Biographical Sketch of Mr. Bruce T. Lundin

Mr. Lundin is a native of California and received his B.S. degree in Mechanical Engineering from the University of California in 1942. He joined the staff of the Lewis laboratory late in 1943, after working about a year and a half as project engineer on refinery design for the Standard Oil Company of California.

During the war, he was engaged in heat-transfer research and investigations of the cooling characteristics of multi-cylinder liquid-cooled engines. With the swing to jet engines at the close of the war, he became Head of the Jet-Propulsion Research Section which conducted some of the early research on turbojet performance characteristics, on afterburners for turbojet engines, and on turbojet thrust augmentation by liquid injection. In 1949, Mr. Lundin was appointed Assistant Chief and in 1952 Chief of the Engine Research Division of the Lewis laboratory. In this capacity, he is responsible for the supervision and direction of the full-scale engine research program of the Lewis laboratory. This program covers analytical and experimental research on full-scale turbojet and ram-jet engines under simulated flight conditions, on automatic control systems for various types of engines, on jet-engine exhaust systems and on analytical studies of complete propulsion systems.

Mr. Lundin is author of numerous publications on turbojet thrust augmentation, engine performance and operational characteristics and turbojet design for supersonic propulsion. He has also presented many papers at national NACA conferences and professional society meetings and is author of the chapter on Ram-Jet Engines in the Princeton Series on High-Speed Aerodynamics and Jet Propulsion.

Mr. Lundin is an Associate Fellow of the Institute of the Aeronautical Sciences and present Chairman of the Cleveland-Akron Section. He is also a member of Tau Beta Pi and Sigma Xi. He has been a member of the NACA Subcommittee on Engine Performance and Operation since its organization in 1950. He was also recipient of the annual award of the Cleveland Technical Society's Council to the Outstanding Junior Engineer in the Cleveland area in 1953.

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Biography

of

Bruce T. Lundin

Bruce T. Lundin, a native of Alameda, California and a graduate of Mechanical Engineering from the University of California in 1942, began his scientific career with the National Advisory Committee for Aeronautics in 1943 at the Lewis Research Center. He was initially engaged in heat transfer investigations and in improving the performance of our World War II aircraft engines. In 1946 he was placed in charge of the Jet Propulsion Research Section, which conducted some of our country's early research on turbojet engines.

In 1952 Dr. Lundin was appointed Chief of the Engine Research Division at the Center a nd became responsible for the full-scale engine program. Work that he directed over the next several years contributed significantly to the performance and reliability of today's commercial transport and military aircraft engines.

When NACA became the nucleus of the present National Aeronautics and Space Administration in 1958, Dr. Lundin was appointed an Assistant, and later Associate, Director of the Center. In this capacity he directed much of the Center's expanded role in space propulsion and power generation, including turbojet engines, chemical rockets and the electric propulsion of spacecraft using chemical, solar and nuclear energy sources. He also directed the development and operation of NASA's medium-class launch vehicles, including the Centaur launch vehicle, the world's first rocket to utilize liquid hydrogen as a fuel.

In May 1968, Dr. Lundin was transferred to NASA Headquarters as Deputy, and later Acting, Associate Administrator of the Office of Advanced Research and Technology. In this position, he was responsible for program development and the overall operation and institutional management of the four NASA Research Centers (Ames, Dryden, Langley and Lewis).

On Nov. 1, 1969, Dr. Lundin was appointed Director of the Lewis Research Center, a federal laboratory of about 3500 employees with an annual budget of 350 million engaged in aeronautical propulsion research, space propulsion and power research and launch vehicle development and operation. During the last few years, Dr. Lundin also led the Center into the new fields of space communications, energy R&D and ground transportation. In 1977, after nearly 35 years of continuous public service, Dr. Lundin resigned his position to enter private life.

In 1978, Dr. Lundin served as Chairman of the NASA Seasat Failure Review Board and in 1979 as Staff Director and Consultant to the Chairman of the President's Commission on the Accident at Three Mile Island. He is currently engaged as a consultant on wind, and nuclear energy systems.

Dr. Lundin is a member of the National Academy of Engineering, a Fellow of the American Institute of Aeronautics and Astronautics, the American Astronautics Society a nd the Royal Aeronautical Society, and a member of the American Society for Public Administration. He is also a member of Tau Beta Pi and Sigma Xi, a former advisor to the U.S. Air Force Scientific Advisory Board and, for seven years, the NASA member of the Aerospace Safety Advisory Panel that was established by the Congress after the Apollo 204 fire.

Dr. Lundin's awards and honors include the NASA Medal for Outstanding Leadership in 1965, the NASA Distinguished Service Medal in 1971 and 1977, the NASA Public Service Award in 1971 and 1975 and he was the recipient of the National Space Club's Engineer of the Year Award in 1976. In 1975, he was awarded the honorary degree of Doctor of Engineering from the University of Toledo.

Dr. Lundin and his wife, ~~Barbara~~ Jean, ~~are the parents of three grown children and~~ reside at their home in North Olmsted, Ohio.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WASHINGTON 25, D. C.

BRUCE T. LUNDIN
ASSISTANT DIRECTOR
LEWIS RESEARCH CENTER

Bruce T. Lundin, Assistant Director, Lewis Research Center of the National Aeronautics and Space Administration at Cleveland, Ohio, began his career at Lewis in 1943 in the Thermodynamics Division.

During World War II he was engaged in heat-transfer research and investigations of the cooling characteristics of multi-cylinder liquid-cooled engines. At the close of the war, he became head of the Jet Propulsion Research Section which conducted some of the early research on turbojet performance characteristics on afterburners for turbojet engines, and on turbojet thrust augmentation by liquid injection.

In 1949 Mr. Lundin was appointed Assistant Chief of the Engine Research Division at Lewis, and became Chief of that Division, with responsibility for the supervision and direction of the full-scale engine research program in 1952. This program covered analytical and experimental research on full-scale turbojet and ramjet engines under simulated flight conditions, on automatic control systems for various types of engines, on jet engine exhaust systems, and on analytical studies of complete propulsion systems. He was Chief of the Propulsion Systems Division from 1957 until appointment to his present position in October, 1958.

Mr. Lundin was born in Alameda, California, on December 28, 1919. He earned a Bachelor's degree in Mechanical Engineering from the University of California in 1942. He is the author of the chapter on Ramjet Engines in the Princeton Series on High-Speed Aerodynamics and Jet Propulsion. He is an Associate Fellow of the Institute of the Aeronautical Sciences, and was a member of the NACA Subcommittee on Engine Performance and Operation from its organization in 1950 until 1958, when the NACA became the nucleus of NASA.

Mr. Lundin resides at 3331 Metropolitan Parkway, North Royalton, Ohio, with his wife, Barbara, and their three children, Dianne, Robert, and Nancy.

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NACA Lewis Flight Propulsion Laboratory
21000 Brookpark Road, Cleveland 11, Ohio

Portrait available:

BRUCE T. LUNDIN

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Mr. Lundin resides at 7061 Beresford Avenue, Parma Heights, Ohio, with his wife, Barbara, and their three children, Dianne, Robert, and Nancy.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WASHINGTON, D. C. 20546

BIOGRAPHICAL DATA

BRUCE T. LUNDIN

Deputy Associate Administrator
Advanced Research and Technology

Bruce T. Lundin is the Deputy Associate Administrator for Advanced Research and Technology at NASA Headquarters, Washington, D.C. His appointment to the position was effective August 1, 1968.

The Office of Advanced Research and Technology (OART), one of four major NASA program offices, is responsible for the planning, conduct, and dissemination of the results of all NASA aeronautical and space-related research, as well as coordination of supporting research and technology efforts required for specific missions.

As Deputy Associate Administrator, Lundin exercises the No. 2 functional role in overseeing the broadly-based scientific and engineering tasks undertaken by OART to assure that the nation remains at the forefront of advancements in aviation and space.

Lundin came to Washington from the NASA Lewis Research Center, Cleveland, Ohio; where he had been Associate Director for Development and had a distinguished career in aeronautical propulsion and launch vehicle technology. He had directed at Lewis such propulsion and space power generation programs as Centaur, Atlas-Agena, and SNAP-8.

Lundin was born in Alameda, California, December 28, 1919. He received a B.S. degree in mechanical engineering in 1942 from the University of California. He began his scientific career with the National Advisory Committee for Aeronautics (NACA) in 1943 at the Lewis center. When the NACA became part of the National Aeronautics and Space Administration in October, 1958, Lundin was appointed Associate Director of the center, directing the organizational aspects and planning required for the center's expanding role in research.

The NASA executive is a member of Tau Beta Pi, Sigma Xi, an associate fellow of the American Institute of Aeronautics and Astronautics, and a fellow of the Royal Aeronautical Society. He is also a member of several governmental advisory committees, including the NASA

Aerospace Safety Advisory Panel, the Scientific Advisory Board of the U.S. Air Force, and the NASA Research Advisory Committee on Space Vehicles. In 1965 he was recipient of the NASA Medal for Outstanding Leadership.

Lundin resides in Annandale, Virginia, with his wife Barbara and three children.

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LEWIS RESEARCH CENTER
CLEVELAND 35, OHIO

BRUCE T. LUNDIN

Mr. Lundin is 41 years of age and was born in Alameda, California. He received a B.S. degree in Mechanical Engineering from the University of California in 1942. He joined the NACA staff at Lewis in 1943 in the Thermodynamics Division, where he was engaged in heat-transfer research and investigations of the cooling characteristics of reciprocating engines. As emphasis was placed on jet engines at the close of the war, he became head of the Jet Propulsion Research Section which conducted some of the early research on turbojet engines, on afterburners for turbojet engines, and on other forms of thrust augmentation.

In 1949 Mr. Lundin was appointed Assistant Chief of the Engine Research Division at Lewis, and became Chief of that Division, with responsibility for the supervision and direction of the full-scale engine research program in 1952. This program covered analytical and experimental research on full-scale turbojet and ramjet engines, on automatic control systems for various types of engines, on jet engine exhaust systems, and on analytical studies of complete propulsion systems. He was appointed Chief of the Propulsion Systems Division in 1957.

Mr. Lundin was appointed to his present position of Assistant Director, Lewis Research Center, in October 1958, when the NACA became the nucleus of NASA. In this capacity he directs the conception and planning, and provides management control for research programs in the following divisions: Chemistry and Energy Conversion, Rocket and Aerodynamics, Nuclear Systems, and Fluid System Components.

He is the author of the chapter on Ramjet Engines in the Princeton Series on High-Speed Aerodynamics and Jet Propulsion. He is an Associate Fellow of the Institute of the Aeronautical Sciences and was Chairman of the Cleveland-Akron Section in 1956-57. He is a member of the American Rocket Society. He was a member of the NACA Subcommittee on Engine Performance and Operation from its organization in 1950 until 1958, and subsequently a member of the NASA Research Advisory Committee on Mechanical Power Plant Systems, also a member of the Department of Defense Advisory Panel on Aeronautics, and a member of the former NASA Research Steering Committee for Manned Space Flight. In 1953, he received the Junior Technical Achievement Award presented by the Cleveland Technical

Society to men under 37 in recognition of technical perfection and scientific promise. He also has some thirty-two additional technical reports and papers, generally classified, in the aeronautical power-plant field. He is also a member of Tau Beta Pi and Sigma Xi.

Mr. Lundin resides at 3331 Metropolitan Parkway, North Royalton, Ohio, with his wife, Barbara, and their three children.

C O P Y

BIOGRAPHICAL SKETCH OF BRUCE T. LUNDIN

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LEWIS RESEARCH CENTER

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The following data was transmitted to Paul J. Burr of IAS regarding Aerospace Technology Panel:
Mr. Lundin - Chairman, Propulsion Systems

IAS Data: Grade - Associate Fellow
Honors/Awards-1953 Junior Technical Achievement Award presented by Cleveland Technical Society
IAS Offices Held - Chairman, Cleveland-Akron Section 1956-57
Prime Professional Interest - Spacecraft and Missile Propulsion Research
Additional Professional Information - Author of the chapter on Ramjet Engines in the Princeton Series on High-Speed Aerodynamics and Jet Propulsion
Also, some (32) additional technical reports and papers, generally classified, in aeronautical powerplant field).

Children: Dianne (12), Robert (10), Nancy (6)

8-29-60

Public Information Office
NASA Lewis Research Center
Cleveland, Ohio 44135
433-4000, ext. 415

BIOGRAPHICAL SKETCH OF BRUCE T. LUNDIN

Bruce T. Lundin joined the staff of the National Aeronautics and Space Administration's Lewis Research Center in 1943 in the Thermodynamics Division where he was engaged in heat-transfer research. He assumed his present position as Associate Director for Development in December 1961. In his present capacity, Lundin directs the planning, procurement and execution of the various propulsion and power generation development programs assigned to Lewis, including the Centaur and Atlas-Agena launch vehicles, and the SNAP-8 power systems.

Lundin is a native of Alameda, Calif., and received a B. S. degree in mechanical engineering in 1942 from the University of California. After joining Lewis in 1943, he became head of the Jet Propulsion Research Section which conducted early research on turbojet engines and other forms of thrust augmentation.

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BIOGRAPHY

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

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When NACA became the nucleus of the present National Aeronautics and Space Administration in October of 1958, Mr. Lundin was appointed an Assistant Director of the Center. In this capacity he directed much of the Center's expanded role in space propulsion and power generation. This role was further enlarged in December, 1961 when he was appointed Associate Director for Development. His responsibilities included development of turbojet engines, chemical rockets, electric thrusters for spacecraft propulsion, and electric power generating systems for spacecraft using chemical, solar and nuclear energy sources. He also directed the development and operation of NASA's Centaur and Agena launch vehicles for unmanned spacecraft and of spacecraft for investigating advanced methods of space propulsion.

In May 1968, Mr. Lundin was appointed Deputy Associate Administrator for Advanced Research and Technology at NASA Headquarters, and in March 1969 was named Acting Associate Administrator for Advanced Research and Technology. On November 1, 1969 he was appointed Director of the Lewis Research Center, the position he now holds.

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February 1973