



NASA Administrators and Their Professional Backgrounds

President Trump’s nomination of Rep. Jim Bridenstine (R-OK) to become the 13th Administrator of NASA is encountering opposition in part because he lacks a degree in science or engineering and is a politician. Some media sources are asserting that all previous NASA administrators have had backgrounds as scientists, engineers or astronauts.

That is incorrect as shown in the following table, which summarizes the backgrounds of the 11 men who have served as NASA Administrator so far (one of whom, Jim Fletcher, served twice, so is both the fourth and the seventh Administrator). James Webb (1961-1968), often cited as the most effective NASA administrator in the agency’s history, and Sean O’Keefe (2001-2005) did not have degrees in science or engineering and were not astronauts. Webb was a lawyer; O’Keefe was a public administrator.

Bridenstine would be the first politician to hold that job, however. He is in his third term in the U.S. House of Representatives representing the 1st district of Oklahoma. Prior to his election, he was Executive Director of the Tulsa Air and Space Museum & Planetarium. Bridenstine is a naval aviator who is serving in the Oklahoma Air National Guard while he is a Member of Congress. He has a degree from Rice University with a triple major in economics, psychology and business, plus a Master’s in Business Administration (MBA) from Cornell. His congressional biography lists “business experience in real estate, ranching, aerospace, and defense contracting.”

PROFESSIONAL BACKGROUNDS OF NASA ADMINISTRATORS		
Name	Term	Education and Prior Experience
T. Keith Glennan	Aug 19, 1958-Jan 20, 1961	Degree in electrical engineering. Corporate executive (Paramount Pictures, Samuel Goldwyn Studios, Vega Airplane, Ansco Corp); government official (Director, US Navy Underwater Sound Laboratories); academic. Was president-on-leave of the Case Institute of Technology in Cleveland while serving as NASA Administrator.

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Name	Term	Education and Prior Experience
James Webb	Feb 14, 1961-Oct 7, 1968	Degrees in education, law. Military pilot; congressional staffer; corporate executive (Sperry Gyroscope Co; Kerr-McGee Oil Co.); government official (Director of White House Bureau of the Budget—now OMB; Under Secretary of State). Was a director and assistant to the president of Kerr-McGee Oil Industries in Oklahoma prior to becoming NASA Administrator.
Thomas Paine	Mar 21, 1969-Sept 15, 1970 <i>(was Acting Administrator Oct 8, 1968-Mar 21, 1969; Deputy Administrator Mar 25, 1968-Mar 20, 1969)</i>	Degrees in engineering, physical metallurgy. Corporate executive (General Electric). Was manager of TEMPO, GE's Center for Advanced Studies, before joining NASA first as Deputy Administrator (1968) and then Administrator (1969).
James Fletcher	Apr 27, 1971-May 1, 1977 May 12, 1986-Apr 8, 1989	Degrees in physics. Corporate executive (Hughes Aircraft, Ramo-Woolridge Corp.; Aerojet General Corp); academic. Was President of University of Utah before joining NASA as Administrator in 1971. After he left in 1977 he was a consultant and academic until he returned in 1986 following the space shuttle Challenger tragedy.
Robert Frosch	June 21, 1977-Jan 20, 1981	Degrees in theoretical physics. Research scientist and director of research programs for Hudson Laboratories of Columbia Univ; government researcher and manager (DARPA; Asst Sec of the Navy for R&D). Was Asst Exec Dir of United Nations Environmental Program before joining NASA as Administrator in 1977.
James Beggs	July 10, 1981-Dec 4, 1985	Bachelor of Science from the U.S. Naval Academy, plus MBA. Corporate executive (Westinghouse Electric, General Dynamics); government official (NASA AA for Advanced Research and Technology; Under Secretary of Transportation). Was VP and a director of General Dynamics before returning to NASA as Administrator in 1981.
Richard Truly	July 1, 1989-Mar 31, 1992 <i>(was Acting Administrator beginning on May 14, 1989)</i>	Degree in aeronautical engineering. Naval aviator. NASA astronaut. Left NASA in 1983 and returned to the Navy, rising to the rank of Vice Admiral. Was Commander of Naval Space Command in Dahlgren, VA before rejoining NASA in 1986 after the space shuttle Challenger disaster to serve as NASA AA for Space Flight, thereafter becoming Acting Administrator and then Administrator in 1989.

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Name	Term	Education and Prior Experience
Daniel Goldin	Apr 1, 1992-Nov 17, 2001	Degree in mechanical engineering. NASA researcher (Lewis Research Center – now Glenn Research Center); corporate official (TRW). Was VP and General Manager of TRW’s Space and Technology Group before rejoining NASA as Administrator in 1992.
Sean O’Keefe	Dec 21, 2001-Feb 11, 2005	Degree in public administration. Congressional staffer; government official (DOD Comptroller; Secretary of the Navy July 1992-January 1993); academic. Was Deputy Director, White House Office of Management and Budget, before joining NASA as Administrator in 2001.
Michael Griffin	Apr 14, 2005-Jan 20, 2009	Degrees in physics, aerospace science, aerospace engineering , electrical engineering, applied physics, business administration, and civil engineering. Private pilot. Government official (NASA AA for Exploration, NASA Chief Engineer; DOD/SDIO), corporate executive (Orbital Sciences–now Orbital ATK), academic. Was Space Department Head at the Johns Hopkins University Applied Physics Laboratory before rejoining NASA as Administrator in 2005.
Charles Bolden	July 17, 2009-Jan 19, 2017	Bachelor of Science (electrical science) from the U.S. Naval Academy, plus master’s degree in systems management. Marine. Naval aviator. NASA astronaut. Left NASA in 1994 and resumed his Marine career, rising to the rank of Major General before retiring in 2003. He was a consultant before rejoining NASA as Administrator in 2009.

Prepared by SpacePolicyOnline.com.
 Does not include individuals who served only in an acting capacity.
 AA = Associate Administrator.
 DOD/SDIO – Department of Defense/Strategic Defense Initiative Organization
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