# FORECAST OF UPCOMING ANNIVERSARIES -- DECEMBER 2012

### 95 Years Ago - 1917

December 16: Science fiction writer Arthur C. Clarke born. "2001: A Space Odyssey" is one of his most well known works. He was also the first to propose the concept of geostationary satellites.

## 65 Years Ago - 1947

December 23: Transistor invented by Drs. John Burdeen, Walter H. Brattain, and William Shockley at AT&T.

#### 55 Years Ago - 1957

December 6: Vanguard (TV-3) failed to launch, exploded on the launch pad, 11:45 a.m., EST, Cape Canaveral, Fla.

December 17: First successful firing of Atlas ICBM, Cape Canaveral, Fla.

### 50 Years Ago - 1962

December 13: Relay 1 launched by Thor Delta, 6:30 p.m., EST, Cape Canaveral, Fla.

December 14: Mariner 2 flew past Venus. First successful planetary flyby.

December 16: Explorer 16 launched by Scout, 0:33 a.m., EST, Wallops Flight Facility, VA.

## 45 Years Ago - 1967

December 13: Pioneer 8/TTS-1 launched by Thor Delta, 9:08 a.m., EST, Cape Canaveral, Fla.

## **40 Years Ago – 1972**

December 7: Apollo 17 launched aboard a Saturn V (SA-512) rocket from Cape Canaveral at 12:33 EST. Landed on Moon on December 11 in the Taurus-Littrow region. Crew: Eugene A. Cernan, Ronald E. Evans, and Harrison H. Schmitt. Last Apollo moon mission.

December 7: "Blue Marble" photograph taken by Apollo 17 crew.

December 11: Nimbus 5 launched by Delta, 2:56 a.m., EST, Vandenberg AFB.

December 16: Aeros 1 (A) launched aboard a Scout rocket from Vandenberg AFB, CA at 3:24 PST.

December 20: Last flight of M2-F3 program, Dryden Flight Research Facility (DFRF), CA.

## 35 Years Ago – 1977

December 10: USSR launches Soyuz 26 aboard a Soyuz rocket from Baikonur. Ferry flight to Salyut-6 space station. Cosmonauts: Yuri V. Romanenko and Georgi M. Grechko.

# 25 Years Ago - 1987

December 21: USSR launches Soyuz TM-4 aboard a Soyuz rocket from Baikonur. Ferry flight to Mir space station. Cosmonauts: Vladimir G. Titov, Musa K. Manarov, and Anatoli S. Levchenko.

### 20 Years Ago - 1992

December 2: STS-53 (Space Shuttle *Discovery*) launched, 8:24 a.m., EST, KSC. Astronauts David M. Walker, Robert D. Cabana, Guion Bluford, Jr., James S. Voss, and Michael R. Clifford. Classified Department of Defense primary payload. Landed at Edwards Air Force Base, CA, 3:43 p.m., EST. Mission Duration: 7 days, 7 hours, 19 minutes.

December 9: EAFB CA. Final DoD mission. Mission duration: 7 days, 7 hours, 19 minutes.

December 8: Galileo, 2nd Earth flyby.

## 15 Years Ago - 1997

December 22: Launch of Intelsat 804 aboard Ariane 42L rocket from Kourou, French Guiana at 00:17:00 UTC.

### 10 Years Ago - 2002

December 10: TDRS-10 (TDRS-J), for Tracking Data and Relay Satellite, launched aboard an Atlas 2A rocket from Cape Canaveral at 9:42 EST.

December 14: Adeos 2, also known as Midori 2 ("Green"), a Japanese (NASDA) remote sensing spacecraft. Launched by a H-2 rocket from Tanegashima Space Flight Center at 8:31 EST along with three other satellites: Fedsat, Micro-labsat, and WEOS. It carried five instruments to monitor the global climate trends. Contact was lost on Oct. 25, 2003.

December 29: Shenzhou 4 (meaning Divine Vessel), a Chinese (PRC) unmanned test satellite launched from Jiuquan Satellite Launch Center in northwestern China by a Long March 2F rocket at 16:40 UTC. It carried a retrievable crew module with all furnishings, test equipment, and dummy astronauts to assess its viability for a manned launch.