## Alan B. Shepard, Jr. (Rear Admiral, USN, Ret.)

NASA Astronaut (Deceased)

PERSONAL DATA: Born November 18, 1923, in East Derry, New Hampshire. Died on July 21, 1998. His wife, Louise, died on August 25, 1998. They are survived by daughters Julie, Laura and Alice, and six grandchildren.

Alan Shepard attended primary and secondary schools in East Derry and Derry, New Hampshire; received a Bachelor of Science degree from the United States Naval Academy in 1944, an Honorary Master of Arts degree from Dartmouth



College in 1962, and Honorary Doctorate of Science from Miami University (Oxford, Ohio) in 1971, and an Honorary Doctorate of Humanities from Franklin Pierce College in 1972. He graduated Naval Test Pilot School in 1951. Later he went to Naval War College, Newport, Rhode Island in 1957.

Shepard began his naval career, after graduation from Annapolis, on the destroyer COGSWELL, deployed in the pacific during World War II. He subsequently entered flight training at Corpus Christi, Texas, and Pensacola, Florida, and received his wings in 1947. His next assignment was with Fighter Squadron 42 at Norfolk, Virginia, and Jacksonville, Florida. He served several tours aboard aircraft carriers in the Mediterranean while with this squadron.

In 1950, he attended the United States Navy Test Pilot School at Patuxent River, Maryland. After graduation, he participated in flight test work which included highaltitude tests to obtain data on light at different altitudes and on a variety of air masses over the American continent; and test and development experiments of the Navy's inflight refueling system, carrier suitability trails of the F2H3 Banshee, and Navy trials of the first angled carrier deck. He was subsequently assigned to Fighter Squadron 193 at Moffett Field, California, a night fighter unit flying Banshee jets. As operations officer of this squadron, he made two tours to the Western pacific onboard the carrier ORISKANY.

He returned to Patuxent for a second tour of duty and engaged in flight testing the F3H Demon, F8U Crusader, F4D Skyray, and F11F Tigercat. He was also project test pilot on the F5D Skylancer, and his last five months at Patuxent were spent as an instructor in the Test Pilot School. He later attended the Naval War College at Newport, Rhode Island, and upon graduating in 1957 was subsequently assigned to the staff of the Commander-in-Chief, Atlantic Fleet, as aircraft readiness officer.

He has logged more than 8,000 hours flying time--3,700 hours in jet aircraft.

Rear Admiral Shepard was one of the Mercury astronauts named by NASA in April 1959, and he holds the distinction of being the first American to journey into space. On May 5, 1961, in the Freedom 7 spacecraft, he was launched by a Redstone vehicle on a

ballistic trajectory suborbital flight--a flight which carried him to an altitude of 116 statute miles and to a landing point 302 statute miles down the Atlantic Missile Range.

In 1963, he was designated Chief of the Astronaut Office with responsibility for monitoring the coordination, scheduling, and control of all activities involving NASA astronauts. This included monitoring the development and implementation of effective training programs to assure the flight readiness of available pilot/non-pilot personnel for assignment to crew positions on manned space flights; furnishing pilot evaluations applicable to the design, construction, and operations of spacecraft systems and related equipment; and providing qualitative scientific and engineering observations to facilitate overall mission planning, formulation of feasible operational procedures, and selection and conduct of specific experiments for each flight. He was restored to full flight status in May 1969, following corrective surgery for an inner ear disorder.

Shepard made his second space flight as spacecraft commander on Apollo 14, January 31 - February 9, 1971. He was accompanied on man's third lunar landing mission by Stuart A. Roosa, command module pilot, and Edgar D. Mitchell, lunar module pilot. Maneuvering their lunar module, "Antares," to a landing in the hilly upland Fra Mauro region of the moon, Shepard and Mitchell subsequently deployed and activated various scientific equipment and experiments and collected almost 100 pounds of lunar samples for return to earth. Other Apollo 14 achievements included: first use of Mobile Equipment Transporter (MET); largest payload placed in lunar orbit; longest distance traversed on the lunar surface; largest payload returned from the lunar surface; longest lunar surface EVA (9 hours and 17 minutes); first use of shortened lunar orbit rendezvous techniques; first use of colored TV with new vidicon tube on lunar surface; and first extensive orbital science period conducted during CSM solo operations.

Rear Admiral Shepard has logged a total of 216 hours and 57 minutes in space, of which 9 hours and 17 minutes were spent in lunar surface EVA.

He resumed his duties as Chief of the Astronaut Office in June 1971 and served in this capacity until he retired from NASA and the Navy on August 1, 1974.

Shepard was in private business in Houston, Texas. He served as the President of the Mercury Seven Foundation, a non-profit organization which provides college science scholarships for deserving students.

## John Herschel Glenn, Jr. (Colonel, USMC, Ret.) NASA Astronaut (former)

PERSONAL DATA: Born July 18, 1921 in Cambridge, Ohio. Married to the former Anna Margaret Castor of New Concord, Ohio. They have two grown children and two grandchildren.

Glenn attended primary and secondary schools in New Concord, Ohio. He attended Muskingum College in New Concord and received a Bachelor of Science degree in



Engineering. Muskingum College also awarded him an honorary Doctor of Science degree in engineering. He has received honorary doctoral degrees from nine colleges or universities.

He entered the Naval Aviation Cadet Program in March 1942 and was graduated from this program and commissioned in the Marine Corps in 1943. After advanced training, he joined Marine Fighter Squadron 155 and spent a year flying F-4U fighters in the Marshall Islands.

During his World War II service, he flew 59 combat missions. After the war, he was a member of Marine Fighter Squadron 218 on the North China patrol and served on Guam. From June 1948 to December 1950 Glenn was an instructor in advanced flight training at Corpus Christi, Texas. He then attended Amphibious Warfare Training at Quantico, Virginia. In Korea he flew 63 missions with Marine Fighter Squadron 311. As an exchange pilot with the Air Force Glenn flew 27 missions in the in F-86 Sabrejet. In the last nine days of fighting in Korea Glenn downed three MIG's in combat along the Yalu River.

After Korea, Glenn attended Test Pilot School at the Naval Air Test Center, Patuxent River, Maryland. After graduation, he was project officer on a number of aircraft. He was assigned to the Fighter Design Branch of the Navy Bureau of Aeronautics (now Bureau of Naval Weapons) in Washington from November 1956 to April 1959, during which time he also attended the University of Maryland.

In July 1957, while project officer of the F8U Crusader, he set a transcontinental speed record from Los Angeles to New York, spanning the country in 3 hours and 23 minutes. This was the first transcontinental flight to average supersonic speed. Glenn has nearly 9,000 hours of flying time, with approximately 3,000 hours in jet aircraft.

Glenn was assigned to the NASA Space Task Group at Langley Research Center, Hampton, Virginia, in April 1959 after his selection as a Project Mercury Astronaut. The Space Task Group was moved to Houston and became part of the NASA Manned Spacecraft Center in 1962. Glenn flew on Mercury-6 (February 20, 1962) and STS-95 (October 29 to November 7, 1998), and has logged over 218 hours in space. Prior to his first flight, Glenn had served as backup pilot for Astronauts Shepard and Grissom. When astronauts were given special assignments to ensure pilot input into the design and development of spacecraft, Glenn specialized in cockpit layout and control functioning, including some of the early designs for the Apollo Project. Glenn resigned from the Manned Spacecraft Center on January 16, 1964. He was promoted to the rank of Colonel in October 1964 and retired from the Marine Corps on January 1, 1965. He was a business executive from 1965 until his election to the United States Senate in November 1974. Glenn retired from the U.S. Senate in January 1999.

On February 20, 1962, Glenn piloted the Mercury-Atlas 6 "Friendship 7" spacecraft on the first manned orbital mission of the United States. Launched from Kennedy Space Center, Florida, he completed a successful three-orbit mission around the earth, reaching a maximum altitude (apogee) of approximately 162 statute miles and an orbital velocity of approximately 17,500 miles per hour. Glenn's "Friendship 7" Mercury spacecraft landed approximately 800 miles southeast of KSC in the vicinity of Grand Turk Island. Mission duration from launch to impact was 4 hours, 55 minutes, and 23 seconds.

STS-95 Discovery (October 29 to November 7, 1998) was a 9-day mission during which the crew supported a variety of research payloads including deployment of the Spartan solar-observing spacecraft, the Hubble Space Telescope Orbital Systems Test Platform, and investigations on space flight and the aging process. The mission was accomplished in 134 Earth orbits, traveling 3.6 million miles in 213 hours and 44 minutes.