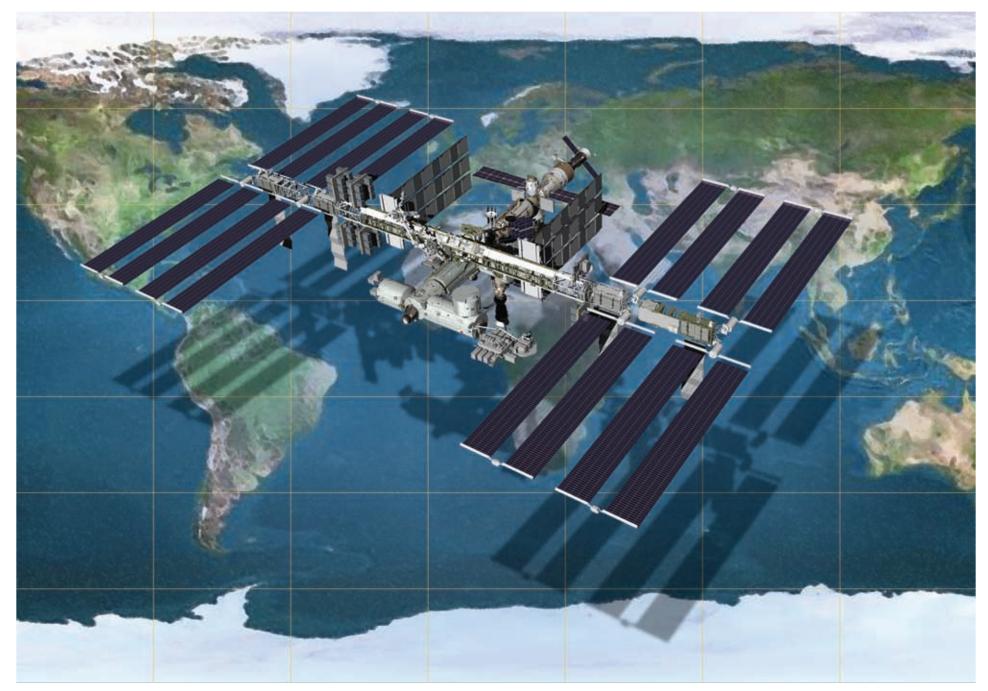


National Aeronautics and Space Administration

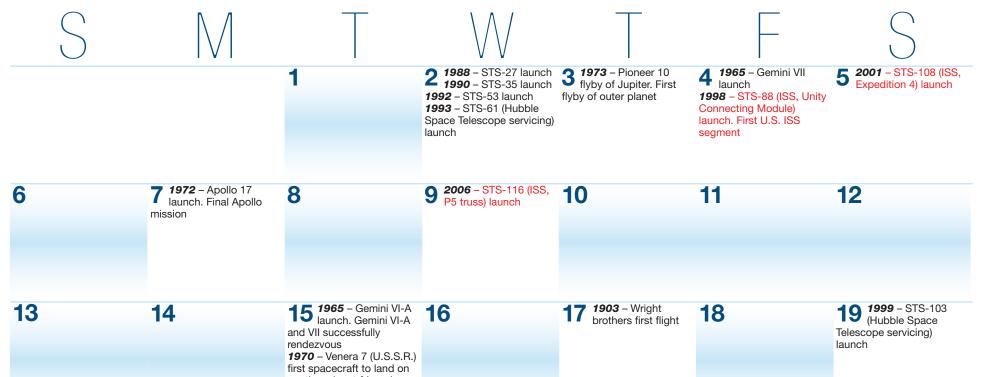


International Space Station

2009 Calendar



The International Space Station (ISS) is the largest and most complicated spacecraft ever built. It is allowing NASA to conduct scientific research to improve life on Earth and to prepare for long-duration space flights to the moon and other destinations.

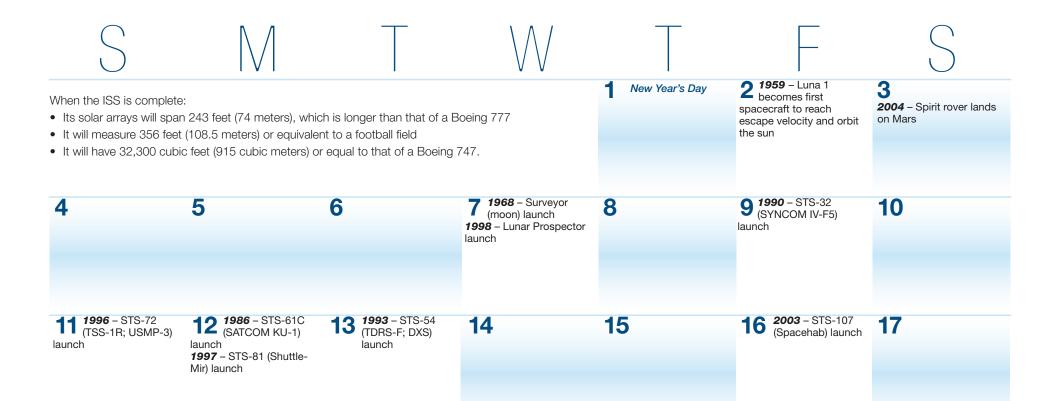


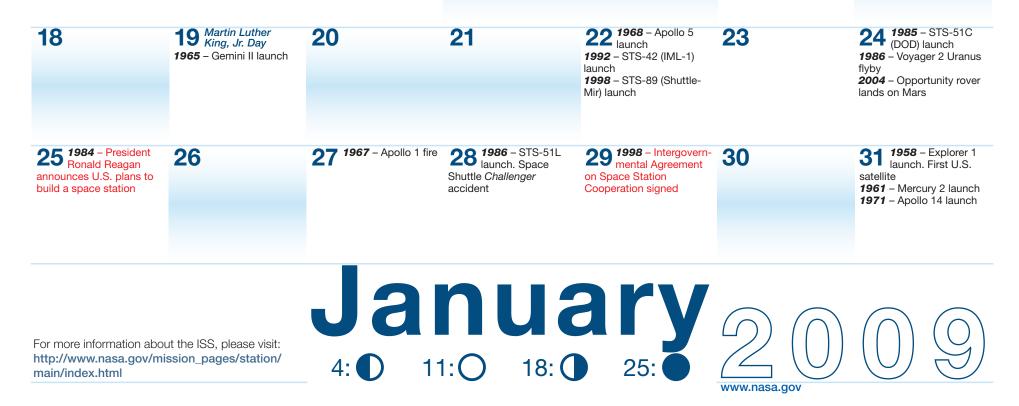
		another planet (Venus)				
20	21 Winter Solstice – Winter begins 1968 – Apollo 8 launch	22	23	24 1968 – Apollo 8 becomes first crewed mission to orbit the moon	25 Christmas	26
27	28	29	30	31 Orion Statistics: Crew size Diameter Pressurized volume For more information a http://www.nasa.gov/		
		De 2:0 9:0			/mission_pages/cons	



NASA's Constellation Program is currently building the next-generation vehicle that will visit the International Space Station (ISS). The Orion crew exploration vehicle will ferry crew members to and from Earth and the ISS beginning in the next decade. Orion will

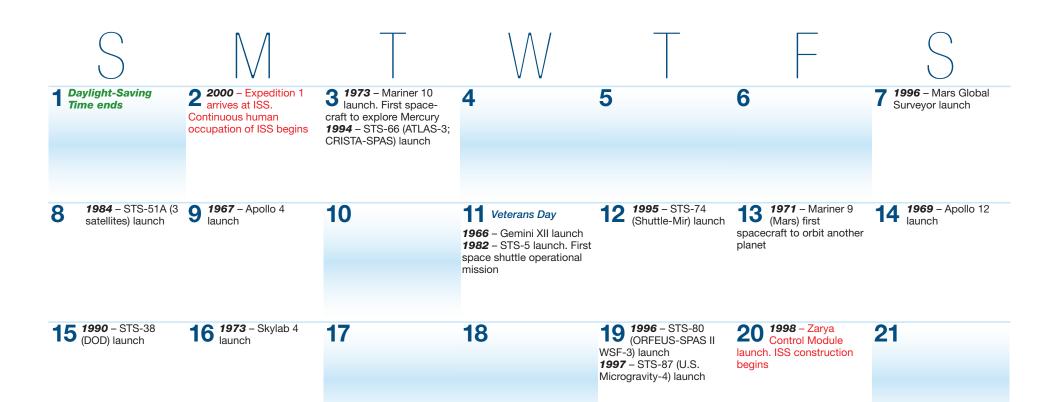
be launched atop the Ares I rocket. The Orion will also be used to send astronauts to the moon. In addition to Orion and Ares I, Constellation is also developing a heavy cargo launch vehicle, Ares V. For more information about the ISS, please visit: www.nasa.gov







Science on the International Space Station (ISS) focuses on human research and technology development to pave the way for future exploration of the solar system and to improve life on Earth.





30 2000 – STS-97 (ISS, P6 truss) launch. First set of ISS solar arrays

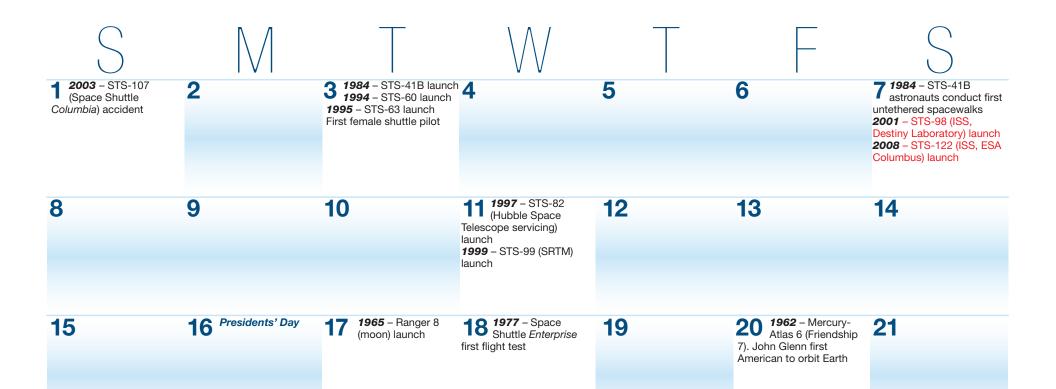
For more information on living in space. please visit: http://spaceflight.nasa.gov/living/index.html http://www.nasa.gov/topics/shuttle_station/

2:0 9:0 16:0 24:0 24:0 0000



Expedition 1 began the permanent habitation of the International Space Station (ISS) on Nov. 2, 2000. Since then, crews have been working, eating, sleeping, exercising and performing other functions of everyday life on the orbital outpost. The Expedition crews living

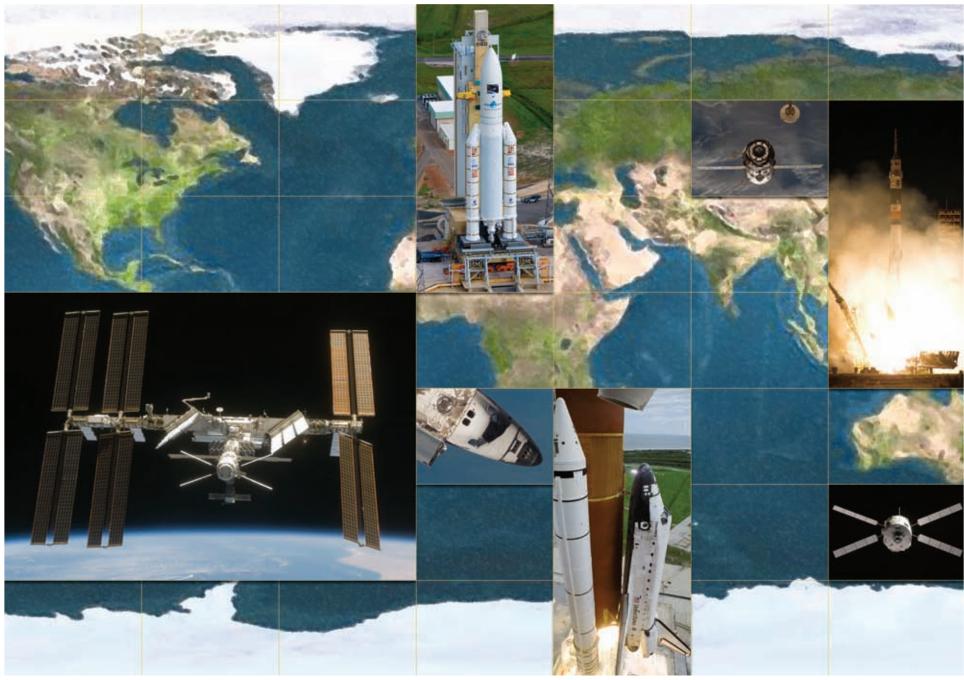
on the station are helping NASA develop techniques for future explorers to better overcome the challenges of space flight life. To help make life on the ISS more like life on Earth, crews are also learning how to celebrate holidays, such as Thanksgiving, in space.





For more information about ISS science, please visit: www.nasa.gov/mission_pages/station/science/index.html http://www.nasa.gov/mission_pages/station/science/payload_ops.html

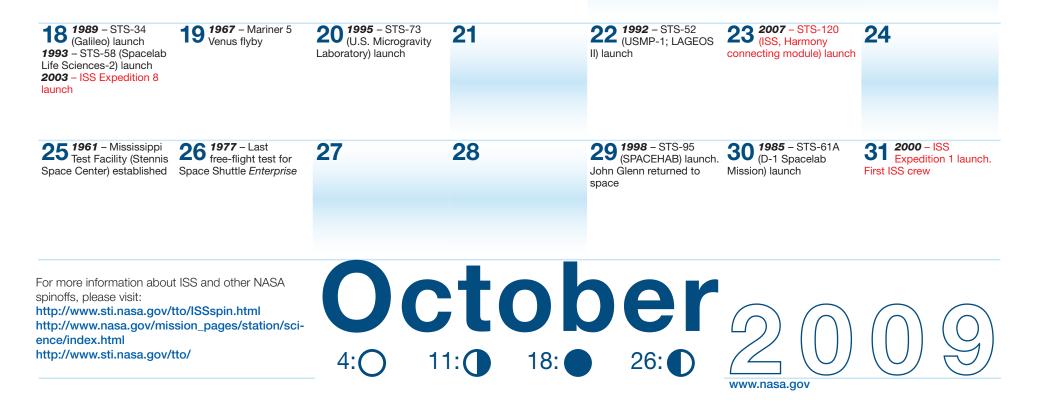


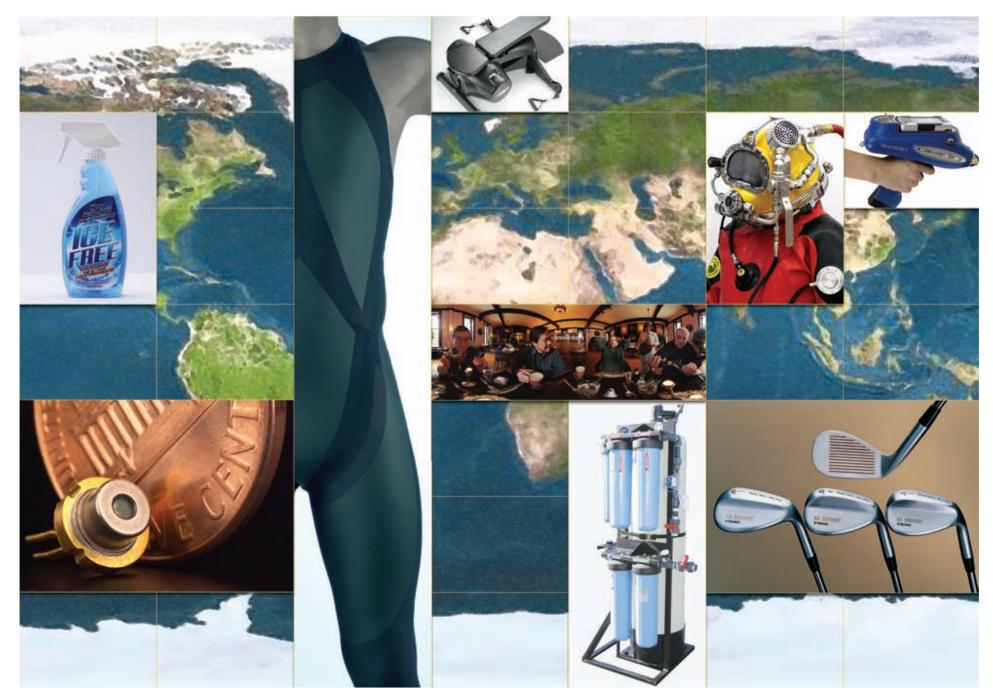


More than 80 flights are scheduled during construction of the International Space Station (ISS). These missions deliver equipment, modules, supplies and crew members to the station. The international fleet of vehicles includes the space shuttle (U.S.), Soyuz (Russia),

Progress (Russia), H-II Transfer Vehicle (Japan), and Automated Transfer Vehicle (Europe). The space shuttle, Soyuz, Progress and ATV spacecraft are featured above.

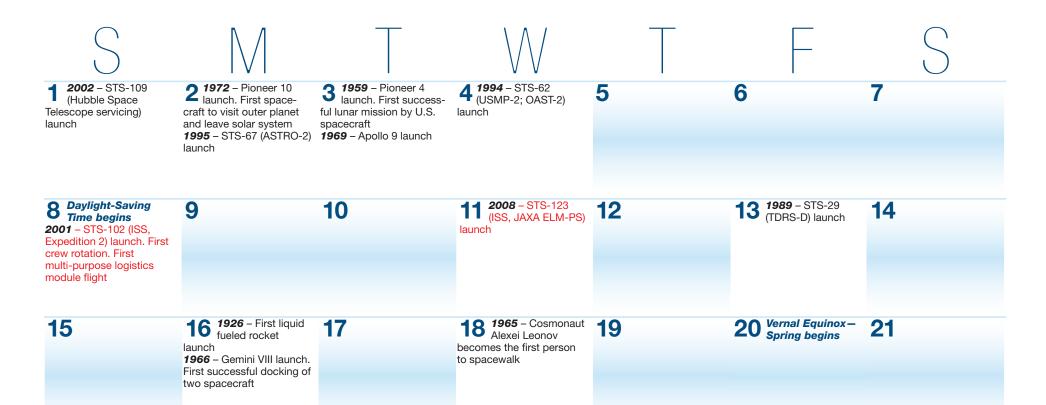


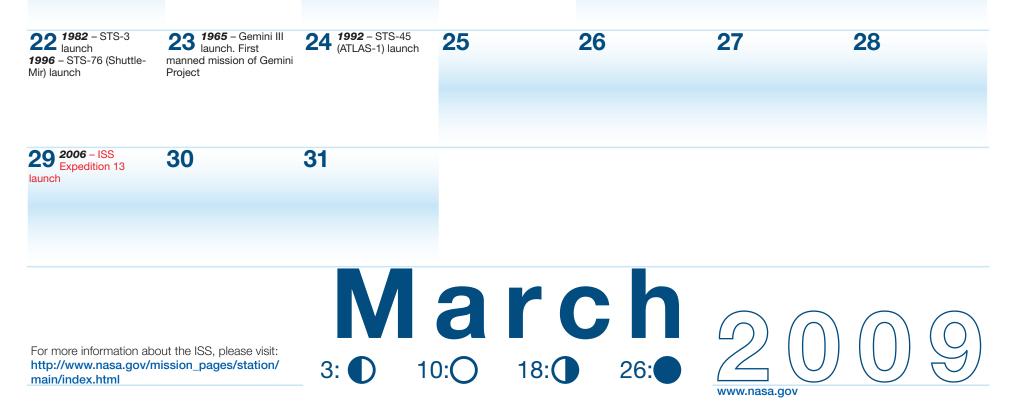


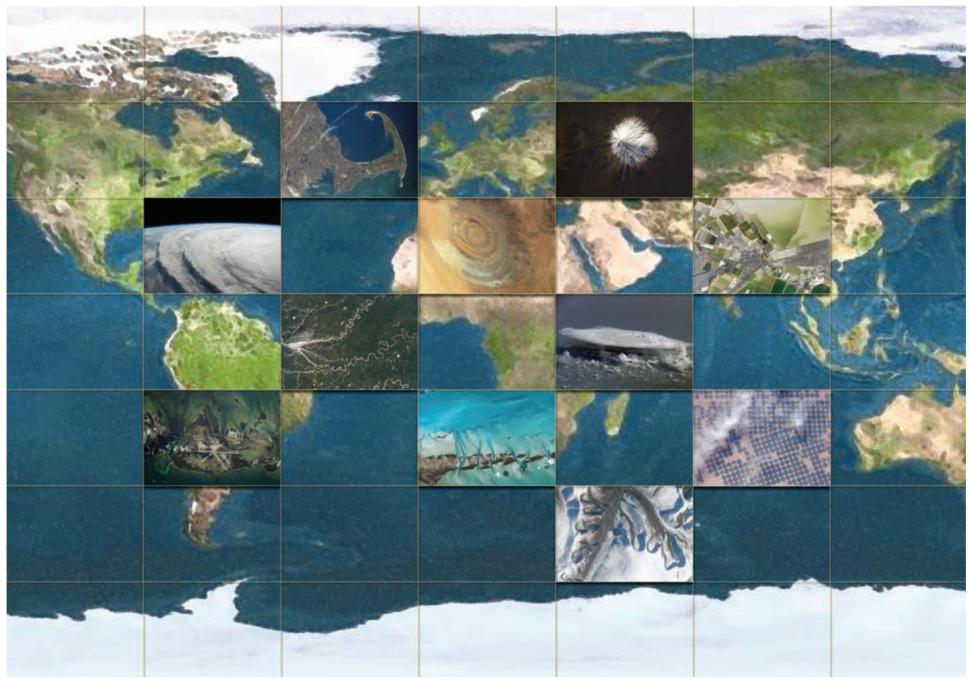


NASA research not only helps the United States reach its space exploration goals, it involves the creation of "spinoffs" that improve life on Earth or experiments that have tremendous potential for Earth application. These spinoffs stem from technologies created

to support the International Space Station (ISS). Areas of everyday life that have benefitted from ISS spinoffs include water purification, manufacturing, sports, construction, aviation safety, robotics, vision enhancement, exercise and medicine.







The Crew Earth Observations (CEO) experiment: The International Space Station (ISS) provides a unique opportunity for its crew members to observe and photograph natural and human-made changes on Earth. The photographs also record events such as storms,

floods, fires and volcanic eruptions. CEO provides researchers with vital, continuous images to better understand the planet.





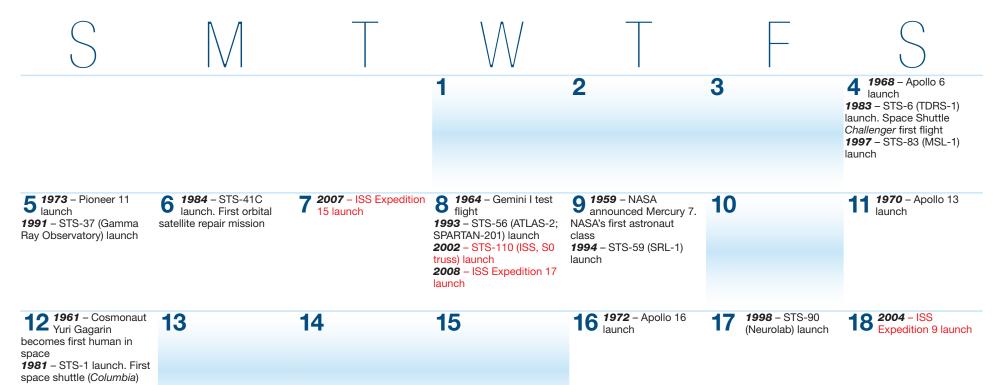
EarthKAM - http://www.earthkam.ucsd.edu/

4: 12: 18: 26: 0 www.nasa.gov



The International Space Station (ISS) is an orbital classroom for students around the world who have been treated to on-orbit demonstrations from the ISS Expedition crews. Students can also participate in interactive education programs such as EarthKAM or

compare plants grown on Earth to plants grown on the station. NASA has numerous resources available to help students learn about space and all of the professions necessary to carry out NASA's programs.

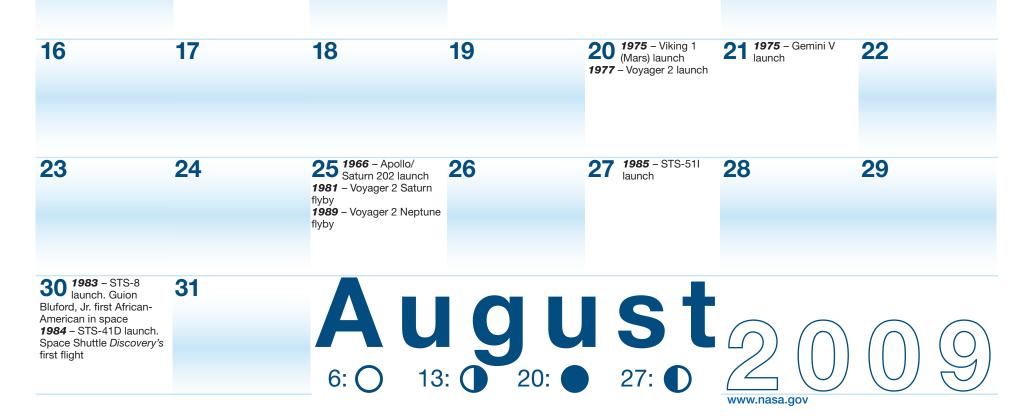






Not only is the International Space Station (ISS) the most complex scientific and technological endeavor ever undertaken, it is a shining example of international cooperation. The ISS is a partnership of five space agencies—NASA, Roskosmos (Russia), the European Space Agency, Japan Aerospace Exploration Agency and the Canadian Space Agency.

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It is easy to track the orbit of the ISS or to learn when it is visible to humans on the ground. For more information, please visit: http://spaceflight.nasa.gov/realdata/index.html For more information about the ISS, please visit: www.nasa.gov								
2 (TDRS-E) launch	3	4 2007 – Phoenix Mars Lander launch	5	6	7 (CRISTA-SPAS-02) launch	8 1978 – Pioneer 13 (Venus) launch 1989 – STS-28 launch 2007 – STS-118 (ISS, S5 truss) launch		
9	10 2001 – STS-105 (ISS, Expedition 3) launch	11	12 ¹⁹⁷⁷ – Space Shuttle <i>Enterprise</i> , first free-flight test 2005 – Mars Reconnais- sance Orbiter launch	13	14	15		



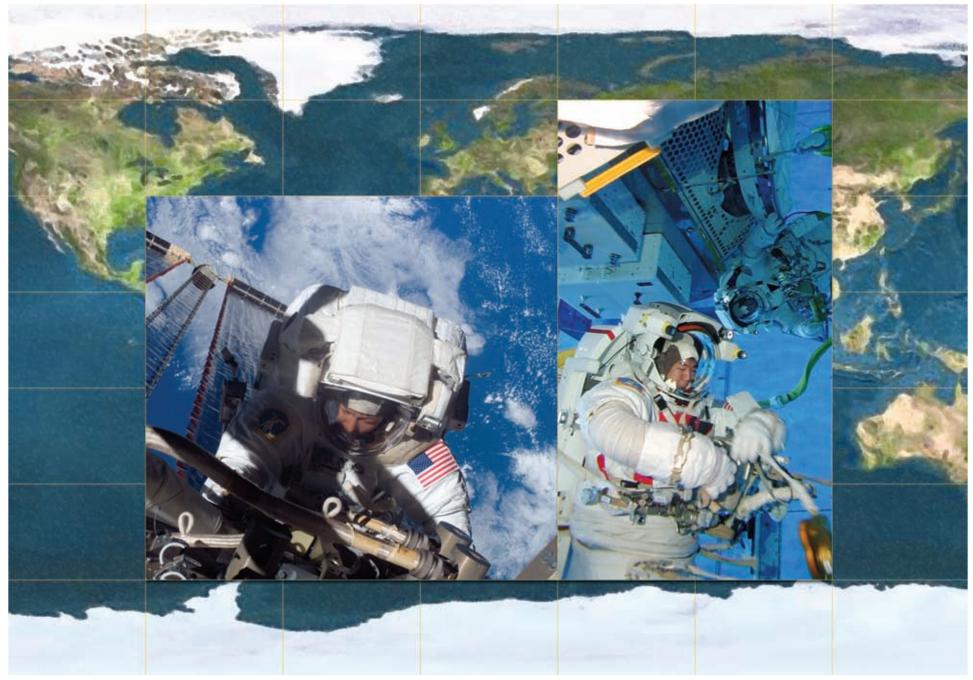


With a permanent human presence aboard the International Space Station (ISS), flight control teams at the Mission Control Center in Houston and the Mission Control Center in Moscow are on duty 7 days a week, 24 hours a day, 365 days a year. Flight controllers

keep a constant watch on the crew's activities and monitor spacecraft systems, crew health and safety as they check every system to ensure operations proceed as planned.

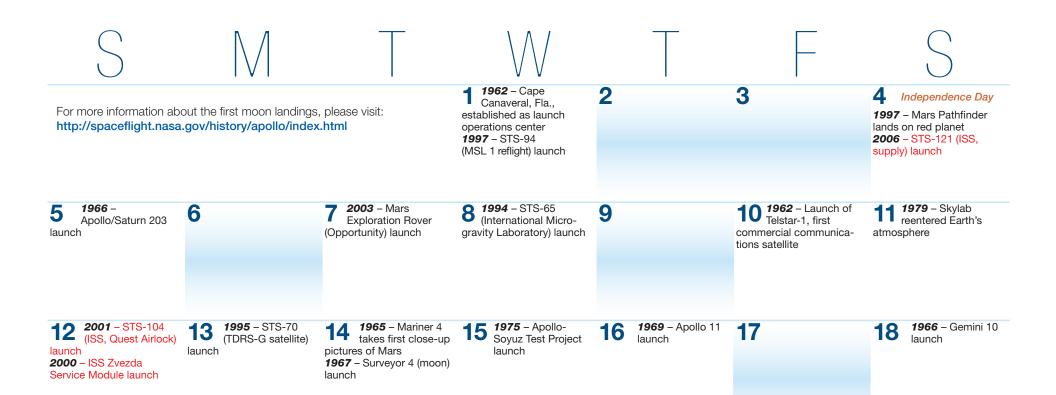
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countries: the United Stat	will include contributions fr tes, Canada, Japan, Russi any, Italy, the Netherlands, zerland.	1	2			
3	4 (Magellan) launch	5 1961 – Mercury- Redstone 3 (Freedom 7) launch. First U.S. human (Alan Shepard Jr.) space flight	6	7 1992 – STS-49 (Intelsat VI Repair) launch. Space Shuttle <i>Endeavour's</i> first flight. First 3-person spacewalk	8	9
10	11	12	13	14 1973 – Skylab space station launch	15 1963 – Mercury- Atlas 9 (Faith 7) launch. Final Mercury flight 1997 – STS-84 (Shuttle- Mir) launch	16



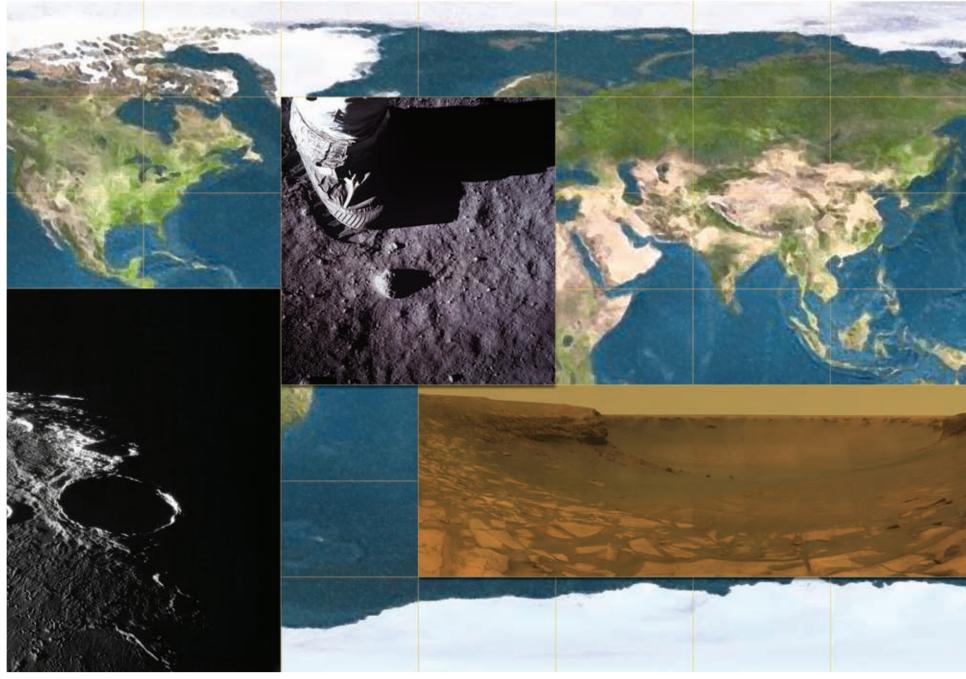


Building and maintaining the International Space Station (ISS) requires crew members to conduct extravehicular activities (spacewalks). More than 130 spacewalks are scheduled

to take place during the ISS assembly. To prepare for the spacewalks, crew members train in a 6.2-million-gallon pool at the Neutral Buoyancy Laboratory (NBL) in Houston, Texas.

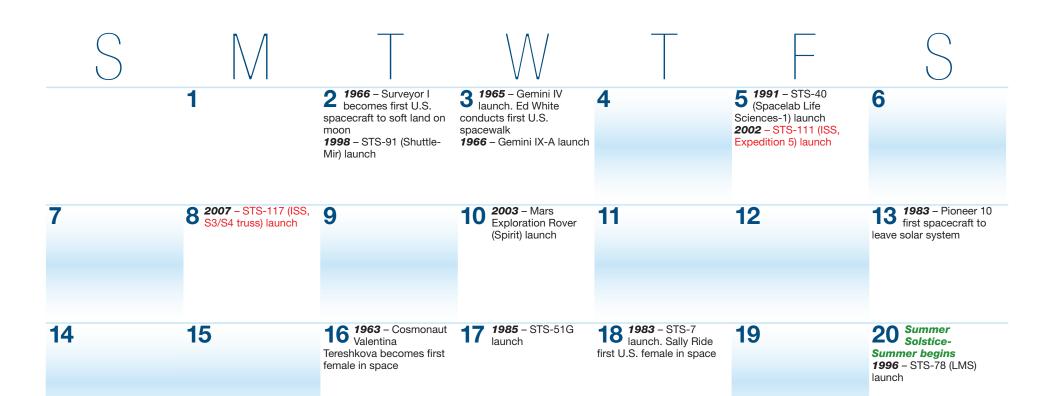






Humankind's greatest achievement in space occurred at 10:56 p.m. EDT, July 20, 1969, when Astronaut Neil Armstrong became the first human to walk on the moon. The United States is working to return astronauts to the moon and to explore other destinations. The

International Space Station is playing a vital role in that preparation as a testbed for long-duration space flight.









www.nasa.gov

