



The EMR-Telemetry News

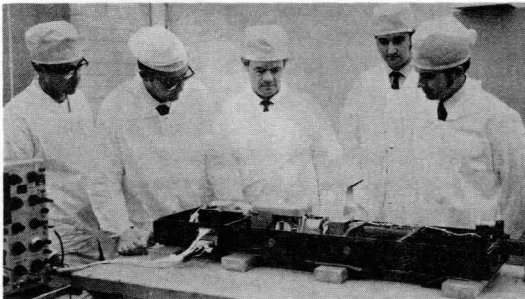
Sarasota, Florida

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WHITE LIGHT CORONAGRAPH FIRST FLIGHT MODEL TESTED

The first flight model of a new scientific sun-studying experiment--scheduled to be on board NASA's next Orbiting Solar Observatory (OSO-H)--has been successfully acceptance tested in Sarasota and delivered to the U. S. Naval Research Laboratory, Washington, D. C.



Observing the White Light Coronagraph flight experiment during acceptance testing are: Tony Ramos and Richard Davies, of EMR-T; Charles R. Detwiler, NRL; Gerry Aguirre, EMR-T; David Roberts, NRL.

EMR-T developed the White Light Coronagraph electronics for this prime experiment to go on OSO-H under a contract awarded by NRL over a year ago. The White Light Coronagraph consists of a miniaturized television camera with associated data processing circuits. This sophisticated equipment utilizes digital TV techniques and is designed to function in orbit for six months or more.

OSO-H will observe certain phenomena involving the sun-- solar winds, matter

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MDAC/NASA TEAM SURVEYS EMR-T WORK FOR SKYLAB

A six-man Quality/Reliability Survey Team from NASA, Huntsville, Ala., and McDonnell Douglas Astronautics Co., St. Louis, visited EMR-Telemetry last week to evaluate EMR's performance in the area of quality and reliability on the Skylab "man-rated" space program.

The MDAC/NASA inspection team surveyed work in progress in Receiving, Shipping, Assembly, Inspection, Testing and Purchasing in connection with EMR-T's contract with MDAC to provide telemetry systems for the Skylab Program, known in-house as "Airlock."

This Survey is part of a Manned Flight Awareness program, designed to make each member of the Skylab team aware of his responsibility for quality workmanship necessary to astronaut safety and mission success. The Manned Flight Awareness program seeks to instill in all members of the government-industry team a sense of pride through awareness of the importance of their work.

"In their preliminary report, the MDAC members of the Survey Team remarked on the very high morale and motivation of EMR-T's workers on the Airlock/Skylab project," reports Bob Walter, Manager of Quality Assurance.

Members of the visiting Survey Team were: E. H. Koopman, Dale Iffrig and William Vogan, all of MDAC, St. Louis, and W. R. Wollenberg, Resident MDAC

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TELEVENT--NEW OPERATIONAL SOFTWARE FOR T/C SYSTEMS

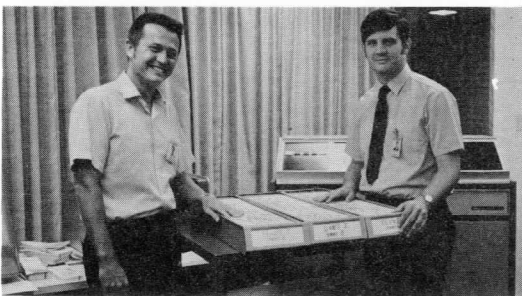
"TELEVENT" -- Telemetry Event Processing System--is a new telemetry/computer software package put together in EMR-T's Software Systems Department. (A software program is a set of instructions which directs a computer to perform certain operations, step-by-step.)

With the arrival of the computer age, EMR-T's equipment is now frequently used in conjunction with high-speed central processors, or computers. Our computer-controlled telemetry modules are combined with EMR computers in high-speed data processing systems which we call T/C (telemetry/computer) systems.

How can telemetry modules and the computer communicate? Through software. The computer programs (sets of instructions) direct the computer in controlling the telemetry modules, processing data and producing data outputs in a form meaningful to the user.

"TELEVENT is a software tool which effectively ties together the various standard software packages that have been developed for EMR T/C systems," explains Scientific Programmer Bill Doe. "With TELEVENT we can prepare the software for an acceptance test procedure (ATP) for a customer's system of standard products in a matter of days instead of weeks," he says.

"Also, with TELEVENT, the user gets operational software he can use with a



Bill Doe, Ted York with TELEVENT system card deck.

minimum of additional programming to fit his specific needs," Bill says.

"TELEVENT also makes it easy for the non-Programmer to use an EMR T/C system," says Paul Germond, Manager of Applications Engineering. "The customer's instrumentation people can specify the system set-up and the processing they want done in basic alpha-numeric language."

The TELEVENT system consists of 10,000 instructions coded on punched cards and is provided to the customer as a "Library." These instructions are stored in binary form in mass storage--on magnetic tape, disc or drum. The user can make selections from this library and, through specially-developed TELEVENT instructions, he can tie selections together into a procedure to solve his particular problem in data acquisition and reduction.

"Standard programs have been combined and organized in such a way that re-configuration of software for a new system can be accomplished with a minimum of time and effort," Bill Doe explained. "Our 22 basic TELEVENT instructions can be used for: setting up a complete telemetry front end; data acquisition; processing of data; and formatting of data. The customer saves time and core storage, too."

The idea for TELEVENT came from Ted York, head of EMR-T's Software Systems Department, and Bill Doe spent the past six months developing the new software concept. The first TELEVENT software package has been sold in conjunction with a new EMR T/C PCM Data Handling System to be delivered to NASA-Wallops Island, Va.

"To sum up, TELEVENT enables us to provide standard operational software for ATP and for the customers' T/C systems a lot faster and easier," Ted York says.

EEA SUMMER LEAGUE BOWLERS GET AWARDS

Prize winners in the EMR Employees Association's Summer Bowling League collected their trophies at a gala bowling banquet last Saturday at the Holiday Inn, Lido Beach. Over 40 bowlers attended, according to League President Arch Brumfield. Trophy winners included:



Winning Team: Richard Marquis, Ruth Slattery, Gerry Proper, Howard Ecker.

MEN

High Average: Dale Gray (177)
High Scratch Series: Tom Toler (561)
High Scratch Game: Chuck Holderman (234)
High Handicap Series: Al Orr (654)
High Handicap Game: Arch Brumfield (253)
Most Imp. Av., ABC Award: H. Ecker (4 pins)

WOMEN

High Average: Joyce Hammond (147)
High Scratch Series: Gerry Proper (525)
High Scratch Game: Anna Sass (204)
High Handicap Series: Mariann Gusbar (673)
High Handicap Game: Gary Germond (239)
Most Imp. Av., WIBC Award: Mona Nainby (11 pins)
Special WIBC Award (Pin) - High Handicap Series: Gerry Proper (681)

FOOTBALL TRIP IS ON

All signals are "go" for EEA's first excursion on Saturday evening, August 15, when a bus load of EMR-T employees and their families head for the pro football game in Tampa Stadium. The San Francisco Forty-Niners will meet the Cleveland Browns. For details, watch the bulletin boards or call Ted York.

REGISTER TO VOTE

Are you registered to vote? Tomorrow, August 8, is your last chance to register to vote in the First Primary, Sept. 8; Second Primary on Sept. 29; and General Election on Nov. 3. You may register on Saturday, Aug. 8, between 9 a. m. and 5 p. m., at the Office of the Supervisor of Elections, Sarasota County Court House.

WHITE LIGHT CORONAGRAPH

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escaping from the sun, and matter between the earth and the moon -- with particular attention to the sun's corona or sun streamers.

The corona is a gaseous halo surrounding the sun, with streamers shooting out intermittently to distances of hundreds of thousands of miles from the sun's surface. The sun itself is 93 million miles from earth. Difficulties in making scientific observations of the sun's corona and its streamers are compounded by the brightness of the light of the sun and the earth's atmosphere which diffuses the light. Hence the advantage of an Orbiting Solar Observatory, above the earth's masking atmosphere.

EMR-T's effort on the White Light Coronagraph centered in Special Systems, headed by Kent Morgan. Richard Davies has Project Engineering responsibility and others on the project team have included: Gerry Aguirre, Don Hammond, Tom Hofstetter, Tony Ramos, Don Murray, Phil Potts, and Larry O'Connor.

The first flight model is now at NRL for installation of the optical system and testing. It will then go to Ball Brothers Research Corp., Boulder, Colo., as a prototype for integration with the spacecraft and other flight hardware. The second flight model, due for delivery to NRL in about seven weeks, will be the final flight hardware.

PULSE - The EMR-Telemetry News

M. E. Herbst, Editor

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JO BAISLEY RETIRES -- FETED BY CO-WORKERS

Josephine M. Baisley joined EMR in Ridgefield, Conn., in June, 1954, and this month can claim the distinction of being the first EMR employee to retire under the Schlumberger Retirement Plan.

As Jo can testify, that short span of 16 years has brought many changes in our business -- from the bulky, hard-wired early telemetry products of the '50's to the sophisticated space-age systems of the '70's.

"You might say we were just on the ground floor in those days," Jo says. "We didn't have printed wiring boards then -- and never heard of the space program or going to the moon!

"When I started as an Assembler in Ridgefield, the Grove Street plant consisted of a building just about half the size of our present Production Building. There were perhaps a hundred employees," she relates. To accommodate its growth, EMR moved its operations to Sarasota in 1957, and Jo has no regrets about her decision to move south with the company--particularly when she recalls the snow, ice and flooding encountered while commuting from Danbury to Ridgefield.

Most recently Jo has worked in Materials' pre-forming area in the Stock Room, under Marcel Dagenais' direction. There component leads are bent (pre-formed) to the proper shape and size for use in Assembly.



Jo Baisley receives good wishes from Marcel Dagenais, Manager of Material Handling, and a handshake from Ernie Wright, Manager of Materials.



Some of our Ridgefield Pioneers--Betty Boyce, Alf Englund, Jo Baisley, and Ethelyn "Mac" Brown. Co-workers honored Jo with a party and presents--a watch, a money tree, and other gifts.

Jo and her son, Starr, live on the north side of Sarasota. "I'm planning to use the money I'll receive from the Growth Plan for an investment," she said. And her Schlumberger Retirement Plan income will help to supplement Social Security benefits.

"Retirement will give me time to visit with my friends, and to read, sew and fish--and maybe do some traveling which I dearly love," Jo says. "But of course I'm going to miss my co-workers."

We're going to miss you, too, Jo. Good luck.

MDAC/NASA TEAM SURVEY (Cont'd)

QA Representative. NASA team members were M. J. Berkebile, R. L. Saidla, and P. H. Wormell, all of NASA's George C. Marshall Space Flight Center, Huntsville, and W. A. Sewell, Resident DCAS-QAR.

"Skylab" is a NASA experimental space station program--a manned orbiting workshop--which will serve as living quarters and work area for three astronauts for several stays in space of up to two months for each stay. EMR's part of this complex project involves developing airborne telemetry hardware and two ground-based computerized test sets to test the Skylab telemetering equipment.