

## **FORECAST OF UPCOMING ANNIVERSARIES -- OCTOBER 2015**

### **70 Years Ago - 1945**

October 15: Operation Clitterhouse, V-2 launched from Cuxhaven, Germany, by British.

### **55 Years Ago - 1960**

October 4: Courier I-B orbited Aboard Thor Ablestar rocket, 1:50 p.m., EDT, Cape Canaveral, Fla.

### **50 Years Ago - 1965**

October 14: OGO (Orbiting Geophysical Observatory)-2 orbited Aboard Thor rocket., 6:13 a.m., PST, Vandenberg AFB, CA.

October 25: Agena target vehicle for Gemini 6 exploded at launch. Manned Gemini flight postponed. Mission redirected to rendezvous mission with Gemini 7 scheduled for December 1965 launch date, Cape Canaveral, Fla.

### **45 Years Ago - 1970**

October 14: First X-24A supersonic flight, John A. Manke, pilot, Dryden Flight Research Facility (DFRF), CA.

October 25: Zond 8 Launch (USSR Moon Flyby)

### **40 Years Ago - 1975**

October 6: Explorer 54 (AE-D) orbited aboard Delta, 5:00 a.m., EDT, Vandenberg AFB.

October 16: GOES-A (SMS-C) orbited by NASA for NOAA aboard Delta, 6:40 p.m., EDT. GOES-A is the first in a series of weather satellites.

October 22: Venera 9, Venus Landing (Soviet Venus Orbiter/Lander)

October 25: Venera 10, Venus Landing

### **35 Years Ago - 1980**

October 30: FleetSatCom 4 launched, 10:54 p.m., EST, Cape Canaveral, Fla.

### **30 Years Ago - 1985**

October 3: STS-51J (Space Shuttle *Atlantis*) launched with DoD payload. Crew: Karol J. Bobko, Ronald J. Grabe, Robert A. Stewart, David C. Hilmers and William A. Pailles. First flight for Atlantis. Launched from KSC, 11:15 a.m., EDT Atlantis landed Edwards AFB, CA, October 7, 10:00 a.m., PDT. Mission Duration: four days, one hour and 45 minutes.

October 30: STS-61A (Space Shuttle *Challenger*) launched from KSC at 12:00 noon, EST with Spacelab D-1 in cargo bay and GLOMR satellite. Crew: Henry W. Hartsfield, Steve R. Nagel, Bonnie J. Dunbar, James F. Buchli, Guion S. Bluford, Ernst Messerschmid (West Germany), Reinhard Furrer (West Germany) and Wubbo J. Ockels (Netherlands). Landed at Edwards AFB, CA, November 6 at 9:45 a.m., PST. Mission duration seven days and 45 minutes .

### **25 Years Ago - 1990**

October 6: STS-41 (Space Shuttle *Discovery*) launched from KSC 7:47 a.m., EDT with Ulysses solar spacecraft aboard. Crew: Richard N. Richards, Robert O. Cabana, William M. Shepherd, Bruce E. Melnick, and Thomas Akers. Landed at Edwards AFB, CA, October 10 at 6:57 a.m., PDT. Mission Duration: Four days, two hours and ten minutes.

### **20 Years Ago – 1995**

October 20: STS-73 (Space Shuttle *Columbia*) launched from KSC at 9:53 a.m. EDT. Crew: Kenneth D. Bowersox, Kent V. Rominger, Kathryn C. Thornton, Catherine G. Coleman, Michael E. Lopez-Alegria, Fred W. Leslie, and Albert Sacco, Jr. USML-1 payload. Second United States Microgravity Laboratory (USML-2) Spacelab mission. Landed: November 5 at 6:45 a.m., EST at KSC. Mission Duration: 15 days, 21 hours, 53 minutes.

### **15 Years Ago – 2000**

October 9: High Energy Transient Explorer (HETE 2), an American astrophysical research spacecraft was launched at 05:38 UTC from over Kwajalein Missile Range in the Marshall Islands by a Pegasus rocket released from an L-1011 cargo aircraft that flew out of Vandenberg AFB.

October 11: STS-92 (Space Shuttle *Discovery*) launched from KSC at 7:17 p.m., EDT. Crew: Brian Duffy, Pamela A. Melroy, Koichi Wakata (Japan), Leroy Chiao, Peter J.K. Wisoff, Michael Lopez-Alegria, and William S. McArthur. ISS assembly mission 3A with Z1 Integrated Truss Segment and Pressurized Mating Adapter 3. Landed: October 24 at 4:59 p.m., EDT, Edwards Air Force Base. Mission Duration: 12 days, 21 hours, 42 minutes.

### **10 Years Ago – 2005**

October 12: Shenzhou 6 (meaning Divine Ship), a People's Republic of China (PRC) spacecraft, was launched by a Long March 2F rocket from Jiuquan in northwest China. It carried two Chinese astronauts Fèi Jùnlóng and Niè Hǎishèng in the re-entry capsule, also named as Shenzhou 6, to orbit around for about five days.

### **5 Years Ago – 2010**

October 1: Chang'e 2, a Chinese lunar satellite mission, launched from Xichang at 10:59 UTC on a Long March 3C rocket. It is designed to observe the Moon for at least six months, but carries enough fuel to operate much longer. Similar to how the Lunar Reconnaissance Orbiter (LRO) was used to detect spots for future manned missions to the Moon, the Chinese spacecraft will map candidate landing sites for the next mission in China's lunar program.

October 7: Soyuz-TMA 1M, launched from Baikonur at 23:10 UTC by a Soyuz FG rocket carrying one NASA astronaut (Scott Kelly) and two Russian Cosmonauts (Oleg Skripochka and Alexander Kaleri) to the International Space Station (ISS) where they joined their colleagues boosting the lab's crew size to six. Soyuz-TMA 1M introduced new improvements to the veteran vehicle, featuring new guidance, navigation, control and data processing systems, along with an improved cooling device for the vehicle's electronics. The spacecraft features a variety of avionics and computer upgrades that allows the vehicle to be less operator intensive.