



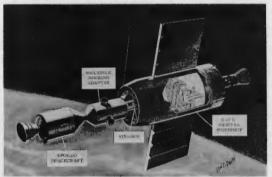
## The EMR-Telemetry News

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# EMR TELEMETRY GOING INTO ORBITAL WORKSHOP



EMR has been awarded a several million dollar contract by McDonnell Douglas Astronautics Company, St. Louis, to supply an on-board telemetry system for NASA's Saturn I B Workshop. In the Orbital Workshop space mission, the EMR telemetry system will monitor and encode measurements of internal and external spacecraft environments and on-board experiments for transmission to earth.

call for converting the spent-fuel stage of a launching rocket into a stabilized space station where astronauts may live and work for a month or more in space. The Saturn I B Workshop cluster consists of a Multiple Docking Adapter, Airlock Module and the S-IV B spent-fuel stage of the Saturn launch vehicle. The Apollo Command and Service Module (CSM) will carry several astronauts to rendezvous and dock with the Orbital Workshop cluster

"space station. " (Continued on page 2)

Plans for the NASA Orbital Workshop

# CRAZY OVER HORSES --

### THAT'S EILEEN FITZGERALD

During the week, from 8:00 until 4:30, Eileen Fitzgerald is a busy Reprotypist in Applications, helping produce technical proposals so that EMR customers will buy our products. Before and after those hours, Eileen is an enthusiastic equestrienne and horse breeder. Not only is she skilled in equitation (the art of riding on horseback) but she owns horses, too. She breeds, trains, shows and cares for them herself.

"Right now," Eileen relates, "I have a registered Appaloosa filly called Palm Feather, and I'm in the process of saddle training her. Then there's my chestnut thoroughbred, Papetta, who was bred to a stallion of Man O'War lineage. She is due to foal in February, and eventually I hope to race her colt." Incidentally, it takes ll months for a mare to foal.

Eileen and her sister, Joan, are both "horse crazy" -- although their parents had no interest in horses. Eileen, born in Altamonte Springs, Florida, lived in New Jersey for 18 years. "When I moved back to Florida with my parents in 1962, one of the first things I did was to buy a pregnant horse, Jackie. Then I got a job at EMR. During the next five years, Jackie produced three foals, one of them my filly, Palm Feather. George Zimmerman, of Production Test, bought Jackie from me a year ago for his three children. (Continued on page 3)

# EMR TELEMETRY GOING INTO ORBITAL WORKSHOP (Cont'd.)

The Saturn Orbital Workshop cluster will be launched first. Then, following that, the CSM, carrying astronauts, will be launched into orbit. The CSM will rendezvous with the Saturn I B Workshop cluster and dock at its Multiple Docking Adapter. The astronauts will leave the CSM spacecraft and enter the Airlock Module which will permit the astronauts to pass in and out of the S-IV B spentfuel stage while it serves as an orbiting research laboratory "space station."

The Orbital Workshop will be activated by the astronauts in the spent-fuel hydrogen tank of the Saturn S-IV B stage. The workshop and living quarters will be occupied for approximately 28 days in space in a "shirt sleeve" environment.

After completing the experiments for the 28-day mission, the astronauts will return to earth in the Apollo Command Module, leaving the Orbital Workshop to serve as a small space station which will be revisited at a later date. Plans are then to inhabit the vehicle for up to 56 days.

Award of the contract to EMR for the telemetry system was based on the highly successful performance of similar EMR telemetry used on Gemini missions, plus the capability for expansion of the EMR PCM (Pulse Code Modulation) telemetry system to handle the greater volume of data for the Saturn IB Workshop cluster. The telemetry system will be capable of handling nearly 2000 channels of telemetry data through the incorporation of remote multiplexers. Included in the complex technical requirements for testing the telemetry system will be a computercontrolled test set incorporating the 2700series digital telemetry modules designed and manufactured by EMR.

#### SOCIAL CLUB -- SPLASH PARTY

SWIM & DANCE
FREE FOOD AND REFRESHMENTS
SATURDAY NIGHT
SUN & FUN CLUB
SEPT. 14, 8:30 --12:30
FREE FOR EMR SOCIAL CLUB
MEMBERS, SPOUSES AND DATES
GUESTS \$1.50

#### ANNIVERSARY GREETINGS

Some 68 EMR-Telemetry employees are observing anniversaries of employment during September. The list below shows the names of our colleagues who are marking three, five, seven, ten, or more years with the company.

Happy Anniversary to:

1953 T. R. Ryley 1955 Judd Bodycote 1957 Clyde Chadwick David Middleton Ola Mink Helen Peters Evelvn Sweeting Lucille Williams 1958 Tom Antzack Ned Buck Douglas Dinnes Joe Faso Ron Fores Ruth Johnson Jim Wachob

1961 Doris Roberts Ruth Slattery 1963 E. A. Bailes G. William Cook Dale Dennis Harry Durrett Ron Evans Jim Ewton Martha Fulton Pete Halpern Vern Mort Pat Scoles 1965 Sam Berryman Diane Fisher Harold Leslie Mike Russell Verna Williams

PULSE EMR-Telemetry News W. M. Thompson, Editor "My sister and her husband now breed horses on their farm near Elmira, N.Y." Eileen continues. "Last summer, when I moved up north to live with my sister, I spent just about all my free time showing their Appaloosa stallion in horse shows in New York State. We took a number of first and second place ribbons in Western pleasure, trail, halter, and equitation classes."

While in New York, Eileen worked at Cornell University. She decided to come back to Florida last winter, and rejoined EMR early this year. She keeps her horses in a pasture about two miles southeast of the EMR plant now.



What's an Appaloosa? A breed which originated in the Northwest, among the Nez Perce Indiantribe, and is gaining in popularity. They have a spotted white "blanket" over the rump, striped hoofs, and a "human" eye -- pink in the corners. Eileen's Appaloosa stands 15 or 16 hands high (a hand is four inches).

Does it cost a lot? "Well, yes," admits Eileen, "but if you love horses and enjoy working with them, it probably doesn't cost any more than any other hobby you might have. And, who knows, some day maybe my Thoroughbred will be a winner."

### INSURANCE REVISIONS

Following is the second of a series of Pulse articles explaining new improvements in EMR's group insurance plan effective September 1, 1968.

The latest revision in EMR's group insurance plan includes an improvement in the Type B medical expenses coverage. Type B coverage of medical expenses has a deductible of 1% of annual earnings, with a minimum deductibe of \$50 and a maximum of \$250 for each family member. After establishing a deductible, you are eligible for reimbursement of 80% of the excess of covered medical expenses.

This revision lengthens the period of time in which you can establish the medical expenses to satisfy the 1% deductible requirement. In the past, Type B expenses were subjected to a 1% of salary deductible which had to be accumulated within 90 days. Under our revised plan, the period for establishing the deductible is extended to the calendar year from January 1 thru December 31.

Although this feature is effective Sept. 1, 1968, you can apply covered medical expenses incurred from June 1,1968. Thus, you should review your copies of itemized bills for medical expenses since June 1, and if they are covered medical expenses in excess of your 1% deductible, you are eligible for reimbursement of 80% of expenses over the deductible. Remember, the 1% deductible is applicable individually to each employee, and individually to each covered dependent.

Save your copies of itemized bills. They will help you to determine when your deductible has been reached and when you can apply for insurance benefits for Type B expenses. If you have questions, please call the Insurance Clerk, Ext. 292.

#### MORE TELEMETRY ORDERED FOR BLACK ARROW PROGRAM

Solartron Electronic Group, Ltd., the British Schlumberger Company, has placed an order with EMR-Telemetry for additional telemetry to be used on Black Arrow, a British space program. The new order involves 15 additional EMR 2700-series digital modules, plus logic cards, and blank chassis.

Solartron has been awarded the contract for integration of the Black Arrow Checkout Stations, a follow-on contract to the "Data Central" station for which EMR-Telemetry supplied several 2700-series modules late last year.

The total order for EMR-Telemetry equipment for this British program now makes up the largest one-program order for standard products ever logged by EMR from outside the United States, according to Peter M. Smith, of International Sales. In addition to the EMR-Telemetry equipment already delivered or currently on order, EMR-Computer, Minneapolis, has also received orders for three 6130 computer systems and peripherals for the Black Arrow program.

"An interesting feature of the Black Arrow Checkout systems, "Peter Smith says, "is that at least one of them will 'commute' between test facilities in England and the launching site at Woomera, Australia. This system will probably establish a mileage record for ground equipment."

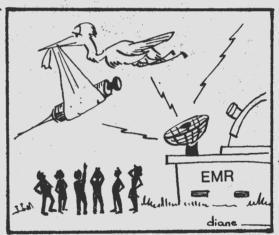
Black Arrow is designed to be a technological statellite launcher, primarily for use in developing and testing new satellite components which will contribute to communication satellite programs for Britain.

#### FLU SHOTS AT EMR BEGIN

Flu shots, aimed at helping employees avoid influenzathis winter, will be made available to EMR-Telemetry employees in Sarasota next Friday, September 20. Dr. David L. Crane, Sarasota County Health Officer, and EMR-Telemetry Nurse Mary Jo Myers will administer the shots in Room 249 in the A & E Building. Employees are urged to follow the schedule as closely as possible.

EMR is paying all the costs involved. An exact timetable will be distributed to all departments next week showing the time the shots will be given to each employee. "We are pleased to provide this extra health benefit for employees, "says Bob Ireland, of Security and Services. 'Employees will benefit through the convenience of getting the shots here at work, plus gaining the health dividend of lowered incidence of influenza attacks. EMR will also benefit through reduced absences due to the flu.

EMR's flu shot program was proposed last year after predictions of a serious



HOPE HE STOPS THIS TIME!

influenza outbreak. However, the vaccine was lost and the program had to be cancelled.

Dr. Crane, advises that he has received a supply of vaccine for this year's flu shots at EMR-Telemetry.

Employees who have had flu shots since 1964 will need only one flu shot. If you have had no flu shots, or if you had them before 1964, you will need two shots this year -- the first on September 20.

Cartoon by Diane Schmidt