

## ***FORECAST OF UPCOMING ANNIVERSARIES -- AUGUST 2016***

### **145 Years Ago: 1871**

August 19: Orville Wright born, Dayton, OH.

### **55 Years Ago - 1961**

August 6: Gherman S. Titov launched aboard Vostok 2, 0600 UTC, Baikonur, USSR.

August 15: Explorer 12 launched by Thor Delta, 11:21 p.m., EDT, Cape Canaveral, Fla.

August 23: Ranger 1 launched by Atlas Agena, failed, 6:04 a.m., EDT, Cape Canaveral, Fla.

August 25: Explorer S55 A (Explorer 13) launched by Scout, 2:29 p.m., EDT, Wallops, VA.

August 30: Discoverer 29 launched by Thor, 4:00 p.m., EDT, Vandenberg AFB, CA.

### **50 Years Ago - 1966**

August 10: Lunar Orbiter 1 launched by Atlas Agena, 3:26 p.m., EDT, Cape Canaveral, Fla.

August 17: Pioneer 7 (Pioneer B) launched by Delta, 11:20 p.m., EDT, Cape Canaveral, Fla.

August 24: Luna 11 (USSR Moon Orbiter) launched by Modified SS-6 (Sapwood) or Molniya, 08:09:00 UTC.

August 25: Saturn rocket (SA-202) launched, suborbital flight test, 1:15 p.m., EDT, Cape Canaveral, Fla.

### **45 years Ago - 1971**

August 25: First supersonic flight of M2-F3, pilot William Dana, DFRF, CA

### **40 years Ago - 1976**

August 9: Luna 24 (USSR Moon Sample Return) launched by Proton K from Baikonur, 15:04:12 UTC. The last of the Luna series of spacecraft, the mission of the Luna 24 probe was the third Soviet mission to retrieve lunar ground samples.

### **35 Years Ago - 1981**

August 3: Dynamics Explorer 1 launched by Delta, 5:56 a.m., EDT, Vandenberg AFB, CA.

August 3: Dynamics Explorer 2 launched as part of dual payload, same date, same location.

August 26: Voyager 2, Saturn flyby at a distance of about 63,000 miles. It captured images of the planet's moons and rings.

### **30 Years Ago - 1986**

August 4: Cosmos 1769 launched by a Modified SS-9 (SCARP) or SS-13 (SCRAG at 05:02:00 UTC from Baikonur to perform naval radar and signal reconnaissance as part of the Electronic Ocean Reconnaissance Satellite (EORSAT) Program.

### **25 Years Ago - 1991**

August 2: STS-43 (Space Shuttle *Atlantis*) launched 11:02 a.m., EDT, KSC. Crew: John E. Blaha, Michael A. Baker, Shannon W. Lucid, G. David Low, and James C. Adamson. That same day the Tracking and Data Relay Satellite-5 was ejected into orbit from the cargo bay. Landed August 11, 8:23 a.m., EDT, KSC. Mission Duration: 8 days, 21 hours, and 21 minutes.

August 14: Intelsat 6 F-5, an International mammoth communications satellite, was launched from the Kourou Space Center, French Guiana, at 23:15 UTC, using the Ariane 4 (44L model) booster rocket.

August 15: Meteor/Toms (Meteor 3-5) launched by the U.S.S.R. using the Tsiklon 3 booster rocket from Plesetsk, Russia at 9:15 UTC. The spacecraft also carried a U.S. built Total Ozone Mapping Spectrometer (TOMS) on a joint U.S. and Soviet mission to study the ozone layer.

August 30: Solar-A launched by M3-SII from Kagoshima Space Center, Japan at 2:30 UTC. A joint UK, US, and Japanese venture, it provided valuable data about the Sun's corona and solar flares. The national name of Solar-A is Yohkoh (meaning "sunlight" in English).

### **20 Years Ago – 1996**

August 7: Announcement of possible microfossils found in ALH84001 Martian Meteorite.

August 17: Soyuz TM-24, a Russian transport spacecraft, carried cosmonauts Claudie Andre-Deshays (France), Valery G. Korzun, and Alexander Y. Kaleri to the MIR Space Station. It was launched by a Soyuz-U rocket from Baikonur at 13:17 UTC, and docked with Mir at 14:50 UTC on August 19.

August 17: ADEOS (ADvanced Earth Observation Satellite) -- Japanese remote sensing spacecraft launched by an H-2 rocket from Tanegashima Space center at 01:53 UTC. Named Midori post-launch, it carried instruments to monitor wind and temperature on ocean surfaces and aerosols, ozone, and greenhouse gases in the atmosphere. Failed on June 30, 1997.

August 21: FAST (Fast Auroral SnapshoT explorer) dedicated to study the physical processes that produce auroras launched at 1:50 PDT by a Pegasus-XL rocket from aboard an L-1011 cargo plane flying out of Vandenberg AFB.

### **15 Years Ago – 2001**

August 6: Galileo probe Flyby of Io.

August 8: Genesis probe launched by a Delta 2 rocket from Cape Canaveral at 12:13 EDT. Part of NASA's Discovery Program. Genesis was designed to discover the origin/genesis of solar system. The spacecraft was directly injected into the Langrangian-1 (L-1) region (located at about 1.5 million km in the sunward direction) to collect solar wind samples. Crashed Sept. 8, 2004 at U.S. Army Dugway Proving Ground in Utah.

August 10: STS-105 (Space Shuttle *Discovery*) launched from KSC at 5:10 EDT to dock with the ISS (Flight 7A.1). Crew: Scott J. Horowitz, Frederick "Rick" W. Sturckow, Daniel T. Barry, and Patrick G. Forrester. The payload included the Early Ammonia Servicer (EAS), to be installed on the outside of the ISS, and the Multi-Purpose Logistics Module (MPLM) Leonardo. Returned the Expedition 2 crew: Yury V. Usachev, James S. Voss, and Susan J. Helms; and transported the Expedition 3 crew: Frank L. Culbertson, Jr., Vladimir N. Dezhurov, and Mikhail Tyurin. Landed at KSC, August 22 at 2:23 p.m., EDT. Mission Duration: 11 days, 21 hours, 12 minutes.

### **10 Years Ago – 2006**

August 18: NASA awards \$500 million total that was divided between Space Exploration Technologies of El Segundo, Calif. and Rocketplane Kistler of Oklahoma City for the demonstration phase of the Commercial Orbital Transportation Services (COTS) program. COTS was funded to invest in commercial space transportation services with the hope of creating a competitive market for supply flights to the International Space Station (ISS) to follow the Space Shuttle's retirement.

### **5 Years Ago – 2011**

August 5: Juno launched 12:25 p.m. EDT from Cape Canaveral Air Force Station to provide the most extensive survey ever of Jupiter while in polar orbit for approximately one year from 2016 to 2017. The launch vehicle was an Atlas V 551 with a Centaur upper stage.