GYRO UPDATE  Work continues on the proposed two gyro plus Fine Sun Sensor (FSS) control mode. (See the description of the new mode by Ivan Mason in the NASA IUE Newsletter, No. 20, p. 5, 1983.)

Substantial modifications have been made to the ground and spacecraft computer software by the Observatory staff. Off-line testing has begun and tests on the IUE spacecraft are expected to begin in late June.

Once the two gyro plus FSS control mode has been checked out, it will be available as a backup maneuvering mode in case another gyro fails. What limitations the two gyro mode might impose on science observations will not be known until spacecraft tests are performed.

At present all three gyros are healthy and no problems are anticipated. Once the two gyro mode becomes available, IUE will have extra insurance that it can continue for several more astronomically productive years.

LWP CALIBRATION CORRECTION  Angelo Cassatella, one of the VILSPA Resident Astronomers, informs us that there is an error in the LWP calibration published recently (Blades, J.C., and Cassatella, A.C. 1982, ESA IUE Newsletter No. 15, p. 38; reprinted in this Newsletter). Some truncated spectra were used in the calibration computations, causing errors in the values of $S_a^{-1}$ given for 1900 and 3200Å in their Table 1. Intermediate values of $S_a^{-1}$ are correct as published. The revised calibration will be available soon.

SIXTH EPISODE PROGRAMS  The programs awarded for the sixth episode continue the trend of increasing demand for IUE observing time. Out of 309 proposals submitted, 207 were accepted. (Last episode 162 out of 252 proposals were awarded.) Twenty proposals were accepted for archival research. Collaborative programs with VILSPA are on the increase; approximately 20% of the US1 time will be spent on collaborative exposures. A total of 287 scientists are involved in the accepted proposals, including 124 Principal Investigators from 63 institutions. New researchers continue to join the IUE family: there are 30 new PI's 18 of which have never observed with IUE. Welcome aboard!

DELTA V  Another firing of the large hydrazine jets is currently scheduled for May 27. The "boost" is required to counteract the westward drift of IUE's orbit. The major impact to observers is the increased overhead of ensuring good telemetry signal strength for camera reads until new orbital elements can be derived. About 50 years' supply of hydrazine is available on the IUE at the current rate of usage.

NEW GUIDE TO OBSERVING  Principal Investigators for sixth episode programs have already received the preliminary version of the new, expanded IUE Observer's Guide. Several sections have been enlarged or added, including discussions about the IUE spacecraft itself, exposure estimates, blind offsets, aperture orientation, the LWP camera, microphonics avoidance,
background radiation levels, overexposures and phosphorescence ghosts, trailed and multiple exposures, the SIUPS page, the Regional Data Analysis Facilities, and calibration recommendations. All our Guest Observers, both new and experienced, are urged to read through the new guide. Comments are welcome.

PERSONNEL CHANGES Two Telescope Operators have left IUE and two have joined the staff. Bryan Baroffio and Bill O'Donnell have taken positions with the Orbit and System Support Operation at Goddard, which oversees satellites such as Landsat 4, IRAS, and TDRSS. Our two new TO's are Matt Garhart and Holly Abraham. They are currently concluding their training and will soon be sitting in the "hot seat" at the observing console.

Cathy Imhoff
25 April 1983