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Charles M. Atkins, List of Academic Theses Since 1961
Related to the History of Aeronautics and Astronautics
(NASA Historical Note 61, July 1966)

This preliminary listing of academic theses of interest to historians and social scientists is made available for general information, critical comments and related suggestions. The NASA Historical Advisory Committee suggested that such a listing might provide useful perspective on contemporary scholarship. Mr. Charles Atkins, a member of our Summer Seminar on "History, Social Science and Space" and graduate student in Political Science at M.I.T., kindly undertook this task.

The NASA Historical Staff is also sponsoring preparation of a bibliography of bibliographies on the history of aeronautics and astronautics, and is undertaking a list of research resources available for academic scholarship. These will be available sometime this fall.

Eugene M. Emme
NASA Historian

Comment Draft

LIST OF ACADEMIC THESES
SINCE 1961
RELATED TO THE
HISTORY OF AERONAUTICS AND ASTRONAUTICS

(HHN-61)

Compiled by

Charles M. Atkins
(M.I.T.)

NASA Historical Staff

Washington, D.C.

July 1966

F O R E W O R D

This listing represents a first attempt to compile academic theses of relevance to the history of aeronautics and astronautics. It has been estimated that almost 70,000 doctoral dissertations have been completed in American universities since 1961, so this select compilation must be regarded as preliminary. In accord with the desire of the Historical Staff of the National Aeronautics and Space Administration to assist scholarly research, it is hoped that this list may be suggestive. It will, hopefully, stimulate a response which will permit additions to this listing of interest to historians and other scholars concerned with science, technology, and public policy in the twentieth century.

Selected theses are grouped into four major categories: History, Social Science (implicitly including Economics, International Relations, Law, and Political Science), Natural Science (implicitly including Astronomy, Meteorology, and Physics), and Engineering (implicitly including Aeronautical and Mechanical). Thus, it is apparent that only a relatively small portion of all the existing theses have

been listed; the premise was that the above fields would be of major interest to historians and social scientists.

Within each of the four major categories are listed the authors in alphabetical order, the title of their thesis, the degree-awarding institution, and the date of completion. Unless a specific reference appears, it may be assumed that these theses represent doctoral dissertations.

The major sources of data regarding these theses included:

Index to American Doctoral Dissertations 1961-1962
Ann Arbor, Mich., University Microfilms, Inc., 1963

Index to American Doctoral Dissertations 1962-1963
Ann Arbor, Mich., University Microfilms, Inc., 1964

American Doctoral Dissertations 1963-1964
Ann Arbor, Mich., University Microfilms, Inc., 1965

American Doctoral Dissertations 1964-1965
Ann Arbor, Mich., University Microfilms, Inc., 1966

List of Doctoral Dissertations In History In Progress or Completed at Colleges and Universities in the United States Since 1961, Washington, D.C. Compiled and edited by W. R. Rundell, Jr., American Historical Association, November 1964

Additions, corrections, or other comments - addressed to the NASA Historical Staff - would be appreciated.

Charles M. Atkins

HISTORY

- Bilstein, Roger E., "Social and Economic Effects of Civil and Commercial Aeronautics in the United States, 1925-1941," Ohio State University (196?)
- Boodey, C. Webster, Jr., "National Claims to the Use of Outer Space for Military Purposes and the Development of the Public International Law of Space," New York University (196?)
- Bottomo, Edgar M., "The Missile Gap - A Study in the Formulation of Public Policy, 1957-1961," Fletcher School of Law and Diplomacy (196?) ←
- Calvert, Monte A., "The Professionalization of the American Mechanical Engineer, 1840-1940," University of Pittsburgh (196?)
- Chapin, Seymour L., "Astronomy and The Paris Academy of Sciences During the Eighteenth Century," University of California, Los Angeles (196?)
- Davies, Alan C., "The Exchange of Technological Information between the U.S. and Britain in the 19th Century," Princeton University (196?)
- Deierhoi, Tyler, "The Great Powers and the Disarmament Conference of 1932," Duke University (196?)
- Ford, W. B., "Communications Satellites: Technical Innovation and Foreign Policy," Fletcher School of Law and Diplomacy (1966) M.A.
- Graham, Loren R., "History of the Soviet Academy of Sciences, 1927-1932," Columbia University (196?)
- Griffith, E. Alison, "The Genesis of the National Aeronautics and Space Act of 1958," Columbia University (1960) M.A. ←
- Haney, Herbert L., "Comets: A Chapter in Science and Superstition in Three Golden Ages: the Aristotelian, the Newtonian, and the Thermonuclear," University of Alabama (1964-65)

Kevles, Daniel J., "History of the Physics Profession in the U.S., 1865-1920," Princeton University (196?)

Krauskopf, Robert W., "French Air Power Policy: 1919-1939," Georgetown University (196?)

→ Lasby, Clarence G., "German Scientists in America: Their Importation, Exploitation and Assimilation, 1945-1952," University of California, Los Angeles (1961-62)

Lofgren, Charles A., "American Strategic Studies, 1945-1960: An Intellectual History," Stanford University (196?)

Miller, Edward A., "The Founding of the U.S. Air Force Academy, 1954," University of Denver (196?)

Morris, Max K., "Politico-Military Coordination in the United States Armed Forces," Fletcher School of Law and Diplomacy (196?)

Newton, Wesley P., "Aviation in the Relations of the United States and Latin America, 1916-1929," University of Alabama (1963-64)

Rosholt, Robert L., "An Administrative History of NASA, 1958-1963," University of Minnesota (1965)

Winnik, Herbert, "The Views of American Scientists on Science and Related Material Put in their Historical Context, 1875-1910," University of Wisconsin (196?)

SOCIAL SCIENCE

- Adams, Robert S., "U.S. Disarmament Proposals, 1919 to Date: A Comparative Analysis with Special Reference to an International Organization," New School for Social Research (1965)
- Ambrose, Mary S., "The National Space Program," American University (1961) M.A. ←
- Armacost, Michael H., "The Thor-Jupiter Controversy: A Case Study in Service Rivalry and Weapons Innovation," Columbia University (196?) ←
- Bok, Enid, "Making American Space Policy: The Establishment of NASA," Massachusetts Institute of Technology (1963) Working Paper ←
- Browre, Michael, "The Birth of the Atomic Age: A Study in U.S. Policy Making," Harvard University (1965)
- Comfort, Kenneth J., "The Development of Nuclear Weapons for Tactical Use: A Study in the Problems of Weapons Innovation," Columbia University (1965)
- Coyne, Edward, "Genesis of a Space Astronomy Program in NASA," Case Institute of Technology (1965) M.A.
- Evans, Eugene E., "Dispute Settlement and Hierarchy: The Military Guided Missile Controversy, 1955-1960," University of Illinois (1962-63) ←
- George, Edward Y., "Shortage of Engineering Manpower: A Study of the Concept of 'Shortage' in Scientific and Engineering Manpower with Special Reference to Chemical Engineers," New School for Social Research (1961-62)
- Hall, R. Cargill, "International Legal Aspects in Space Exploration," San Jose State (1966) M.A.
- Holmfeld, John, "The Establishment and Site Selection of the NACA Engine Research Laboratory (Lewis Research Center)," Case Institute of Technology (1966) M.A.

- Huszagh, Frederick W., "The International Law-Making Process: A Case Study on the International Regulation of Space Telecommunication," University of Chicago (1963-64)
- Hydo, C. M., Reverend Emerick John, "The U-2 Espionage Incident," St. John's University (1961-62)
- Jahnige, Thomas Paul, "Congress and Space: The Committee System and Congressional Oversight of NASA," Claremont Graduate School (1964-65)
- Johns, Claude J., Jr., "The United States Air Force Intercontinental Ballistic Program, 1954-59: Technological Change and Organizational Innovation," University of North Carolina (1963-64)
- Kash, Don E., "International Cooperation in Space," University of Iowa (1964)
- Kerr, James R., "Congressmen as Overseers: Surveillance of the Space Program," Stanford University (1962-63)
- Klette, Immanuel J., "Some Implications of National and International Aspects of Outer Space," Georgetown University (1962-63)
- Kline, Raymond C., "Some Political and International Law Problems Related to Outer Space," American University (196?)
- Levin, Theodore H., "An Economic Study of Policy in Air Transportation: Local Service Airlines," American University (1964-65)
- Levine, Arthur L., "United States Aeronautical Research Policy, 1915-1958: A Study of the Major Policy Decisions of the NACA," Columbia University (1962-63)
- Lycan, Deane R., "Defense-Space Research and Development Contracting Expenditures: Analysis and Some Implications of their Aerial [sic] Patterns," University of Washington (1964-65)
- McBride, James H., "The Senate and the Test Ban Treaty: Hearings and Debate," Georgetown University (1965)
- Mitchell, Ralph E., "Atomic Air Power and American Foreign Policy: The Period of Nuclear Monopoly, 1945-49," University of Kentucky (1964-65)

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- Mitchell, Ralph E., "Atomic Air Power and American Foreign Policy: The Period of Nuclear Monopoly, 1945-49," University of Kentucky (1964-65)

- Mobius, Joseph B. M., "Communication Processes and United States Government Policy: The Development of a Communication Satellite Policy in the Executive Branch," Massachusetts Institute of Technology (1964-65)
- Morenoff, Jerome, "Reconnaissance in Air Space and Outer Space: A Legal Analysis and Prognosis," George Washington University (1964-65)
- Pack, Janet R., "Economic Implications of Disarmament," University of California, Berkeley (196?)
- Posner, Jack, "Implementation of the Communication Satellite Act of 1962," American University (1966)
- Puckett, Robert H., "International Control and Limitation of Space Activities: The American National Interest," University of Chicago (1961-62)
- Schick, Jack M., "The Limits of War: A Study of Politics and the Polaris," University of Chicago (1961-62)
- Smith, Gordon, "The R.A.F. Warplans [sic] and British Foreign Policy, 1935-40," Massachusetts Institute of Technology (1966)
- Smoke, Richard L., "Civil-Military Relations in the American Space Program: 1957-60," Harvard College (1965) Honors Thesis ←
- Swaine, Howard R., "Subsidization of Local Air Services," University of California, Los Angeles (1964-65)
- Tascher, John, "The Cleveland Rocket Society," Case Institute of Technology (1965) M.A.
- Terchek, Ronald, "The Making of the Test-Ban Treaty: A Study in Legislative Decision Making," University of Maryland (1965)
- Unger, Bernard, "Organizing for Manned Space Flight," George Washington University (196?) ←
- Weibel, Eugene U., "International Civil Aviation and Federal Power," Harvard University (1962-63)

Wyand, Martin J., "U.S. Trunk Airlines in Technological
Transition: Some Changing Cost Considerations,
1961-62," University of Illinois (1964-65)

NATURAL SCIENCE

- Anderson, John D., "Motion of the Node and Perigee for a Near Earth Satellite Subject to Perturbation by the Moon or Sun," University of California, Los Angeles (1961-62)
- Barnes, Arnold A., Jr., "Energy Balance of the Stratosphere During the IGY," Massachusetts Institute of Technology (1961-62)
- Coyne, George V., "Comparative Spectrophotometry of Selected Areas on the Lunar Surface," Georgetown University (1961-62)
- Kidd, John, "A Study of High-Energy Gamma Rays at the Top of the Atmosphere," University of Chicago (1961-62)
- Manasse, Fred K., "Distortion in the Metric of a Small Center of Gravitational Attraction Due to its Proximity to a Very Large Mass," Princeton University (1961-62)
- Marcus, Allan H., "A Stochastic Model of the Formation and Survival of Lunar Craters," University of California, Berkeley (1964-65)
- Miller, Charles R., "The Orientation of Dust Grains in Interstellar Space," California Institute of Technology (1961-62)
- Obasi, Godwin O. P., "Atmospheric Momentum and Energy Calculations for the Southern Hemisphere During the IGY," Massachusetts Institute of Technology (1962-63)
- Oesterwinter, Claus, "The Motion of a Lunar Satellite," Yale University (1964-65)
- Pilet, Stanford C., "First Order Secular and Long Period Perturbations of an Artificial Lunar Satellite," University of Cincinnati (1962-63)

- Pollack, James B., "Theoretical Studies of Venus: An Application of Planetary Astrophysics," Harvard University (1964-65)
- Schorn, Ronald A., "Radiation Pressure Effects on Earth Satellite Orbits," University of Illinois (1962-63)
- Scott, Dan W., "Extensive Air Showers at High Altitudes," Massachusetts Institute of Technology (1961-62)
- Shen, William Chuan-Chieh, "The Generation of Available Potential Energy due to Horizontal Variations in Terrestrial Radiation as Measured by The Satellite Explorer VII," University of Wisconsin (1963-64)
- Sowle, David H., "The Magnetic Effects of High Altitude. Large Yield Nuclear Explosions," University of Minnesota (1961-62)
- Teweles, Sidney, "Spectral Aspects of the Stratospheric Circulation During the IGY," Massachusetts Institute of Technology (1962-63)
- Winter, Donald F., "A Theory of Radar Reflection from the Moon," Harvard University (1961-62)
- Wintz, Edward K., "Geometric Applications of Artificial Earth Satellite Observations," Ohio State University (1964-65)

ENGINEERING

- Abzug, Malcolm G., "Attitude Control of Multiple-Part Satellites," University of California, Los Angeles (1961-62)
- Aldrin, Edwin E., Jr., "Line of Sight Guidance Techniques for Manned Orbital Rendezvous," Massachusetts Institute of Technology (1962-63)
- Aronne, John F., "Managing the Airspace: A Study of Air Traffic Control," New York University (1963-64)
- Bohne, Quentin R., "Ground Wind-Induced Loads on Axisymmetric Launch Vehicles," University of Minnesota (1962-63)
- Bowen, Ray M., "Theoretical Performance of Liquid Hydrogen with Liquid Ozone as a Rocket Propellant," Agriculture and Mining College of Texas (1961-62)
- Bowers, James C., "Optimum Analogue and Digital Attitude Control Systems for Space Vehicles," University of Washington (1963-64)
- Brofman, Woody, "Approximate Analytical Solution for a Satellite Orbit Subjected to Small Thrust or Drag," Polytechnic Institute of Brooklyn (1963-64)
- Clancy, Thomas F., "Effects of Radiation Forces Upon the Attitude of an Artificial Earth Satellite," Cornell University (1962-63)
- Crocker J. Allen, "The National Aeronautics and Space Administration," George Washington University (1962) M.S. ←
- Firstman, Sidney I., "Operational Methods for Space Vehicle Countdown Planning," Stanford University (1963-64) ←
- Hankey, William L., Jr., "Optimization of Lifting Re-entry Configurations," Ohio State University (1962-63)

- Hollister, Walter M., "Mission for a Manned Expedition to Mars," Massachusetts Institute of Technology (1962-63)
- Keller, Jack L., "Optimum Rendezvous Maneuvers for High Thrust Rockets," Polytechnic Institute of Brooklyn (1962-63)
- Kishi, Francis H., "Digital Computer Controlled Adaptive Processes with Application to the Re-Entry of Aerospace Vehicles," University of California, Los Angeles (1963-64)
- Kornreich, Theodore R., "Analysis of Interplanetary Spacecraft Missions," Polytechnic Institute of Brooklyn (1964-65)
- Kroeger, Richard A., "Rocket Thrust Stand Simulation of Space Vehicle Flight," University of Oklahoma (1963-64)
- Lee, Vernon A., "Development of a Method for the Determination and Analysis of Optimum Constrained Ballistic Orbit Transfer Mission," University of Texas (1962-63)
- Liu, Han-Shou, "The Dynamics of a Rigid, and of a Deformable, Dumbell Satellite," Cornell University (1963-64)
- McCoonell, Dudley G., "A Study of Transient Melting Ablation About a Decelerating Spherical Body," California Institute of Technology (1963-64)
- Martin, Frederick H., "Closed-Loop Near-Optimum Steering for a Class of Space Missions," Massachusetts Institute of Technology (1964-65) Classified
- Miller, James S., "Trajectory and Guidance Theory for a Low-Thrust Lunar Reconnaissance Vehicle," Massachusetts Institute of Technology (1961-62)
- New, Noah C., "Spacecraft Attitude Control for Extended Missions," Massachusetts Institute of Technology (1962-63)

- Nicolaides, John D., "On Missile Flight Dynamics,"
Catholic University of America (1962-63)
- Pringle, Ralph, Jr., "On the Capture, Stability, and
Passive Damping of Artificial Satellites," Stanford
University (1963-64)
- Schwartz, Jay W., "Data Processing in Scientific Space
Probes," Yale University (1963-64)
- Smelt, Ronald, "Upper-Atmosphere Properties Derived
From Discoverer Satellites," Stanford University
(1961-62)
- Stern, Robert G., "Interplanetary Mid-Course Guidance
Analysis," Massachusetts Institute of Technology
(1962-63)
- Wu, Jain-Ming, "A Satellite Theory and Its Applications,"
California Institute of Technology (1964-65)