



## The EMR-Telemetry News Sarasota, Florida

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February/March, 1976

### CREDIT UNION ELECTS NEW OFFICERS FOR 1976

EMR Sarasota Employees Credit Union reported assets of over \$433,000 at the annual meeting on January 29 -- up 4.7% from a year ago. Dividends to Credit Union savers in 1975 totaled 6% for the year.

In addition, members have free life insurance coverage on shares (up to \$2000) and loans, according to Treasurer Phil Blecker.

Newly-elected officers and members of various committees include:

**President:** Skip Bailes; **Vice President,** Bill Gregory; **Secretary,** Don Parker; **Treasurer,** Phil Blecker.

**Credit Committee:** Chairman, Mike Russell, Lillian Conway, Earl Studenwalt.

**Supervisory Committee:** Chairman, Joe Mezzatesta, Dave Loverne, Roy Paxton.

**Education & Publicity:** Chairman, Renee DeToni, Martin Belkin, Jim Rexrode.

### SRDM SOLD TO AUSTRIA

An order for EMR's new Model 810 SRDM (Scanning Radiometer Data Manipulator) has been received from Austria where the unit will be installed in the Vienna airport tower for civil aviation use. Our SRDM enhances the weather data received from NOAA weather satellites for use by meteorological observers.



Credit Union Board Members are: (standing) Skip Bailes, Bill Gregory, Phil Blecker, Don Parker; (seated) Martin Belkin, Renee DeToni, Jim Rexrode.

### 1510-- AT THE HEART OF THE APPLICATION

Being in the right spot at the right time can really help make a sale. Take it from Dick Ridgewell, of Instruments Marketing, who reports this true story:

EMR's Model 1510 Spectrum Analyzer has been installed in an application at the Texas Heart Institute, Houston. The 1510 is used to detect irregularities in heartbeat when artificial valves are being used in the human heart.

A patient at the Heart Institute--an Engineer with NASA, Houston--noticed the use of the Model 1510, and said, "I must get one of those for my application at NASA."

"We expect the order this month," Dick Ridgewell said. The application? Study of muscle fatigue.

## BUILD - TO - PRINT CONTRACTS = JOBS

EMR-Telemetry's effort over the past year to establish a successful printed circuit board build-to-print business is paying off in jobs for employees and provides fuller utilization of EMR's expensive automated manufacturing capability.

Started in November, 1974, during a slump in the economy, this effort was headed by Sam Gray, of Procurement, and several EMR manufacturing people who actively solicited "build-to-print" work for our extensive printed circuit manufacturing facility. Volume of build-to-print work is growing, and it is profitable, according to Sam Gray.

"Our customers include ECI, McDonnell-Douglas, Sperry Microwave, SWS, Solartron and Weston. We are currently bidding on other jobs which we expect will include printed circuit fabrication, machine shop and assembly work to meet the customer's rigid quality and delivery requirements.

"Essentially, build-to-print work is doing a fabrication or manufacturing job to the plans and specifications the customer provides. Thus, it is mainly a manufacturing effort, with little engineering or design involvement," Sam Gray said. "Build-to-print jobs also give us a broader view of other kinds of business, as well as a look at new developments that other companies are going into.

"Excellent quality control is required, and we must deliver as promised, or the customer won't come back with repeat orders," he noted.

"We have met our goals for January and February build-to-print orders," he said. "Our minimum goal for 1976 is \$300,000 in build-to-print printed circuit board work."

EMR's regular Sales Force is also on the lookout for new build-to-print opportunities--black boxes as well as printed circuit boards.

## HAPPY ANNIVERSARY!

Major service milestones were observed during January and February by the following employees:

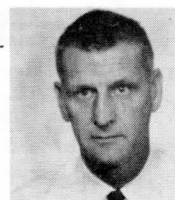


Standing: George Keegan holds 15 year sign; also standing are 10-year service employees: Richard Peck, Ed Domrzalski, Harry Yates, Jon Brown, Bob Heaton

Seated: Donna Mahler and Shirley Huston, both observing their 10th service anniversaries.



Dan Rendon  
(at left)



Frank Wakefield  
(at right)

Dan Rendon (Senior Service Technician in California) and Frank Wakefield (Senior Service Technician in New Mexico) are observing their 15th service anniversaries.

PULSE - The EMR-Telemetry News

M. E. Herbst, Editor

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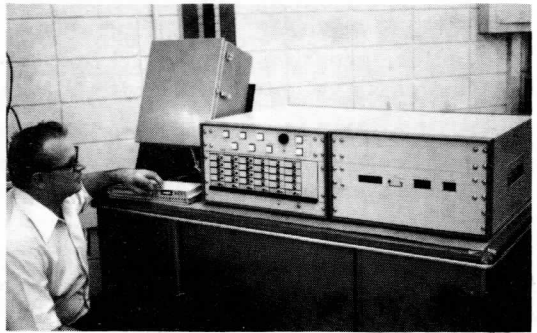
A SCHLUMBERGER COMPANY

## UTILITY ORDERS 3200 SYSTEM

Puget Sound Power & Light, Seattle, Wash., has selected the 3200 Supervisory Control System for installation at a transmission substation. The largest investor-owned utility in the State of Washington awarded the contract to our Industrial Products Group on the basis of technical evaluation of the 3200 system, in direct competition with several other leading suppliers in the industry, according to Don Turrell, Product Line Manager for Industrial Products.

Delivery is scheduled within 120 days. "We expect additional orders from the customer for other substation control systems after this initial installation is completed," Turrell said.

Other 3200 Supervisory Control Systems have been delivered to Coronado Oil in Wyoming, and the U. S. Energy Research and Development Agency's Hanford Reservation in the State of Washington.



Len Zeiler with 3200 Industrial Monitoring/Control Demonstration System delivered to France.

Recently a 3200 Industrial Monitoring/Control Demonstration System was shipped to Compteurs-Schlumberger, Villacoublay, France--a sister Schlumberger company--to be used to introduce the 3200 system to the European market for applications such as electric utilities, oil and gas distribution and environmental monitoring.

## EFFIE ANDERSON IS NEW RETIREE

Effie Anderson -- a member of EMR's first training class for Assemblers in Sarasota back in January, 1957 -- is retiring from her EMR career, and starting a busy new life as a very active retiree, effective March 1.

Effie, most recently a Material Attendant in Materials, plans to spend a couple of months with her mother in Peabody, Mass., this Bicentennial summer.

She has also scheduled a trip to



Effie Anderson

South America in October, and is going into real estate sales in Sarasota for a new career. "Then there's my painting -- I do portraits," Effie explains, "and some day I hope I'll have my own one-woman show in the EMR lobby."

Reminiscing about her EMR days, Effie recalls moving from the temporary EMR quarters on Clark Road to the brand new Production Building in Fruitville in June, 1957. "We each loaded some items into our cars and helped move."

Effie has also written children's stories, and now plans to polish them up and submit them to publishers. Her three children and four grandchildren--all in Florida--will have a hard time keeping pace with this active, charming lady! Have fun, Effie.

## EMR LADIES ARE ACTIVE GIRL SCOUT VOLUNTEERS

Mention Scouting, and most people think of "Boy Scouts." But for three busy EMR ladies, scouting means Girl Scouts -- and doing volunteer work with Girl Scouts.

SUE BURNS (Secretary in Sales and Service) is Leader of Troop 54 Cadettes-- Girl Scouts in the 7th, 8th and 9th grade age group. RENÉE DE TONI (Reprotypist Editor in Technical Publications) is Co-Leader with Sue for Troop 54, which meets at Incarnation Church on Wednesday evenings. APRIL BENSON (Materials Coordinator Clerk, in Procurement) is one of the active mothers for Junior Girl Scout Troop 189, which meets at Pine Shores Presbyterian Church on Thursday evenings. April's daughter, Jill, 9, is a member of that Troop for girls in the 4th, 5th and 6th grades.

April, Renée and Sue have plunged headlong into Scouting--starting with overnight outdoor camp training at Camp Honi Honta in Manatee County last November. "Camping out, cooking over a fire, and the whole thing. . ." is the way the girls describe their experience in Troop Camp Training for Leaders.

Generally, the Leaders advise, give the girls support and leadership when needed, help organize their projects, meetings, guest speakers, transportation. . . Yes, it's a lot of work, sometimes occupying several evenings a week, plus weekends--but Sue, Renée and April feel it's very worthwhile.

Fortunately for Sue and Renée, their husbands are also Boy Scout leaders, so the couples cooperate on scouting projects. For example, on Renée's first overnight camping trip at Camp Hamilton with her Girl Scout Troop, her husband, Gene, was able to take over when Renee was bitten by a poisonous caterpillar! "Our four-year-old son, Timmy, can't wait to be a Boy Scout," Renée reports.



April Benson, Sue Burns and Renée DeToni -- plus cookies.

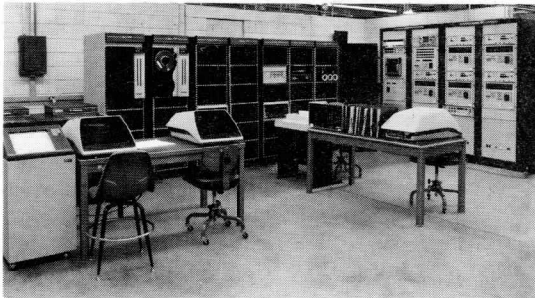
Sue and Mike Burns, with no children of their own, devote many hours each week to working with scouts. Sue was a Scout herself, and also had worked with young people in Junior Achievement in Orlando. As an "Air Force Brat" Sue traveled with her family, even living in Japan for three years as a youngster. . . Renée was in scouting for 12 years, and attended the Scout Cabaña in Mexico when she was high school. . . April Benson, new to scouting, received her Girl Scout pin this week, along with some of the new Scouts in her daughter's Troop! April and Renée have been friends since they worked together back in Illinois prior to moving to Sarasota.

Girl Scout activities? How about the Girl Scout cookie drive. . . shelling at the beach on Sunday to send the shells to the blind. . . bowling on Saturday. . . March 7 begins Girl Scout Week. . . Then there's the Girl Scout Fair, with a Bicentennial theme, at the Gulf Gate Mall on March 13. "Our girls have four booths, depicting the history of California, Pennsylvania, West Virginia and Delaware," Sue and Renée report. April's girls are doing the Illinois booth . . . and a float for the King Neptune Parade. (Cont'd in next column)

## NEW SHIPMENTS INCLUDE A WIDE VARIETY OF SYSTEMS

Recent shipments to EMR customers have included some major contracts for EMR-Telemetry systems:

General Dynamics, Fort Worth-- A large telemetry/computer system for handling flight test data on the F-16 aircraft. This half-million-dollar system includes a new special data compressor and two PDP-11 computers. The data compressor essentially examines the data before it goes into the computer, and eliminates unnecessary redundancy. The EMR team included Program Manager Wiley Dunn, Project Engineer Jack Cain, Systems Technician Randy Mitchell, Data Compressor Engineer Graham Hildebrand, plus Jon Altenbernd's Software development team, and a group of EMR experts to handle the on-site installation, including Dick Crete.



General Dynamics F-16 system.

General Electric, San Jose--Two nuclear power plant data acquisition systems  
(Cont'd in next column)

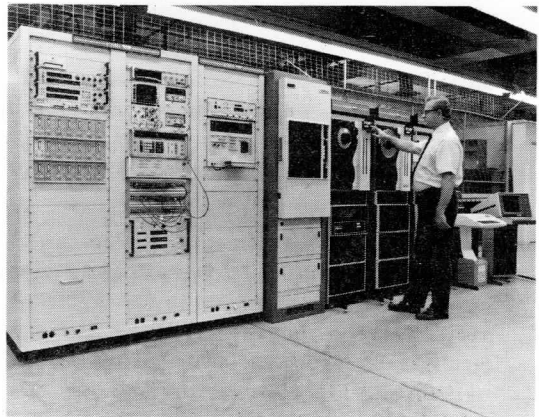
### EMR LADIES ARE ACTIVE GIRL SCOUT VOLUNTEERS (cont'd)

Sue and Renée are helping their girls with the Troop "Challenges" -- Emergency Preparedness, Social Dependability, Environment--all requiring the Leaders' guidance and advice. "For their annual trip our girls want to go river tubing up in Gainesville," Sue and Renée said.

Challenges? Not only the girls have challenges--the Leaders do, too!

### General Electric (cont'd)

featuring high density digital recording. One system delivered in January was to be installed at a U. S. nuclear power plant near Minneapolis, and the second EMR system was ordered by GE for installation in Italy. Gerry Maki and Larry O'Connor headed the Engineering effort.



National Parachute Test Range system with Len Zeiler.

National Parachute Test Range, El Centro --This EMR telemetry/computer system, valued at over \$250,000, is to be installed at the Navy's Parachute Test Range in California, where sophisticated instrumentation is utilized in research, development, test and evaluation of parachutes and related aerodynamic deceleration devices. Len Zeiler and Roger Mort worked on this system.

Hercules, Inc., Bacchus, Utah--A remote data acquisition system for testing solid propellant rocket motors, plus a distribution "patch panel" system permitting use of the system in more than one test bay. The equipment is used in testing the second stage motor of the Trident missile. The Engineering team included Curt Dyke, Gary Snyder, Jay Marshall, Ron VanderVliet, Jack Bishop and Roy Shepard.

## "GREEN FRIZBY" RECEIVES GOES SATELLITE SIGNALS

The "Green Frizby" antenna on EMR's lawn near the Engineering Building is a 1.7 Gigahertz radio frequency receiving antenna used with the new "GOES" weather satellite.

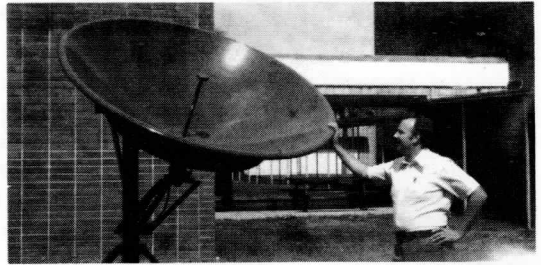
The antenna and our SRDM (Scanning Radiometer Data Manipulator) are now in use to demonstrate EMR's weather data instrumentation to potential customers. This antenna gives EMR the capability of receiving weather pictures via WEFAX--weather facsimile-- from the NOAA (National Oceanic and Atmospheric Administration) GOES weather satellites.

This capability is in addition to the earlier Automatic Picture Transmission (APT) system which uses the antenna atop the Engineering Building along with our SRDM (Model 810) to produce excellent cloud cover pictures from the NOAA III and NOAA IV weather satellites.

According to Art Brough, Product Line Manager for Weather Products and Systems, the GOES satellite is located over the equator at approximately 23,000 miles from earth--in a geostationary, earth-synchronous orbit. Thus, our "Green Frizby" looks at the same point in the sky and always "sees" the satellite.

Our Sarasota 11 p. m. weather news shows us the GOES pictures, Art explains. However, these pictures are "corrected" to show only clouds. The actual photographs show details of the land masses and the geographical characteristics.

Three GOES satellites are currently out there--one at 70° longitude (East Coast of U. S.); one at 105° longitude (Central Western U. S.) and one at 135° longitude (Western Pacific). Two GOES satellites are functioning and the one in the middle is in reserve in case one of the others fails, he said.



Ed Domrzalski with our "green frizby" which is pointing toward GOES weather satellite.

The GOES satellite's electronic photography equipment is constantly looking at the earth from pole-to-pole and earth edge-to-earth edge. The pictures are very high quality and are transmitted via a radio link to Wallops Island, Va. The original pictures are put into the computer, corrected for panoramic distortion, and the new picture (like an atlas map) is sent back to the satellite for retransmission to everyone who wants the corrected pictures.

A World Weather Watch is being developed, and GOES-compatible satellites will be orbited in 1978 by the major technological powers -- two from the U. S., one from Japan, one from Russia, and one from the common market countries of Europe. Since one satellite can view approximately 1/5th of the earth at a given time, the five satellites will enable the world to view all quadrants simultaneously, thus giving total weather forecasting capabilities, he explains. "It beats sticking your finger out the window," Art quipped.

EMR is a leading producer of weather instrumentation equipment for satellite imagery, Art said. "With our unique basic product--the SRDM-- we will become a world leader in weather image processing equipment as the World

## SWS ORDERS TOOLS TO BE BUILT HERE

New orders for tools used in the world-wide search for oil have been awarded to EMR-Telemetry by Schlumberger Well Services, Houston. The latest orders, valued at over \$600,000, have arrived just as work nears completion on the earlier SWS contracts, according to Frank W. Bloechl, Product Line Manager for Build-to-Print Projects. Final shipments on the earlier SWS orders are scheduled for April.

Meanwhile, EMR's fabrication, machine shop, assembly and test areas are gearing up for the new SWS orders involving the following tools:

SGC--Scintillation Gamma Cartridge -- an add-on order for 75 additional units of this downhole nuclear tool. Upon completion of this latest order, EMR-T will have delivered 240 of these tools to SWS during the past year.

ILV--Induction Linearity Vernier (quantity of 25) -- an uphole tool, used for testing induction logging tools.

CME -- Mechanical Centralizer (quantity of 150) -- a device to assure that the tool housing (the protective cylinder which surrounds the downhole tool) is kept as close to the center of the well hole as possible.

PGP --Power Gamma Gamma Panel (quantity of 60) -- an uphole tool which processes data received from a downhole cartridge.

CNU--Compensated Neutron Unit (quantity of 116) -- an uphole test box used to test uphole nuclear panels.

Delivery on some of these units will begin in March, Bloechl said, and will continue for approximately six months.

## TOP SALESMEN HONORED

Top Salesmen for EMR for 1975 were honored at EMR-T's annual sales meeting in January in Sarasota. Don Shumaker, our Sales Representative in Albuquerque, N.M., captured the Top Salesman of the Year award.

Other members of the EMR Million Dollar Club for 1975 (in addition to Don Shumaker) are:

Wyatt Bishop - Sarasota, FL.  
Tillie Castelletti - Seattle, WA.  
Bud Hinkel - Cupertino, CA.  
Carl Steineckert - Lancaster, CA.

Congratulations on your accomplishments during a difficult year, gentlemen!

## POWER PROTECTION UNITS ORDERED BY MEXICO

Additional fault locator systems and distance relays have been ordered by the Mexican national utility commission, according to Pete Farinas of our Power Protection Group.

The new orders for 11 fault locator systems and eight distance relays brings total orders from Mexico for these products to well over a quarter of a million dollars.

## PURCHASING MEETING TO BE HELD AT EMR

EMR will be host to visiting members of the Procurement operations of other Schlumberger companies from around the country on March 3-4.

The Cooperative Purchasing Program annual conference, organized by Larry Whitsit, of Schlumberger Limited, this year includes Procurement management representatives of Schlumberger Well Services, Heath, Sangamo, Weston, Rixon and EMR. The seminar provides for exchange of ideas, methods, economic data, and a plant tour of the host facility, according to Sam Gray, EMR-T

## CONTRACT AWARDED TO BUILD BLOOD FLOWGRAPH

EMR-Telemetry has been awarded a contract to produce prototype units of a new Blood Flowgraph which is being used by medical researchers to ascertain defects in the human arterial system.

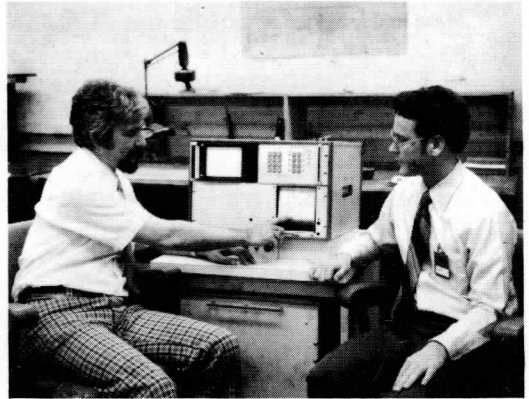
Doll Research, Inc., of New Hyde Park, N. Y., awarded EMR the contract valued at over \$200,000.

Mr. Henri G. Doll, former Chairman of the Board of Schlumberger Limited and a member of the Schlumberger organization from 1927 to 1967, is the founder of Doll Research, Inc.

The "Non-Invasive Arterial Flowgraph" was designed by Doll Research, and EMR was invited to participate in the packaging and to assist in designing the computer interface and control unit. Quantities of the prototypes will be manufactured in our Production Department and tested in Engineering.

The Blood Flowgraph is a research and diagnostic device which attaches to the patient by means of "non-invasive" electrodes -- that is, no surgery is involved. The electrodes are attached to the skin of the patient's legs and arms. In conjunction with a large magnetic field, the blood flow through the arteries causes an electrical signal to be developed. The electrical signal is detected and processed through a computer. Other body signals and "noise" are suppressed, and the researcher or doctor is then able to look at a graph which shows the forward and back-flow of the blood. Diagnosticians can then determine changes in blood flow, or artery blockages such as occur in hardening of the arteries, blood clots, and arterial conditions associated with diabetes, etc.

Four medical research teams, sponsored by Doll Research, are already utiliz-



Jay Marshall, of EMR, and Hans Broner, Chief Engineer with Doll Research, Inc., demonstrate new Blood Flowgraph.

ing the Arterial Flowgraph in their research projects in New York, Boston, and Toulouse, France.

EMR personnel active in the Blood Flowgraph project include Jay Marshall, Roy Paxton, Bruce Randall, Jim Maguire, Frank Bloechl, Don Bolt, Skip Bailes, Dick Vorce and Dave Loverne.

## PENSIONERS GET RAISE

All Schlumberger company pensioners who retired before January 1, 1974 received good news this month in the form of an increase to their regular pensions.

The sliding scale of increases -- from 10% to 60% -- aids those former employees who retired prior to 1974. The increase provided Pensioners with added benefits (a minimum of \$5. per month) retroactive to January 1, 1975. Schlumberger's management reviewed the pension levels and voluntarily made this first increase to our Pensioners.

In the future, the Company intends to conduct periodic reviews of the pensions of those who have retired and, depending upon the company's financial position, may update pensions from time to time.