

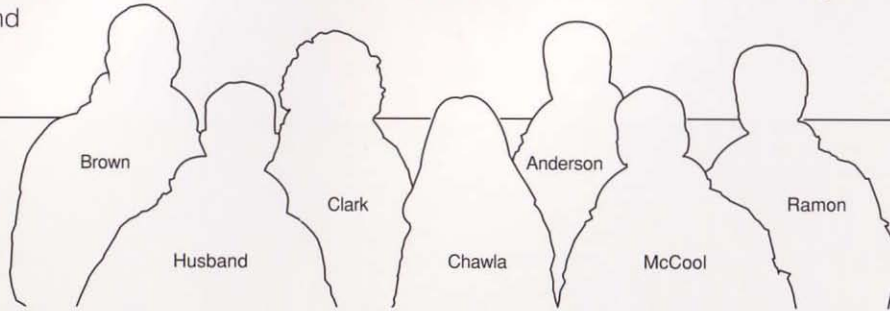


National Aeronautics and  
Space Administration

Crew of Space Shuttle  
Mission STS-107







### Commander

#### Rick D. Husband (Colonel, USAF)

Rick Husband was born in Amarillo, Texas. He received a B.S. degree in mechanical engineering from Texas Tech University and an M.S. degree in the same discipline from California State University, Fresno. After graduating from college, Husband was commissioned a second lieutenant in the USAF and attended pilot training at Vance Air Force Base (AFB), Oklahoma. He completed F-4 training and an assignment flying the F-4E before being assigned as an F-4E instructor pilot and academic instructor at George AFB, California. He then attended the USAF Test Pilot School, Edwards AFB, California, and served as a test pilot flying the F-4 and all five models of the F-15. In the F-15 Combined Test Force, Husband was the program manager for the Pratt & Whitney F100-PW-229 increased performance engine and also served as the F-15 Aerial Demonstration Pilot. He was later transferred to the Aircraft and Armament Evaluation Establishment at Boscombe Down, England, as an exchange test pilot with the Royal Air Force. There he served as a test pilot in the Tornado, Hawk, Hunter, Buccaneer, Jet Provost, Tucano, and Harvard. He has logged over 4500 hours of flight time in more than 40 different types of aircraft. NASA selected Husband as an astronaut in 1994. He has served as the Astronaut Office representative for Advanced Projects, which encompassed Space Shuttle upgrades, the Crew Return Vehicle, and studies to return humans to the moon, as well as plans for an expedition to Mars. Most recently, he served as Chief of Safety for the Astronaut Office. Husband served as pilot for STS-96 (1999), a 10-day mission during which the crew performed the first docking with the International Space Station. STS-107 is his second Space Shuttle mission and his first as Commander.

### Pilot

#### William C. McCool (Commander, USN)

William McCool was born in San Diego, California. He received a B.S. degree in applied science from the U.S. Naval Academy, an M.S. degree in computer science from the University of Maryland, and an M.S. degree in aeronautical engineering from the U.S. Naval Postgraduate School. McCool completed flight training and was assigned to Tactical Electronic Warfare Squadron 129 at Whidbey Island, Washington, for initial EA-6B Prowler training. His first operational tour was with Tactical Electronic Warfare Squadron 133, where he made two deployments aboard USS *Coral Sea* (CV-43) to the Mediterranean Sea, and received designation as a wing qualified landing signal officer (LSO). He was selected for the Naval Postgraduate School/Test Pilot School (TPS) Cooperative Education Program. After graduating from TPS, he worked as TA-4J and EA-6B test pilot in Flight Systems Department of Strike Aircraft Test Directorate at Patuxent River, Maryland. He was responsible for managing and conducting a wide variety of projects, ranging from airframe fatigue life studies to numerous avionics upgrades. His primary efforts, however, were dedicated to flight test of the Advanced Capability (ADVCAP) EA-6B. Following his Patuxent River tour, McCool returned to Whidbey Island, and was assigned to Tactical Electronic Warfare Squadron 132 aboard USS *Enterprise* (CVN-65). He served as Administrative and Operations Officer with the squadron through their work-up cycle, receiving notice of NASA selection while embarked on *Enterprise* for her final pre-deployment at-sea period. McCool has over 3000 hours flight experience in 24 aircraft and over 400 carrier arrestments. NASA selected him as an astronaut candidate in 1996. STS-107 is first Space Shuttle mission.

### Mission Specialist

#### Michael P. Anderson (Lieutenant Colonel, USAF)

Michael P. Anderson was born in Plattsburgh, New York, but calls Spokane, Washington, home. He received a B.S. degree in physics/astronomy from the University of Washington and an M.S. degree in physics from Creighton University. Following his college graduation, Anderson was commissioned a second lieutenant in the USAF. He served as Chief of Communication Maintenance for the 2015 Communications Squadron and later as Director of Information System Maintenance for the 1920 Information System Group. He attended undergraduate pilot training at Vance Air Force Base, Oklahoma, and upon graduation was assigned to the Second Airborne Command and Control Squadron, Offutt Air Force Base, Nebraska, as an EC-135 pilot. With over 4,000 hours in various models of the KC-135 and the T-38 aircraft, Anderson served as an aircraft commander and instructor pilot in the 920th Air Refueling Squadron, Wurtsmith Air Force Base, Michigan, and as an instructor pilot and tactics officer in the 380 Refueling Wing, Plattsburgh Air Force Base, New York. Anderson was selected as an astronaut for NASA in 1994. He flew on STS-89 (1998), the eighth Shuttle-Mir docking mission and the fifth and last exchange of a U.S. astronaut; STS-89 delivered Andy Thomas to Mir and returned with David Wolf. STS-107 is Anderson's second Space Shuttle mission.

### Mission Specialist

#### Kalpana Chawla, Ph.D.

Kalpana Chawla was born and raised in Karnal, India. She received a B.S. in aeronautical engineering from Punjab Engineering College, Chandigarh, India, an M.S. in aerospace engineering from University of Texas, and a Ph.D. in aerospace engineering from University of Colorado. In 1988, she started work at NASA Ames Research Center in the area of powered-lift computational fluid dynamics. Her research concentrated on simulation of complex air flows encountered around aircraft such as the Harrier in "ground-effect." Chawla holds flight instructor's certificates for single-engine airplanes and gliders, and commercial pilot's licenses for gliders and multi-engine land and seaplanes. Selected by NASA in December 1994, Chawla reported to the Johnson Space Center in March 1995 as an astronaut candidate in the 15th Group of Astronauts. She flew as a mission specialist on STS-87 (1997). STS-107 is her second Space Shuttle mission.

### Mission Specialist

#### David Brown, M.D. (Captain, USN)

David Brown was born in Arlington, Virginia. He received a B.S. degree in biology from the College of William and Mary and a doctorate in medicine from Eastern Virginia Medical School. Brown joined the Navy after his internship at the Medical University of South Carolina. Completing flight surgeon training, he reported to the Navy Branch Hospital in Adak, Alaska, as Director of Medical Services. He was then assigned to Carrier Airwing Fifteen which deployed aboard the USS Carl Vinson in the western Pacific. In 1988, he was the only flight surgeon in a ten-year period to be chosen for pilot training.

He was ultimately designated a naval aviator, ranking number one in his class. Brown was then sent for training and carrier qualification in the A-6E Intruder. He reported to the Naval Strike Warfare Center in Fallon, Nevada, where he served as a Strike Leader Attack Training Syllabus Instructor and a Contingency Cell Planning Officer. Additionally, he was qualified in the F-18 Hornet and deployed from Japan aboard the USS Independence flying the A-6E with VA-115. He then reported to the U.S. Naval Test Pilot School as their flight surgeon where he also flew the T-38 Talon. Brown has logged over 2,700 flight hours with 1,700 in high-performance military aircraft. He is qualified as first pilot in NASA T-38 aircraft. NASA selected Brown as an astronaut candidate in 1996. STS-107 is his first Space Shuttle mission.

### Mission Specialist

#### Laurel Blair Salton Clark, M.D. (Commander, USN)

Laurel Clark was born in Ames, Iowa, but considers Racine, Wisconsin, to be her hometown. She received both a B.S. degree and a doctorate in medicine from the University of Wisconsin-Madison. During medical school she did active duty training with the Diving Medicine Department at the Naval Experimental Diving Unit. After completing medical school, Dr. Clark underwent postgraduate medical education in pediatrics at Naval Hospital Bethesda, Maryland. She completed Navy undersea medical officer training at the Naval Undersea Medical Institute in Groton, Connecticut, and diving medical officer training at the Naval Diving and Salvage Training Center in Panama City, Florida, and was designated a Radiation Health Officer and Undersea Medical Officer. Dr. Clark was then assigned as the Submarine Squadron Fourteen Medical Department Head in Holy Loch, Scotland. During that assignment she dove with U.S. Navy divers and Naval Special Warfare Unit Two Seals and performed numerous medical evacuations from U.S. submarines. After two years of operational experience she was designated as a Naval Submarine Medical Officer and Diving Medical Officer. Following 6 months of aeromedical training at the Naval Aerospace Medical Institute in Pensacola, Florida, and subsequent designation a Naval Flight Surgeon, Dr. Clark was stationed at MCAS Yuma, Arizona. There she served as Flight Surgeon for a Marine Corps AV-8B Night Attack Harrier Squadron (VMA 211) for 2 years. She was then assigned as the Group Flight Surgeon for the Marine Aircraft Group (MAG 13). Prior to her selection as an astronaut candidate, she served as a Flight Surgeon for the Naval Flight Officer advanced training squadron (VT-86) in Pensacola, Florida. NASA selected her as an astronaut candidate in 1996. Prior to flight assignment she worked on ISS and Shuttle medical systems and Payload operations and development. STS-107 is her first Space Shuttle mission.

### Payload Specialist

#### Ilan Ramon (Colonel, Israel Air Force)

Ilan Ramon was born in Tel Aviv, Israel. He received a B.S. degree in electronics and computer engineering from the University of Tel Aviv, Israel. Ramon graduated as a fighter pilot from the Israel Air Force (IAF) Flight School. He participated in A-4 Basic Training and

Operations, and Mirage III-C training and operations. As one of the IAF's establishment team of the first F-16 Squadron in Israel, he attended the F-16 Training Course at Hill Air Force Base, Utah. He served as a second Deputy Squadron Commander, F-16 Squadron; as a first Deputy Squadron Commander, F-4 Phantom Squadron; and as Squadron Commander, F-16 Squadron. Following that Ramon was assigned to the Air Force HQ as Head of the Aircraft Branch in the Operational Requirements Department. Two years later he was promoted to the rank of Colonel and assigned as Head of the Department of Operational Requirements for Weapon Development and Acquisition. Colonel Ramon has accumulated 3,500 flight hours, with over 1,000 flight hours on the F-16. In 1997, Colonel Ramon was selected as a Payload Specialist. He was designated to train for a Space Shuttle mission carrying an Israeli payload (MEIDEX) that includes a multispectral radiometric camera for recording atmospheric desert aerosols from space. In August 1998, he started basic Shuttle training at Johnson Space Center in Houston, Texas. In August 2000, Ramon was assigned as one of the seven crew members for this flight. STS-107 is his first Space Shuttle mission.



### STS-107 Patch Description

STS-107 is a multidiscipline microgravity and Earth science research mission with a multitude of international scientific investigations conducted continuously during the planned 16 days on orbit. The central element of the patch is the microgravity symbol,  $\mu g$ , flowing into the rays of the astronaut symbol. The mission inclination is portrayed by the 39-degree angle of the astronaut symbol to the Earth's horizon. The sunrise is representative of the numerous experiments that are the dawn of a new era for continued microgravity research on the International Space Station and beyond. The breadth of science conducted on this mission will have widespread benefits to life on Earth and our continued exploration of space illustrated by the Earth and stars. The constellation Columba (the dove) was chosen to symbolize peace on Earth and the Space Shuttle *Columbia*. The seven stars also represent the mission crew members and honor the original astronauts who paved the way to make research in space possible. The Israeli flag is adjacent to the name of the payload specialist who is the first person from that country to fly on the Space Shuttle.