# FORECAST OF UPCOMING ANNIVERSARIES -- JUNE 2013

# 85 Years Ago - 1928

June 11: Friederich Stamer made the first manned flight of a rocket-powered aircraft from the Rhön Mountains in Germany. Stamer's rocket-mounted, tailless glider was designed by Alexander Lippisch, and it flew about one mile.

# 50 Years Ago - 1963

June 14: Vostok 5, cosmonaut Valery F. Bykovsky launched by Vostok rocket, 1200 UTC, Baikonur.

June 16: Vostok 6, cosmonaut Valentina V. Tereshkova launched by Vostok rocket, 0936 UTC, first woman in space, Baikonur.

June 19: Tiros 7 launched by Thor Delta, 5:50 a.m., EDT, Cape Canaveral, Fla.

### 40 Years Ago - 1973

June 10: Explorer 49 launched by Delta, 10:13 a.m., EDT, Cape Canaveral, Fla.

# 35 Years Ago - 1978

June 15: USSR launches Soyuz-29 aboard a Soyuz rocket from Baikonur at 20:16 UTC. Ferry flight to Salyut-6 space station. Crew: Vladimir V.Kovalyonok and Aleksandr S.Ivanchenkov.

June 16: GOES-3 launched by Delta, 6:49 a.m., EDT, Cape Canaveral, Fla.

June 22: Jim Christy's discovery of Pluto's moon, Charon.

June 26: SeaSat-1 launched by Atlas F, 9:13 p.m., EDT, Vandenberg AFB. First satellite launched to provide global observations of the Earth's oceans.

June 27: USSR launches Soyuz-30 aboard a Soyuz rocket from Baikonur at 15:27 UTC. Ferry flight to Salyut-6 space station. Second Interkosmos-mission. Crew: Pyotr I.Klimuk and Miroslaw Hermaszewski (Poland).

## **30 Years Ago - 1983**

- June 2: Venera 15 (Soviet Venus Orbiter to study the surface properties of Venus. Identical to Venera 16) launched by Proton K from Baikonur at 02:38:39 UTC.
- June 6: Venera 16 Launch (Soviet Venus Orbiter to study the surface properties of Venus. Identical to Venera 15) by Proton K from Baikonur at 02:32 UTC.
- June 13: Pioneer 10 satellite became the first man-made object to leave the solar system. It was also the first spacecraft to visit an outer planet and the first to capture close-range images of Jupiter. Its final signal was sent to Earth in January 2003.
- June 18: STS-7 (Space Shuttle *Challenger*) launched 7:33 a.m., EDT KSC. Crew: Robert L.Crippen, Frederick B.Hauck, John M.Fabian, Sally K.Ride, and Norman E.Thagard. Shuttle launched Anik C-2, Palapa B-1, and SPAS-01, subsequently retrieved by STS-7. First U.S. woman in space: Sally Ride. Landed June 24, 6:56 a.m. PDT, Edwards Air Force Base (EAFB). Mission Duration: 6 days, 2 hours and 23 minutes.
- June 20: Dual DoD launch, 11:45 a.m., PDT, Vandenberg AFB.
- June. 27: USSR launches Soyuz T-9 aboard a Soyuz rocket from Baikonur at 09:12 UTC. Ferry flight to Salyut-7 space station. Crew: Vladimir A.Lyakhov and Aleksandr P.Aleksandrov.
- June 28: Galaxy 1 launched by Delta, 7:08 p.m., EDT, Cape Canaveral, Fla. First venture of Hughes Aircraft into the field of operational spacecraft.

### 25 Years Ago - 1988

- June. 7: USSR launches Soyuz TM-5 aboard a Soyuz rocket from Baikonur at 14:03 UTC. Ferry flight to Mir space station. Crew: Anatoly Y. Solovyov and Viktor P. Savinykh; Aleksandr A.Aleksandrov (Bulgaria).
- June 15: Nova-II launched by Scout, Navy improved Transit, launched 11:51 p.m., PDT, Vandenberg AFB.
- June 15: Meteosat-3 (and two other satellites: Amsat-Oscar-13 and PAS-1) launched aboard an Ariane 44LP from Kourou, French Guiana at 11:19:01 UTC.
- June 22: Russia launched a scale model of the Buran orbiter to complete a series of five test flights. These flights led to the first and only unmanned Buran mission in November 1988.

### 20 Years Ago - 1993

June 21: STS-57 (Space Shuttle *Endeavour*) launched 9:07 a.m. EDT, KSC. Crew: Ronald J. Grabe, Brian Duffy, G. David Low, Nancy J. Sherlock, Peter J. Wisoff, and Janice E. Voss. First flight of the Spacehab module ([SPACEHAB-1). EURECA retrieval. Landed July 1, 1993, 8:52 a.m. EDT, KSC. Mission Duration 9 days, 23 hours, 44 minutes.

# 15 Years Ago - 1998

- June 2: STS-91 (Space Shuttle *Discovery*) launched 6:06 p.m. EDT, KSC. Crew: Charles J. Precourt, Dominic L. Pudwill Gorie, Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and cosmonaut Valery Victorovitch Ryumin (Russia). Marked the final Shuttle/Mir Docking Mission and first use of the super lightweight external tank (SLWT). Returned Mir crew member Andrew Thomas to Earth. Landed June 12, 1998, 2:00:17 p.m. EDT, KSC. Mission duration 9 days, 19 hours, 55 minutes.
- June.18: Launch of Intelsat 805 aboard an Atlas 2AS rocket from Cape Canaveral at 22:48 UTC.

#### 10 Years Ago - 2003

June 2: Mars Express, a European (ESA)-Russian (IKI) planetary mission was launched by a Soyuz-Fregat rocket from Baikonur at 17:45 UTC. It consisted of a Mars Orbiter and a lander named Beagle 2 that was released from the orbiter when it reached Mars' vicinity in December 2003. Beagle 2 was declared lost after no communications were received following the scheduled landing on Mars.

June 10: MER-A (Mars Exploration Rover A) launched by a Delta 2 rocket from Cape Canaveral AFS at 17:59 UTC. It carried a robotic rover named Spirit (launched a month before its twin, Opportunity) to do geology observations near Gusev Crater on Mars. Both arrived on Mars in January 2004.

# 5 Years Ago - 2008

June 9: Zhongxing 9, also known as Chinasat 9, a Chinese (PRC) communication satellite, was launched by a Long March 3B rocket from Xichang Satellite Launch Center in Sichuan province at 16:15 UTC. It was the primary vehicle for transmitting voice and video from the 2008 Beijing Olympics.

June 11: The Fermi Gamma-ray Space Telescope, or Fermi, (formerly the Gamma-ray Large Area Space Telescope, or GLAST) mission is designed to survey gamma rays from astronomical sources in the energy range from 10 keV to over 300 GeV. Launch aboard a Delta 2 from Cape Canaveral at 12:05 p.m. EDT.

June 20: Jason 2 is a French-American ocean monitoring satellite that was launched by a Delta 2 rocket from Vandenberg AFB at 12:46 a.m. PDT. The 510 kg, 500 W craft carried instruments to enable derivation of sea surface levels with an accuracy of 2.5 cm. It is a cooperative mission involving the French CNES, the European EUMETSAT, and the American NOAA and NASA.