FORECAST OF UPCOMING ANNIVERSARIES -- APRIL 2013

85 Years Ago - 1928

April 11: First manned rocket-powered car tested by Fritz von Opel, Max Valier and others at Berlin, Germany, 62 miles per hour top speed.

55 Years Ago - 1958

- April 2: President Dwight D. Eisenhower proposes establishing NASA in a message to Congress.
- April 25: First successful launch and inflation in space of a sphere by NACA on Nike-Cajun rocket, WFF.

50 Years Ago - 1963

- April 2: Explorer 17 launched by Thor Delta, 9:00 p.m., EST, Cape Canaveral, Fla. First in NASA sounding rocket program when NASA launched 85 pound scientific payload to 208 mile altitude.
- April 2: Luna 4 (Soviet Moon Flyby Mission) launched by Molniya or Modified SS-6 (Sapwood) or Molniya rocket at 08:04 UTC from Baikonur.

45 Years Ago - 1968

- April 2: "2001: A Space Odyssey" had its world premiere at the Uptown Theatre in Washington, D.C.
- April 4: Apollo 6 launched by AS-502, 7:00 a.m., EST, KSC. Saturn V final qualification of the Saturn V launch vehicle and Apollo spacecraft for manned Apollo missions.
- April 7: Luna 14 (Soviet Moon Orbiter) launched by Molniya or Modified SS-6 (Sapwood) at 19:25 UTC from Baikonur.

40 Years Ago - 1973

- April 3: Salyut 2 launched by Proton K, 0900 UTC, Baikonur.
- April 5: Pioneer 11 launched by Atlas Centaur, 9:11 p.m., EST, Cape Canaveral, Fla. First spacecraft to fly to Saturn. First spacecraft to take close-up pictures of Saturn. First spacecraft to provide pictures of the polar regions of Jupiter.
- April 19: Intercosmos Copernicus 500 (known as Intercosmos 9) launched by Cosmos rocket, 1020 UTC, Kapustin Yar.
- April 20: Anik 2 launched by Delta, 6:47 p.m., EST, Cape Canaveral, Fla.

35 Years Ago - 1978

April 26: Heat Capacity Mapping Mission (HCMM/AEM-1) launched by Scout, 5:20 a.m., EST, Vandenberg AFB.

30 Years Ago - 1983

April 4: STS-6 (Space Shuttle *Challenger*) launched, 1:30 p.m., EST, KSC. Crew: Paul J. Weitz, Karol J. Bobko, Donald H. Peterson and Story F. Musgrave. Landing: April 9, 10:53 a.m. PST, Edwards Air Force Base (EAFB), CA. Mission Duration: 5 days, 0 hours, 23 minutes.

First flight of the orbiter Challenger.

First Tracking and Data Relay Satellite successfully deployed. TDRS-1 launched from STS-6 the same day. The IUS stage malfunctioned leaving the TDRS satellite tumbling in a useless orbit. Still the satellite was put into a correct prbit thanks to its thrusters.

First space walk of Shuttle program [D. Peterson & S. Musgrave].

First flight of the lightweight external tank and lightweight solid rocket booster casings.

April 20: USSR launches Soyuz T-6 aboard Soyuz rocket from Baikonur at 13:11 UTC. Crew: 1. Vladimir G.Titov, Gennadi M.Strekalov, and Alexander A.Serebrov. Ferry flight to Salyut-7 space station. Failure to dock.

April 28: Launch of GOES-6 (F) by Delta from Cape Canaveral at 22:26 UTC.

25 Years Ago - 1988

April 25: SOOS 5 (Stacked Oscar on Scout) launched by Scout G, 9:57 p.m., EDT, Vandenberg AFB. Dual navigation satellites Transit O 23 and Transit O 32 launched by NASA for the U.S. Navy. The satellites form part of a navigation constellation for the Navy also known as the Navy Navigation Satellite (NNS).

20 Years Ago - 1993

April: Using data from the Total Ozone Mapping Spectrometer (TOMS), scientists from the Goddard Space Flight Center, Greenbelt, Md., determined that ozone levels over the mid-latitudes of the Northern Hemisphere had reached record low levels in the second half of 1992.

April 8: STS-56 (Space Shuttle *Discovery*) launched 1:29 a.m. EDT, KSC. Crew: Kenneth D. Cameron, Stephen S. Oswald, C. Michael Foale, Kenneth D. Cockrell, and Ellen Ochoa. Carried Atmospheric Laboratory for Applications and Science-2 (ATLAS-2). Landed April 17, 7:37 a.m. EDT, KSC. Mission duration 9 days, 6 hours, 8 minutes.

First Hispanic female astronaut to fly in space. (E. Ochoa)

April 25: Array of Low Energy X-Ray Imaging Sensors (ALEXIS) spacecraft launched on a Pegasus booster from the wing of a B-52, off the coast of California (Vandenberg AFB). Launch at 13:56 UTC. First all DoE sponsored satellite.

April 26: STS-55 (Space Shuttle *Columbia*) launched 10:50 a.m. EDT, KSC. Crew: Steven R. Nagel, Terence T. Henricks, Jerry L. Ross, Charles J. Precourt, Bernard A. Harris Jr., Ulrich Walter, and Hans W. Schlegel (Germany). Carried the second reusable German Spacelab, D-2. Landed May 6, 1993, 10:30 a.m. EDT, Edwards AFB. Mission Duration 9 days, 23 hours, 39 minutes.

15 Years Ago - 1998

April 1: Transition Region And Coronal Explorer (TRACE) spacecraft launched to study the Sun's atmosphere by Pegasus XL, under the wing of a L-1011, Vandenberg AFB, CA. Launch time: 02:43:23 UTC.

April 17: STS-90 (Space Shuttle *Columbia*) launched 2:19 p.m. EDT, KSC. Carried Neurolab to study neurological and behavioral changes in space. Astronauts Richard A. Searfoss, Scott D. Altman, Richard M. Linnehan, Dafydd Rhys Williams, Kathryn P. Hire, Jay C. Buckey, and James A. Pawelczyk. Landed May 3, 12:09 p.m. EDT, KSC. Mission duration 15 days, 21 hours, 50 minutes.

April 21: Cassini Venus Flyby.

April 24: Globalstar 5-8 commercial communications satellites launched by Delta 2.

10 Years Ago - 2003

April 25: Expedition 7 International Space Station Crew (ISS) -- First American – (Edward T. Lu) to launch as the Flight Engineer of a Soyuz spacecraft (Soyuz TMA-2) Crewmember Yuri I. Malenchenko. Launched By a Soyuz FG rocket from Baikonur at 03:54 UTC.

(Ed Lu). First American to launch and land on a Soyuz Spacecraft. (Ed Lu)

April 28: GALEX (GALaxy Evolution eXplorer) – A NASA astronomy satellite designed to explore the origin and evolution of galaxies, stars and heavy elements using an onboard ultraviolet telescope. Launched at 12:00 UTC on 28 April 2003 by a Pegasus XL rocket released from a L-1011 cargo plane flying out of Cape Canaveral.

5 Years Ago - 2008

April 8: Soyuz TMA-12 launched by a Soyuz FG rocket from Baikonur at 12:17 UTC. It carried three astronauts (two Russian and one South Korean: Sergei A Volokov, Oleg D.Kononenko, and Yi So-Yeon, South Korea) to the International Space Station (ISS) and docked automatically with it at 16:00 UTC on April 10. After about 10 days at the ISS, the South Korean astronaut and two other astronauts who had been staying on the ISS for several months, returned to Earth on April 19 on Soyuz TMA-11 (that had remained docked at the ISS since its mission in October 2007). It was a rough landing at a location 400 km away from the planned location.

April 25: Tianlian 1, the first data-relay satellite of China (PRC), launched by a Long March 3C rocket from Xichang satellite Launch Center in Sichuan province at 15:35 UTC. Its operation was designed to be activated with the launch of the manned Shenzhou 7 mission later in 2008. It will then cover about 50% of Shenzhou 7 orbit, rather than the coverage of 12% without the relay.

April 26: GIOVE-B (Galileo In-Orbit Validation Element-B), the second of the test versions of the 30 craft European Union navigational fleet that is planned to be launched beginning 2010 was launched by a Soyuz-Fregat rocket from Baikonur at 22:16 UT. (A similar version, GIOVE-A, was launched in December 2005.) The 500 kg craft carried two (redundant) Rubidium atomic clocks, and an even more precise Passive Hydrogen Maser with an accuracy of one nanosecond/day. It also carried a radiation-monitoring payload, and a laser retro-reflector for high-accuracy laser ranging. When completed, this Galileo fleet will become the third available fleet, after the long-functional GPS and the to-be-completed GLONASS fleets.

April 28: CartoSat 2A was the primary Indian remote sensing craft among the fleet of 10 satellites that were launched by a PSLV 9 rocket from Sriharikota in southeastern coast of India at 03:54 UT. The images will be used in rural and urban planning.