Photo Credit: Ron Mollere

Runners and Walkers on Your Mark!

More than 700 Goddard civil servants and contractors jockey for position at the start of the annual center-wide, two-mile Fun Run on April 28.

What's UP? June 1993

Compton Gamma Ray Observatory — *Days in orbit: 787*
The observatory is functioning normally. As of May 26, the mean orbital altitude was 219 miles (353.51 kilometers). A series of two 16-minute thruster burns is planned each day beginning June 15 and continuing for about two weeks to boost the observatory's orbit from 217 to 280 miles (from 350 to 450 kilometers).

Cosmic Background Explorer (COBE)— *Days in orbit: 1,289*
COBE continued to acquire all science and engineering data without any major problems or operational errors. The spacecraft is being monitored closely while it is in its shadow season. The shadows, which are 14 minutes long, will reach a maximum of 17 minutes at the end of June.

Extreme Ultraviolet Explorer (EUVE) — *Days in orbit: 358*
Recent discoveries from EUVE were presented at the 182nd National Meeting of the American Astronomical Society (AAS), University of California at Berkeley, following the one-year anniversary of EUVE's launch on June 7. The new results include the discovery of elements that blanket the light from white dwarf stars, the detection of ionized helium in the local interstellar gas, the detection of an extreme ultraviolet shadow in the local interstellar medium and new findings on the mysteries of rare extragalactic objects.

Hubble Space Telescope (HST) — *Days in orbit: 1,040*
All science instruments and spacecraft subsystems operated nominally in May. Preparation for the HST First Servicing Mission (FSM) included the seventh in a series of training simulations. Both the wide Field Planetary Camera (WF/PC) II and the Solar Array II successfully completed preship reviews and arrived at Goddard the first week in June to begin integration and test activities. The Corrective Optics Space Telescope Axial Replacement (COSTAR) had some schedule setbacks in May. Vibration tests uncovered interference problems between the mechanisms and the optical bench housing. Design corrections and cleaning of the optics to remove particulate contamination generated by the interference was required. Delivery to Goddard is now planned for early July. This is later than originally scheduled but still supports the December 2, 1993 launch date.

International Ultraviolet Explorer (IUE) — *Days in orbit: 5,635*
IUE periodically observed a set of solar-type stars over a 16-day interval in May to monitor the spectral line emission from active regions on these stars. The IUE activities were coordinated with ground-based observations used to infer the strengths of the magnetic fields associated with the regions. By analyzing the change in the ultraviolet emission and the magnetic fields as the stars rotate, the IUE guest investigators can map the spatial distribution of the active regions and correlate their emission and magnetic field properties. When combined with similar relations observed for the Sun, these results provide a test of proposed mechanisms responsible for heating the chromospheres of solar-type stars.

Upper Atmosphere Research Satellite (UARS) — *Days in orbit: 625*
The Halogen Occultation Experiment (HALOE) instrument, which measures trace gas concentrations by atmospheric infrared absorption, is making very good measurements. The Microwave Limb Sounder (MLS) instrument, which measures chlorine monoxide (one of the main ingredients causing ozone depletion) continues to gather excellent data. UARS data are becoming more available and being used for geophysical studies. Five special UARS sessions were held at the European Society meeting in Weisbaden, Germany and at the American Geophysical Union meeting in May. A special UARS issue of geophysical research letters is scheduled to be released this month. Interesting results to date indicate that dynamical transport of trace gases may play a much larger role in polar ozone morphology than previously believed. UARS battery performance has remained stable and plans are being made to conduct reconditioning procedures during the mid-June full sun period. In response to last month's safehold situation, meeting was held May 26 to review proposed changes to the failure detection logic by the contractor. This revised logic would replace the patched logic currently onboard and provide a more rugged safehold protection system.