## ASTRONAUT BIOGRAPHY



NASA

National Aeronautics and Space Administration

Lyndon B. Johnson Space Center Houston, Texas 77058

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Randy "Komrade" Bresnik (Colonel, U.S. Marine Corps, Ret.) NASA Astronaut

#### Summary:

Randy "Komrade" Bresnik was selected as an astronaut in 2004. He was commissioned as a Second Lieutenant in the U.S. Marine Corps in May 1989. During his military career, he became an F/A-18 Test Pilot and was eventually deployed to Kuwait to fly combat missions in support of Operation Iraqi Freedom. A veteran of STS-129, he has also trained as a Cave-a-naut with the European Space Agency to test living deep beneath the Earth's surface as well as an Aquanaut for NASA's Extreme Environment Mission Operation (NEEMO) 19. Bresnik most recently served as the Commander of the International Space Station for Expedition 53 and flight engineer for Expedition 52. Currently, he serves as the Assistant-to-the-Chief of the Astronaut Office for Exploration managing the development and testing of everything that will operate beyond low earth orbit on Artemis missions.

#### **Personal Data:**

Born September 11, 1967 in Fort Knox, Kentucky. Considers Santa Monica, California to be his hometown. Married to the former Rebecca Burgin of Pompton Plains, New Jersey, they have a son and a daughter. He enjoys travel, music, photography, weight training, sports, scuba diving, motorcycling, and flying warbirds. His father Albert 'Randy' Bresnik resides in Santa Monica, California.

#### Education:

Graduated from Santa Monica High School, Santa Monica, California, 1985. Bachelor of Arts in Mathematics from The Citadel, Charleston, South Carolina, 1989. Master of Science in Aviation Systems, University of Tennessee-Knoxville, 2002. Graduate of Air War College, 2008. Honorary Doctorate in Aeronautics, The Citadel, Charleston, South Carolina, 2010.

#### **Experience:**

Bresnik received his commission as a Second Lieutenant in the U.S. Marine Corps from the Naval Reserve Officer Training Corps at The Citadel in May 1989. After graduation, he attended The Basic School (TBS) and Infantry Officers Course (IOC) in Quantico, Virginia. He attended primary flight training in Pensacola, Florida, Intermediate and Advanced flight training in Beeville, Texas, and was designated a Naval Aviator in April 1992. He completed initial F/A-18 training at Navy Fighter/Attack Training Squadron VFA-106, NAS Cecil Field, Florida. Upon completion of training, he reported to Marine Fighter/Attack Squadron, VMFA-212 at Marine Corps Air Station (MCAS) Kaneohe Bay, Hawaii, then MCAS El Toro, California, and additionally MCAS Miramar, California, where he made three overseas deployments to the Western Pacific. While assigned to VMFA-212, he attended the Marine Corps Weapons and Tactics Instructors Course (WTI) and Naval Fighter Weapons School (TOPGUN). Bresnik was selected for U.S. Naval Test Pilot School (USNTPS) at NAS Patuxent River, Maryland and began the course in January 1999. After graduation in December 1999, he was assigned as a F/A-18 Test Pilot/Project Officer at the Naval Strike Aircraft Test Squadron (NSATS). While at Strike, Bresnik flew the F/A-18 A-D and F/A-18 E/F in all manners of flight test. In January 2001, he returned to the USNTPS as a Fixed-Wing and Systems Flight Instructor where he instructed in the F/A-18, T-38, and T-2. Bresnik returned to the Test Squadron in

# ASTRONAUT BIOGRAPHY

### Randy "Komrade" Bresnik

January 2002 to continue flight test on the F/A-18 A-F as the Platform/Project Coordinator. In November 2002, he reported to Marine Aircraft Group Eleven (MAG-11) as the Future Operations Officer. In January 2003, MAG-11 deployed to Ahmed Al Jaber Air Base, Kuwait. From Al Jaber, he flew combat missions in the F/A-18 with VMFA-225 in support of Operation Southern Watch and Operation Iraqi Freedom. He was the Operations Officer of VMFA-232 when he was selected as an astronaut.

He has logged more than 6,700 hours in 87 types of aircraft/rotorcraft/glider/spacecraft. He holds an Airline Transport Pilot Rating and an Unlimited Piston Engine Letter of Authorization.

#### **NASA Experience:**

Selected as an astronaut by NASA in May 2004. In February 2006, he completed Astronaut Candidate Training that included scientific and technical briefings, intensive instruction in shuttle and International Space Station systems, physiological training, T-38 flight training, and water and wilderness survival training. Bresnik completed his first spaceflight on STS-129 in November 2009. From 2009 through 2011, Bresnik was assigned as the support astronaut on the Space Shuttle Closeout Crew tasked with strapping in the crew and closing and sealing the access hatch for flight. He was the Lead Astronaut on the closeout crew for the final Shuttle Mission STS-135. From 2012 through 2015, he served as the Lead Astronaut for NASA's partnership with the SpaceX Company in the design and development of their crewed Dragon Capsule as well as a Capsule Communicator (CAPCOM) in the Mission Control Center.

In 2010, Bresnik trained as a Cave-a-naut in the extreme environment training of the European Space Agency's Cooperative Adventure for Valuing and Exercising human behavior and performance Skills (CAVES), in Sardinia, Italy. This was the first spaceflight analog of its type exploring, mapping, and living deep beneath the surface of the Earth.

In September 2014, Bresnik, his three crew members and two habitat technicians tested technologies and training techniques for use aboard the International Space Station and future deep space exploration missions during NASA's Extreme Environment Mission Operation (NEEMO 19). Bresnik was the Commander of NEEMO 19 team of Aquanauts. The mission was conducted in Florida International University's undersea research habitat the Aquarius Reef Base, located six miles off the coast of Key Largo, Florida, and 62 feet below the surface of the Atlantic Ocean.

#### Spaceflight Experience:

STS-129 (November 16 through November 29, 2009). This was the 31st shuttle flight to the International Space Station. During the mission, the crew delivered two Express Logistics Carriers (ELC racks) to the space station, approximately 30,000 pounds of replacement parts. Bresnik performed two spacewalks for a total of 11 hours and 50 minutes. The STS-129 mission was completed in 10 days, 19 hours, 16 minutes and 13 seconds, traveling 4.5 million miles in 171 orbits, and returned to Earth bringing back with them NASA astronaut Nicole Stott following her tour of duty aboard the station.

ISS Expedition 52/53 (July 28 through December 14, 2017). The crew launched from the Baikonur Cosmodrome aboard the Soyuz 51S spacecraft. Bresnik was joined by ESA/ASI Astronaut Paolo Nespoli and Russian Cosmonaut Sergey Ryazanskiy. During the mission the crew worked over 300+ scientific experiments and investigations, worked with 4 different visiting space vehicles, and conducted 4 spacewalks (3 USOS & 1 Russian). Bresnik performed 3 spacewalks totaling 20 hours and 10 minutes. Bresnik's spacewalk experience is now 5 EVAs for a total of 32 hours 0 minutes outside in the void of space. The crew also took 808,126 photographs of the earth and inside the ISS during the two expeditions. Expedition 52/53 was completed in 139 days, completing 2224 orbits of the earth and travelling 58,835,163 mi (108,962,720 km). Bresnik served as Flight Engineer aboard the Soyuz 51S and Expedition 52 as well as Commander of the International Space Station for Expedition 53.

# ASTRONAUT BIOGRAPHY

### Randy "Komrade" Bresnik

Since August 2018, Bresnik has been serving as the Assistant-to-the-Chief of the Astronaut Office for Exploration. In this role he manages insight and expertise of the crew in their essential role in the development and testing of all vehicles and aspects of an Artemis mission - Orion crewed vehicle, Space Launch System (SLS), Exploration Ground Systems (EGS), Human Landing Systems (HLS), and the Lunar Gateway, Lunar unpressurized and pressurized rovers, as well as the new lunar surface exploration suits.

#### Awards/Honors:

Legion of Merit; Defense Meritorious Service Medal; Meritorious Service Medal; three Strike/Flight Air Medals; three Navy and Marine Corps Commendation Medals with Combat "V"; three Navy and Marine Corps Achievement Medals; Presidential Unit Citation and various other military service awards. NASA Silver Achievement Medal.

Distinguished Graduate: The Citadel Naval Reserve Officers Training Corps (NROTC), Officer Candidate School, The Basic School, Navy Flight Training; "Iron Mike" Physical Fitness Award, U.S. Marine Corps Officer Basic School; The Outstanding Student Award, U.S. Naval Test Pilot School; Empire Test Pilot School Award, United States Naval Test Pilot School; Stephen A. Hazelrigg Memorial Award for Best Test Pilot/Engineer Team, Naval Strike Aircraft Test Squadron; "Best Presentation" Award, European Society of Experimental Test Pilots Symposium.

#### **Organizations:**

Associate Fellow, Society of Experimental Test Pilots; Association of Space Explorers; Association of Naval Aviation.

#### **Pronunciation:**

RAN-dolf BRES-nick