

Large Energy Development Projects: Lessons Learned from Space and Politics

Harrison H. Schmitt

Apollo 17 Astronaut, former U.S. Senator

Harrison H. Schmitt, a native of Silver City, NM, has the diverse experience of a geologist, pilot, astronaut, administrator, businessman, writer, and U.S. Senator. He received his B.S. from Caltech, studied as a Fulbright Scholar at Oslo, and attended graduate school at Harvard. His Ph.D. in geology in 1964 is based on geological field studies in Norway. As a civilian, Schmitt received Air Force jet pilot wings in 1965 and Navy helicopter wings in 1967.

Selected for the Scientist-Astronaut program in 1965, Schmitt organized the lunar science training for the Apollo Astronauts, represented the crews during the development of hardware and procedures for lunar surface exploration, and oversaw final preparation of the Apollo 11 Lunar Module Descent Stage. He was designated Mission Scientist in support of the Apollo 11 mission. After training as backup Lunar Module Pilot for Apollo 15, Schmitt served as Lunar Module Pilot for Apollo 17 - the last Apollo mission to the moon. On December 11, 1972, he landed in the Valley of Taurus-Littrow as the only scientist and the last of 12 men to step on the Moon.

In 1975, after two years managing NASA's Energy Program Office, Schmitt fulfilled a long-standing personal commitment by entering politics. Elected in 1976, he served a six year term in the U.S. Senate beginning in 1977. Senator Schmitt, the only "natural scientist" in the Senate since Thomas Jefferson was Vice-President of the United States, was a member of the Senate Commerce, Banking, Appropriations, Intelligence, and Ethics Committees. In his last two years in the Senate, Schmitt held the position of Chairman of the Commerce Subcommittee on Science, Technology, and Space and of the Appropriations Subcommittee on Labor, Health and Human Services, and Education. He later served on the President's Foreign Intelligence Advisory Board, the President's Commission on Ethics Law Reform, the Army Science Board, as Co-Chairman of the International Observer Group for the 1992 Romanian elections, and as Vice Chairman of the U.S. delegation to the 1992 World Administrative Radio Conference in Spain.

Harrison Schmitt consults, speaks, and writes on policy issues of the future, the science of the Moon and Planets, and the American Southwest. He is presently Chair Emeritus of The Annapolis Center (risk assessment) and Adjunct Professor of Engineering at the University of Wisconsin-Madison, teaching "Resources from Space." Schmitt's current board memberships include Orbital Sciences Corporation, Edenspace Systems Corporation, and PhDx Systems, Inc., and, as a retired Director, he is a Member of the Corporation of the Draper Laboratory. He is a member of the Energy Department's Laboratory Operations Board. Schmitt founded and is Chairman of Interlune-Intermars Initiative, Inc., advancing the private sector's acquisition of lunar resources and Helium-3 fusion power and clinical use of medical isotopes produced by fusion-related processes.

Schmitt's honors include 1973 Arthur S. Fleming Award, 1973 Distinguished Graduate of Caltech, 1973 Caltech Sherman Fairchild Scholar, NASA Distinguished Service Award, Fellow of the AIAA, Honorary Member of the Norwegian Geographical Society and Geological Association of Canada, 1989 Lovelace Award (space biomedicine), 1989 G.K. Gilbert Award (planetology), and Honorary Fellow of the Geological Society of America, American Institute of Mining, and Geological Society of London. Dr. Schmitt has received honorary degrees from U.S. and Canadian universities. In recognition of past service, the U.S. Department of State in July 2003 established the Harrison H. Schmitt Leadership Award for U.S. Fulbright Fellowship awardees.