar 1960 : 58-64)

Box 140, Folder 19	"Some How's, Why's, and Where's of Missiles and Space" (Robert M. Skinner, Air Force/Space Digest Apr 1960 : 134-136)
Box 140, Folder 20	"The Hybrid Rocket Motor and Its Unique Capabilities" (John Gustavson, presented to ARS Semi-Annual Meeting and Astronautical Exposition, 9-12 May 1960; Grand Central Rocket Co report AC-13, 15 Apr 1960)
Box 140, Folder 21	"Compilation of Material Presented By the Exploratory Physics Group at the Thermonuclear Project Meeting - June 1, 1960" (J. S. Luce to Distribution, ORNL Catalog 60-6-96, 21 Jun 1960)
Box 140, Folder 22	"A Parametric Technique for Rapid Weight Determinations of Optimized Multistage Vehicles" (H. Radd, Convair report PDSA 76-60, 23 Jun 1960)
	Mission Analysis for Electric Propulsion Systems (USAF project 4994)
Box 140, Folder 23	Final Report (TRW report 4114 / WADD Technical Report 60-533, Jun 1960)
Box 141, Folder 1	"Agena Structure - Makes Wide Use of Magnesium" (Irwin Stamble, Space/Aeronautics Jul 1960 : 52-56)
Box 141, Folder 2	"Performance of Nuclear Rocket for Large-Payload, Earth Satellite Booster" (Eldon W. Samis, Journal of Aero/Space Sciences 27 No.7 (Jul 1960) : 481-493)
Box 141, Folder 3	"What Price Weight for Advanced Aerospace Vehicles?" (Herbert C. Sanders, Space/Astronautics Jul 1960 : 67-72)
Box 141, Folder 4	Feasibility Study for a Space Environment Simulator Capable of Duplicating An Accurate Space Vehicle Temperature History (J. C. Elizalde, H. T. Iida, and R. O. Hartung, GDC report ERR-AN-018, 30 Aug 1960)
Box 141, Folder 5	"Liquid Behavior in a Zero-G Field" (Ta Li, GD report AE60-0682, Aug 1960)
Box 141, Folder 6	"Nuclear Cycling Into Space" (Thomas Szekely, Space Digest Aug 1960)
Box 141, Folder 7	"Predicting the Performance of Re-entry Bodies" (A. A. Gammal, Space/Aerodynamics Sep 1960 : 55-58)
Box 141, Folder 8	"The Problems of Waste Heat Rejection in Electric Propulsion Systems" (S. Lieblein, NASA Lewis report E-1132, 7 & 17 Oct 1960)

Box 141, Folder 9	"Figuring the Heating of Blunt Shapes in Hypersonic Flight" (L. D. Wing, Space/Aeronautics Oct 1960 : 187-196)
Box 141, Folder 10	"Messung und Auswertung von Bogencharakteristiken (Ar, N2)" (H. Maecker, Zeitschrift für Physik 158 no.4 (1960) : 392-404) (reprint)
Box 141, Folder 11	"Parametric Weight Study of a Manned Space Entry Vehicle" (Onys A. Kelly, Jr, Aerospace Engineering Oct 1960 : 40-49, 77)
Box 141, Folder 12	"Experimental Performance of Ion Rockets Employing Electron-Bombardment Ion Sources" (Harold R. Kaufman and Paul D. Reader, ARS paper 1374-60, presented to ARS Electrostatic Propulsion Conference, 3-4 Nov 1960)
Box 141, Folder 13	"Model Analysis - Space Thermal Environment Simulation" (J. C. Ballinger and H. T. Iida, Convair report ERR-AN-026, 23 Nov 1960)
Box 141, Folder 14	articles from Aerospace Engineering (Nov 1960): "Performance and Design Considerations for Maneuvering Space Vehicles" (L. W. Warzecha, pp.18-23, 56-59); "Space Reconnaissance" (Sandefur pp.28-31, 50, 62)
Box 141, Folder 15	"Reliability Planning in Space Systems - An Analytical Method (Part II)" (Vernon L. Grosse, Missile Design and Development Nov 1960: 24-29)
Box 141, Folder 16	Trident - A New Concept for Space Propulsion (briefing; circa Nov 1960)
Box 141, Folder 17	"A Propulsion System Using a Cavity Reactor and Magnetohydrodynamic Generator" (Richard J. Rosa, ARS paper 1519-60, presented to ARS 15th Annual Meeting, 5-8 Dec 1960)
Box 141, Folder 18	illustrations of Helios propulsion sections
Box 141, Folder 19	"Power for Interplanetary Travel" (Max Hunter and Edward Bonnett, unknown journal : 30-33, 46)
Box 141, Folder 20	Spacecraft Data Charts (Satelliten-Kartei)
Box 141, Folder 21	Satelliten-Kartei

1961

Box 141, Folder 22	"Normal Solar Absorptivity and Total Hemispherical Emissivity of Engineering Surfaces and Coatings" (E. H. Christensen, Convair report AE61-0079, 26 Jan 1961)
Box 141, Folder 23	"Determination of Aerodynamic Heating of Hypersonic Glider Wings" (Martin Kaplan, GE report 61SD12, 30 Jan 1961)

Box 141, Folder 24	"Minimum Weight Shield for Helios C Configuration as a Function of Crew Dose for Reactor Start-In-Flight" (D. M. Cook to A. Reetz, Convair Memo N-S/3-348, 30 Jan 1961)
Box 141, Folder 25	"The Space Vehicle System Engineer" (Harold L. Bloom, Missile Design and Development (Jan 1961) : 34-38)
Box 141, Folder 26	material sent by John S. Luce (21 Mar 1961) on Plasma Arcs
Box 141, Folder 27	"Thermionic Energy Converters" (J. J. Connelly Jr, Naval Research Reviews, Mar 1961) (reprint)
Box 141, Folder 28	"Nuclear Energy in Space - Nucleonics Special Report" (Nucleonics 19, no. 4 (Apr 1961) : 53-100, 110-112) (photocopy of thermofax original)
Box 141, Folder 29	"A Preliminary Study of Advanced Propulsion Spacecraft Payload Capabilities" (E. W. Speiser, JPL TM 33-42, 10 May 1961)
Box 141, Folder 30	Quality Assurance Provisions for Space Vehicle System Contractors (MSFC Quality Engineering Bulletin Nr.2 Rev. A, 15 Jun 1961)
Box 141, Folder 31	"Photo Propulsion" (Ronald Dorr and Keith Marshall, Purdue University, 22 Jun 1961)
Box 141, Folder 32	Staging Optimization (Transue) ["Optimum Staging Weights of Multi-Stage Missiles" (John Richard Transue, Masters Thesis, UCLA, Jun 1961)]
	2-3 Million Pound Thrust Launch Vehicle Systems (NAS8-1513)
Box 142, Folder 1-3	Second Status Report (GD report AE61-0606, 6 Jul 1961) [3 folders]
Box 142, Folder 4	"Re-entry Technology Divides into Two Categories" (Space Age News 10 Jul 1961 : 4)
Box 142, Folder 5	"Energieanlagen für Bemannte Raumfahrzeuge" (F. Huep, Flugwelt 1961 no.7 : 500-503)
Box 142, Folder 6	articles from Space/Aeronautics (Jul 1961): "Spacecraft Temperature Control: State of the Art" (Dieter Goetze, pp.55-59); "Spacecraft Temperature Control: Breakthrough on Transit" (Eileen B. Kress, pp.60-61); "Which Engine for the Supersonic Transport?" (Andrew Sarne, pp.62-63) ; "Dynamic Pressure on a Moving Body" (Robert M. Sando, pp.64-65)
	Six- to Twelve-Million-Pound-Thrust Launch Vehicles (NAS8-898)

Box 142, Folder 7-9	Final Summary Report (GD report AE61-0567, 15 Aug 1961) [3 folders]
Box 142, Folder 10	"The Application of Magnetohydrodynamic Generators in Nuclear Rocket Propulsion" (R. J. Rosa, AvcoEverett Research Laboratory report 11 / AFBSD TR 61-58, Aug 1961) Orbit Launch Vehicle (NAS8-1535)
Box 143, Folder 1-3	Final Report (GD report AE61-0790, 6 Sep 1961) [3 folders]
Box 143, Folder 4	Performance Capability of the Three Stage Saturn C-1 Configuration (S-I, S-IV, S-V) (Convair report AE61-1069, 30 Sep 1961)
Box 143, Folder 5	"Development Program, Flight Operations and Facilities for Nuclear Rockets" (H. Radd and I. J. Deane, ARS paper 2056-61, presented at Space Flight Report to the Nation, 9-15 Oct 1961)
Box 143, Folder 6	"Prospects for Advanced Nuclear Systems" (R. V. Meghreblian, Astronautica Acta 7 fasc.4 (1961) : 276-289) (reprint)
Box 143, Folder 7	"HELIOS B Chemo-Nuclear Vehicle Design" (F. D'Vincent, 30 Nov 1961)
Box 143, Folder 8	Estimated Performance of a Mach 7.0 Hydrogen-Fueled Turboramjet (STRJ-176) (PWA report TDM-1745, 13 Dec 1961)
Box 143, Folder 9	"The Hall and Ion Slip Effects in a Non-Uniform Gas" (R. J. Rosa, AvcoEverett Research Laboratory report 121 / AFBSD TR 61-80, Dec 1961)
Box 143, Folder 10	"Water Moderated Nuclear Rockets" (Frank E. Rom, Paul G. Johnson, and Robert E. Hyland, NASA TM X-482, Dec 1961) [photocopy]
1962	
Box 144, Folder 1	Controlled Thermonuclear Reactions for Space Applications (Aerojet-General Nucleonics report AN-488, Jan 1962)
Box 144, Folder 2	"Data Storage in Spacecrafts" (Alex Egger and William S. Knowles, Computer Design no.1 (Jan 1962) : 44-49)
Box 144, Folder 3	papers presented at ARS Electric Propulsion Conference, 14-16 Mar 1962
Box 144, Folder 4	"The Use of Atmospheric and Extraterrestrial Resources in Space Propulsion Systems, Part 1" (S. T. Demetriades, G. L. Hamilton, R. W. Ziemer, and C. F. Young, ARS paper 2438-62, presented to ARS Electric Propulsion Conference, 14-16 Mar 1962)

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Box 144, Folder 5-7	Second Phase Proposal, Vol 1: Program Planning (GDA report AE 62.1271, 26 Mar 1962) [3 folders]
Box 144, Folder 8	A Conceptual Design for a Reusable One-Stage Orbital Space Truck (ROOST) (Douglas report SM-41719, Apr 1962)
Box 144, Folder 9	"Summary of a Preliminary Investigation Comparing a Nuclear Rocket Engine Cluster to a Single Engine" (D. Gibson, Rocketdyne report, 25 Jun 1962)
Box 144, Folder 10	Payload, Cost, and Reliability Analysis of Saturn C-5 and NOVA with NERVA or Chemical Third Stages (Aerojet General report 2279, Jun 1962)
Box 145, Folder 1	Rocket Performance Data (Rocketdyne report, 3 Aug 1962) [data for LOX-H2 engine]
Box 145, Folder 2	"Command and Control of Space Systems" (Wolf Haberman, Missiles and Space, Aug 1962 : 12-21)
Box 145, Folder 3-4	Liquid Hydrogen Technology (GDA report AE62-0774, Sep 1962) (photocopy) [2 folders]
Box 145, Folder 5	"Rendezvous and Coupling of Spacecraft" (Ervin Sommer, GDA report ERR-AN211, 1 Nov 1962)
Box 145, Folder 6	"Nuclear Rockets for Unmanned Missions" (Frank E. Rom, Armin F. Leitscher, and Paul G. Johnson, Nucleonics 20, no.11 (Nov 1962) : 53-57)
Box 145, Folder 7	"Atomare Triebwerke für die Raumfahrt" (Robert E. Mayes, Flugwelt 1962 no.12 : 1004-1009)
	articles from Journal of the Aerospace Sciences 29, no.12 (Dec 1962) [3 folders]
Box 145, Folder 8	"Laminar, Transitional, and Turbulent Heat Transfer to a Cone-Cylinder-Flare Body at Mach 8.0" (Victor Zakkay and Clifton J. Cllahan, pp.1403-1413)
Box 145, Folder 9	"Experimental Effect of Bluntness and Gas Rarefaction on Drag Coefficients and Stagnation Heat Transfer on Axisymmetric Shapes in Hypersonic Flow" (D. E. Bloxsom and B. V. Rhodes, pp.1429-1432)
Box 145, Folder 10	"Analysis and Synthesis of a Particular Class of Satellite Altitude-Control Systems - Part I, System Analysis

Results" (Cornelius T. Leonides, Robert E. Roberson, and Masanao Aoki, pp.1433-1453)

Box 145, Folder 11	Nova & Post-Nova Propulsion Summary (briefing, Rocketdyne report BCI 62-169, circa 1962)
1963	
Papers presented to 9th AAS Annual Meeting and Interplanetary Missions Conference, 15-17 Jan 1963 [3 folders]	
Box 145, Folder 12	"A Role for Nuclear Rockets" (R. B. Dillaway and A. G. Negro, AAS paper)
Box 145, Folder 13	"Design Objectives for Tomorrow's Big Boosters" (Philip Bono, AAS preprint 63-02)
Box 145, Folder 14	"Booster Recovery by Paraglider Methods" (R. F. Brodsley and J. D. McNerney, AAS preprint 63-03)
Box 145, Folder 15	"Gaseous Core Reactors" (Frank E. Rom, presented to NASA-Lewis OART Conference on Technology, 26 Jan 1963)
Box 145, Folder 16	"Schub durch Atomexplosionen" (Hans Philip, Flugwelt 1963 no.1 : 59-60)
Box 145, Folder 17	"Tungsten-Water-Moderated Nuclear Rocket Concept" (Frank E Rom, NASA Lewis report E-2145, 18 Apr 1963)
Box 145, Folder 18	"Saturn I, IB, and V Launch Vehicle Specifications, Weights and Compatible Trajectories" (Weight and Performance Review Board to Dr. Lanse, GD memo M-P&VE-V-33, 13 May 1963)
Papers presented at AIAA Summer Meeting, 17-20 Jun 1963 [4 folders]	
Box 145, Folder 19	"A Hypothetical Fusion Rocket Vehicle" (J. L. Hilton, J. S. Luce, and A. S. Thompson, AIAA paper 63-239)
Box 145, Folder 20	"Feasibility of Large Launch Vehicle Recovery" (S. A. Millikin, AIAA paper 63-247)
Box 146, Folder 1	"ASTRO - An Available Economical Solution to the High Cost of Space Flight: (M. W. Root and G. M. Fuller, AIAA paper 63-263;)
Box 146, Folder 2	"Astroplane - A Reusable Orbital Booster Utilizing Lifting Tankage" (John C. Moise, Calvin S. Henry, and Robert S. Swanson, 15 Apr 1963, AIAA paper 63-283)

Box 146, Folder 3	"Future of On-Board Computers for Space Vehicles" (Gordon H. Smith, Autonetics report, Jun 1963)
Box 146, Folder 4	"Characteristics of Facility Which Might Be Employed for Testing a Gaseous Nuclear Rocket" (George H. McLafferty, UAC report UAR-B104, 8 Jul 1963)
Box 146, Folder 5	"Estimated Potential Performance Characteristics of Gaseous Nuclear Rockets" (G. H. McLafferty, UAC report UAR-B113, 23 Jul 1963)
Box 146, Folder 6	Raketentechnik und Raumfahrtforschung 7 no.3 (Jul-Sep 1963)
Box 146, Folder 7	The Implications of Booster Recovery on the Propulsion System (Douglas report, 27-28 Aug 1963)
Box 146, Folder 8	"Le Propulseur Héliothermique" (Jean Surugue and Emile le Grivés, presented to IAF 14th International Astronautical Congress, 25 Sep - 1 Oct 1963)
Box 146, Folder 9	"A Consideration of the Problems Relating to Feasibility, Utility and Development of Electrical Propulsion Systems (U)" (B. Pinket, S. H. Dole, W. H. Krase, J. W. Noah, W. Sollfrey, and Z. A. Typaldes, RAND report RM-3469-NASA (Abridged), Sep 1963)
Box 146, Folder 10	"Physik und Technik höchster Temperaturen" (A. Koller and H. Motschman, Fortschritte der Verfahrenstechnik 6 (1962/63) : 221-238) (reprint)
Box 146, Folder 11	cryogenics for space use [loose bibliography, pp.45-51]
1964	
Box 146, Folder 12	Electrical Power Conversion and Regulation Semiannual Report (Edward F. Schraith, GDA report GDA-ERR-AN571, 30 Jun 1964)
Box 146, Folder 13	"An Analysis of Atlas Agena Launch Costs (U)" (D. L. Harvey, GDA report DCB 64-069, 30 Jul 1964)
Box 146, Folder 14	"Nuclear Pulse Propulsion" (J. C. Vance, General Atomics report GA-5572, 5 Oct 1964, presented to IEEE 11th Nuclear Science Symposium, 29-30 Oct 1964)
Box 146, Folder 15	Rotary, Deployable Space Solar Power Supply (NASA contractors report CR-122)
Box 146, Folder 16	"Plasmabeschleunigung in expandierender Überschallströmung" (Th. Peters, Zeitschrift für Naturforschung, Teil A 19 (1964) : 1129-1130) (photocopy)

Box 146, Folder 17	"The Supersonic Transport Program - Mach 2-plus or Mach 3?" (Aluminum Corp of America [ALCOA] brochure, circa 1964)
1965	
Box 146, Folder 18	Aerospace Transporter (Eurosace)
Box 146, Folder 19	"Mehrfachbeschleunigung und Reflexion von Plasmoiden" (H. Schindler, Zeitschrift für Naturforschung 20a No.7 (1965) : 973-974) (reprint)
Box 146, Folder 20	"Intérêt de la Concentration du Rayonnement Solaire pour la Conversion de l'énergie a Bord des Véhicules Spatieux" (Emile le Grivès, presented to IAF 16th International Astronautical Congress, 12-18 Sep 1965, ONERA report T.P.No.268 (1965))
Box 146, Folder 21	"Utilization de L'énergie solaire pour la propulsion dans l'espace intérieur l'Orbite terrestre" (Emile le Grivès, La recherche Aérosptiale 108 (Sep-Oct 1965), ONERA report T.P.No.297 (1965))
Box 146, Folder 22	"1 On the Side, 2 On Top, 3 In Orbit" (GDC brochure, Oct 1965) [on Scientific Passenger Pod (SPP) and OV1 Orbiting Vehicle]
	Development of Electrical Switchgear for Space Nuclear Electrical Systems (NAS3-6467)
Box 147, Folder 1	Quarterly Progress Report No.4 for Period: Sept 4, 1965 thru December 4, 1965 (GE report, NASA-CR-54861, no date)
Box 147, Folder 2	"Entmischung von Isotopen im Bereich der Dissoziation" (W. Frie, Zeitschrift für Physik 185 (1965) : 493-506) (reprint)
Box 147, Folder 3	An Analysis of Chemical Upper Stages for NASA Scientific Missions (NASA Lewis report TM X?52127, 1965) (photocopy)
Box 147, Folder 4	"Study of a NERVA-Electric Manned Mars Vehicle" (E. Stuhlinger, J. C. King, R. D. Shelton, and G. R. Woodcock, presented to AIAA/AAS Symposium "Stepping Stone to Mars", 28-29 Mar 1966)
Box 147, Folder 5	"Evaluation of Rocket Vehicle Progress and Anticipated Trends" (Heinze Mueller, Martin Co report M-66-11, Apr 1966)
Box 147, Folder 6	Lockheed Horizons (complete issues): no.1 (Spr 1965); no.4 (Q1 1966); no.5 (Q2 1966)
1966	
Box 147, Folder 7	"High-Capacity Aircraft" (Warren E. Kraemer, International Science and Technology May 1966 : 48-59)

Box 147, Folder 8	Hypersonic Systems Technology (Lockheed report LR 19751 / LAC 609408, 23 May 1966)
Box 147, Folder 9	articles from Space/Aeronautics June 1966: "Metallized Liquid Propellants" (W. W. Wells, pp.76-82); "A Public Navsat System" (Jack Breckman, pp.92-99)
Box 147, Folder 10-12	"Microwave Powered Ferry Vehicles" (M. I. Willinski, Spaceflight 8 (Jun 1966) : 217-225) [3 copies; 3 folders]
Box 147, Folder 13	Convair's Future in Electric Propulsion (GDC report GDC-DBE-66-011, Aug 1966)
Box 147, Folder 14	"The Shape of Things to Come in Space Electronics" (Victor Harris to C. F. O'Donnell, NA Internal Letter; 18 Oct 1966)
Box 147, Folder 15	"Vergleichende Analyse von Gaskern-Reaktoren für Antriebe von Raumfahrzeugen" (Günter W. Tumm, Doctoral dissertation, TUB D83, 15 Nov 1966)
Box 148, Folder 1	Centaur Capability Handbook (GDA report BTD64-119-1, rev.A, 1 Oct 1964) [sent to Ehrlicke by W. C. Strobl, 18 Nov 1966]
Box 148, Folder 2	"Atlas SLV-3A, Atlas SLV-3C and Centaur Performance" (GD brochure, Nov 1966)
Box 148, Folder 3	"Rebuttal to Dr Nicholas E Golovin's Comments on the Launch Vehicle Committee's Position Paper" (AIAA Panel Discussion, Boston, Nov 30, 1966); Phil Bono to AIAA Launch Vehicle and Missiles Technical Committee (no date)

1967

Box 148, Folder 4	"Propulsion System Comparison for Manned Mars Landing Missions" (R. R. Titus, UARL report F-110224-3, 14 Feb 1967)
Box 148, Folder 5	Flight Report (Winzen Research newsletter, circa Feb 1967)
Box 148, Folder 6	United Aircraft Nuclear Propulsion Research
Box 148, Folder 7	Neptun - Studienprojekt einer Wiederverwendbaren trägerrakete (H. H. Koelle, Institut für Raumfahrttechnik, TUB report 2/1967, 31 Mar 1967)
Box 148, Folder 8	"The Variable Payload Booster - Next Generation of Large Launch Vehicle?" (Phil Bono, Douglas paper 4298, presented to CCTC 4th Space Congress, 3-6 Apr 1967)
Box 148, Folder 9	Advanced Atlas Launch Vehicle Digest no.2 (GDC publication, Apr 1967)

Box 148, Folder 10-11	Atlas Launch Vehicle Family for Spacecraft Contractor Planning (GDC report BGJ 67-001, Apr 1967) [2 copies; 2 folders]
Box 148, Folder 12-13	"The Enigma of Booster Recovery - Ballistic or Winged?" (Phil Bono, Frank E. Senator, and D. (Sam) Garcia, presented to 2nd Space Technology Conference, 9-12 May 1967, Douglas paper 4181) [2 copies ; 2 folders]
Box 148, Folder 14	Fiber-Reinforced Metal-Matrix Composites: Government-Sponsored Research, 1964-1966 (Defense Metals Information Center, Battelle Memorial Institute, DMIC report 241, 1 Sep 1967)
Box 148, Folder 15	"Astropower Data Sheet" (Douglas publication GR-1521, Sep 1967)
Box 148, Folder 16	"Project Apollo - The Lunar Module" (Grumman publication CAP31, Oct 1967)
Box 148, Folder 17	"The NASA/Grumman Lunar Module" (Grumman publication 6772, circa Oct 1967)
Box 148, Folder 18	"Centaur Space Residency" (W. C. Strobl to Ehrlicke, 7 Nov 1967)
Box 148, Folder 19	correspondence regarding Atlas, Apr-Nov 1967
Box 148, Folder 20-21	Launch Vehicle Estimating Factors for Generating OSSA Prospectus (NASA, OSSA; 1967? and 1968 editions) [2 folders]
Box 149, Folder 1	Service Module Summary (NR report RD67-49, Dec 1967)
Box 149, Folder 2	Slush Hydrogen Production, Storage, and Distribution Study Program - Final Report (Union Carbide, NASA report CR-81185, 13 May 1966; microfiche print N67-15455)
Box 149, Folder 3	Centaur - A Stage of Titan III for Extended In-Orbit Maneuvering Missions (GDC report BNZ67-, draft, circa 1967)
Box 149, Folder 4	"Gaseous Nuclear Rocket Technology" (George H. McLafferty, chap 9 of unidentified publication, circa 1967)
1968	
Box 149, Folder 5	Nuclear Saturn - First-Generation Nuclear Stage (NR report SD 68-643A-1A, revised Oct 1968)
Box 149, Folder 6	Nuclear Saturn - First-Generation Nuclear Stage Summary (NR report SD 68-643-2A, rev Jan 1969)
Box 149, Folder 7	papers by Demitrios George Samaras

Box 149, Folder 8	Entwurfskriterien für große Wiederverwendbare Trägersysteme (H. H. Koelle et al, Bundesministerium für wissenschaftliche Forschung report BMWF-FB W 68-07, Jan 1968)
Box 149, Folder 9	R. Cooper to Ehrlicke (Feb 1968)
Box 149, Folder 10	Fiber-Reinforced Metal-Matrix Composites - 1967 (Defense Metals Information Center, Battelle Memorial Institute, DMIC report S-21, 1 Jun 1968)
Box 150, Folder 1	Atomics International Solid State Battery Development Parametric Study of Optimized Liquid-Hydrogen Thermal Protection Systems for Nuclear Interplanetary Spacecraft
Box 150, Folder 2-4	Vol. I - Results and Summary (D. G. Barry and T. S. Hunter, GD) FW report FZA-434-1, 31 Aug 1968) (photocopy) [3 folders]
Box 150, Folder 5	Radioisotope Thermoelectric Generators for a Grand Tour Mission (Atomics International report TI-6090-69-001, 18 Oct 1968)
Box 150, Folder 6	Konstruktive Gestaltung Eines Gaskern-Reaktor-Antriebes (TUB, Institut für Raunfahrttechnik report TUB-IR 1968/19, 15 Nov 1968)
Box 150, Folder 7	Bono (Philip) material (1967-1968)
1969	
Papers presented to AIAA 7th Electric Propulsion Conference, Williamsburg, VA, 3-5 Mar 1969 [2 folders]	
Box 150, Folder 8	"Spacecraft Design for Multipurpose Solar Electric Propulsion Missions" (J. H. Molitor, L. Schweiger, and D. MacPherson, AIAA Paper 69-252)
Box 150, Folder 9	"Study of Electric Spacecraft Plasmas and Field Interactions" (J. M. Sellen Jr, AIAA paper 69?276)
Box 150, Folder 10	"Low Cost Propulsion Systems" (GDC report PD69-0058, presented to Advanced Chemical Rocket Engine Panel, 14 Apr 1969)
Box 150, Folder 11	Metal-Matrix Composites - Symposium of the Metallurgical Society of AIME, May 12-13, 1969 (Defense Metals Information Center, DMIC Memo 243, May 1969)
Box 150, Folder 12	"Blast Wave Theory" (part of A. K. Oppenheim, Non-Steady Gasdynamics)

Box 151, Folder 1	"Liquid Metal Magnetohydrodynamics" (Edward S. Pierson, George A. Brown, and William D. Jackson, USAF Aero propulsion Laboratory report AFAPL-TR-69-33, May 1969)
Box 151, Folder 2	"Trip Report - Visit to Lewis Research Center, NASA Headquarters, Bellcomm, Inc, and MSFC, June 3-5, 1969" (R. H. Sehnert to W. O. Hoverman, NR Internal Letter, 24 Jun 1969)
Box 151, Folder 3	Fiber-Reinforced Metal-Matrix Composites - 1968 (Defense Metals Information Center, Batelle Memorial Institute, DMIC report S-27, 1 Jul 1969)
Box 151, Folder 4	Feasibility Study on a Ballistic Single-Stage Reusable Launch System (MBB report RFT 1017, Aug 1969) [partial translation]
Box 151, Folder 5	"Electric Propulsion Systems for Space Station Attitude Control" (Ernst Stuhlinger, presented to Orbiting International Laboratory and Space Sciences Conference, 2 Oct 1969) [2 copies]
Box 151, Folder 6	"Two Stage, Fully Recoverable Space Shuttle Lunar Mission Capability Case 710" (W. H. Eilertson to File, Bellcomm Memo B69 10080, 27 Oct 1969)
Box 151, Folder 7-8	Engine/Stage Test Stand (E/STS) 2 Preliminary Engineering Report (Norman Engineering Co report, 19 Dec 1969; for Space Nuclear Propulsion Office, Nuclear Rocket Development Station, NV) (2 folders)
Box 151, Folder 9	"Overall Electric Propulsion System Efficiency vs Specific Impulse" (graphic, photocopy)
1970	
Box 151, Folder 10	Friedwardt Winterberg to Ehricke, 26 Jan 1970)
Box 151, Folder 11	Nuclear Flight System Definition (NASA) - Briefing (Lockheed report, 29 Jan 1970) [photocopy of selected pages]
Box 151, Folder 12	"Preliminary Investigation of Ablative Material Response to High Intensity CO2 Laser Radiation" (William D. Brewer, Langley RC, NASA TM X-1941)
Box 151, Folder 13	Beneficial Effects of Space Shuttle on Payload Design & Operations (NR report SV70-9, Jul 1970)
Box 151, Folder 14	"Invited Comments" (Ernst Stuhlinger, AIAA Electric Propulsion Conference, 31 Aug-2 Sep 1970)
	Preliminary Power Conversion System Radiator (NAS8-26346)

Box 151, Folder 15	Final Review (NR report SD70-591, 5 Nov 1970)
1971	
Versatile Upper Stage Study (NAS7-804)	
Final Report	
Box 151, Folder 16-17	Vol.I - Summary (GDC report GDCA-BNZ71-012, Jun 1971) [2 copies; 2 folders]
1972	
Compatability of a Cryogenic Upper Stage with Space Shuttle (NAS3-14389)	
Box 151, Folder 18	Final Study Summary (GDC report GDCA-BNZ71-020-FS, 1 Feb 1972)
Box 151, Folder 19	"Thermonuclear Micro-Bomb Rocket Propulsion" (F. Winterberg, circa 1972)
Box 152, Folder 1	Agena Space Tug (Lockheed Missile and Space Co briefing, Aug 1972)
Box 152, Folder 2-4	US Space Launch Systems ("Hap Hazard", Navy Space Systems Activity report NSSA-R-20-72-2, 1 Mar 1970) [3 folders]
1973	
Box 152, Folder 5	reports by Federation of Americans Supporting Science and Technology [FASST]: Notes: Missing Title: <ul style="list-style-type: none"> • <i>Youth, Space Benefits, and the Space Shuttle - Testimony By the Federation of Americans Supporting Science and Technology Before the United States House of Representatives Manned Space Flight Subcommittee of the Committee on Science and Astronautics, March 15, 1973 (1973)</i> • <i>Technology, the Economy, and the Space Program - A Study of Student Attitudes, Perceptions, and Knowledge About Technology, the Economy, and the Space Program (1973)</i>
Box 152, Folder 6	"Mechanical and Physical Properties of Advanced Composites" (W. T. Freeman and G. C. Kuebler, presented to ASTM 3rd Conference on Composite Materials, 21-22 Mar 1973)
Box 152, Folder 7	Titan III/Centaur D-1T Systems Summary (GDC report CASD-LVP73-007, Sep 1973)

Box 152, Folder 8	citations on mag-lev technology [circa 1973]
Box 152, Folder 9-10	<p>photocopies of articles on mag-lev technology [2 copies each; 2 folders]:</p> <p>Notes:</p> <p>Missing Title:</p> <ul style="list-style-type: none"> • "Electromagnetic Flight" (Henry H. Kolm and Richard D. Thornton, <i>Scientific American</i> 229, no.4 (Oct 1973) : 18-25) • "The Magneplane: Guided Electromagnetic Flight" (Henry H. Kolm and Richard D. Thornton, <i>IEEE Proceedings of the 1972 Applied Superconductivity Conference</i>, May 1-3, Annapolis, Maryland, pp.76-85)
Box 152, Folder 11	"Hybrid Magnetically Levitated Bus" (Charles Guderjahn, presented to Transpo 73 [?], proceedings [?] pp.209-214)
1974	
Box 152, Folder 12	Review of Metals Technology (Metals and Ceramics Information Center publication, May 1972-Oct 1974)
1975	
Box 152, Folder 13	"Airships Are Back for Another Try" (US News and World Report, 3 Feb 1975)
Hypersonic Research Engine Project (NAS1-6666)	
Box 153, Folder 1	Phase II - Final Oral Review Technical Presentation (AiResearch report 75-11338, 25 Mar 1975)
1976	
Box 153, Folder 2-3	Cold Fuel for Hot Performance - Liquid Hydrogen for Propulsion, 1945-1959 (John L. Sloop, comment draft 7 Nov 1975, Chapters 11-12 only) [2 copies (copy 2 includes Ehrlicke to Sloop, 22 Apr 1976 and Ehrlicke to Sloop 28 Apr 1976) 2 folders]
Box 153, Folder 4	TC-5 [Titan-Centaur] / Helios B Launch Data
Box 153, Folder 5	"The Air-Scooping Nuclear-Electric Propulsion Concept for Advanced Orbital Space Transportation Missions" (R. H. Reichel, IAF paper 76-161; presented to the IAF27th International Astronautical Congress, 10-16 Oct 1976) [advance copy]
1977	
Box 153, Folder 6	"Very Large Launch Vehicles" (Ed Hujsak to Ehrlicke, 28 Apr 1977)

1978	
Box 153, Folder 7	Liquid Hydrogen as a Propulsion Fuel, 1945-1959 (John L. Sloop, NASA, 1978) [photocopy of selected pages on development of Centaur]
1979	
Box 153, Folder 8	The Origins of the Space Shuttle (Richard P. Hallion, 15 Aug 1979) [photocopy of rough draft for Ehricke's comments]
1981	
Box 153, Folder 9	Shuttle/Centaur Orientation at NASA LeRC (GDC briefing, 27 May 1981 rev. 26 Jun 1981)
Box 153, Folder 10	Shuttle/Centaur Mission Applications (GDC briefing, Jul 1981)
Box 153, Folder 11	Shuttle/Centaur Mission Applications (GDC briefing, 24 Jul 1981)
1982	
Box 153, Folder 12	"The Centaur Family" (W. F. Rector III, IAF paper 82-02, presented to IAF 33rd International Astronautical Congress, 27 Sep-20 Oct 1982)
Undated	
Box 153, Folder 13	"Air-Scattered Neutron and Gamma Radiation Dose Rates for the Helios-C Nuclear Rocket" (Donald H. Robey, GDA report, no date)
Box 153, Folder 14	Hydrogen and Metals (RI report SC2443.2T) [§II Introduction only]
Box 153, Folder 15	Lasers and Rocket Engines (NR report, no date) [photocopy]
Box 153, Folder 16	"Propulsion System Survey"
Box 154, Folder 1	"Re-Entry & Descent Study of the Aerothermodynamic Characteristics of a Winged Sphere Satellite" (Paul I. Dickey, no date)
Box 154, Folder 2-3	§IV. Launch Vehicle Performance Data (report unidentified) [2 copies; 2 folders]
Box 154, Folder 4	miscellaneous data
Box 154, Folder 5	miscellaneous data - launch vehicles
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Box 154, Folder 10	miscellaneous graphics - "Large Booster Comparison" (Bell Aerosystems)
Box 154, Folder 11	miscellaneous graphics - "Maximized Shuttle Utilization"
Box 154, Folder 12	miscellaneous graphics - nuclear propulsion
Box 154, Folder 13	notes - Castor & Pollux Engines
Box 154, Folder 14	notes - ion propulsion [material from blue binder]
Box 154, Folder 15	notes - ion propulsion [material from red folder]
Box 154, Folder 16	notes and sketches - spacecraft design
Box 154, Folder 17	notes - systems engineering
Box 154, Folder 18	miscellaneous sketches - rocket/scramjet vehicles

Planets and Planetary Missions

Arrangement: (includes Astronautics and Orbital Mechanics)

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Studies and Projects	
A Study of Early Manned Interplanetary Missions [EMIM] (NASA contract NAS8-5026) [22 folders, total]	
Box 158, Folder 11	Proposal (GDA report AE 62-0315, 23 Mar 1962)
Box 158, Folder 12	First Monthly Progress Report - Period: 1 June-30 June, 1962 (GDA report ASO 1-1, 30 Jun 1962)
Box 159, Folder 1	Intermediate Report No. 1 - Missions and Operations Studies (Ehrlicke, GDA report AOK 62-0001, 30 Jul 1962)
Box 159, Folder 2	[briefing] (GD report, 2 Aug 1962)
Box 159, Folder 3	"Interplanetary Studies: Scientific Payload Estimates - Preliminary" (D. H. Garber to Ehrlicke, GDA Memo, 13 Aug 1962, corrected 28 Sep 1962)
Box 159, Folder 4-5	[briefing] (GD report, 2 Oct 1962) [2 copies; 2 folders]
Box 159, Folder 6	documentation on IBM participation in GD study
Box 159, Folder 7	"Mars Mapper" (D. H. Garber to Ehrlicke, GDA memo, 23 Nov 1962)

Box 159, Folder 8	Systems Integration, Mission-Performance Analysis, Vehicle Comparisons (Ehricke and B. H. Ohman, GDA report AOK62-0010, 1 Dec 1962)
Box 159, Folder 9	Systems Integration, Mission Performance Analysis, Vehicle Comparisons (GDA report AOK 62-0013, 1 Dec 1962) [briefing slide brochure]
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	Final Summary Report (GDA report AOK 63-0001, 31 Jan 1963) [9 folders]
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	EMIM - EMPIRE Follow-On (continuation of NASA contract NAS8-5026) [112 folders, total]
Box 160, Folder 7	Statement of Work (GDA report, draft, Nov 1962)
Box 160, Folder 8	"Saturn V - Performance and Capability" (chart, 5 Mar 1963)
Box 160, Folder 9	Study - LSS Insulation System (W. S. Evans, GDC report AOK 63-0009, 5 Mar 1963)
Box 160, Folder 10	Weight Scaling Equations for the EMPIRE Study Follow-On (B. H. Oman, GDC report ASO 63/6, 4 Apr 1963) [2 copies]
Box 160, Folder 11-12	"Interplanetary Mission Information Computer Program (IMICOMP) for EMPIRE" (Ehricke, GDA memo ASO 63/8, 8 Apr 1963) (2 copies; 2 folders)
Box 160, Folder 13	[briefing] (GDA report AOK 63-018), §3 only

EMPIRE Follow-On First Presentation of May 1963 at MSFC (GDA report AOK 63-0020, 25 May 1963) [4 folders, total]

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Box 161, Folder 5	Earth-Planet Parameters (W. E. Bollman, JPL report TM 312-322, 19 Jun 1963)
Box 161, Folder 6	Methodology of Mission and Systems Synthesis of Manned Planetary Flights with Particular Emphasis on Venus and Mars as Target Planets (Ehricke, GD report AOK-63-019, 1 Jul 1963)
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Box 161, Folder 9	Radiation Shielding Studies for EMPIRE, Phase II (D. H. Robey, GDA report, May-Sep 1963)
Box 161, Folder 10-11	Selection of Promising Initial Planetary Missions and Mission Modes (Ehricke, GDA report ASO 63/24, 18 Sep 1963) [2 copies; 2 folders]
Box 162, Folder 1-2	Second Presentation of 24 September 1963 at GDA (GDA report AOK 63-027, 20 Sep 1963) (2 copies; 2 folders)
Box 162, Folder 3	Study of Interplanetary Vehicle Assembly Modes, Part I (Ehricke, GDA report AOK 63-029, 23 Sep 1963)
Box 162, Folder 4	"Trip Report on JPL Visit 23 September 1963" (M. H. Hansan and R. E. Mannioin to distribution, GDA memo, 25 Sep 1963)
Box 162, Folder 5-6	Propellant and Thrust Dependent Scaling Factors for Interplanetary Vehicles (B. H. Oman, GD report AOK 63-033, 28 Oct 1963) [3 copies; 2 folders]
Box 162, Folder 7	Definitions, Equations and Scaling Curves Associated with Interplanetary Weight Analysis (B. H. Oman, Convair report ASO 63/25, 8 Nov 1963)
Box 162, Folder 8	A Brief Study of the Application of Three Nerva Engine Models to Comparatively Modern Manned Interplanetary Missions Such as Capture in an Elliptic Orbit around Venus in 1975 and Return to Earth (B. Brown, Ehricke, B. Oman, and W. Strobl, GDA report GDA 63-1223, 20 Nov 1963) [2 copies]
2nd Annual Film Report (draft, 11 Dec 1963) [2 folders]	

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	Final Report [17 folders, total]
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	Manned Mars Exploration in the Unfavorable Time Period (NASA contract NAS8-11004) [5 folders, total]
Box 168, Folder 19	First Program Report (GD FW report FZM-3031, 11 Sep 1963)
Box 168, Folder 20	Second Program Report (GD FW report FZM-3079, 7 Nov 1963)
	[Final Report] [3 folders, total]
Box 168, Folder 21	Vol.II - Summary (GD FW report FZM-4039-2, 26 Jan 1964)
Box 168, Folder 22-23	Vol.III - Technical Report (GD FW report FZM-4039-3, 15 Feb 1964) [2 folders]
	A Study of the Development Of A Basic Planetary Transportation System Model (NASA contract NAS8-11084) [49 folders, total]

	Notes: renamed "Space Technology and Mission Planning" [STAMP], circa Apr 1964
Box 169, Folder 1	General Dynamics/Astronautics Briefing Charts for the Planetary Transportation Study Orientation Meeting, Huntsville, Alabama, July 18/19, 1963 (GD report AOK 63-021, 18-19 Jul 1963)
Box 169, Folder 2	"ELV Comparison and Evaluation Methodology" (Ehricke, summer 1963)
Box 169, Folder 3-4	First Presentation of 30 October 1963 at MSFC (GDA report AOK 63-032, 30 Oct 1963) [2 copies, 2 folders]
Box 169, Folder 5	Interim Report (Ehricke, GDA report, circa 1964)
Box 169, Folder 6	Presentation of 30 January 1964 (GD report GD A-AOK64-003, 28 Jan 1964)
Box 169, Folder 7	A Study of the Development of a Basic Planetary Transportation Systems Model (GD report GD A-AOK64-003, 30 Mar 1964) [corrected version of 30 Jan 1964 presentation]
Box 169, Folder 8	Third Presentation (GD report GD A-AOK64-010, 17 Apr 1964)
	Fourth Presentation (GD report GD A-AOK64-020, 1 Oct 1964) [3 folders]
Box 169, Folder 9-10	1-2 of 3 folders
Box 170, Folder 1	3 of 3 folders
Box 170, Folder 2	Statement of Work (MSFC FPO P-170, Apr 1964) [2 copies]
Box 170, Folder 3-4	Proposal (GDA report AOK 64-013, 3 May 1964) [2 copies; 2 folders]
	Final Report [18 folders, total]
Box 170, Folder 5	Vol.I - Summary (GD report GDC AOK 65-001-1, circa Jan 1965)
Box 170, Folder 6-7	Vol.II - Technology Report (GD report GDC AOK 65-001-2, 9 Apr 1965) [2 copies; 2 folders]
	Vol.IV - Manual (GD report GDC AOK 65-001-4, Jan 1965) [15 folders, total]
Box 170, Folder 8-11	copy 1, §§1-5 [4 folders]

Box 171, Folder 1-4	copy 1, §§6-8 [4 folders]
	copy 1, §§9-14 [4 folders]
Box 171, Folder 5-6	1-2 of 4 folders
Box 172, Folder 1-2	3-4 of 4 folders
Box 172, Folder 3	copy 2, §§1-3 only
Box 172, Folder 4	copy 3, §§1-3 only (photocopy)
Box 172, Folder 5	copy 2, §5
Box 172, Folder 6	drafts - "Cost Analysis of Space Transportation - Basic Transportation Considerations"
	drafts - "Cost Analysis of Space Transportation - Manufacturing Cost" (§2) [2 folders]
Box 172, Folder 7	MS, paste-ups
Box 172, Folder 8	blueline
Box 172, Folder 9	drafts - Management Look at STAMP Briefing
Box 172, Folder 10	drafts - Method of Approach (§37.2)
Box 172, Folder 11	drafts - PERT / Time Correlation
Box 172, Folder 12	drafts - "Planetary Mission Evaluation Matrix" (pp.223-241)
Box 172, Folder 13	drafts - SPATA - Space Payload and Technology Analysis (GDC report)
Box 173, Folder 1	drafts - "Systematic Evaluation and Comparison of a Large Number of Interplanetary Missions"
Box 173, Folder 2	drafts - "STEPP, A Computerized System for Space Technology Evaluation and Program Planning" (Ehrlicke, no date)
Box 173, Folder 3	drafts - miscellaneous pages (pp. 3-186)
Box 173, Folder 4	notes - background data
Box 173, Folder 5	notes - program VMI613
Box 173, Folder 6	notes - vehicle cost [pp.18-24 of unidentified document, including extract from Eugen Sänger, Space Travel]

Box 173, Folder 7	graphics - miscellaneous charts
Box 173, Folder 8	graphics - probability of success
Box 173, Folder 9	notes - program effectiveness evaluation
	A Study of Mission Requirements for Manned Mars and Venus Exploration (NASA contract NAS8-11318) [3 folders, total]
Box 173, Folder 10	Mid-Term Progress Report (GD FW report FZM-4277, 3 Dec 1964)
Box 173, Folder 11-12	Technical Report (GD FW report FZM-4366-3 Vol III, 30 May 1965) [2 folders]
	Outlook for Space (NASA Internal Study, RI recommendations) [8 folders, total]
Box 178, Folder 6	NASA 1980-2000 Background (Jul-Aug 1974) Notes: [notes, correspondence regarding Outlook for Space]
Box 178, Folder 7	NASA 1980-2000 Notes: [drafts by various team members for Outlook for Space]
Box 178, Folder 8	Manned Space Flight - Program Planning - Charts (photocopies)
Box 179, Folder 1	correspondence, Aug-Sep 1974
Box 179, Folder 2	"Outlook for Space, Economy of Infinity and Economy of Durability" (Ehricke, extract from Extraterrestrial Industry - A Challenge to Growth Limitations, Proceedings of the Essential Resources Conference, The Conference Board)
	"Outlook for Space 1980-2000" (Ehricke, 6 Sep 1974) [2 folders]
Box 179, Folder 3	TS & edit copy
Box 179, Folder 4	photocopy
Box 179, Folder 5	Outlook for Space - Review of Interim Results (NASA, 28 May 1975)
	Manned Mars and Venus Exploration Studies [MAVES] (NASA contract NAS8-11327) [16 folders, total]
Box 174, Folder 1	Study Plan (GDA report ASO 64/31, 19 Mar 1964)
	Proposal (GDA report GDA AOK 64-011, 1 May 1964) [2 folders]
Box 174, Folder 2	paste-up

Box 174, Folder 3	published copy
Box 174, Folder 4-6	Mid-Term Presentation (GDA report, 1 Dec 1964) [3 copies; 3 folders]
Box 174, Folder 7	Final Presentation (GDA report, 17 Feb 1965)
	Final Report [5 folders, total]
Box 174, Folder 8	Vol. I - Summary Technical Report (GD report GD C-AOK-65-002-1, 8 Jun 1965)
Box 174, Folder 9-10	Vol. II - Detailed Technical Report / Mission Oriented Studies (GD report GD C-AOK-65-002-2, 21 May 1965) [2 folders]
Box 175, Folder 1	Vol. III - Detailed Technical Report / Design Studies (GD report GD C-AOK-65-002-3, 15 Mar 1965)
Box 175, Folder 2	Vol. IV - Research and Technology Implications Report (GD report GD C-AOK-65-002-4, 15 Mar 1965)
Box 175, Folder 3	draft pages
Box 175, Folder 4	notes - MAVES Cost Analysis
Box 175, Folder 5	notes - crew requirements
Box 175, Folder 6	graphics - Mars & Venus exploration (transparencies)
	Advanced Planetary Probe (General Dynamics Internal Study) [5 folders, total]
Box 175, Folder 7	Proposal (circa May 1965) (2 photocopies)
Box 175, Folder 8-9	Preliminary 1965 Study Program (GD internal working paper, 6 Aug 1965) [3 copies; 2 folders]
Box 175, Folder 10	briefing graphics (circa Aug 1965)
Box 175, Folder 11	Final Report [?] (circa Dec 1965) (partial copy)
	Lunar Orbit Operations Experiments Definition (NR Project TMA 02063) [5 folders]
Box 176, Folder 1	Lunar Orbit Science - Lunar Mapping Experiments (NR report PD69-22, Jan 1969)
Box 176, Folder 2	Lunar Orbit Science - A Mass Spectrometer Experiment for Lunar Orbit (NR report PD69-23, Jan 1969)

Box 176, Folder 3	Lunar Orbit Science - Utilizing Apollo Command and Service Modules (NR report PD69-24, Jan 1969)
Box 176, Folder 4	Lunar Orbit Science - Technical Analyses (NR report SD 69-30, Jan 1969)
Box 176, Folder 5	"Closeout Data for TMA 02063, Lunar Orbit Operations Experiments Definition" (C. W. Roberts to L. N. Rathburn, NR Internal Letter AS/MS/69-114, 27 Jun 1969)
Mariner Venus/Mercury 1973 (NASA Program) [9 folders, total]	
Box 176, Folder 6	Mariner Venus/Mercury 1973 Study (JPL report TM 33-434, 1 Aug 1969)
Box 176, Folder 7	North American Rockwell Correspondence
Box 176, Folder 8	Mariner Venus/Mercury 1973 Project - Industry Briefing (JPL report, 24 Feb 1970)
Box 176, Folder 9	Mariner Venus/Mercury 1973 Project - Mission Synopsis (JPL report [?], 24 Feb 1970)
Box 176, Folder 10	Internal Briefing on '73 Venus/Mercury Program (NR report, circa Mar 1970)
Box 176, Folder 11	Preliminary Mission Description (JPL report 615-3 rev. A, 15 Sep 1970)
	Mariner Venus/Mercury 1973 - Technical Proposal (NR report, 22 Oct 1970) (2nd draft, photocopy) [3 folders]
Box 176, Folder 12-13	1-2 of 3 folders
Box 177, Folder 1	3 of 3 folders
Solar Electric Multi-Mission Study (JPL RFP EB-2-3713) [3 folders, total]	
	Proposal [2 folders]
Box 177, Folder 2	Vol.I - Technical (NR report SD 68-874-1, 11 Nov 1968)
Box 177, Folder 3	Vol. II - Management (NR report SD 68-874-2, 11 Nov 1968)
Box 177, Folder 4	"Project Directive - Solar-Electric Multi-Mission Spacecraft for Unmanned Interplanetary Missions, TPA 350, S/A 35010, S/A 35030, and S/A 35410, First Half CFY1969" (S. P. Horio to Those Listed, NR Internal Letter ADS/UMS/68-115, 13 Dec 1968)

Outer Planet Missions (NR Internal Study) [4 folders]

Box 177, Folder 5 Outer Planet Mission & Support Technology Studies (NR report PD69-65, May 1969)

Box 177, Folder 6 Outer Planet Missions Group - Correspondence (Apr 1970)

Box 177, Folder 7 Science Payloads (NR report PD70-18, Jul 1970)

Box 177, Folder 8 Project Description (NR report SD 70-99-1A, Apr 1971)

Apollo Lunar Experiments Missions (part of NASA contract NAS9-150 for Apollo Command-Service Module) [3 folders]

Box 177, Folder 9 "Call For Lunar Orbit Experiment Proposals" (NASA DNO 69-181, 3 Mar 1969)

Box 177, Folder 10 "Lunar Orbital Sciences - Proposed Investigations and Investigators" (NR [?], 9 May 1969)

Box 177, Folder 11 "Experiment Assignments" (NR [?], 7 Jul 1969)

Solar Electric Propulsion Asteroid Belt Mission (JPL contract 952566, subcontract to NASA contract NAS7-100) [6 folders, total]

Box 177, Folder 12 Second Monthly Presentation (NR report, 7 Oct 1969)

Final Report [5 folders, total]

Box 178, Folder 1-4 Vol. II - Technical Report (NR report SD 70-21-2, Jan 1970) [4 folders]

Box 178, Folder 5 Vol. III - Program Development Plan (NR report SD 70-21-3, 19 Jan 1971)

Transportation Systems

Named Files

Box 204, Folder 1 Classifications [charts]

Box 204, Folder 2 Shuttle Station Paper - Vienna

Studies and Projects

Orbit-to-Orbit Shuttle (Chemical) Feasibility Study (USAF contract F04701-71-C-0171) [4 folders]

Box 204, Folder 3	First Technical Direction Meeting - Summary Briefing (NR report, 30 Apr 1971)
Box 204, Folder 4	Third Technical Direction Meeting - Summary Briefing (NR report PD 71-114, 8 Sep 1971)
Box 204, Folder 5	Reaction Control Systems for the Orbit-to-Orbit Shuttle (D. H. Jaeger, Aerospace Corp report TOR-0059(6759-01)-5, 14 Jul 1970)
Box 204, Folder 6	OOS/Tug Handbook (Aerospace Corp report TOR-0172(2770-02)-2, 21 Jul 1971)
	SPS [Satellite Power Systems] Transportation Workshop (UAL Huntsville, 29-31 Jan 1980) [15 folders, total]
Box 204, Folder 7	SPS Transportation - Executive Summary (Boeing report, 17 Dec 1979))
Box 204, Folder 8	"SPS Technology Projects - Transportation Systems (Planned Future Activities)" (Jim Watkins, 19 Dec 1979)
Box 204, Folder 9	"SPS Transportation System - Orbit-to-Orbit Transfer (EOTV)" (William Wales, 19 Dec 1979)
Box 204, Folder 10	Correspondence
Box 204, Folder 11	"Ground to Low-Earth-Orbit Transportation Briefing" (Billy W. Shelton, Jan 1980)
Box 204, Folder 12-13	Satellite Power Systems Transportation Workshop Summary (RI report, Jan 1980) [2 copies (1 cannibalized); 2 folders]
Box 204, Folder 14-15	Boeing Presentation Data (21 Jan 1980) (2 folders)
Box 205, Folder 1	Advanced STS Technical Issues Study for SPS Earth-to-LEO Transportation (C. F. Ehrlich Jr, RI report SSD80-0020, 25 Jan 1980) [photocopy]
Box 205, Folder 2	"SPS Overview" (Carl Schwenk, no date)
Box 205, Folder 3	SPS Transportation Workshop - January 29, 30, 31, 1980 (RI briefing) [photocopy]
Box 205, Folder 4	Workshop Documents (agendas, participant lists)
Box 205, Folder 5-6	Final Report of the SPS Space Transportation Workshop (Johnson Environmental and Energy Center, University of Alabama Huntsville, Oct 1980) [2 copies; 2 folders]

Box 205, Folder 7 miscellaneous charts

Miscellaneous Reference Materials

1959

Box 205, Folder 8 "Manned Control of Orbital Rendezvous" (E. Levin, presented at the National Symposium on Manned Space Stations, 20-22 Apr 1960; RAND report P-1834, 20 Oct 1959)

1963

Box 205, Folder 9 Advanced Lunar Transportation Systems - Nuclear Ferry Vehicle - Final Report (GDA report AE 62-0970, Jan 1963)

Box 205, Folder 10 A Mathematical Technique for Evaluation of Lunar Transportation Systems (NASA report MTP-FPO-63-1, 16 Jul 1963)

Nuclear Lunar Logistics (NAS8-5600) [2 folders]

Box 205, Folder 11 Presentation 18 July 1963 Huntsville, Alabama (Lockheed report LMSC-A304086 / NSP 63-85, 18 Jul 1963)

Box 205, Folder 12 Presentation 18 July 1963 - Huntsville, Alabama (Aerojet-General report 2931, 18 Jul 1963)

Box 205, Folder 13 "On the Utility of the Moon in Space Transportation: The Lunatron Concept" (William J. A. Escher, AIAA Meeting on Engineering Problems of Manned Interplanetary Exploration, 30 Sep-1 Oct 1963)

1964

Box 205, Folder 14 Reusable Orbital Transport - Planetary Mission Support and Lunar Base Logistics Mission (G. Gordon, GDA report DCB-64-097, Dec 1964)

1968

Box 205, Folder 15 "Early Nuclear Rocket Applications" (Paul G. Johnson, AIAA paper 68-653, presented to AIAA 4th Propulsion Joint Specialist Conference, Cleveland, OH, 10-14 Jun 1968)

1969

Box 206, Folder 1 Low Cost Space Transportation Systems (NR report SD 69-2, Jan 1969 rev. 30 Jan 1969)

Box 206, Folder 2 "Macro System: Hercules - Earth/Moon Transportation system for the Initiation of Lunar Utilization Phase" (William J. D. Escher, Feb 1969)

Box 206, Folder 3	1½ Stage ILRS Logistic Vehicle - Design Review (report ADS/SS/69-400-056, 14 Mar 1969) [photocopy]
Box 206, Folder 4	"Nuclear Rocket Applications: Mission and Launch Vehicle Versatility" (Paul Johnson, AIAA paper 69-555, presented to AIAA 5th Propulsion Joint Specialist Conference, 9-13 Sep 1969)
	Lunar Escape Systems [LESS] Feasibility Study (NAS1-8923) [2 folders]
Box 206, Folder 5	Final Technical Report (J. O. Matzenauer, NR report SD 69-598, Oct 1969)
Box 206, Folder 6	Summary Report (J. O. Matzenauer, NR report SD 69-598-1, Oct 1969)
Box 206, Folder 7-8	NR Space Division Space Tug Study Summary - Part I - Mission Analysis and System Requirements (NR report PD69-167, circa 1969) [2 copies; 2 folders]
	1970
Box 207, Folder 1	"MINIS, MAXIS, and MUSTARD - Considerations in the Sizing of International Space Transportation Systems" (R. F. Creasey, presented to AAS 16th Annual Meeting, 8-10 Jun 1970) [sent to Ehricke by Creasey, 30 Jun 1970]
	1971
	Space Tug / OOS Economics Effectiveness Study (NASA)
Box 207, Folder 2	Briefing (GDC, Nov 1971)
	1972
Box 207, Folder 3	"Implications of New Transport Vehicles and Cost Analysis of Supplying and Maintaining a Manned Lunar Laboratory" (F. Vinsonneau, circa 1972)
	1973
Box 207, Folder 4	New Space Transportation Systems - An AIAA Assessment (AIAA Ad Hoc Committee on the Assessment of New Space Transportation Systems, 9 Jan 1973)
	1974
Box 207, Folder 5	Hybridtug - Ein Alternativkonzept für Den Raumschlepper (Harry O. Ruppe, Winfried M. Schauer, and Robert H. Schmucker, Technische Universität München Lehrstuhl für Raumfahrttechnik report TB-17, 13 Feb 1974)

1975

Study of the Commonality of Space Vehicle Applications to Future National Needs (NASw-2727) [6 folders, total]

Box 207, Folder 6 Midterm Submission (Unclassified Portion) (Aerospace Corp report ATR-75(7365)-2, 24 Mar 1975)

Advanced Space System Concepts and Their Orbital Support Needs (1980-2000) [5 folders]

Box 207, Folder 7 Vol. I - Executive Summary (Aerospace Corp. report ATR-76(7365)-1, Vol.I, Apr 1976)

Box 207, Folder 8 Vol. II - Final Report (Aerospace Corp. report ATR-76(7365)-1, Vol.II, Apr 1976)

Box 207, Folder 9 Vol. III - Detailed Data, Part I - Catalog of Initiatives, Functional Options, and Future Environments and Goals (Aerospace Corp. report ATR-76(7365)-1, Vol.III, Apr 1976)

Box 207, Folder 10 Vol. III - Detailed Data, Part I [incomplete photocopy]

Box 207, Folder 11 Vol. IV - Detailed Data, Part II - Program Plans and Common Support Needs (Aerospace Corp. report ATR-76(7365)-1, Vol.IV, Apr 1976)

Box 208, Folder 1-2 "The Space Tug - An Assessment" (H. O. Ruppe, circa 1975) [2 photocopies; 2 folders]

1976

Box 208, Folder 3 "Preliminary Concept Analysis of Heavy Lift Launch Vehicles for Geostationary Cargo Transport" (H. H. Koelle, TUB AI Working Paper 1976-1, 15 Jun 1976)

1977

Box 208, Folder 4 "Single-Stage-To-Orbit Shuttles - Considerations on Feasibility and Economics" (Robert H. Schmucker and Harry O. Ruppe, presented to the 12th International Symposium on Space Technology and Sciences, 16-21 May 1977)

Shuttle Growth Study - Booster and External Tank Options (NAS8-32015)

Box 208, Folder 5 Final Report, Vol.V, Part 1 - Cost and Programmatics, Part 2 - Comparative Evaluation (RI report SD 77-SR-0008 Volume V, May 1977)

1979

Box 208, Folder 6 "Star-Raker - An Airbreather/Rocket-Powered, Horizontal Takeoff Tridelta Flying Wing, Single-Stage-To-Orbit Transportation System" (David A. Reed, Jr, Hideo Ikawa, and Jonas A. Sadunas, presented to AIAA Conference on Advanced Technology for Future Space Systems, Hampton, VA, 8-11 May 1979)

1981

Box 208, Folder 7 Future Space Systems Operational Concept (RI report, Oct 1981)

Box 208, Folder 8 Future Space Systems Operational Options Study (RI report, Oct 1981)

Undated

Box 208, Folder 9 notes - interorbital staging analyses

Box 208, Folder 10-11 notes - Transportation Systems [2 folders]

Space Habitation and Human Factors

Named Files

Box 208, Folder 12 Briefing to GMoD Presented in Bonn, Germany, January 1966

Box 208, Folder 13 Briefing to SAMSO (Col. Mock) - May 8, 1968

Box 208, Folder 14 Manned Space Stations [1959-1963]

Box 208, Folder 15 Manned Space Station

Box 208, Folder 16 Military Space

Box 208, Folder 17 Military Space Systems Matrix

Box 208, Folder 18-19 Space Medicine (1) [2 folders]

Box 209, Folder 1 Space Medicine (2)

Box 209, Folder 2 Space Medicine (3)

Box 209, Folder 3 Space Radiation & Shielding

Box 209, Folder 4 Space Station

Studies and Projects

Space Station Program Definition (NASA contract NAS9-9953)	
Box 209, Folder 5	"12-Man Space Station Preliminary Weight Statement (Configuration 2)" (L. A. Duffey to R. W. Westrup, NR Internal Letter WS/69/35, 18 Apr 1969)
Box 209, Folder 6	"Suggested Reorientation of Space Station Design Concept" (Director of Flight Operations to Manager, Advanced Missions Program Office, NASA Memo 69-FM8-35, 12 May 1969)
Box 209, Folder 7	Phase B Technical Proposal (NR report SD 69-200-1, 5 Jun 1969)
Box 209, Folder 8	"Manned Earth Orbit Space Station Weight Study" (L. A. Duffey to R. W. Westrup, NR Internal Letter WS/69-79, 21 Aug 1969)
Box 209, Folder 9	"Contract NAS9-9553, Appendix G, Reference Lunar Program" (Rene A. Berglund, NASA to Ray G. Heath, NR, NASA reference HS-122, 29 Sep 1969)
Box 209, Folder 10	"Initial Space Station Habitability Considerations Relative to the Artificial-g Environment" (J. W. Beckwith to Distribution, NR Internal Letter SS-OPS/69-011, 3 Oct 1969)
Box 209, Folder 11	"Initial Systems Safety Criteria" (R. O. Hartley to Distribution, NR Internal Letter, 3 Oct 1969)
Space Station/Base Technology Plan - A Compilation of Requirements and Projected Utilization with Current Technology Status and Future Technology Projections (NASA/OMSF/Space Station Task Group, Nov 1969)	
Box 209, Folder 12	[1 of 3 folders]
Box 210, Folder 1-2	[2-3 of 3 folders]
Box 210, Folder 3	Guidelines and Constraints Document (MSC report MSC-00141 Rev F, 7 Nov 1969)
Box 210, Folder 4	Space Station Program Definition (NAS9-9953) - Baseline Habitability Considerations (C. L. Brockman to "those concerned", NR Internal Letter SS-OPS/69-026, 12 Nov 1969)
Box 210, Folder 5	Space Station Program Information Management - Updated IMS Concept (GE Space Systems report EL-203, 14 Nov 1969)
Box 210, Folder 6	"Minutes ERB #35, Base Subsystem Selection, 17 November 1969" (R. O. Hartley to All Managers and Subsystem Project Engineers, NR Internal Letter S/S-SA-69-005, 19 Nov 1969)

Box 210, Folder 7	"Primary Areas of Emphasis" (J. I. Dodds to Ehrlicke, NR Internal Letter, 10 Nov 1969)
Box 210, Folder 8	"Provisional Radiation Dose Limits for Space Station Crew" (NASA MSC to North American Rockwell Corp, Seal Beach, CA, TWX, 21 Nov 1969)
Box 210, Folder 9	Space Station Definition (NAS8-25140) - 2nd Monthly Progress Report (McDonnell-Douglas report MDC G0227, 10 Nov 1969) [photocopy sent to Ehrlicke by E. W. Nicks, 2 Dec 1969]
Box 210, Folder 10	"Space Base Configuration" (Ehrlicke to J. I. Dodds, NR Internal Letter, 2 Dec 1969)
Box 210, Folder 11	"Space Base External Dynamics" (Ehrlicke to R. E. Greer, NR Internal Letter, 3 Dec 1969)
Box 210, Folder 12	Phase B Definition - Informal Technical Briefing / Discussion (NR report PDS69-119, 5 Dec 1969)
Box 210, Folder 13	"Orbit Requirements Comparison for Space Base" (Ehrlicke to R. E. Greer, NR Internal Letter, 10 Dec 1969)
Box 210, Folder 14	Guidelines and Constraints Document - Space Station Program Definition - Phase B (MSC report MSC-00141 rev. H, 12 Dec 1969)
Box 210, Folder 15	Phase B Definition - First Quarterly Progress Report (NR report SD 69-608, MSC-00734, 12 Dec 1969)
Box 210, Folder 16	Phase B Definition - Special Emphasis Task Summary Report (NR SD 69-611, MSC-00737, 12 Dec 1969)
Box 211, Folder 1	"Space Base Dynamics Analysis" (V. Baddeley to A. Cormack, NR Internal Letter S/S?G&C?69-022, 29 Dec 1969)
Box 211, Folder 2	"Space Station Internal Dynamics and Related Human Factors" (Ehrlicke to unknown, circa 1969)
Box 211, Folder 3	Phase B Definition - February Progress Review (NR report PDS70-212, 19 Feb 1970)
Box 211, Folder 4	"Space Station Configuration Option 130 Preliminary Weight Summary" (L. A. Duffey to R. W. Estrup, NR Internal Letter SS-70-220-26, 23 Feb 1970)
Box 211, Folder 5	February Progress Report (NR report SD 70-144, MSC-00733, 3 Mar 1970)
Box 211, Folder 6	"Space Station Configuration 712 Preliminary Weights" (L. A. Duffey to R. W. Westrup, NR Internal Letter SS-70-220-36, 9 Mar 1970)

Box 211, Folder 7	Phase B Definition - Technology Requirements Review (NR report PDS70-217, 25 Mar 1970)
Box 211, Folder 8	Phase B Definition - Third Quarterly Progress Report (NR report SD 70-506, MSC 00734, 19 Jun 1970)
Box 211, Folder 9	Phase B Definition - Executive Summary (NR SD 70-123, MSC-00701, Jul 1970)
Box 211, Folder 10	Phase B Definition - Skylab Program Utilization Plan (NR report SD 70-126, MSC-00704, Jul 1970)
	Phase B Definition - Solar-Powered Space Station Preliminary Design
Box 212, Folder 1	Vol. 1 - Summary, Core Module System (NR SD 70-159-1, MSC-00720, Jul 1970)
Box 212, Folder 2	Solar-Powered Space Station Preliminary Performance Specification (NR report SD 70-510-1, MSC-00729, Jul 1970)
	Phase B Definition - Special Emphasis Task Summary Report (NR SD 70-531, MSC-00737, Jul 1970) [2 folders]
Box 212, Folder 3	full report
Box 212, Folder 4	§3 ("Special Mission Assessment") [photocopy]
Box 212, Folder 5	Space Station - A Guide for Experimenters (NR report SD 70-534, MSC 02453, Oct 1970)
	Phase B Definition - Nuclear Reactor-Powered Space Station Definition and Preliminary Design
	Vol.I - Summary (NR report SD 70-168-1, MSC-00741, Jan 1971)
Box 212, Folder 6	copy 1 of 2
Box 213, Folder 1	copy 2 of 2
	Phase B Definition - Radioisotope-Powered Space Station Definition
Box 213, Folder 2	Vol.I - Summary (NR report SD 70-502-1, MSC-00747, Jan 1971)
Box 213, Folder 3	Phase B Options Period - Executive Summary (NR report SD 70-537, MSC-02456, Jan 1971)
Box 213, Folder 4	Phase B Extension (Modular Space Station) - Second Quarterly Report (NR report SD 71-235, MSC-02467, 2 Sep 1971)

Box 213, Folder 5	Phase B Extension (Modular Space Station) - NASA Administrator's Review (NR report SD 717582, 3 Dec 1971)
Box 213, Folder 6	Space Station - Charts
Box 213, Folder 7	miscellaneous notes on space station design
Box 213, Folder 8	spiral notebook "σασσαιη π[subset] πω & γσασβσ π[subset] ασ"
Box 213, Folder 9	unidentified artists concept of space station

Miscellaneous Reference Materials

1954	
Box 213, Folder 10	"Die Rückkehr von Geflügelten Geräten von Aussenstationsbahnen" (H. J. Koepler and M. E. Kübler, presented to IAF 5th International Astronautical Congress, 5-7 Aug 1954) [reprint]
1956	
papers presented to IAF 7th International Astronautical Congress, 17-22 Sep 1956 [2 folders]	
Box 213, Folder 11	"Personal Experiences During Short Periods of Weightlessness Reported by Sixteen Subjects" (J. Gerathewohl, as published in <i>Astronautica Acta</i> 2 (1956) : 203-217) [reprint]
Box 213, Folder 12	"Una Stazione Spaziale Mimetizzata" (Federico Romano)
1958	
Box 213, Folder 13	Space Medicine: Sealed Cabin Considerations (C. M. Whitlock, Convair report AZM-035, Feb 1958)
Box 213, Folder 14	"Survey of Radiation Around the Earth to a Radial Distance of 107,400 Kilometers" (James A. Van Allen and Louis A. Frank, State University of Iowa, submitted to <i>Nature</i> ; circa 1958)
1959	
Box 214, Folder 1	A Systematic Approach to Human Engineering Analysis (J. B. Fink, Convair report ZX-7-047, 2 Feb 1959)
1960	
Box 214, Folder 2	Radiation Shield Requirements for the Solar Flare of May 10, 1959 (Donald H. Robey, GD report AE60-0177, 18 Feb 1960)

Box 214, Folder 3	"Solar Irradiance from Mercury to Pluto" (Hubertus Strughold and Oskar L. Ritter, Aerospace Medicine 31 (Feb 1960) : 127-130) [reprint]
Box 214, Folder 4	Corpuscular & Radio Emission From the Sun (Donald H. Robey, Convair report AE60-0212, 2 Mar 1960)
Box 214, Folder 5	Estimated Radiation Shield for the High Energy Solar Flare of February 23, 1956 (Donald H. Robey, Convair report AE60-0194, 25 Mar 1960)
Box 214, Folder 6	Nuclear Radiation In Space (H. E. Adelsen, Convair report AR-P-008, 13 Apr 1960)
Box 214, Folder 7	"Space Medicine and Astrobiology" (Hubertus Strughold, invited lecture to IAF 11th International Astronautical Congress, 14-20 Aug 1960) [reprint]
Box 214, Folder 8	"Eye Hazards and Protection in Space" (Hubertus Strughold and Oskar L. Ritter, Aerospace Medicine, Aug 1960, pp.670-673) [reprint]
	"On the Influence of Particle Radiation on Manned Space Flight" (Donald H. Robey, SAE paper 230R, presented to AFOSR 3rd Astronautics Symposium, 12-14 Oct 1960) [2 folders]
Box 214, Folder 9	Convair report (4 Aug 1960)
Box 214, Folder 10	SAE preprint
	1961
Box 214, Folder 11	"Protection Against Solar Flare Protons" (Trutz Foelsche, AAS paper 61-34, presented to AAS 7th Annual Meeting and Interplanetary Missions Conference, 16-18 Jan 1961)
Box 214, Folder 12	Gas Regeneration and Food Production in a Closed Ecological System (Jack E. Myers and Allan H. Brow, National Academy of Sciences/ National Research Council publication 893, Apr 1961)
Box 214, Folder 13	Inflatable Structures in Space - Hearing before the Committee on Science and Astronautics, US House of Representatives (Eighty-seventh Congress, First Session, 19 May 1961)
Box 214, Folder 14	"Orbital Characteristics of Earth and Moon Satellites as a Basis for Space Medicine Studies" (Hubertus Strughold and Oskar L. Ritter, Aerospace Medicine 32 (May 1961) : 422-424) [reprint]
	"Solar Corpuscular and Radio Emission" (Donald H. Robey, AAS paper 61-85, presented to AAS West National Meeting, 1-3 Aug 1961) [2 folders]
Box 214, Folder 15	draft (5 May 1961)

Box 214, Folder 16	AAS preprint
Box 214, Folder 17	Handbook of Environmental Engineering (E. C. Theiss, H. Mileaf, and F. Egan, McGraw-Hill for USAF Aeronautical Systems Division, ASD report TR 61-363, 1961)
Box 214, Folder 18	Waste-Recovery Processes for a Closed Ecological System (W. O. Pipes, National Academy of Sciences/National Research Council publication 898, 1961)
1963	
Box 214, Folder 19	"Radiation Doses in Interplanetary Flight" (T. Foelsche, presented to AAS 9th Annual Meeting of Interplanetary Missions Conference, 15-17 Jan 1963)
Box 215, Folder 1	Lectures in Aerospace Medicine (presented to USAF School of Aerospace Medicine, 4-8 Feb 1963)
Box 215, Folder 2	2nd Manned Space Flight Meeting - A Volume of Technical Papers (AIAA, 22-24 Apr 1963)
Manned Orbital Research Laboratory [MORL] [2 folder]	
Box 215, Folder 3	Proposal [management review copy]
Box 215, Folder 4	briefing [draft]
	"Bio-Logistics of a 30, 60, and 100-Day Manned Orbital Space Station based on the Metabolic Approach" (William L. S. Wu and Mahmoud M. Yakut, AIAA paper 63-164, presented to AIAA Summer Meeting, 17-20 Jun 1963) [2 folders]
Box 215, Folder 5	draft
Box 215, Folder 6	as published ["Biologistics for a Manned Space Station Based on the Metabolic Approach" (William L. S. Wu and Mahmoud M. Yakut, Journal of Spacecraft and Rockets 1 No.2 (Mar-Apr 1964) : 204-209)]
1965	
Box 215, Folder 7	"The Physiological Clock in Aeronautics and Astronautics" (Hubertus Strughold, Annals of The New York Academy of Sciences 134, article 1, 22 Nov 1965) [reprint]
1966	
Preliminary Technical Data for Earth Orbiting Space Station (NASA MSC report MSC-EA-R-66-1, 7 Nov 1966) [6 folders, total]	

Box 215, Folder 8	Vol. I: Summary Report
Box 215, Folder 9	Vol. II: Standards & Criteria
	Vol. III: Systems [3 folders, total]
Box 215, Folder 10	[1 of 3 folders]
Box 216, Folder 1-2	[2-3 of 3 folders]
Box 216, Folder 3	Vol. IV: Configuration, Integration & Weights
	1967
Box 216, Folder 4	"The Optical Environment of Manned Spacecraft" (Gordon Newkirk Jr., Planetary and Space Science 15 no 8 (Aug 1967) : 1267-1285) [photocopy]
	1968
Box 216, Folder 5	Space Station Logistics Systems (NR SD report PD69-8, Jan 1968)
	The Control and Use of Libration-Point Satellites (Robert W. Farquhar, Sanford University Department of Aeronautics and Astronautics report SUDAAR 350, Jul 1968) [3 folders, total]
Box 216, Folder 6-7	SUDAAR 350 [2 copies, 2 folders]
Box 216, Folder 8	published as NASA TR R-346 (Sep 1970)
	1969
Box 216, Folder 9	"100-Man Station in Space Favored by NASA Planners" (Frank McComber, San Diego Union (9 Mar 1969) : A-20)
Box 216, Folder 10	address by A. H. Abdel-Ghani to Orbiting International Laboratory and Space Sciences Conference, 29 Sep 1969
Box 216, Folder 11	"Basic Biomedical Concepts in the Jet and Space Age" (Hubertus Strughold, Applied Mechanics Reviews 22 No.12 (Dec 1969) : 1339-1342)
	1970
Box 216, Folder 12	Space Business Daily (14 May 1970)
Box 216, Folder 13	"An Overview of NASA's Space Station Program" (Douglas R. Lord, Robert L. Lohman, and Robert F. Lovelett, AAS Paper 70-020, presented to AAS Annual Meeting, 8-10 Jun 1970)

Space Station Definition (NASA contract NAS8-25140)

Box 217, Folder 1 Final Report, Vol. V: Subsystems, Book 2: Crew Systems, Appendixes A through L (McDonnell-Douglas Astronautics report MDC G0605, Jul 1970)

Box 217, Folder 2 Space Station Utilization Conference (Ames Research Center, 9-11 Sep 1970)

Lunar Base Synthesis Study (NASA contract NAS8-26145) [2 folders]

Box 217, Folder 3 Technical Proposal (NR SD 70-309, 1 May 1970)

Box 217, Folder 4 Final Report, Vol.II: Appendixes (NR SD 71-477-2, 15 May 1971)

Box 217, Folder 5-6 "Problems Arising in Large Space Stations in the Year 2000" (Rene A. Berglund, MSC-04375, presented to the International Congress on Science & Technology in the Year 2000, 6-13 Jun 1971) (2 copies; 2 folders)

1972

Geosynchronous Mission Requirements (NR IR&D Project 230) [2 folders]

Box 217, Folder 7 Geosynchronous Operations (NR SD report PD72-6, 21 Mar 1972)

Box 217, Folder 8 Geosynchronous Mission Requirements - Interim Report (NR report SD 72-SA-0111, May 1972)

Geosynchronous Platform Definition (NASA contract) [2 folders]

Box 218, Folder 1 Proposal, Vol. I: Technical Proposal (NR report SD 72-SA-0086-1, 5 May 1972)

Box 218, Folder 2 "Baseline Mission Model, Initial Definition" (D. M. Galvin and M. R. Schall to H. L. Myers, NR Internal Letter SAP-SE/72-027, 19 Jul 1972)

Box 218, Folder 3 Skylab - A Guidebook (Leland F. Belew and Ernst Stuhlinger, NASA MSFC report EP-107, 1973) [sent to Ehrlicke by Ernst Stuhlinger, 5 Jul 1973]

Box 218, Folder 4 "Stabilisierung Grosser Flächen im Orbit" (Henning W. Scheel, Ingenieurburo Scheel, DGLR paper 73-108, presented to DGLR 6th Annual Meeting, Sep 1973)

Box 218, Folder 5 Dodds' Presentation Material (circa 1973)

1975

	Orbital Assembly and Maintenance (NASA contract NAS9-14319) [3 folders]
Box 218, Folder 6	Midterm Briefing (Martin Marietta, 14 Mar 1975)
Box 218, Folder 7	Third Quarter Briefing (Martin Marietta, 19 Jun 1975)
Box 218, Folder 8	Final Report - Executive Summary (Martin Marietta report MCR-75-319, Aug 1975)
Box 218, Folder 9	"The 'Small Users Concept' for Spacelab Payloads" (A Neubecker and E. Igenbergs, IR/TUM report, no date), [sent to Ehricke by Harry O. Ruppe, 24 Sep 1975]

1976

Box 218, Folder 10	"Mars Travel May Cause Depression" (San Diego Union, 12 Dec 1976)
--------------------	---

1977

Box 218, Folder 11	"15 Nations Plan Spacelab Feat" (San Diego Union, 1 Feb 1977)
Box 218, Folder 12	Consideration in the Design of Large-Scale Space Habitats (Loren Abdulezer, Polytechnic Institute of New York, Polytechnic Space Resources Program, circa 1977)

1979

Box 218, Folder 13	"Consciousness Alteration in Space" (B. J. Bluth; AIAA paper 79-1430, presented to 4th Princeton/AIAA Conference on Space Manufacturing, 14-17 May 1979)
Box 218, Folder 14	articles from Space World, Aug-Sep 1979 : 33-34 Notes: Missing Title: <ul style="list-style-type: none"> • "Space Colonies: Two Approaches" (Alexei Vasilyev) • "Vegetable Gardens in Space"

1980

Box 218, Folder 15	"Social and Psychological Problems of Extended Space Missions" (B. J. Bluth, presented to AIAA Global Technology 2000 Conference, 6 May 1980)
--------------------	---

1981

	"Man-Made Space Debris - Does It Restrict Free Access to Space?" (M. Wolfe, V. Chobotov, D. Kessler, and R. Reynolds, AIAA paper
--	--

IAA-81-256, presented to IAF 32d International Astronautical Congress, 6-12 Sep 1981) [2 copies, 2 folders]

Box 218, Folder 16 copy 1 [includes Gloria W. Heath to M. Wolfe (27 Jul 1981)]

Box 218, Folder 17 copy 2 [sent to Ehricke by Malcolm G. Wolfe, 11 Jan 1982; includes Gloria W. Heath to Malcolm Wolfe (30 Nov 1981)]

1984

"Advanced Tether Applications - Briefing to the Administrator" (I. Bekey, 10 Aug 1984) [2 folders]

Box 219, Folder 1 briefing packet

Box 219, Folder 2 back-up graphics

Undated

Box 219, Folder 3 "A Preliminary Investigation of Large Scale Space Habitat Atmosphere" (Warren Ziegler)

Box 219, Folder 4-5 material - military space operations [2 folders]

Box 219, Folder 6 material - military space operations from red binder

Box 219, Folder 7 graphics - military use of space

Box 219, Folder 8-10 notes and calculations - military use of space [3 folders]

Box 219, Folder 11 notes - Earth-to-Orbit costs

Box 219, Folder 12 notes - radiation

Space and Lunar Industry

Named Files

Box 219, Folder 13 Calculations - Lunar LOX, Soletta, SPS

Box 219, Folder 13 Lunar Industrialization Papers

Studies and Projects

Space Industrialization (NASA contract NAS8-32198) [73 folders, total]

	Notes: Rockwell International contact
Box 220, Folder 1	Space Industrialization [correspondence, 1976-1977]
Box 220, Folder 2-3	Space Industrialization RFP [2 folders]
Box 220, Folder 4	Space Industrialization Program - Strawman SOW (RI) [photocopy]
Box 220, Folder 5	"Report by Dr Ehricke on Space Industrialization Productivity Dated July 1975" (J. Gilbert to Distribution, 9 Sep 1975)
Box 220, Folder 6	O'Neill Correspondence (Apr 1976)
	Proposal [5 folders, total]
Box 220, Folder 7-8	Vol.I: Technical Proposal (RI report SD 76-SA-0079-1, 29 Jun 1976) [3 copies; 2 folders]
Box 220, Folder 9-11	Vol.III: Study Plan (RI report SD 76-SA-0079-3, 29 Jun 1976) [3 copies; 3 folders]
Box 220, Folder 12	"Medical Leave of K. A. Ehricke During Space Industrialization Study" (Ehricke to P. Priest, MSFC, 18 Aug 1976)
Box 220, Folder 13	"Material on Space Industrialization Presented to J. T. Murphy, NASA-MSFC, 31 Aug 1976" (Ehricke)
Box 220, Folder 14	Study Plan (RI report SD 76-SA-0079-3A (preliminary), 24 Sep 1976)
Box 220, Folder 15	Background Scenario - Two Principal Global Dynamic Forces: Human Dynamics - Future-Shaping; Climatic Dynamics - Future Conjecture
Box 221, Folder 1-2	background scenario - material from red binder [2 folders]
Box 221, Folder 3	background scenario - material from brown binder
Box 221, Folder 4-5	"Background Scenario Assessment" (Ehricke) [2 folders]
	background scenario drafts [5 folders]
Box 221, Folder 6	§1.1.3 "Background Scenario Assessment" [photocopy]
Box 221, Folder 7	§1.1.3.7 "Energy" [MS]
Box 222, Folder 1	§1.1.3.7 "Energy" [TS and photocopies]
Box 222, Folder 2	§1.1.3.8 "Natural - Ecology/Environment in the Natural Domain"
Box 222, Folder 3	[no § number] "Developing World" / "China" / "USSR"

Box 222, Folder 4	"Monthly Progress Report for September/October" (Ehrlicke to C. C. Priest, MSFC; RI reference 76MA4823, 29 Oct 1976)
Box 222, Folder 5	Standard Merit Criteria [initial review copy]
Box 222, Folder 6	Subsection Write-Ups
Box 222, Folder 7	December Progress Report (RI SD report, enclosure to 77MA0092, 5 Jan 1977)
Box 222, Folder 8	January Progress Report (RI SD report, enclosure to 77MA0708, 2 Feb 1977)
Box 222, Folder 9-10	Mid-Term Briefing (RI report SD 77-AP-0012, 15 Feb 1977) [2 copies; 2 folders]
Box 222, Folder 11-13	Overall Briefing for Mid-term Review (RI report, 16 Feb 1977) [3 copies; 3 folders]
Box 222, Folder 14	societal goal pool analysis
Box 222, Folder 15	"Chuck" [Charles A Gould] to "Krafft" [Ehrlicke], 22 Feb 1977 [regarding societal goal pool analysis]
Box 223, Folder 1	Contract Modification, effective 1 Mar 1977
Box 223, Folder 2-4	NASA Headquarters Mid-Term Briefing (RI report SD 77-AP-0024, 7 Mar 1977) [3 copies; 3 folders]
Box 223, Folder 5-6	February/March Progress Report (RI report, enclosure to 77MA1593, 4 Apr 1977) [3 copies; 2 folders]
Box 223, Folder 7	Amit K. Maitra [correspondence]
Box 223, Folder 8	May Progress Report (RI report, enclosure to 77MA2627, 3 Jun 1977)
Box 223, Folder 9	Industries in Space to Benefit Mankind - A View Over the Next 30 Years (RI report SD 77-AP-0094, circa Jul 1977)
Box 223, Folder 10-11	Part I Final Briefing (RI report SD77-AP-77, 7 Jul 1977) [2 copies (1 cannibalized); 2 folders]
Box 223, Folder 12	Proposed Final Report Outline
Box 223, Folder 13	"Space Industrialization - The Long-Range View and the Near and Intermediate Steps" (Charles L. Gould, RI report, circa 1978)
	Final Report [4 folders]

Box 223, Folder 14	Vol.1: Executive Summary (RI report SD 78-AP-0055-1, 14 Apr 1978)
Box 223, Folder 15	Vol.2: Space Industrialization Background, Needs, and Opportunities (RI report SD78-AP-0055-2, 14 Apr 1978)
Box 224, Folder 1	Vol.3: Space Industrialization Implementation Concepts (RI report SD 78-AP-0055-3, 14 Apr 1978)
Box 224, Folder 2	Vol.4: Appendixes (RI report SD 78-AP-0055-4, 14 Apr 1978)
Box 224, Folder 3	Space Industrialization briefing charts (RI) [photocopies]
Box 224, Folder 4-5	briefing charts [2 folders]
Box 224, Folder 6	pages from unidentified briefing (1)
Box 224, Folder 7	pages from unidentified briefing (2)
Box 224, Folder 8	pages from unidentified briefing (3)
Box 225, Folder 1	notes and transparencies from unidentified briefing
Box 225, Folder 2	miscellaneous correspondence on space industrialization
Box 225, Folder 3	material on space industrialization
Box 225, Folder 4	miscellaneous pages
Box 225, Folder 5	miscellaneous pages on space industrialization
Box 225, Folder 6	miscellaneous drafts and data
Box 225, Folder 7	miscellaneous drafts and notes
Box 225, Folder 8	material on manufacture of organics and pharmaceuticals in space
Box 225, Folder 9	material submitted under contract 6 Dec 1977 [SI material for Rockwell]
Box 225, Folder 10	miscellaneous graphics
Box 225, Folder 11	miscellaneous graphics
Box 225, Folder 12	miscellaneous graphics - "Future Markets"
Box 225, Folder 13	miscellaneous graphic - "Lunar Industries Development: Market - Product - Time Matrix"

Space Industrialization (NASA contract NAS8-32197) [4 folders, total]

Notes: Science Applications Inc contract

	Pre-Proposal Briefing - Study of Space Industrialization (Science Applications Inc, Dec 1975) [2 folders]
Box 225, Folder 14	printed copy
Box 225, Folder 15	photocopy
Box 226, Folder 1	Space Industrialization Study - Part I - Final Briefing (Science Applications, Inc, 12 Jul 1977)
Box 226, Folder 2	Opportunities in Space Industrialization - The Growing Commercial Use of Space (Science Applications, Inc, 1978)

Miscellaneous Reference Materials

	1954
Box 226, Folder 3	"Structural Problems of the Lunar Base" (P. L. Sowerby, JBIS 13, no. 1 (Jan 1954) : 36-40) [reprint]
	1956
Box 226, Folder 4	"Razzi Lunari Da Osservazione" (Alessandro Boni, presented to IAF 7th International Astronautical Congress, 17-22 Sep 1956)
	1963
Box 226, Folder 5	"The Relation of Tektites to Lunar Igneous Activity" (Paul D. Lowman, Jr, Icarus 2 No. 1 (Jun 1963) : 35-48) [reprint]
Box 226, Folder 6	"Lunar Bases - A State of the Art Review" (Irwin Stambler, Space/Aeronautics Dec 1963) [reprint from Planning Research Corp]
	1964
Box 226, Folder 7	Engineering with Nuclear Explosives - Proceedings of the Third Plowshare Symposium, 21-23 April 1964 (UC Lawrence Radiation Laboratory and San Francisco Operations Office, US Atomic Energy Commission report TID-7695, 21-23 Apr 1964)
	1966
Box 226, Folder 8	"Lunar Research on the Moon" (Zdenek Kopal and Wayne A. Roberts, Boeing report D1-82-0562, Aug 1966) [photocopy]
Box 226, Folder 9	"Lunar Resources: Their Value in Lunar and Planetary Exploration" (P. D. Lowman, Jr, Astronautica Acta 12 no.5-6 (1966) : 384-393) [reprint]

1967

papers presented at AAS 13th Annual Meeting "Commercial Utilization of Space", 1-3 May 1967 [2 folders]

Box 226, Folder 10 "New Tools for the Inquisitive Mind - The Industrial Research Laboratory in Space" (Thomas S. Burkhalter and Sheldon S. White, AAS paper 67-112)

Box 226, Folder 11 "The Utilization and Engineering of an Orbital Hospital (Orval H. Minney, AAS paper 67-123)

articles from The Encyclopedia of Atmospheric Sciences and Astrogeology (New York: Reinhold, 1967) [2 folders]

Box 226, Folder 12 "Moon - Lunar Impact Craters" [reprint]

Box 226, Folder 13 "Moon - Theories of Origin" [reprint]

1968

Box 226, Folder 14 Composition of the Lunar Highlands: Possible Implications for Evolution of the Earth's Crust (Paul D. Lowman, Jr, GSFC report X-64-68-87, Mar 1968)

1970

Box 226, Folder 15 Teleoperator/Robot Development Task Team Summary Report (NASA report, 13 Oct 1970)

Box 226, Folder 16 Teleoperator/Robot Development Task Team Report to the Acting Administrator (NASA report, 13 Oct 1970)

1971

"The Utilization of Halo Orbits for Advanced Lunar Operations" (Robert W. Farquhar, GSFC report X-551-70-449, Dec 1970; NASA TN D-6365, Jul 1971) [2 folders]

Box 226, Folder 17 GSFC report

Box 226, Folder 18 NASA TN

1972

Box 226, Folder 19 "Report of the Lunar International Laboratory Discussion Panel" (F. J. Malina, chairman, Astronautica Acta 11 no.2 (1965) : 123-132) [copy requested by Ehrlicke, 25 Aug 1972]

Box 226, Folder 20	"The Third Industrial Revolution: A Preview of Mankind's Next Cultural Step" (G. Harry Stine, NY Academy of Sciences; Dec 1972)
1973	
Box 226, Folder 21	"A Business Man Views Commercial Ventures in Space" (D. D. Scarff and H. L. Bloom, AIAA paper 73-78, presented to AIAA 9th Annual Meeting, 8-10 Jan 1973)
Feasibility Study of Mining Lunar Resources for Earth Use: Circa 2000 A.D. [2 folders]	
Box 226, Folder 22	Vol.I: Summary (Kenji Nishioka, Roger D. Arno, Arthur D. Alexander, and Robert E. Skye, NASA TM X-62,267, Aug 1973)
Box 226, Folder 23	Vol.II: Technical Discussion (Kenji Nishioka, Roger D. Arno, Arthur D. Alexander, and Robert E. Skye, NASA TM X-62,268, Aug 1973)
1974	
Box 226, Folder 24	"Creation of an Artificial Lunar Atmosphere" (Richard R. Vondrak, Nature 248 (19 Apr 1974) : 657-659))
Box 227, Folder 1	The Geology of the Lunar Base (Jack Green, NA report SD 61-358, 15 Dec 1961) [sent to Ehricke by Jack Green, 26 Jul 1974]
Box 227, Folder 2	"Statement of Harry C. Gatos, Department of Metallurgy and Materials Science, Massachusetts Institute of Technology, Cambridge, Massachusetts to Subcommittee on Manned Space Flight of the Committee on Science and Astronautics, U. S. House of Representatives" (circa 1974)
1976	
Box 227, Folder 3	"A Scheme for Transport of Lunar Materials to Utilization Sites in Earth Orbit" (Gerald W. Driggs, presented to the 7th Lunar Science Conference, 15-19 Mar 1976)
Box 227, Folder 4	Technology for Industrialization of Space
Box 227, Folder 5	"Legal and Economic Prerequisites to Space Industrialization" (Arthur M. Dula, presented to AIAA Meeting, Anaheim, CA, Oct 1976)
Box 227, Folder 6-7	Space Stations for the International Future (J. F. Maxwell and R. E. Sexton, RI report SD 76-0076, 1976) [2 copies; 2 folders]
1977	
Box 227, Folder 8	"The Promise of Space Processing" (William R. Lucas, AIAA paper 77-302, presented to AIAA Annual Meeting, 10-13 Jan 1977)

papers presented to the Third Princeton/AIAA Conference on Space Manufacturing Facilities, 9-12 May 1977 [2 folders]

Box 227, Folder 9	"A Factory Concept for Processing and Manufacturing with Lunar Materials" (Gerald W. Driggs; AIAA paper 77-538)
Box 227, Folder 10	"Systems Analysis of a Potential Space Manufacturing Facility" (Gerald W. Driggs; AIAA paper 77-554)
Box 227, Folder 11	"The Industrialization of Space - Will It Really Happen?" (Jack N. James, submitted to IAF 28th International Astronautical Congress, 25 Sep-1 Oct 1977)
Box 227, Folder 12	"The Inevitability of Extraterrestrial Robotics in Space Industrialization" (Robert W. Prehoda, AAS paper 77-244; presented to AAS 23rd annual meeting, 18-20 Oct 1977) [2 copies]
Box 227, Folder 13-14	Polytechnic Engineer 18 No.1 (Nov 1977) [special issue on space industrialization] [2 copies; 2 folders]
1978	
Box 227, Folder 15	"Technology of Space Industrialization" (Charles L. Gould, presented to AIAA Symposium "Our Extraterrestrial Heritage - From UFO's to Space Colonies", 28 Jan 1978, RI report SD78-AP-0007)
Box 227, Folder 16	"The Role of Chemical Engineering in Space Manufacturing" (Robert D. Waldron, Thomas E. Erstfeld, and David R. Criswell, Chemical Engineering 12 Feb 1979 : 80-94)
Earthport Project [4 folders]	
Box 227, Folder 17	correspondence and reports (1977-1978)
Box 227, Folder 18	"Frontier for Free Trade" (Mark Frazier, AAS paper 77-268, presented to AAS 23rd Annual Meeting, 18-20 Oct 1977)
Box 227, Folder 19	A Launch Pad for Industry into Space - Earthport (Sabre Foundation, circa 1978)
Box 227, Folder 20	Earthport Project - Status and Goals (Sabre Foundation, Spring 1979)
1980	
Box 228, Folder 1	"Return to the Moon" (Michael A. G. Michaud and Leonard W. David, Astronomy 8 no.4 (Apr 1980) : 6-22)

Box 228, Folder 2	"Global Benefits of the Space Enterprise Facility (SEF) Using the External Tank" (Nick Witek and Thomas C. Taylor, presented to IAF 31st International Astronautical Congress, 21-28 Sep 1980)
Box 228, Folder 3	Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, Parts 1 and 2 (Eileen Galloway, prepared for Committee on Commerce, Science, and Transportation, United States Senate, 96th Congress, 2d Session; US GPO, May 1980) [committee print]
Box 228, Folder 4	Statement of Mr. Edward Bock, Project Engineer at the Convair Division of General Dynamics Corporation (US Senate Hearings, 29-31 Jul 1980)
1981	
Box 228, Folder 5	"A Study of 'The Lunar Volcanic Habitat and Its Role in the Industrialization of Space'" (John Tephany, Masters Thesis, 11 Sep 1981)
1983	
Box 228, Folder 6	Research on the Use of Space Resources (William F Carroll, ed, JPL publication 83-36, 1 Mar 1983)
Box 228, Folder 7	"Solar System Industrialization: Implications for Interstellar Migrations" (David R. Criswell, presented to the Conference on Interstellar Migration, Los Alamos National Laboratory, 23-25 May 1983, 20 May 1983, rev. 1 Aug 1983)
	Microfiche - Lunar Orbiter [sent to Ehricke by National Space Science Data Center, 14 Sep 1983]
Box 228, Folder 8	[correspondence and notes]
Box 257	[microfiche]
Box 228, Folder 9-10	McKay to Ehricke, 15 Nov 1983 [2 copies; 2 folders]
Undated	
Box 228, Folder 11	"Establishment of a Space Manufacturing Facility" (Gerald W. Driggs and Jon Neuman)
Box 228, Folder 12	"Lunar Mass Transport" (Briam O'Leary, T. A. Heppenheimer, and David Keplan)
Box 228, Folder 13	"Processing Lunar Material for Use in Space" (David R. Criswell, R. O. Waldron, and T. E. Erstfeld)

Box 228, Folder 14	"A System for the Refining of Lunar Materials in Space" (K. Eric Drexler, submitted to the Subcommittee on Aerospace Technology and National Needs, Committee on Aeronautical and Space Science, US Senate)
Box 228, Folder 15	material on space industrialization from brown folder
Box 228, Folder 16-20	material on lunar surface composition [1-5 of 6 folders]
Box 229, Folder 1	material on lunar surface composition [6 of 6 folders]
Box 229, Folder 2	notes on lunar surface
Box 229, Folder 3	notes on lunar surface composition
Box 229, Folder 4	notes on space industry
Box 229, Folder 5	pages re lunar shuttle and exoindustry

Earth / Resources / Remote Sensing / Open World

Named Files

Box 229, Folder 6	Extraterrestrial Life
Box 229, Folder 7	Henshaw (Paul S.)
Box 229, Folder 8	History - Philosophy [1]
Box 256, Folder 19	History - Philosophy [1] [oversized material]
Box 229, Folder 9	History - Philosophy [2]
Box 229, Folder 10	Infrared
Box 229, Folder 11	ONR-Convair "Monster" Buoy
Box 229, Folder 12	Sandy Coggan and Related Material
Box 256, Folder 20	Sandy Coggan and Related Material [oversized material]
Box 229, Folder 13	Space Law
Box 229, Folder 14	Space Review Material

Miscellaneous Reference Materials

1935

Box 229, Folder 15	quote from F. R. Moulton, Consider the Heavens (University of Chicago Press, 1935)
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1956

Box 229, Folder 16	"Metodo Para El Estudio De Los Problemas Juridicos Que Plantea La Conquista Del Espace Interplanetario" (Aldo Armando Cocia, presented to IAF 7th International Astronautical Congress, 17-22 Sep 1956)
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1960

Box 229, Folder 17	"Does Space Travel Herald a Milestone in Evolution?" (John G. Meitner, presented to IAF 11th International Astronautical Congress, Sep 1960)
--------------------	--

1962

Box 229, Folder 18	"Dimensional Analysis in Mathematical Biology" (Walter E. Stahl, Bulletin of Mathematical Biophysics 23 (1961) : 355-376; Bulletin of Mathematical Biophysics 24 (1962) : 81-108)
--------------------	---

1963

Box 229, Folder 19	Stellar Life ["Life Among the Stars" (John W. Campbell, editorial, Analog Science Fiction/Science Fact, May 1963 : 67-68, 87-88)]
--------------------	---

Box 229, Folder 20	"Über die Möglichkeit der Verwerdung dese Raketenflugzeuges im Globalen Luftverkehr" (Heinz-Hermann Kölle, doctoral dissertation D 83, TUB, 24 Jul 1963)
--------------------	--

Box 229, Folder 21	The Next Fifty Years in Space - Man and Maturity (Dandridge M. Cole, GE missile and Space Division, Aug 1963)
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1965

Box 230, Folder 1	Sozio-Ökonomisches Modell des Planeten Erde (H. H. Koelle, Technische Universität Berlin report TUB-I R 1965/3, 30 Sep 1965)
-------------------	--

Box 230, Folder 2	The Needs and Requirements for a Manned Space Station, Vol.3 - Earth Resources (NASA Panel on Earth Resources of the Space Station Requirements Steering Committee, circa 1965)
-------------------	---

1967

Box 230, Folder 3	articles from Space Digest Jan 1967: Notes: Missing Title:
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- "Space Now - Only the Beginning" (Lloyd V. Berkner, pp.54-55)
- "Can Technology Replace 'Social Engineering'?" (Alvin M. Weinberg, pp.55-58)

Box 230, Folder 4	"Forecasting Technology" (Marvin J. Cetrun; International Science and Technology Sep 1967, 83-92)
Box 230, Folder 5	The Year 2000 - A Framework for Speculation on the Next Thirty-Three Years (Herman Kahn and Anthony J. Wiener, Hudson Institute, 1967) [selected pages from Chapter II, "Comments on Science and Technology"]
1968	
Box 230, Folder 6	"Doing Something About the Weather - In A Big Way" (Lawrence Lessing, Fortune Apr 1968 : 132-137, 171-172)
	"Medical Benefits from Space Program Cited" (Susan Bauernfeind, The Light (San Antonio, TX), 27 Jun 1968, p.2) [2 folders]
Box 230, Folder 7	[reduced size reference copies]
Box 256, Folder 21	[oversized original materials]
Box 230, Folder 8	"Astronautics - Its Development During the Second Century of the R.Ae.S (1966-2066)" (A. V. Cleaver, The Astronautical Journal (Jun 1968))
Box 230, Folder 9	Geologic Orbital Photography: Experience from the Gemini Program (Paul D. Lowman, Jr, GSFC report X-644-68-228, Jun 1968)
Box 230, Folder 10	"Using Technical Forecasts" (Marvin J. Cetran, Science and Technology, Jul 1968 : 57-63)
	papers presented to AIAA 5th Annual Meeting, 21-24 Oct 1968 [2 folders]
Box 230, Folder 11	"Technological Base for Planning of Spaceflight Missions to Obtain Data on the Earth's Resources" (Donald M. Waltz, AIAA paper 68-1074)
Box 230, Folder 12	"Space Oceanography, Potential and Use" (L. A. Cheney, AIAA paper 68-1078)
Box 230, Folder 13	"The Coming Three-Dimensional Civilization" (B. F. Coggan, presented to Anaheim Management Club, 18 Dec 1968)
Box 230, Folder 14	European Preprints [papers from 15th Congresso Scientifico Internazionale per l'Elettronica, Rome, 1968]

1969

Earth Resources Technology Satellite (NASA study) [2 folders]	
Box 230, Folder 15	Earth Resources Technology Satellite (NR report PD69-19 (TMA 03036), Jan 1969)
Box 230, Folder 16	Proposal to NASA GSFC, Vol. 1 - Technical Proposal, Supplement - Phase D Outline (NR report SD 69-376-1, Jun 1969)
Box 230, Folder 17	articles from Oceans 1, no.1 (Jan 1969) Notes: Missing Title: <ul style="list-style-type: none"> • "Western Civilization and the World Ocean" (John P. Craven, pp.33-37) • "The Unseen Problem of Thermal Pollution" (Donald P. de Silva, pp.38-41)
Box 230, Folder 18	"Down with the Year 2000" (Alissandro Silj, Interplay (May 1969) : 25-28)
Box 230, Folder 19	"'America the Beautiful' Doomed?" (interview with Walter D. Hickel, US News and World Report (10 Nov 1969) : 60-64)
Box 230, Folder 20	"How Computers are Changing Your Life" (US News and World Report (10 Nov 1969) : 96-98)
	"Technical Aids Developed in Several Fields" (Frank Macomber, San Diego Union (16 Nov 1969) : A-20) [2 folders]
Box 230, Folder 21	[reduced size reference copies]
Box 256, Folder 22	[oversized original materials]
Box 230, Folder 22	"How Plant World Narrows" (Thomas Harney, San Diego Union (circa 1969))
Box 230, Folder 23	"Unit Separation Processes in Space" (L. R. McCreight and R. N. Griffin); "Why the United States Should Build a Space Base" (Marvin F. Clarke, 29 Oct 1969); "Why Does General Electric Do Research?"
1970	
Box 230, Folder 24	remarks by Fred Hoyle [?] in Houston, 6 Jan 1970
Box 230, Folder 25	"How to Control Pollution" (interview with Lee A. DuBridge, US News and World Report (19 Jan 1970) : 48-52)
Box 230, Folder 26	Current News (29 Jan 1970) [NASA press clipping circular]
Box 230, Folder 27	articles from Bulletin of the Atomic Scientists, Jan 1970: Notes: Missing Title: <ul style="list-style-type: none"> • "Criteria for an Optimum Human Environment" (Hugh H. Iltis, Ori L. Loucks, and Peter Andrews, pp.2-6)

	<ul style="list-style-type: none"> • "To Trouble a Star: The Cost of Intervention in Nature" (Garrett Hardin, pp.17-20) • "Social Consequences of New Developments in Medicine" (Alexander Leaf, pp.21-22)
Box 230, Folder 28	"Smogless Car May Take Years" / "Ford Introduces Tractor to Aid the Poor" (New York Times (19 Feb 1970) : 94)
Box 230, Folder 29	"The Past that Never Was" (Poul Anderson, National Review (24 Feb 1970) : 211-212) [review of Erich von Däniken, Chariots of the Gods? (Putnam, 1970)]
Box 230, Folder 30	"Clean-Air Pressure on Car Firms" (Richard McFarland, The Pittsburgh Press (25 Feb 1970) : 44)
Box 230, Folder 31	"The Cities" (Newsweek News Pointer, Feb 1970)
Box 230, Folder 32	"The Seventies" (Part 1: The American Way 3 No.1 (Jan 1970) : 5-13; Part 2: The American Way 3 No.2 (Feb 1970) : 15-25)
Box 230, Folder 33	To Step Forward With Confidence in 1970: Model of Plans for a Developing Country to Establish Participation in a Global Earth Resources Survey Satellite System within the Decade (John G. Meitner, report 1970-3, prepared for Outer Space Affairs Division, UN, Feb 1970)
Box 230, Folder 34	<p>articles from NR magazine, circa Feb 1970</p> <p>Notes: Missing Title:</p> <ul style="list-style-type: none"> • "Stones with a Story - Tiny Fragments of the Moon Yield Clues to the Origin of the Solar System" (p.22-31) • "Take a Deep Breath - Fresh Winds of Research at Atomics International May Help Blow away Dark Clouds of Air Pollution" (L. B. Taylor, Jr, p.32-39) • "The Ultimate Wing - A Daring New Design Promises Greater Performance for Subsonic Jet Aircraft" (p.40-47)
Box 231, Folder 1	"The Drive to Stop Population Growth" (US News and World Report (2 Mar 1970) : 36-38)
Box 231, Folder 2	"International Legal and Political Aspects of Earth Resource Surveying by Satellite" (Robert F. Packard, presented to AIAA Earth Resources Observation and Information Systems Meeting, Annapolis, MD, 2-4 Mar 1970)
Box 231, Folder 3	"Arms Talks Stir Doubts - Letdown Feared During Long Negotiations" (Ray McHugh, San Diego Union (15 Mar 1970) : A-8)
Box 231, Folder 4	"Earth Resources Skylab II Experiment"

Box 231, Folder 5	"Technology, Astronauts and Hippies" (Martin Goland, Tomorrow Through Research [Southwest Research Institute newsletter], Spring 1970)
Box 231, Folder 6	"After the Fashion of Birds; The Significance of Man's Flying on the Moon" (William J. D. Escher, 10 May 1970)
Box 231, Folder 7	"The Threat to Life in the Sea" (Gordon Rattray Taylor, Saturday Review 1 Aug 1970 : 40-42)
Box 231, Folder 8	Technology and Earth Resources Research Applications (TERRA) (Marshall SFC, PD-SA-0, 2 Nov 1970)
Box 231, Folder 9	Proposal for an Integrated Social and Economic Analysis of the United States Leading to a National Socioeconomic Model System (NR report, 20 Nov 1970)
Box 231, Folder 10	"Emergent United States' ... Post-Industrial Society" (Herman Kahn, pp.17-40 of The Management of Information and Knowledge - A Compilation of Papers Prepared for the Eleventh Meeting of the Panel on Science and Technology, Committee on Science and Astronautics, US House of Representatives; 1970)
Box 231, Folder 11-12	"The Automated Chicken" (Ed Kulkosky, The American Way [?] : 17-20, circa 1970) [2 copies; 2 folders]
Box 231, Folder 13	"Lasers: The Next Step in Nuclear Weaponry?" (The National Observer, circa 1970)
Box 231, Folder 14	"Playboy Interview - Candid Conversation: Eleven Scientists Look at Tomorrow" (Frederick Pohl interviews Arthur C. Clarke, Freeman Dyson, Krafft A Ehrlicke, Theodore J. Gordon, J. Allen Hynek, Jerome Y. Lettvin, James V. McConnell, Marvin Minsky, John R. Pierce, Hans Selye, Maurice Wilkins, circa 1970; not published)
1971	
Box 231, Folder 15	"Counterintuitive Behavior of Social Systems" (Jay W. Forrester, Technology Review 73 no.3 (Jan 1971) : 52-68)
Box 231, Folder 16	articles from Los Angeles Times, 14 Feb 1971 Notes: Missing Title: <ul style="list-style-type: none"> • "Nigeria to Take First Steps in Growth Plan" • "Nickel Spells Gold for New Caledonia, French Boom Land" (Ian McCausland)
Earth Observatory Satellite (NASA study)	
Box 231, Folder 17	Interim Briefing (TMA-3139, NR report PD71-120, 17 Sep 1971)

Box 231, Folder 18	Space for Mankind's Benefit - A Space Congress Held at Huntsville, Alabama, November 15-19, 1971 (NASA SP-313; 1972)
Box 232, Folder 1	"Modeling on a Grand Scale" (Martin Shubik, Science 174 (3 Dec 1971)) [review of Jay W. Forrester, World Dynamics (Cambridge (MA): Wright-Allen, 1971)]
Box 232, Folder 2	For the Benefit of All Mankind - A Survey of the Practical Returns from Space Investment (Report of the Committee on Science and Astronautics, US House of Representatives, Ninety-Second Congress, First Session, House Report 92-748, Union Calendar No. 398, Dec 1971)
Box 232, Folder 3	Earth Resources Management Systems (NR report SD71-489, 1971)
Box 232, Folder 4	Sonderdruck - Auswirkungen der Raumfahrt - RF-Information (Messerschmitt-Bölkow-Blohm report 2/71, 1971)

1972

Box 232, Folder 5	Remote Sensing of Earth Resources (House Committee on Science and Astronautics, Panel on Science and Technology, Thirteenth Meeting (25-26 Jan 1972)) [committee prints of testimony]
Box 232, Folder 6	"Deep-Sea Vehicles" (Fred Park, International Science and Technology, Mar 1965) [sent to Ehrlicke by Cranford, 28 Feb 1972]
Box 232, Folder 7	"New Transatlantic Structures and Liaisons to Be Set Up at the Industrial and Operational Level" (D. F. Huebner, presented to the 5th US-European Conference (Eurospace), San Francisco, 22-25 May 1972)
Box 232, Folder 8	Richard A. Givens to Paul Hinshaw, letter, 29 Aug 1972 [on "Limits of Growth"]
Box 232, Folder 9	"Comments on the Earth Resources Sensing and Data Acquisition Program" (Frank Hattersley, presented to the Thirteenth Meeting, Panel on Science and Technology Remote Sensing of Earth Resources, Committee on Science and Astronautics, House of Representatives, House report SCG20031R, Jan 1972)
Box 232, Folder 10	"Towards a Science of Regional Systems" (Amit K. Maitra, presented to American Association for the Advancement of Science meeting, 28 Dec 1972; General Systems Bulletin 18 (1973) : 77-86)

1973

Box 232, Folder 11	The Sciences 13 no.1 (Jan/Feb 1973)
Box 232, Folder 12	"Space: The Return on the National Investment" (Robert Anderson, presented to the Detroit Section of SAE, 2 Apr 1973)

Box 232, Folder 13	"Buckminster Fuller on Cities" (interview by Michael Ben-Eli; The American Way, Apr 1973 : 13-21)
Box 232, Folder 14	"American Industry: Does Anyone Care?" (Robert Anderson, presented to The Economic Club, Detroit, MI, 7 May 1973)
Box 232, Folder 15	"Ground Transportation for the Eighties" (Proceedings of the IEEE 61 No.5 (May 1973) : Special Issue)
Box 232, Folder 16	"Was It Worth It?" (William F. Buckley, Jr and Alan Shepard, Firing Line, 24 Jul 1973)
Box 232, Folder 17	"Recycling Raw Materials from Waste Products" (Gernot Gieseler and Klaus Wahl, Dornier-Post 4/73 : 23-27) [complete issue]
Box 232, Folder 18	Manuals on Methods of Estimating Population, Manual V - Methods of Projecting the Economically Active Population (UN Dept of Economic and Social Affairs Population Studies, No. 46, UN report ST/SOA/Series A/46, Nov 1971)
Box 232, Folder 19	[unidentified script, circa 1973]
1974	
Box 232, Folder 20	Amit K. Maitra to Ehrlicke (1 Aug 1974)
Box 232, Folder 21	US China Business Review 1 No.6 (Nov-Dec 1974)
Box 232, Folder 22	On Man's Role in Space - A Review of Potential Utilitarian and Humanistic Benefits of Manned Space Flight (Jesco von Puttkamer, NASA OSF, Dec 1974)
1975	
Box 232, Folder 23	"What the Ozone Controversy Is All About" (US News and World Report, 20 Jan 1975, p.72)
Box 232, Folder 24	"Space to Share - A Musical Space Fantasy" (Charles Wells Morley, Jan 1975)
Box 232, Folder 25	"Environmental Impact of Large Space Facilities" (Richard R. Vondrak, presented to the Princeton University Conference on Space Manufacturing, May 1975)
Box 233, Folder 1	"Toward a Better-Nourished World - Ours and Theirs" (Douglas N. Ross, The Conference Board Record Jul 1975 : 31-42)
Box 233, Folder 2	L-5 News (A Newsletter from the L-5 Society), Nos.1-7 (Sep 1975-Mar 1976)

Identification of Beneficial Uses of Space (NASA Contract NAS8-28179)	
Box 233, Folder 3	Phase III Final Report, Vol. II - Technical Report, Book 1 - Development and Business Analysis of Space Processed Isoenzymes (GE Space Division report 75SDS4281, 30 Nov 1975)
A "Rapid-Growth" Scenario, Including "Far-Out" Speculations on the Future of Space - Work In Progress (Pat Gunkel, Hudson Institute report, circa 1975) [2 folders]	
Box 233, Folder 4	draft
Box 233, Folder 5	misc pages
Box 233, Folder 6	"K-101 Editorial" [against government regulation, circa 1975, photocopy]
1976	
Box 233, Folder 7	articles from Science 191 (20 Feb 1976) [photocopies]" Notes: Missing Title: <ul style="list-style-type: none"> • "The Age of Substitutability - What Do We Do When the Mercury Runs Out?" (H. E. Goeller and Alvin Weinberg, pp.683-689) • "Chemicals From Coal - By-Products of Conversion of Coal to Clean Fuels Will Offer New Options to the Maker of Chemicals" (Arthur M. Squires, pp.689-700) • "World Changes and Chances: Some New Perspectives for Materials - Trends in Use, World Trade, and International Politics Define Issues and Research Directions" (S. Victor Radcliffe, pp.700-707)
Box 233, Folder 8	"Next 25 Years - How Your Life Will Change" (US News and World Report, 22 Mar 1976 : 39-42)
Box 233, Folder 9	"Space Resources and the Human Race" (W. L. Hurd, presented to the European Organization for Quality Control 20th Annual Conference, 15-18 Jun 1976)
Box 233, Folder 10	Why Space is Important to Our Future (RI brochure, Sep 1976)
Box 233, Folder 11	"Goals and Needs of World Development: Their Relevance to the International Space Stations" (Bertand H. Châtel, presented to IAA International Space Hall of Fame Dedication Conference, Alamagordo, New Mexico, 5-9 Oct 1976)
Box 233, Folder 12	"The Future of Space Law" (E Galloway, IAF paper IAF-ISL-76-06, presented to IAF 27 IAC Colloquium on the Law of Outer Space, 10-16 Oct 1976)

Box 233, Folder 13	"Utilization of O'Neill's Model 1 Lagrange Point Colony as an Interstellar Ark (Gregory L. Matloff, JBIS 29 (1976) : 775-785)
Box 233, Folder 14	Weltall Unser Lebensraum - An der Schwelle zum Dritten Raumfahrtjahrzehnt (Bruno Stanek, circa 1976)
1977	
Box 233, Folder 15	"What Future for an International Remote Sensing Regime?" (Hamilton DeSaussure, presented to the Association of the Bar of the City of New York; 28 Mar 1977)
Box 233, Folder 16	The Impact of Technology on Air Warfare (Proceedings of the Air University Airpower Symposium, 29-31 Mar 1977)
1978	
Box 233, Folder 17	"Supertechnology" (New Scientist 23 Mar 1978 : 787-788) [excerpt from Paul Davies, The Runaway Universe, (Dent, 1978)]
1979	
Box 233, Folder 18	newsletter from Albin Kazanowski, World Future Society (sent to Ehrlicke circa 2 Feb 1979)
Box 233, Folder 19	clippings from Albin Kazanowski, World Future Society (sent to Ehrlicke 14 Feb 1979)
Box 233, Folder 20	"How James Schlesinger Set Up the Oil Hoax" (Fusion (English ed) 2 No.9 (Jul 1979)) complete issue]
papers presented to IAF 30th International Astronautical Congress, 16-22 Sep 1979 [2 folders]	
Box 233, Folder 21	"Homo spatialis: A Space Law Dilemma" (George S. Robinson)
Box 233, Folder 22	"Structuring the International Marketplace for Maximum Socio-Economic Benefits from Space Industrialization" (W. A. Good, G. S. Robinson, M. F. Shakun, and E. F. Sudit, NYU Graduate School of Business Administration, July 1979)
1980	
Box 233, Folder 23	Fusion (English ed) 3 No.8 (May 1980)
Box 233, Folder 24	Implications of the Climatic Controversy for the Global Society (International Institute for Integration Technology monograph, Nov 1980)
1981	

Box 233, Folder 25	Fusion (English ed) 4 No.10 (Aug 1981)
Box 233, Folder 26	Fusion (German ed) 2 No.5 (Nov 1981)
Box 234, Folder 1	papers sent to Ehrlicke by Ben R. Finney, circa 1981
	1983
Box 234, Folder 2-3	Fusion (German ed) 4, no.5/6 (Dec 1983) (2 copies; 2 folders)
	1984
Box 234, Folder 4	Fusion Asia 1 No.2 (Jan 1984)
Box 234, Folder 5	"Beyond the Space Station" (Jesco von Puttkamer, 30 Jul 1984)
Box 234, Folder 6	Abstracts of Papers, 35th International Astronautical Congress (Lausanne, 8-13 1984)
Box 234, Folder 7	"Panelists Say Joint Adventures in Space Are Crucial to Peace" (Philip M. Boffey, New York Times, 30 Oct 1984, C3)
	Undated Material
Box 234, Folder 8	"Früchte des Meeres" (Die Welt, no date)
Box 234, Folder 9	"Re-creation of Dead Predicted in Future" (unidentified newsclipping; no date)
Box 234, Folder 10	loose bibliography on satellites
Box 234, Folder 11-15	miscellaneous graphics [5 folders]
Box 234, Folder 16	miscellaneous graphics - relative values of research programs
Box 234, Folder 17	miscellaneous graphics - solar system resources and accessibility
Box 234, Folder 18	miscellaneous illustrations
Box 234, Folder 19	miscellaneous loose pages
Box 234, Folder 20	miscellaneous material on marine photosynthesis
Box 234, Folder 21	miscellaneous newsclippings on aviation technology
Box 234, Folder 22	miscellaneous newsclippings on environment

Box 256, Folder 23	miscellaneous newsclippings on environment [oversized material]
Box 234, Folder 23	miscellaneous newsclippings on evolution
Box 234, Folder 24-26	miscellaneous newsclippings on resources [3 folders]
Box 256, Folder 24-25	miscellaneous newsclippings on resources [oversized materials] [2 folders]
Box 234, Folder 27	miscellaneous notes
Box 256, Folder 26	miscellaneous notes [oversized materials]
Box 234, Folder 28	miscellaneous notes on global issues
Box 234, Folder 29	miscellaneous notes on resources
Box 234, Folder 30	miscellaneous notes on space operational areas

Energy

Named Files

Box 235, Folder 1	Antenna Selection
Box 235, Folder 2-3	Energy (file 1 of 3) [2 folders]
Box 235, Folder 4	Energy (file 2 of 3)
Box 235, Folder 5-6	Energy (file 3 of 3) [2 folders]
Box 235, Folder 7	Energy (Ad Hoc) (file 1 of 2) [RI Solar Central Power Ad Hoc Task Group]
Box 235, Folder 8	Energy (Ad Hoc) (file 2 of 2) [RI Solar Central Power Ad Hoc Task Group]
Box 236, Folder 1	Energy (Material Under Jim Madewell)
Box 236, Folder 2	Energy Related Presentations
Box 236, Folder 3	Lehman Energy Memos (Alan Lehman, RI Internal Letters, Apr 1974)
Box 236, Folder 4	Notti Flywheel Papers
Box 236, Folder 5	Organizations

Box 236, Folder 6 Power Relay Satellite

Box 236, Folder 7 Water Electrolysis (D.H. Robey to Ehrlicke, NR Internal Letter, 16 Jul 1968)

Studies and Projects

Satellite Solar Power Station Study (NASA contract NAS3-16804) [8 folders]

Box 236, Folder 8 NASA RFP 3-4997-Q (1972)

Box 235, Folder 9 Monthly Progress Report No. 2 - For the Period August 1 to August 31, 1972 (Arthur D. Little / Grumman / Raytheon / Spectrolab report, 13 Sep 1972) [photocopy]

Box 235, Folder 10 Monthly Progress Report No. 4 - For the Period October 1 to October 31, 1972 (Arthur D. Little / Grumman / Raytheon / Spectrolab report, 10 Nov 1972) [photocopy]

Box 235, Folder 11 Monthly Progress Report No. 6 - For the Period 1 December 1972 - 31 December 1972 (Arthur D. Little Inc / Grumman / Raytheon / Spectrolab report, 17 Jan 1973) [photocopy]

Box 236, Folder 12 SSPS Structure/Control Interaction - Final Briefing (Grumman report, Feb 1973) [photocopy]

Box 236, Folder 13 Application of Microwave Power Transmission to the Satellite Solar Power Station (Raytheon report AV-963, 14 Feb 1973) [photocopy]

Box 236, Folder 14 Final Report Briefing (Arthur D. Little Inc / Grumman / Spectrolab / Raytheon report, 14 Feb 1973) [photocopy]

Box 236, Folder 15 Feasibility Study of a Satellite Solar Power Station - Final Report (Arthur D. Little Inc, NASA contractor's report CR-2357, Feb 1974)

Microwave Power Transmission System Studies (NASA contract NAS3-17835) [6 folders, total]

Box 236, Folder 16 RFP (NASA RFP 3-546232)

Box 236, Folder 17 Fisher to Ehrlicke, RFP related correspondence to Mar 1974

[Final Report] [4 folders]

Box 236, Folder 18 Vol.I - Executive Summary (Raytheon report ER 75-4368, NASA CR-134886, Dec 1975)

Box 237, Folder 1	Vol.II - Introduction, Organization, Environmental and Spaceborne Systems Analyses (Raytheon report ER75-4368, NASA CR-134886, Dec 1975)
Box 237, Folder 2	Vol.III - Section 8 - Mechanical Systems and Flight Operations (Raytheon report ER 75-4368, NASA CR-134886, Dec 1975)
Box 237, Folder 3	Vol.IV - Sections 9 Through 14 With Appendices (Raytheon report ER 75-4368, NASA CR-134886, Dec 1975)
	Space-Based Solar Power Conversion and Delivery Systems (NASA Contract NAS8-31308) [7 folders, total]
Box 237, Folder 4	Research and Technology Operating Plan [RTOP] (NASA, 26 Apr 1974)
Box 237, Folder 5	RFP (NASA RFP 8-1-A-31-00323)
Box 237, Folder 6-7	Interim Summary Report (ECON Inc report 76-145-IB, 31 Mar 1976) [photocopy; 2 folders]
	Second Interim Report [3 folders]
Box 237, Folder 8-9	Vol II - Engineering Analysis of Orbital Systems (Grumman Aerospace report, 30 Jun 1976) [photocopy; 2 folders]
Box 238, Folder 1	Vol III - Economic Analysis of Space-Based Solar Power Systems (ECON Inc report 76-145-2, 30 Jun 1976) [photocopy]
	Satellite Power System (RI Internal study) [6 folders, total]
Box 238, Folder 2	Space Power Station - Charts
Box 238, Folder 3	Space Power Station - Master Development Schedule - Charts
Box 238, Folder 4	Presentation to Dr. Fletcher on Space Solar Power (16-17 Jul 1975)
Box 238, Folder 5	"Corporate Research and Engineering Assessment of the Energy-Environmental Business Area" (E. B. Ash to C. J. Meecham, RI Internal Letter, 23 Jul 1975)
Box 238, Folder 6-7	"Satellite Power Systems" (R. K. Swim to C. G. Allen, RI Internal Letter 75-V-IV-076, 4 Sep 1975) [2 copies; 2 folders]

Miscellaneous Reference Materials

1955

Box 238, Folder 8	Solar Energy Furnaces - A Review of Development in the Utilization of Solar Energy to Produce High Temperature (Guy Benveniste, Stanford
-------------------	--

Research Institute report; for distribution at the World Symposium on Applied Solar Energy, 31 Oct-5 Nov 1955)

1957

Box 238, Folder 9 The Solar Furnaces of the Labaoratoire de l'Energie Solaire of Montlouis, France (Eugene F. Poncelot and William C. Thuman, Stanford Research Institute report [project 1621-531 for the Association for Applied Solar Power], circa 1957)

1958

Box 238, Folder 10 "Scientists Seeking Huge Electron to Tame Power of the H-Bomb" (Thomas R. Henry, The Evening Star (Washington DC), 15 Jan 1958 : A-9)

1961

Box 238, Folder 11 "Some Comments on the Transmission of Power by the Use of Microwave Beams" (H. Letow, G. Hamm, and R. W. Slocum, IRE Transactions on Antennas & Propogation, Nov 1961) [photocopy]

Box 238, Folder 12 Performance Potentialities of Direct Energy Conversion Processes Between Electrostatic and Fluid Dynamic Energy (Maurice Lawson, Hans von Ohain, and Frank Wattenark, ARL report 178, Dec 1961)

1962

Box 238, Folder 13 "MHD Power Generation" (R. J. Rosa, presented to Pacific Energy Conversion Conference, Jul 1962)

1965

Box 238, Folder 14 High Temperature Dense Plasma Induced by Laser (G. H. Sichling and J. C. Bryner, NA report SID 65-540, Apr 1965)

1966

Box 238, Folder 15 AEC Policy and Action Paper on Controlled Thermonuclear Research (AEC report TID-23277, Jun 1966)

1967

Box 238, Folder 16 "New Uses for Nuclear Energy in Outer Space" (Paul Harlock and Seymour Dundes, AAS paper 67-115, presented at AAS 13th Annual Meeting "Commercial Utilization of Space", 1-3 May 1967)

1968

Box 238, Folder 17	"On the Problem of Two Axes Panel Orientation for the Summer Solstice Power Loss" (D. H. Robey to List, NR Internal Letter, 22 Feb 1968)
Box 238, Folder 18	Report of Ad Hoc Panel on Fusion Research on Low Beta Plasmas Confined in Open-Ended Magnetic Geometries (AEC report TID-24254, Mar 1968)
Box 238, Folder 19	"World Program in Controlled Fusion" (Amasa S. Bishop; presented to AF-IIT Symposium, no date) [sent to Ehrlicke by Amasa Bishop, 21 May 1968]
Box 238, Folder 20	"The Possibility of Producing a Dense Thermonuclear Plasma by an Intense Field Emission Discharge" (F. Winterberg, Physical Review 174 No.1 (5 Oct 1968) : 212-220) [reprint]
Box 239, Folder 1	Solar Energy Society Fourth Annual Meeting - Abstracts (21-23 Oct 1968)
Box 239, Folder 2	"Production of a Dense Thermonuclear Plasma by a Pulsed High Intensity Field Emission Discharge" (F. Winterberg, Zeitschrift für Naturforschung 23a No.9 (1968) : 1396-1397) [reprint]
1969	
Box 239, Folder 3	Intense Electron Beams: Background for the February 28, 1969 AEC-CTR Review (Robert L. Hirsch, ed, 20 Feb 1969)
Box 239, Folder 4	"Ignition of Thermonuclear Microexplosions by Intense Relativistic Electron Beams" (Friewardt Winterberg, Desert Research Institute, University of Nevada preprint series no.64, Mar 1969)
Box 239, Folder 5	Research on New Concepts in Energy Conversion - Quarterly Technical Progress Report No.20 - Covering the Period February 1, 1969 to April 30, 1969 (Air Force AeroPropulsion Laboratory report, 15 May 1969) [photocopy]
Box 239, Folder 6	"Atomic and Pulping Wastes: New Schemes for Treatment" (Chemical Engineering 76 No.21 (6 Oct 1969) : 108-110)
Box 239, Folder 7	Research on New Concepts on Energy Conversion - Annual Technical Progress Report No. 1 Covering the Period November 1, 1968 to October 31, 1969 (Air Force AeroPropulsion Laboratory, RTC, AFSC; 15 Nov 1969)
Box 239, Folder 8	"Nuclear-Powered World May Be Long Way Ahead" (Frank G. Siscoe, San Diego Union (16 Nov 1969) : A-26)
1970	
Box 239, Folder 9	"Outlook for Binary Power Plants Using Liquid-Metal MHD" (L. L. Prem and W. E. Parkins, IEEE Spectrum May 1970 : 35-44)

Box 239, Folder 10	"New Concepts in Mechanical Energy Storage" (David W. Rabenhorst, paper 709035, presented to 5th Intersociety Energy Conversion Engineering Conference, Las Vegas, NV, 21-25 Sep 1970; published in Proceedings, pp.2-95 to 2-99)
Box 239, Folder 11	"Space Resources to Benefit the Earth" (Peter E. Glaser, presented to 3rd Conference on Planetology and Space Mission Planning, NYAS, 29 Oct 1970)
Box 239, Folder 12	Southern California Edison Co data, circa 1970
	1971
Box 239, Folder 13	A Role for Liquid Rocket Advanced Technology in the Electric Power Crisis (Escher Technology Associates, Jan 1971)
Box 239, Folder 14	"AEC Okays Fusion R&D Study" (Space Daily 11 Feb 1971, p.193)
	1972
Box 239, Folder 15	"Solar Energy for Terrestrial Applications" (statement of Roy P. Jackson to Subcommittee on Aeronautics and Space Technology, House of Representatives, 1 Mar 1972)
Box 239, Folder 16	"NASA Plans Expanded Program to Exploit Space Solar Power" (Katherine Johnsen, Aviation Week and Space Technology, 27 Mar 1972 : 21)
Box 239, Folder 17-18	"Physics Looks at Solar Energy" (Adam Baker Meinel and Marjorie Pettit Meinel, Physics Today, Feb 1972 : 44-50) [2 photocopies, requested by Ehrlicke from RI TIC 17 Apr 1972; 2 folders]
Box 239, Folder 19	"Liquid Metal MHD" (W. E. Parkins to Ehrlicke, NR Internal Letter, 25 Apr 1972)
Box 239, Folder 20	Thermionic Power Generation and Power Plants (NASA Literature Search 18887, 26 May 1972)
Box 239, Folder 21	"A Focus for Solar Energy" (Congressional Record - House, 31 May 1972 : H5129-H5131)
Box 239, Folder 22	"SPART [Space Program Advanced Research and Technology] Study" (R. K. Swim to Those Listed, NR Internal Letter, 2 Jun 1972)
Box 239, Folder 23	"Miller Urges Upped Solar Energy Research" / "Sees Shuttle Use" (Space Daily 5 Jun 1972 : 183)
Box 239, Folder 24	100 Megawatt Terrestrial Solar Power Plant Definition - Study Plan (MSFC, draft, 1 Aug 1972)

Box 239, Folder 25	Solar Thermal-Electric Power Stations - Systems Studies and Economic Optimization (Colorado State University and Westinghouse Electric Co, Research Proposal Submitted to the National Science Foundation under Research Applied to National Needs, P213367, 1 Aug 1972) [sent to Ehricke for review]
Box 239, Folder 26	energy-related newsclipping sent to Ehricke by Robert Sehnert, Jul-Aug 1972
Box 239, Folder 27	"The Potential Role of Solar Energy Utilization in the Energy Household of the United States of America" (Martin Wolf, presented to the Subcommittee on Foreign Economic Policy, Committee on Foreign Affairs, House of Representatives, 26 Sep 1972) [summary only]
Box 239, Folder 28	"Testimony of Robert E. Hunter, Senior Fellow, Overseas Development Council, Washington, DC, before the Subcommittee on Foreign Economic Policy of the House Foreign Affairs Committee, September 27, 1972"
Box 239, Folder 29	"Laser Fusion: A New Approach to Thermonuclear Power" (William D. Metz, Science 177 (29 Sep 1972) : 1180-1182); "Fission: the Pro's and Con's of Nuclear Power" (Allen Hammond; Science 177 (13 Oct 1972) : 147-149)
Box 239, Folder 30	"Transport of Highly Active Waste Products to the Sun" (Rudi G. Reichert, presented to IAF 23rd International Astronautical Congress, 8-15 Oct 1972; Dornier report)
Box 240, Folder 1	US Energy Outlook - A Summary Report of the National Petroleum Council (11 Dec 1972)
Box 240, Folder 2	"Radioactive Wastes in Salt Mines" (W. C. McClain and R. L. Bradshaw, Mines Magazine 59 no.8 (Aug 1966) : 11-14) [photocopy requested by Ehricke 20 Dec 1972]
Box 240, Folder 3	"The Use of the Space Shuttle to Support Large Space Power Generating Systems" (Peter E. Glaser, presented to the Joint AAS/American Association for the Advancement of Science Annual Meeting, 26-31 Dec 1972)
Box 240, Folder 4	"Survey of Energy Consumption Projections" (Committee on Interior and Insular Affairs, United States Senate, 1972)
Box 240, Folder 5	Zur Optimierung von Kernreaktorenenergie versorgungsanlagen mit turboelektrischen Wandlern (Jürgen Blumenberg, Technische Universität München Institut für Raumfahrttechnik report 72-2, 1972)
Box 240, Folder 6	Zur Optimierung von nuklear-elektrischen Raumfahrzeugen mit Ionenantrieb (Harry O. Ruppe, Technische Universität München Lehrstuhl für Raumfahrttechnik report 72-3, 1972)

Box 240, Folder 7	"Rickover Says Energy Crisis Real" (Willard Edwards, San Diego Union [?] circa 1972)
Box 240, Folder 8	Entwicklungsvorhaben: "Fliehkraftentfalteter ROBE-Solargenerator" (Ingenieurbüro Scheel report, circa 1972)
Box 240, Folder 9	pages from congressional report on energy [photocopies]
1973	
Box 240, Folder 1	"Energy Relay Satellite Urged for Shuttle" (Craig Covault, Aviation Week and Space Technology 8 Jan 1973 : 47-48)
Box 240, Folder 11	articles from Journal of Microwave Power 5 no.5 (Dec 1970) [requested by Ehrlicke "for Shuttle paper", 9 Feb 1973]: Notes: Missing Title: <ul style="list-style-type: none"> • "Microwave Power Transmission From an Orbiting Solar Power Station" (G. Gobov, pp.223-231) • "High-Power Microwave Generators of the Crossed-Field Type" (W. C. Brown, pp.245-259) • "Atmospheric Attenuation of Microwave Power" (V. J. Falcone Jr, pp.269-278) • "The Receiving Antenna and Microwave Power Rectification" (W. C. Brown, pp.279-292)
Box 240, Folder 12	Solar Cells - Outlook for Improved Efficiency (National Academy of Sciences, 1972) [requested by Ehrlicke "for Shuttle paper", circa Feb 1973]
Box 240, Folder 13	"Nuclear Power - The Future" (T. N. Marsham and R. S. Pease, Atom 196 (Feb 1973) : 46-62)
Solar Climate Control Project [3 folders, total]	
Box 240, Folder 14	Project Plan for a Program to Develop a Solar Climate Control Industry (Arthur D. Little, Inc report, 16 Mar 1973) [photocopy]
Final Oral Presentation - Phase I [2 folders]	
Box 240, Folder 15	Marketing (Arthur D Little Inc report, 29 May 1974)
Box 240, Folder 16	Technical Findings (Arthur D Little Inc report, 29 May 1974)
Box 240, Folder 17	"Microwave Ovens: Not Recommended" (Consumer Reports, Apr 1973 : 221-230)
Box 240, Folder 18	"Testimony - William D. Carey, Vice President - Arthur D. Little, Inc - House Committee on Science and Astronautics" (24 Jul 1973)

Box 240, Folder 19	"United States and World Energy Consumption" (R. H. Sehnert to Ehrlicke, RI Internal Letter, 4 Sep 1973)
	Terrestrial Applications of Solar Technology and Research [TERRASTAR] (NASA Grant NGT 01-03-044)
Box 240, Folder 20	Final Report (NASA CR-129012, Sep 1973)
Box 241, Folder 1	"Power from Space - Large Space Reflectors with Active Structural Control" (T. A. Heppenheimer, submitted to ASME Joint Automatic Control Conference, 10 Nov 1973)
Box 241, Folder 2	Oil Politics, USA (Ringrone Newspapers (1966) Ltd Special Briefing No. 39, 1973)
Box 241, Folder 3	reprints of papers by F. Winterberg
	1974
Box 241, Folder 4	"Statement of Philip S. Hughes, Assistant Comptroller Before the Subcommittee on Activities of Regulatory Agencies Relating to Small Business of the House Select Committee on Small Business" (17 Jan 1974)
	An Evaluation of Solar Power
Box 241, Folder 5	Part I - Thermal Energy for Buildings (E. S. Ash, RI report, 8 Feb 1974) [photocopy]
Box 241, Folder 6-7	Concepts for Space Disposal of Nuclear Waste (MIT, Oct 1972) [2 copies, sent to Ehrlicke circa Feb 1974; 2 folders]
Box 241, Folder 8	"Conserving Energy: Corporate Challenge and Response" (C. J. Meecham, opening address for the AIPE Plant Engineering and Maintenance Conference, 18 Mar 1974)
Box 241, Folder 9	Solar Energy for Residential and Commercial Heating and Cooling (Energy Task Force, RI report SD 74-SA-0046, Apr 1974)
Box 241, Folder 10	An Overview of Solar Energy Applications (Peter E. Glase, Arthur D. Little report, presented to Joint Committee on Atomic Energy, United States Senate, 7 May 1974)
	material on Southern California Edison Co rate increase, Jun 1974
Box 241, Folder 11	[1 of 2 folders]
Box 242, Folder 1	[2 of 2 folders]

Box 242, Folder 2	"Testimony of Michael H. Moskow, Assistant Secretary for Policy Development and Research, Department of Housing and Urban Development - House Committee on Science and Astronautics - Solar Energy Research, Development, and Demonstration Act of 1974" [HR 15612] (30 Jul 1974) [photocopy]
Box 242, Folder 3	"Neutrons and Radioisotopes Produced by Collective Effect Accelerations" (John S. Luce, LLL report UCRL-75933, 19 Aug 1974, submitted to Annals of the New York Academy of Science) [preprint]
Box 242, Folder 4	"Collective-Field Acceleration of High-Energy Ions" (J. S. Luce, presented to Conference on Energy Storage, Compression and Switching, Torino, Italy, 5-7 Nov 1974; LLL report UCRL-76953, 7 Jul 1975)
	Comparison and Evaluation of Power Plant Options for Geosynchronous Power Stations
Box 242, Folder 5-6	Final Report - Part 2 - Nuclear Power from Space (J. Richard Williams, Georgia Institute of Technology report, Nov 1974) [2 folders]
Box 242, Folder 7	Solar Energy Thermal Processes (John A. Duffie and William A. Beckman, NY: John Wiley, 1974) [photocopies of selected pages]
Box 242, Folder 8	A Solar-Hydrogen Economy (J. O'M. Bockris) [correspondence and draft pages]
Box 242, Folder 9	Marketing News (Rocketdyne)
Box 242, Folder 10	Survey of Hydrogen's Potential as a Vehicular Fuel (UCRL-51228) [photocopies of selected pages]
	1975
Box 242, Folder 11	"Spoked Wheels to Deploy Large Surfaces in Space - Weight Estimates for Solar Arrays" (R. F. Crawford, et al, NASA CR-2347, Jan 1975)
Box 242, Folder 12	"Statement for the Record of R. D. Ginter (Director, Energy Systems Division, Office of Energy Programs, National Aeronautics and Space Administration) Before the Subcommittee on Space Science and Applications, Committee on Science and Technology, House of Representatives" (25 Feb 1975)
Box 242, Folder 13	Proposal for a Study of the Reliability of Nuclear and Coal-Fired Power Plants and the Resulting Effect on Power Plant Economics and Energy Policy Planning (Council on Economic Priorities, 17 Apr 1975)
Box 242, Folder 14	Corporate Laser Overview (RI-Rocketdyne report BC 75-63, 1 May 1975)

Box 242, Folder 15	Rocketdyne High Power Laser Facility - Beam Safety Criteria (RI-Rocketdyne report, 1 May 1975)
Box 242, Folder 16	Hydrogen Recombiners and Integral Analyzers for the Ringhals Nuclear Power Station Units 3 and 4 - A Technical Proposal to the Swedish State Power Board (RI-Atomics International report AI-75-33P, 12 May 1975; response to bid request EVRI-PUB/MT-8405)
Box 243, Folder 1	papers sent to Ehrlicke by Richard M. Dickinson, JPL (28 May 1975)
Box 243, Folder 2	"Space Colonization and Energy Supply to the Earth" (Gerard K. O'Neill, Testimony Before the Subcommittee on Space Science and Applications of the Committee on Science and Technology, United States House of Representatives, 23 Jul 1975)
Box 243, Folder 3	"Available Energy Conversion and Utilization in the United States" (G. M. Reistad, Transactions of the ASME Journal of Engineering for Power Jul 1975 : 429-434)
Box 243, Folder 4	Identification of Radioactive Nuclides Produced with Ions Accelerated by the LLL Collective-Field Accelerator (R. J. Javerton and J. S. Luce, LLL report UCID-16857, 4 Aug 1965)
Box 243, Folder 5	Samuel W. Fordyce to Ehrlicke, 27 Aug 1975 [invitation to microwave power transmission test]
Box 243, Folder 6	"Electric Vehicles" (Chapter 8 of "Should We Have A New Engine?" - An Automobile Power Systems Evaluation, Vol. II - Technical Reports) (JPL report SP43-17, Aug 1975)
Box 243, Folder 7	Evaluation of a Microwave High-Power Reception-Conversion Array for Wireless Power Transmission (R. M. Dickinsen, JPL TM 33-741, 1 Sep 1975)
	Reception-Conversion Subsystem (RXCV) for Microwave Power Transmission System
Box 243, Folder 8-9	Final Report (Raytheon report ER 75-4386, 1 Sep 1975) [2 folders]
Box 243, Folder 10	"Report on Studies of Space to Earth Microwave Power Transmission Systems" (Andrew Edwards, Jr, and Richard M. Schuh, IAF paper 75-005, presented to IAF 26th International Astronautical Congress, 21-27 Sep 1975) [preprint]
Box 243, Folder 11	Electric Vehicles, Vol II - Industry Assessment (RI Atomics International report AI-75-69, Dec 1975)
Box 243, Folder 12	Augmentation of Flat Plate Solar Energy Collectors Using a Fresnel Refractor-Analytical Evaluation (J. M. Friefeld, Rocketdyne report SET 75-78, 1 Dec 1975)

Box 243, Folder 13	"An Aqueous Carbonate Process Demonstration System for the Shahyarar Power Plant (Iran)" (Atomics International [?], circa 1975)
Box 243, Folder 14	"Development of Solar Electric Power for Applications to the Mid-East" (Atomics International [?], circa 1975)
Box 243, Folder 15	"Residual Oil Gasification to Produce Hydrogen for Middle East Application" (Atomics International [?], circa 1975)
Box 244, Folder 1	The Use of the Sun's Energy for Heating and Cooling (RI briefing packet, circa 1975)
1976	
Box 244, Folder 2	Newsmark: "The Primal Flame" (CBS News Special, radio broadcast 31 Jan 1976) [transcript]
Box 244, Folder 3	"Energy Implications of Materials Processing" (Earl T. Hayes, Science 191 (20 Feb 1976) : 661-668)
Box 244, Folder 4	Abstracts Submitted to the 1976 IEEE International Conference on Plasma Science, May 24-26, 1976
Box 244, Folder 5	Derivation of a Low Cost Satellite Power System (James E. Drummon and Ronald W. Drummond, Maxwell Labs, no date)] [sent to Ehrlicke by J. E. Drummond, 25 Jun 1976]
	Space-Based Power Conversion and Power Relay Systems - Preliminary Analysis of Alternate Systems (NAS8-31628)
Box 244, Folder 6	Interim Report (Boeing report, circa Jun 1976)
	Initial Technical, Environmental, and Economic Evaluation of Space Solar Power Concepts [3 folders, total]
Box 244, Folder 7-8	Vol. I - Summary (NASA JSC report JSC-11568, 31 Aug 1976) [2 copies; 2 folders]
Box 244, Folder 9	Vol II - Detailed Report (NASA JSC report JSC-11568, 31 Aug 1976)
Box 244, Folder 10	The Energy Consumption of Spaceborne versus Terrestrial Transatlantic Communications (Eric E. Rice, Battelle report BMI-NLVP-TM-74-4, 27 Dec 1974) [sent to Ehrlicke by Eric E. Rice, 19 Oct 1976]
	Satellite Power Systems Feasibility Study (NASA contract NAS8-32161)
Box 244, Folder 11-13	Final Report (RI report SD 76-SA-0239-2, Dec 1976) [2 copies; 3 folders]

1977

Box 245, Folder 1	"Introductory Assessment of Orbiting Reflectors for Terrestrial Power Generation" (Kenneth W. Billman and William P. Gilbreath, 11 Feb 1977 rev 26 Feb 1977)
Box 245, Folder 2	Space-Based Power Conversion Systems (NASA contract NAS8-31628) [sent to Ehrlicke by Priest, 13 Apr 1977] Notes: Missing Title: <ul style="list-style-type: none"> • <i>Systems Definition - Sixth Monthly Progress Report</i> (Boeing report, 19 Jan 1976) • <i>Systems Definition - Final Report - Executive Summary</i> (Boeing report D180-20309-1)
Box 245, Folder 3	Orbiting Reflectors for Power Generation - Presentation to NASA Council
Box 245, Folder 4	"Initial Assessment of Orbiting Reflectors for Power Generation" (Ken Billman, presented to NASA Council, 22 Apr 1977)
Box 245, Folder 5	"Space Orbiting Light Augmentation Reflector Energy System (SOLARES)" (presented to NASA Council, 22 Apr 1977)
Box 245, Folder 6	"The Disposal of Radioactive Waste from Fission Reactors" (Bernard L. Cohen, Scientific American 236 No.6 (Jun 1977) : 21-31) [complete issue]
	Satellite Power System Concept Definition Study (NASA contract NAS8-32475)
Box 245, Folder 7	3rd Monthly Progress Report (RI SD report DPD541, 15 Jul 1977)
Box 245, Folder 8	An Introduction of Controlled Thermonuclear Fusion (M.O. Hagler and M .Kristiansen, Lexington (MA): Lexington Books, 1977) [photocopies of selected pages]
Box 245, Folder 9	Perspectives on the Development of Fusion Power by Magnetic Confinement - 1977 (Fusion Power Reactor Senior Review Committee, US DOE, 1977)

1978

Box 245, Folder 10	Future Orbital Power Systems Technology Requirements - A Symposium Held at Lewis Research Center, Cleveland, Ohio, May 31 and June 1, 1978 (NASA Conference Publication CP-2058, Sep 1978)
Box 245, Folder 11	papers sent to Ehrlicke by Henry E. Elder, 21 Jul 1978
Box 245, Folder 12	Satellite Power System - Concept and Development Evaluation Program - Reference System Report (DOE/NASA report DOE/ER-0023, Oct 1978)

1979

Box 245, Folder 13	"Iceland's Heat Energy: Solution to a Future Crunch?" (Jorma Hyypa, Science & Mechanics Summer 1979 : 49-51, 106-107)
Box 245, Folder 14	papers sent to Ehricke by F. Winterburg, 18 Jul 1979
Box 246, Folder 1	Index to Nuclear Safety - A Technical Progress Review by Chronology, Permuted Title, and Author, Vol.1, No.1 through Vol.13, No.6 (J. Paul Blakely and Ann Klein, ORNL report ORNL-NSIC-107, May 1973) [sent to Ehricke by NTIS, 20 Nov 1979]
Box 246, Folder 2	Evaluation of Ultimate Disposal Methods for Liquid and Solid Radioactive Wastes, VI - Disposal of Solid Wastes in Salt Formations (R. L. Bradshaw, J. J. Perona, J. O. Blomeke, and W. J. Poegly Jr, ORNL report ORNL-3358 (Rev), Mar 1969) [photocopy sent to Ehricke by NTIS, 21 Nov 1979]
Box 246, Folder 3-5	Siting of Fuel Reprocessing Plants and Waste Management Facilities (ORNL report ORNL-4451, Jul1970) [photocopy sent to Ehricke by NTIS, 21 Nov 1979; 3 folders]
Box 246, Folder 6-7	Chemical Technology Division Annual Progress Report for Period Ending May 31, 1970 (ORNL report ORNL-4572, Oct 1970) [photocopy sent to Ehricke by NTIS, 21 Nov 1979; 2 folders]
Box 246, Folder 8	"Problems of Disposal of Radioactive Wastes in Germany" (H. Holtzen and J. Schwibach, Atomwirtschaft 12 (3/9 1967) : 413-417; translated from German by R. Gregg Mansfield, Oak Ridge National Laboratory report ORNL-tr-1841) [photocopy sent to Ehricke by NTIS, 10 Dec 1979]
1980	
Box 247, Folder 1-3	Indexed Bibliography on Effects of Radionuclides and Ionizing Radiation on Ecological Systems (G. U. Ulrikson, C. D. Bopp, and R. M. Carroll, Oak Ridge National Laboratory Nuclear Safety Information Center report ORNL-NSIC-95, Aug 1971) [photocopy sent to Ehricke by NTIS, circa 1980; 3 folders]
Box 247, Folder 4	An Engineering Design Study of A Reference Theta-Pinch Reactor (RTPR) (Los Alamos Scientific Laboratory/Argonne National Laboratory report LA-5336/ANL-8019, Mar 1974) [photocopy sent to Ehricke by NTIS, 1 May 1980]
Box 247, Folder 5	The Blascon - An Exploding Pellet Fusion Reactor (A. P. Fraas, ORNL report ORNL-TM-3231, Jul 1971) [photocopy sent to Ehricke by NTIS, 6 May 1980]
Box 247, Folder 6	A Summary of Tritium Handling Problems in Fusion Reactors (J. S. Watson, ORNL report ORNL-TM-4022, Nov 1972) [photocopy sent to Ehricke by NTIS, 6 May 1980]

1981

Box 247, Folder 7	NASA High-Power Space-Based Laser Program - Report of the OAST High-Power Laser Working Group (May 1981)
Box 247, Folder 8	"Atomic Headache: What To Do With Deadly Waste?" (US News and World Report, 31 Aug 1981 : 158-160)
Box 247, Folder 9	abstracts sent to Ehrlicke by Eric E. Rice for 32rd IAC

1983

	newsclippings sent by Charles Gould, 10 Jan 1983 [2 folders]
Box 247, Folder 10	[letter size originals and reduced size reference copies]
Box 255, Folder 23	[oversized materials]
Box 247, Folder 11	Versuch einer zielrelevanten Bewertung alternativer Strategien zur globalen Entsorgung von radioaktiven Abfällen (H. H. Koelle et al, Institut für Luft- und raumfahrt Technische Univerität Berlin report ILR Mitt. 119/1983, 15 Feb 1983)

Undated

Box 247, Folder 12	"Addendum - Fusion Energy Release by High Energy Ions in Plasma and Gases" [pp.165+ of unidentified document]
Box 247, Folder 13	"Advanced Space Power Systems" (Robert R. Bathelemy and Howard A. MacEwen, no date)
Box 247, Folder 14	"Antimaterie im Experiment - Ein Erfolg das Deutschen Elektronen-Synchrotrons" (unidentified newsclipping, no date)
Box 247, Folder 15	"Dissociation of Diamtomic Hydrogen Ions" (C. F. Barnett, no date)
Box 247, Folder 16	"Energy and America" (Conoco ad, no date) [photocopy]
Box 247, Folder 17	"New Power Problem: 'Visual Pollution'" (US News and World Report [?]; no date)
Box 247, Folder 18	"The Oak Ridge Thermonuclear Experiment" (C. F. Barnett et al)
Box 247, Folder 19	unidentified report on Satellite Solar Power Station concept [in German; pp.171-182 only]
Box 248, Folder 1	miscellaneous reports from ORNL
Box 248, Folder 2-3	miscellaneous material on energy [2 folders]

Box 248, Folder 4	miscellaneous material on energy
Box 256, Folder 27	miscellaneous material on energy [oversized material]
Box 248, Folder 5	miscellaneous material on energy from Aerospace Daily, Feb-Mar 1974
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Box 248, Folder 7	energy model transparencies
Box 248, Folder 8	miscellaneous graphics - "Estimated average load diversity for the United States in 1985"
Box 248, Folder 9	miscellaneous material on energy extraction
Box 248, Folder 10	miscellaneous material on fusion reactions
Box 248, Folder 11	miscellaneous material on fusion reactors
Box 248, Folder 12	miscellaneous material on lasers
Box 248, Folder 13	miscellaneous material on nuclear energy
Box 248, Folder 14	miscellaneous material on space power
Box 256, Folder 28	miscellaneous material on space power [oversized material]
Box 248, Folder 15-16	miscellaneous material on energy [2 folders]
Box 248, Folder 17-26	miscellaneous material on space power [9 folders]
Box 248, Folder 27-28	notes on energy generation [2 folders]
Box 248, Folder 29	miscellaneous graphics on space power
Box 248, Folder 30	notes and abstracts on solar power stations
Box 249, Folder 1	miscellaneous pages on space power
Box 249, Folder 2	miscellaneous pages on Nuclear Power Generation Satellite (NPGS)
Box 249, Folder 3-4	notes on Satellite Power Systems [2 folders]
Box 249, Folder 5	miscellaneous graphics and correspondence on PGS [Power Generating Satellite]

Box 249, Folder 6-7	miscellaneous material on microwave transmission / PRS [Power Relay Satellite] [2 folders]
Box 249, Folder 8	miscellaneous graphics on PRS
Box 249, Folder 9	miscellaneous pages on PRS
Box 249, Folder 10	miscellaneous material on energy transfer / PRS
Box 249, Folder 11-13	miscellaneous material on PRS [3 folders]
Box 249, Folder 14	list of documents on power transmission requested by Ehrlicke, circa Feb 1973
Box 249, Folder 15	miscellaneous photocopies on space power
Box 249, Folder 16	miscellaneous photocopies
Box 255, Folder 24	"Some Calculations of the Power Relay Sattelite [sic]" [oversized material]

Space Light

Named Files

Box 249, Folder 17-18	Lunetta Research [2 folders]
Box 249, Folder 19	Space Light (1)
Box 250, Folder 1-2	Space Light (2) [2 folders]
Box 250, Folder 3	Space Light Material

Miscellaneous Reference Materials

1967

	"The Uses of Orbiting Reflector Satellites" (A. G. Buckingham and H. M. Watson, AAS paper 67-118, presented at AAS 13th Annual Meeting "Commercial Utilization of Space", 1-3 May 1967) [2 folders]
Box 250, Folder 4	conference print
Box 250, Folder 5	print from microfiche

Box 250, Folder 6	"Reflecting Satellite: NASA Study Causes Concern Among Astronomers" (Bryce Nelson, Science 155 (1967) : 304-306)
1978	
Box 250, Folder 7	"Eine Sonne für die Nacht" (Stern 31, no.51 (14 Dec 1978) : 100-108)
1979	
Box 256, Folder 29	"Mond und Sterne als kosmische lanternen nutzen" (Welt der Technik, 19 Oct 1979, p.21) [oversized material]
1980	
Box 250, Folder 8	Lunetta Control System - Preliminary Study (John Dickinson, Brent Dussia, Robert Muratore, and Jim Suderman, Aug 1980)
Undated	
Box 250, Folder 9	Soletta Power Economics (no date)
Box 250, Folder 10	derviation of mass of one-square-mile reflector
Box 250, Folder 11	miscellaneous pages - "Appendix B - Solar Flux and Geophysical Data"
Box 250, Folder 12-13	miscellaneous photocopied pages from IES Lighting Handbook [2 folders]
Box 250, Folder 14	miscellaneous pages on Soletta
Box 250, Folder 15	miscellaneous notes on Soletta
Box 250, Folder 16-17	miscellaneous graphics on Soletta [2 folders]
Box 250, Folder 18	material on Lunetta
Box 250, Folder 19	NR graphics on Lunetta

Information Services

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Box 251, Folder 1	Communications
Box 251, Folder 2	Communications Satellites

Studies and Projects

Multifunction Information Transfer Satellite (MITS; NASA Study) [6 folders]

Box 251, Folder 3	MITS – Correspondence
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Box 251, Folder 5-8	miscellaneous graphics [4 folders]

Miscellaneous Reference Materials

1958	
Box 251, Folder 9	"Powerful Transmitter Uses Less Power" (Industrial Laboratories, Jun 1958)
1962	
Box 251, Folder 10	Large Ground Antennas (Eberhardt Rechlin, Bruce Rule, and R. Stevens, JPL TR 32-213; 20 Mar 1962)
Box 251, Folder 11	"Radio Frequency Allocations, Geneva 1959" (International Science and Technology, Jul 1962 : 36-39)
1965	
Instrumentation Satellite Feasibility Study (USAF contract AF19(628)-4181)	
Box 251, Folder 12-14	Final Report, Vol. 1 (unclassified) (Lockheed report LMSC-B111961, AFSC Technical documentary report ESD-TR-65-417, Vol.1, 9 Aug 1965) [photocopy] [3 folders]
1966	
Box 252, Folder 1	Coherent Optical Array Transceiver - Feasibility Evaluation Program (NA report T6-233/3061, 7 Feb 1966) [proposal to NASA]
Box 252, Folder 2	"Operational Telecasting by Spacecraft after 1975" (Richard B. Morton, AAS paper 66-24, presented to AAS 12th National Meeting, 21-23 Feb 1966)
Box 252, Folder 3	"Information Transfer Satellites - Sec. 1: Analysis of Future Information Transfer Requirements" (Edgar M. Van Vleck, OART report, 14 Nov 1966)
1967	

Orbiting Data Relay Network Study (NASA Contract NASw-1446) [3 folders, total]

Box 252, Folder 4	Interim Report (Lockheed report, 10 Jan 1967) [photocopy]
Box 252, Folder 5-6	Final Report (Lockheed Missile and Space Co report LMSC-699559, 10 Apr 1967) [photocopy] [2 folders]
Box 252, Folder 7	Communications Aspects of the Multifunctional Information Transfer Satellites (E. D. Gibson, NR Autonetics report TM 68-572-21-2, 11 Oct 1967)
1968	
Box 252, Folder 8	Synchronous Relay Satellite - A Study of Field-of-View and Orbit Relationships (NR report SD 68-11, 1 Feb 1968)
Box 252, Folder 9	"Information Distribution Systems for Developing Nations" (Philip A. Rubin, presented to IEEE Winter Convention on Aerospace & Electronics Systems, 14 Feb 1968)
Box 252, Folder 10	"Apollo Telecommunications System Characteristics" (D. S. Mercadante to R. A. Stearns, NR Internal Letter IL 68-063-RAS-76, 26 Mar 1968)
Box 252, Folder 11	note from D. Mercadante on Apollo communications system
Box 253, Folder 1	"Communications Satellite Applications" (Philip A. Rubin, Hughes report, presented to Association of Professional Broadcasting Education Annual Convention, 30 Mar 1968)
Box 253, Folder 2	"Large Space Erectable Communication Antennas" (J. A. Fager, IAF paper SD-9, presented at IAF 19th International Astronautical Congress, 13-19 Oct 1968)
1969	
Box 253, Folder 3	Parametric Analysis of Microwave and Laser Systems for Communication and Tracking - A Summary (F. Kalil, NASA report TR R-309, Apr 1969)
Box 253, Folder 4	"Computer Lag Hits Reds in Space" (San Diego Union (28 Nov 1969))
	Trends in the Demand for Information Transfer (NASA Contract NAS2-5369)
Box 253, Folder 5	Final Report - Parallel Demand Trend Analysis of an Information Transfer Satellite Requirement Study (Stanford Research Institute report, 2 Dec 1969)

1970

Box 253, Folder 6	Information Transfer System Requirements (NASA Contract NAS2-5352) [material sent to Ehrlicke by Edgar M. Von Vleck, 14 Jul 1970] Notes: Missing Title: <ul style="list-style-type: none"> • <i>Final Report</i> (Lockheed, NASA contractors report CR-73421, 1 Mar 1970) • <i>Summary Report</i> (Lockheed, NASA contractors report CR-73425, 1 Mar 1970)
	1971
Box 253, Folder 7	material sent to Ehrlicke by Robert Duncan Enzmann, 17 Jan 1971
	1977
Box 253, Folder 8	"Army Speeds Fiber Optics" (Bruce LeBoss, Electronics 3 Mar 1977 : 65-66)
	Undated
Box 253, Folder 9	Advanced Nimbus Data Relay Satellite - Proposal
Box 253, Folder 10	"How NASA Can Directly Service the Individual Public" (Bill McRae, circa Jul 1975)
Box 253, Folder 11	Information Transfer System Requirements (NAS2-5352) briefing packet [photocopy]
Box 253, Folder 12	"Die Möglichkeit des Direkten Fernsehempfangs von Satelliten" (W. Raithel, General Electric, no date)
Box 253, Folder 13	"Planning the Exploitation of Space - Multi-Mission Information Transfer Satellites: The Next Step" (George E. Fosdick and George W. Morgenthaler, no date)
Box 253, Folder 14	"Reference Table of Band Code Letters vs Frequency" (Vectron Inc, no date)
Box 253, Folder 15	miscellaneous material on Comsat
Box 253, Folder 16	miscellaneous unidentified material on information transfer

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Series 5: Miscellaneous Personal Files and Posthumous Material

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Box 253, Folder 17	Detroit (MI) Rocket Society - Annual Report/Membership List/Constitution and By-Laws (1950)
Box 253, Folder 18	Rocketscience (1951-1952) [Detroit (MI) Rocket Society newsletter]
Box 254, Folder 1	Weltraumfahrt 1956 No.4 (Nov 1956) [Ehrlicke receives IAF's Günter Loeser Award]
Box 254, Folder 2	International Academy of Astronautics (1960)
Box 254, Folder 3	miscellaneous clippings (circa 1965)
Box 254, Folder 4	"Spaceman's Salute" (Henry G. Edler, 1966)
Box 254, Folder 5	"What's In a Name - On the Moon?" (I. M. Levitt, Space Digest, Jan 1968 : 66-69)
Box 254, Folder 6	"Are You Geared to Problems or Solutions?" (Charles H. Ford, unidentified publication, circa Feb 1970) : 26-29)
Box 254, Folder 7	miscellaneous correspondence (1970)
Box 254, Folder 8	correspondence with Verlag Karl Thiemig KG (1971)
Box 254, Folder 9	10 Jahre: 1963-1972 - Erfahrungs- und Rechenschafts-bericht (TUB-IR-1972/3, Dec 1972)
Box 254, Folder 10	miscellaneous correspondence (Jan 1973)
Box 254, Folder 11	notes on USIA speakers
Box 254, Folder 12	Richard Höhn to Ehrlicke, 27 Oct 1974 [regarding Hobby - Das Magazin der Technik]
Box 254, Folder 13	Who's Who in America (38th Ed, 1974-1975), Vol. 1 [photocopies of Ehrlicke's entry]
Box 254, Folder 14	Virginia Meltickian to Ehrlicke, 7 Jun 1976 [sample issue of Elektrische Ausrüstung für Maschine und Betrieb (Apr 1976)]
Box 254, Folder 15	Linton to Ehrlicke, 14 May 1977
Box 254, Folder 16	politics (circa 1980)

Box 256, Folder 30	politics (circa 1980) [oversized materials]
Box 254, Folder 17	material on Orbital Systems Corp
Box 254, Folder 18	Astronautik 21 No.4 (1984) [Ehricke receives AIAA Goddard Astronautics Award]
Box 254, Folder 19	miscellaneous pages
Box 254, Folder 20	miscellaneous photos from desk
Box 255, Folder 25	page from National Management Association Rockwell International, Space Club newsletter [photolith; oversized material]
Box 254, Folder 21	Fusion (English ed) 6 No.4 (Nov-Dec 1984) [Ehricke's obituary]
Box 254, Folder 22	"International Private Initiative on Behalf of Successive Colonization of the Moon and Mars" (Fusion Energy Foundation Memorandum, 1985)
Box 256, Folder 31	"The Truth About the German Rocket Scientists" (Marsha Freeman, published in 5 parts in New Solidarity, May 27-Jul 29, 1985) [oversized material]

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