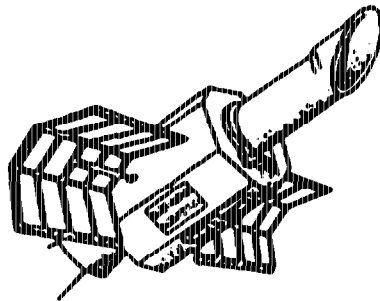


IUE



NEWS

August 15, 1986

Special Edition

Greenbelt, Maryland

CONGRATULATIONS

Dr. Albert Boggess, of NASA Goddard Space Flight Center, and Dr. Robert Wilson, of the University College London, were recently honored by the Royal Astronomical Society of the United Kingdom. They were named co-recipients of the prestigious Herschel Medal, awarded once every three years for exceptional contributions to observational astronomy. Boggess and Wilson were cited for their contributions to the success of IUE. Boggess was the NASA IUE Project Scientist for several years, including prior to launch. Wilson is the U. K. Science and Engineering Research Council IUE Project Director.

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A POSSIBLE ONE-GYRO MODE?

NASA attitude control engineers are working on the design for a one-gyro backup control mode for IUE. Such a control mode is possible since the Fine Sun Sensor (FSS), now used for control with the two-gyro system, yields data in two axes (pitch and roll). The third axis would be controlled using the remaining gyro. The fine control required for target acquisition would require use of the Fine Error Sensor (FES). Some limited spacecraft tests have already been performed to try out specific aspects of the proposed backup mode. Once the design has been finalized, additional modifications to the on-board computer and ground computer control software will be needed. The process involved is similar to that required to design and implement the two-gyro control mode. At present we can make no predictions of what the one-gyro observing capabilities will be until the control system design is complete and ground-based simulations have been performed. (Sorry, a zero-gyro control mode is probably not in IUE's future!)

The magicians involved in designing both the two-gyro and one-gyro control modes are the attitude control engineers in Goddard's Guidance and Control Branch, headed by Henry Hoffman. Hoffman's group has also been involved in the restabilization of the Solar Maximum Mission satellite, just prior to the Shuttle repair mission, and the rescue of the first Tracking and Data Relay Satellite (TDRS), using its thimble-sized jets fired hundreds of times to boost it to synchronous orbit.

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NEW PHONE NUMBERS

A new phone system has recently been installed at Goddard. In most cases, only the prefix has changed from 344- to 286-. The FTS prefix is now 888-. Below are some of the more frequently needed phone numbers.

Dr. Yoji Kondo	(301) 286-6247	Resident Astronomers	(301) 286-7537
Dr. Don West	(301) 286-6901	IUE secretary	(301) 286-7664
Genevieve Wiseman	(301) 286-8511	IUE RDAF staff	(301) 286-8800
G. O. office	(301) 286-3924		

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CHANGES AT NSSDC

There has been some reorganization of the staff at the National Space Science Data Center at Goddard. Requests for IUE data will now be handled through the regular request procedures instead of through Wayne Warren's office. Please address any future requests for IUE data to:

NSSDC Request Coordinator
Code 633.4
Goddard Space Flight Center
Greenbelt, Maryland 20771

The current coordinator is Billie Dolen (301-286-6695). Dr. Wayne Warren continues as the IUE Acquisition Scientist; his new phone number is (301) 286-8310.

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CORRECTIONS TO LWR DEGRADATION COEFFICIENTS

An error has been found in the LWR degradation coefficients presented by Clavel, Gilmozzi, and Prieto (1985, NASA IUE Newsletter No. 27, p. 50). The corrected coefficients are presented in an article in this newsletter. Please note that the old coefficients overcorrect the LWR fluxes slightly; you may wish to reanalyze your data if you have used this correction method.

In their article in this newsletter, Clavel et al. suggest that the LWR degradation may have increased in recent years. This effect would have masked the error in the older set of coefficients, so that the error would not have been detected by Imhoff (1986, NASA IUE Newsletter No. 29, p. 5). Some preliminary analysis has confirmed this suggestion. The corrected coefficients presented in this newsletter appear to work well for data taken up until the end of 1983. After this time, the degradation seems to have increased so that the correction method would yield fluxes that are slightly too low by a few percent.

Note that Holm's correction method (1985, NASA IUE Newsletter No. 26, p. 11) now appears to give correct fluxes, not fluxes too low by 3% as suggested by Imhoff (1986). We also note that the increased degradation rate does not yet show up in the quick-look sensitivity monitoring data (Sonneborn and Garhart, this newsletter).

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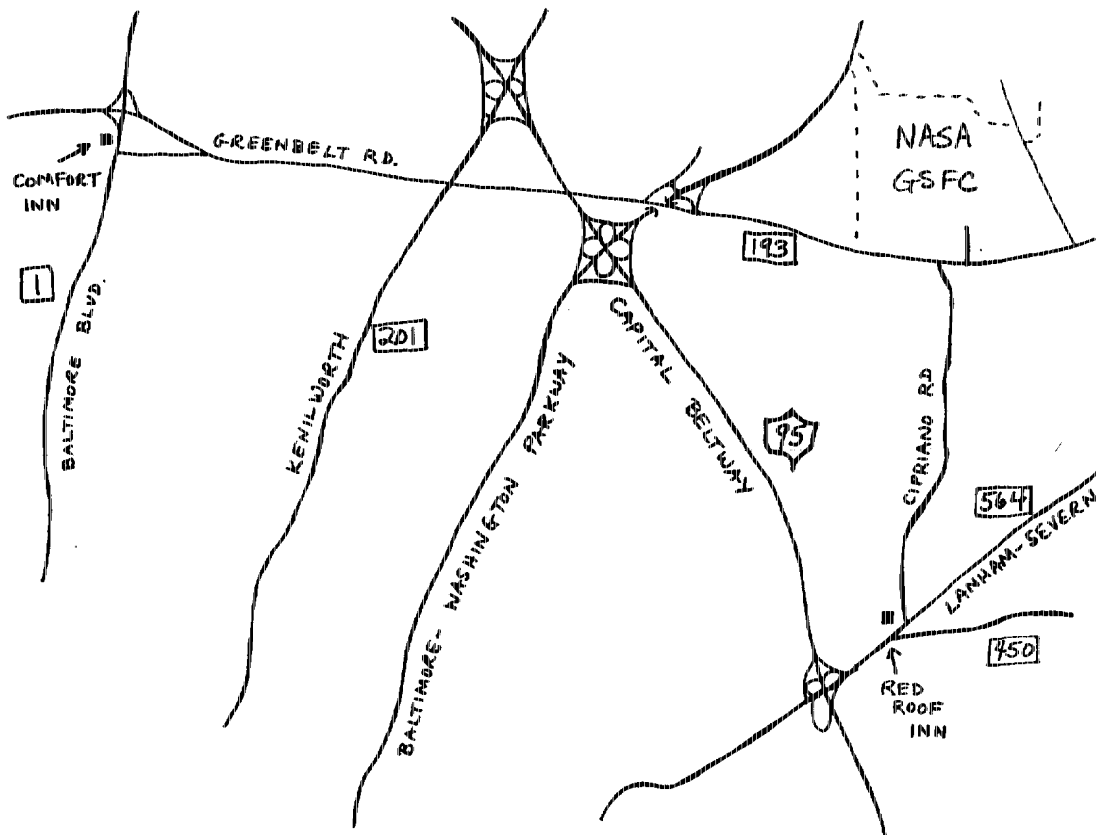
SOME NEW ECONOMY MOTELS NEAR GODDARD

There are two new motels in the area that we know of, both of which are in the economy class. One is the Red Roof Inn and the other is the Comfort Inn. Guest Observers may wish to try them out (no endorsements implied!).

The Comfort Inn is located on Route 1, near the intersection with Greenbelt Road (that goes to Goddard). The Red Roof Inn may be reached from the Beltway, exiting east on Route 564 (Lanham-Severn Road). There are residential streets that can be used to travel between Goddard and the Red Roof Inn. Information on the motels is given below.

Red Roof Inn
9050 Lanham-Severn Road
Lanham, MD 20706
(301) 731-8830
Reg. rates \$29.95 single
 \$36.96 double
 (plus tax)

Comfort Inn
9020 Baltimore Blvd.
College Park, MD
(301) 441-8110
Reg. rates \$43.95 single
 \$49.95 double
 (plus tax)



NEW FES CALIBRATION

At the last IUE Three-Agency Coordination meeting, the proposed FES calibration presented in the last newsletter was discussed. Additional study will be done of the time-dependence, using a larger data set on the calibration stars. In addition, a revision may be made to the format of the dead-time correction. The eventual goal is to produce a definitive FES calibration that can be adopted by the entire IUE Project.

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IUE STAFF CHANGES

Dr. Richard Arquilla is joining the IUE Observatory staff as Resident Astronomer. Richard comes to us from the University of Calgary, where he has been studying dark clouds using microwave molecular spectral lines.

Dr. Nancy Evans has left IUE to take a position at the University of Toronto. She will be missed by the staff and Guest Observers. Dr. Chris Shrader has taken over Nancy's duties as the IUE scheduler.

Ms. Joy Bohlin (formerly Heckathorn) has rejoined the IUE staff after a sojourn at the Space Telescope Science Institute, where she worked on the Faint Object Camera. Joy is overseeing the image processing group, and will continue with her work on hot stars and high-velocity interstellar gas.

Mr. Len Smith and Mr. Kevin Hassett have joined the IUE programming support staff. They are involved in the effort to convert the IUE image processing software to run on a VAX computer and to update the IUE scheduling software.

Catherine L. Imhoff
15 August 1986