# FORECAST OF UPCOMING ANNIVERSARIES -- AUGUST 2019

#### 90 Years Ago - 1929

August 8-29: Round-the-world flight by the Graf Zeppelin.

#### 65 Years Ago - 1954

August 1: Convair XFY-1 Pogo makes first vertical take-off and landing. Test pilot comment: "It's awful hard to fly an airplane looking over your shoulder."

August 5: Bell X-2, No. 1, first glide flight, piloted by Lt. Col. Frank K. Everest, Edwards AFB, CA.

#### 60 Years Ago - 1959

August 7: Explorer 6 launched by Thor Able, 10:23 a.m., EDT, Cape Canaveral, Fla. Returned first crude TV images of earth from space.

August 13: Discoverer 5 (CORONA mission 9002) launched by Thor Agena, 14:57 EDT, Vandenberg AFB.

August 19: Discoverer 6 (CORONA mission 9003) launched by Thor Agena, 15:26 EDT, Vandenberg AFB.

## 55 Years Ago - 1964

August 19: Syncom 3 launched by Thor Delta, 8:15 a.m., EDT, Cape Canaveral, Fla. First launch of a Delta (Delta 25) using strap-on solid motors (3) to increase first stage thrust.

August 28: Nimbus 1 launched by Thor-Agena 3, 4:57 a.m., EDT, Vandenberg AFB. First nighttime cloud-cover images returned by satellite. First NASA program to develop and operate advanced meteorological pace observatories.

### 50 Years Ago - 1969

August 7: Zond 7 launched by Proton K (Soviet Circumlunar Mission), 23:48 UTC, Baikonur, USSR. Obtained color photography of the Earth and the Moon from varying distances after lunar flyby. Reentered the Earth's atmosphere on August 14, 1969, and achieved a soft landing in a preset region south of Kustanai.

August 9: Orbiting Solar Observatory (OSO 6) launched by Thor Delta, 3:52 a.m., EDT, Vandenberg AFB.

August 12: Applications Technology Satellite (ATS 5) launched by Atlas Centaur, 7:0l a.m., EDT, Cape Canaveral, Fla.

### 45 Years Ago - 1974

August 26: Soyuz 15 launched on a Soyuz rocket from Baikonur at 19:58:05 UTC. Ferry flight to Salyut 3 space station; docking unsuccessful. Crew: Lev S. Dyomin and Gennadi V. Sarafanov.

August 30: ANS-1 (Netherlands Astronomical Satellite) launched by Scout, 7:08 a.m., PDT, Vandenberg AFB.

#### 40 Years Ago - 1979

August 10: Westar 3 launched by Delta, 8:20 p.m., EDT, Vandenberg AFB.

#### 35 Years Ago - 1984

August 16: Launch by Delta of three satellites comprising Active Magnetospheric Particle Tracer Explorers (AMPTE) mission, 10:47 a.m., EDT, Cape Canaveral, Fla.

August 30: STS-41D (Space Shuttle *Discovery*) launched, 8:42 a.m. EDT from KSC. Crew: Henry W. Hartsfield, Jr., Michael L. Coats, Judith A. Resnik, Steven A. Hawley, Richard M. Mullane, and Charles D. Walker. Deployment of SBS-D, Syncom IV-2, and Telstar 3-C satellites. First flight of orbiter *Discovery*. First pad abort at T-4 seconds. First deployment of three satellites on single mission. First flight to include a non-NASA employee crewman [C. Walker]. First industrial payload specialist [C. Walker]. Landed September 5 at 8:38 a.m. PDT, Edwards Air Force Base. Mission Duration: 6 days, 56 minutes.

#### **30 Years Ago – 1989**

August 8: Hipparcos launched by an Ariane 44LP rocket from Kourou, French Guiana at 23:25:53 UTC.

August 8: STS-28 (Space Shuttle *Columbia*) launched, 8:37 a.m., EDT, from KSC. Crew: Brewster H. Shaw, Richard N. Richards, James C. Adamson, David C. Leestma, and Mark N. Brown. A Department of Defense mission. Landed August 13 at 6:37 a.m. PDT, Edwards Air Force Base. Mission Duration: 5 days, 1 hour.

August 18: GPS (NavStar) launched by Delta 2, 1:58 a.m., EDT, Cape Canaveral, Fla. Also known as USA-42.

August 25: Voyager 2: First encounter with Neptune.

### 25 Years Ago - 1994

August 3: APEX (Advanced Photovoltaic and Electronic Experiments) was launched by a Pegasus rocket carried by a B-52 bomber from Edwards Air Force Base, California, at 11:38 UTC carrying three diagnostic instruments including a cosmic ray monitor to check the impact of radiation in the Van Allen belt on the other two target instruments.

August 3: DIRECTV 2, also known as DBS-2, a geostationary communications spacecraft, was launched by an Atlas 2-A rocket from Cape Canaveral with the capability to provide 150 channels of TV programs. It carries a time capsule named "SpaceArc". The Rochester (N.Y.) Museum in partnership with NASA's Educational Affairs Division, Space Systems/Loral, the World Space Foundation, Educational Testing Service, and the U.S. International Space Year Association, sponsored "SpaceArc", a reel of optical tape affixed to the satellite with essays, poems and artwork from as many as 5,000 people around the world including messages from then Vice-President Al Gore and his predecessor, Dan Quayle. After its useful life span the spacecraft will be moved to a higher orbit so that only an explorer from a distant future generation may uncover the messages.

## 15 Years Ago – 2004

August 3: The Messenger probe, scheduled to eventually flyby and then orbit around Mercury in 2011, was launched by a Delta 2 rocket from Cape Canaveral at 2:16 a.m. EDT. Messenger was the first spacecraft to take close up photos of Mercury since Mariner 10.

#### 10 Years Ago - 2009

August 29: STS 128 (Space Shuttle *Discovery*) launched at 11:59 EDT from KSC. Crew: Rick Sturckow, Kevin Ford, José Hernández, John "Danny" Olivas, Nicole Stott, Christer Fuglesang and Patrick Forrester. Landed September 11, 8:53 p.m. EDT, Edwards Air Force Base. Mission Duration: 13 days, 20 hours, 53 minutes. *Discovery* carried the Leonardo Multi Purpose Logistics Module which, enables transfer of supplies and scientific equipment to the ISS.