

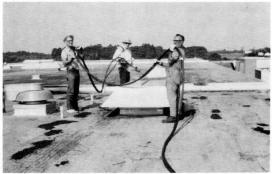
The EMR-Telemetry News

Sarasota, Florida

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April, 1975

ON TOP



Resurfacing the roof of the S-1 section of our Engineering Building is being done by our Plant and Facilities Engineering group. Shown at work on the job are Glenn Campbell, Everett Layton, and Armand Cheramie. (Not in photo is Burt Ekis.)

POWER PROTECTION UNITS GO TO MEXICO, COLOMBIA

Power Protection equipment has been sold to several new customers, including units which will ultimately be used in Saskatchewan, Canada; Mexico, and Colombia, South America.

Pete Farinas, of the Power Protection Group, reports that Saskatchewan Power has ordered a Distance Relay, and Westinghouse (Milwaukee) has ordered 12 Distance Relays for use in Colombia. The Mexican order involves nine Fault Locators to be installed in Baja California at the Tijuana Substation, near San Diego.

NEW PRODUCT READY

This new product--an EMR Model 711 Modular PCM Decommutator--pictured during final test, is scheduled for shipment to a West Coast customer. Half a dozen other clients have already placed orders for the new unit.



Jim Apperson and Opal
Black with
Model 711
Modular
PCM Decomemutator

The very versatile Model 711 can perform functions of several of our Model 2700 boxes, and serves as an entire FCM telemetry system. The unit can be programmed by means of the front panel keyboard, or via a card reader or paper tape reader.

Members of the Model 711 development, design and manufacturing team included Charlie Hall, Chuck Netherton, Ian Albritton, Phil Potts, Tom Bray, Jack Bishop, Roy Paxton, Vince Supple, Bob Heaton, and Jim Apperson, plus many other good EMR-T employees.

ADDITIONAL SWS TOOLS NOW IN PRODUCTION HERE

Work is now underway at EMR-T on an additional group of tools and panels ordered by Schlumberger Well Services, Houston, Texas. The SWS contract, awarded in January, includes cartridges, testers and panels to be manufactured here for use by SWS in the world-wide search for new sources of oil and gas.

Dollar value of the contract is \$800,000, and actual deliveries will start in July, 1975.

These latest equipments include Sonic Logging Cartridges, Sonic Logging Panels, Electronic Mud Testers, and Digital Depth Panels.

EMR's earlier contracts with SWS included delivery of quantities of sophisticated logging tools such as Microlog Proximity Cartridges; nuclear tools such as Compensated Neutron Cartridges and Scintillation Gamma Cartridges, and a variety of related panels used at the drilling locations.

Briefly, the latest tools and panels now in process in Manufacturing are:

Sonic Logging Cartridges - down-hole tool, about 8 feet long, consisting of a transmitter and receiver. The transmitter sends out pulses into the walls of the drill hole. By measuring the time that elapses until these pulses are received at the receiver, the porosity of the well hole walls is known. The data is compared to an existing catalog of rock porosities, and matched up to determine the type of rock strata in the drill hole. SLC's are also used to test the bonding between the cement well liner and the pipe. The Sonic Logging Cartridge is designed to operate to depths of 30,000 feet and at temperatures up to 350° Fahrenheit.

Sonic Logging Panels - The SLP (an above-ground unit) receives information from the SLC and interprets the data for display on strip logging charts inside the logging truck at the drilling site.

Electronic Mud Testers - The EMT (another above-ground unit) measures the resistivity of well fluid. The consistency of this fluid can vary from "mud" to water. Resistivity of the well fluid is another factor in the overall logging calculations. Special "mud" is pumped down into the drilling tube and gushes back out of the bore hole in a continuing cycle. Analyses of the make-up of the "mud" and the various bits of rock and substances coming up from the hole are also very significant. Two types of Mud Testers are being built at EMR. One is a portable unit, carried in a wooden box. The other is a permanent panel, mounted in the logging truck at the drilling site.

Digital Depth Panels - The DDP (used at the surface) operates in conjunction with a Tension Device Panel (TDP-K) which is also being built here. It is important to know how deep the tools are in the bore hole at any given time, since oiland gas-bearing strata can be located anywhere along the hole. One of the major problems in determining how deep the tools are is the fact that the combined weight of the tool and the cable cause the cable to stretch--particularly since the distance involved may be several miles into the earth. The Digital Depth Panel compensates for the stretch and magnetically marks the cable every inch. The depth measurements are accurate within six inches -- even to a depth of 20,000 feet.

Frank Bloechl, of Manufacturing Engineering, is Program Manager for the -2- SWS contracts.

SAFETY AWARD SCORES A NEW FIRST FOR EMR-T

EMR-T received two special commendations recently for achieving a safety record of one million employee hours without a work-related lost-time injury.

The first recognition—an Award of Commendation, from the Travelers Insurance Companies—cited EMR's outstanding performance in accident prevention.

"In addition, EMR employees scored another significant first in safety," said W. T. Long, Vice President and General Manager of EMR-Telemetry.

"The Schlumberger Insurance Office informs us that this is the first time a million hours safety record has been achieved in the whole Schlumberger company," Mr. Long said. Schlumberger employs over 40,000 persons at its various electronics and oil services locations around the world.

Attending the award presentation ceremony were Mr. Bert Carbino, of Schlumberger Limited's insurance office; Mark



Carl Weinrich, Mark Winner, of Travelers Insurance; W. T. Long, and Rich Brogan admire Safety Award presented to EMR-T employees.

Winner, Senior Representative in Safety Engineering for Travelers in Tampa; Mr. Long; Carl Weinrich, then Director of the EMR Safety Awareness Campaign, and R. C. Brogan, Personnel Manager.

EMR's new goal is to reach 1,500,000 hours without a lost-time accident.

NEW LATHE INSTALLED IN OUR MACHINE SHOP

This new, heavy-duty lathe has been added to EMR-T's Machine Shop. The extremely rugged lathe provides greater machining capability to meet the need for increased metal fabrication operations on jobs such as stainless steel piece parts in the Schlumberger Well Services down-hole equipment.

Information for lathe experts: the machine has a 24" swing over the bed, 60" between centers, 4-1/16" diameter through the spindle, and a 20HP main drive motor.

Ted Garrett and Carl Nemeth are the regular operators on the new lathe in our Machine Shop.



Operators Ted Garrett and Carl Nemeth at controls of new lathe.

THEY FLY AND SOAR -- WITH THE GREATES OI

EMR-T's flying enthusiasts have been enjoying some unique aspects of the sport recently--a bombing and spot landing contest, and soaring in a sailplane.

The contest, sponsored by the "Cloud Mashers" Flying Club, had 24 participants, including eight EMR-T men, according to Club President BobGardner, of Receiving Inspection.

Held at Schwartz' Ranch, east of EMR, during March, the "bombing" and spotal landing contest involved three small planes. Each of the 24 teams (a pilot and partner) made three "bomb" runs at 250 feet--dropping a small sack of sand and lime mixture on a target. Out of a total possible score of 450 points, Preston Cox (Drafting) took first place with 346 points.

Other EMR contestants (and family members) ranged from 323 points down to one point. They are: Bill Thompson (Production Control); Bob Gardner and Don Sittler of Quality Assurance; Jay Marshall (Engineering); Bill Miller (Receiving Inspection); Robert Kerwin (brother of John Kerwin of Production Control);



Flying Club's Cessna 150 -- with Bob Gardner and Wiley Dunn

David Gardner (Bob's son); Lee Bolt (son of Don Bolt, of Production Control); John Kerwin, and Wiley Dunn, who was undisputed last place winner. Trophies went to top winners and a special award was presented to the last-place contestant (see photo).



CONTEST -- Holding their last-place trophies are Bob Gardner and Wiley Dunn. Club Secretary Dean Marantis congratulates the "winners."

In Spot Landing, pilots were required to land with the aircraft's main wheels on a line across the runway, thus scoring 100 points. Points were subtracted for passing the line. Wiley Dunn, who had just received his pilot's license two days earlier, scored 92 points. Bob Gardner, the Club Instructor, captured last place, and other EMR pilots scored as follows: Jay Marshall, 60; Bill Thompson, 45, John Kerwin, 41.

LIKE A BIRD

If you're interested in a different kind -4- of airborne experience, try soaring!



Wiley Dunn (Engineering) and Jon Altenbernd (Systems/Software Group) are among the first EMR-T employees to try a glider or sailplane.

"Soaring in a sailplane is the closest you can get to flying like a bird," Jon Altenbernd said. "There's only the ound of the wind--no engine noise. And it's one of the safest sports you can find."

"The sailplane we rented in Arcadia is a simple craft," Wiley explains. "It's cloth over tubular frame, and seats two people." A small plane tows the sailplane aloft, to about 2,000 feet. Upon release, the sailplane's occupants can control the craft via rudder (for yaw); elevator (pitch--keeping the nose up); aileron (for controlling roll) and spoilers (for decreasing lift by increasing drag).

"By catching 'thermals' (columns of warm air) you can continue soaring for hours," Wiley explained.

Now the men are so enthusiastic they are ready to form a Soaring Club. Want to make like a bird? See Wiley or Jon.

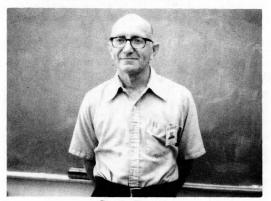
CREDIT UNION ACCOUNTS GUARANTEED TO \$40,000

EMR Sarasota Employees Credit Union announces that it has been approved for membership in the Florida Credit Union Guaranty Corporation. This recently-formed Credit Union corporation guarantees individual members' deposits up to \$40,000 against loss.

"The Credit Union is very pleased to offer this new benefit to our members," Treasurer Phil Blecker said. Guaranteeing members' deposits up to \$40,000 is an additional safeguard, similar to the insured savings of Savings & Loan Associations. he said.

This new guarantee of members' deposits is in addition to the Credit Union's individual life insurance coverage -- up to \$2,000 on a deceased member's account, and full value of all outstanding loans for a deceased member.

ANNIVERSARY GREETINGS



Stan Baron

Happy anniversary to Stan Baron who observes his 10th anniversary with the company this month. Out in the Field, John M. Sherman, District Sales Manager in the San Diego, Calif., area, is marking his 20th service anniversary with EMR during April. (See separate story about John Sherman.)

EMR SPECTRUM ANALYZERS MONITORING JET ENGINES

EMR's Model 1510 Spectrum Analyzers are helping the jet engine industry to automate testing of these high-priced engines. General Electric, of Evendale, Ohio, is currently using our 1510 Spectrum Analyzers to monitor vibration levels in jet engines during development tests.

With the excellent results being achieved in this application, it is expected that the customer will implement plans to utilize the 1510's in production testing as well.

This analysis of jet engine vibration is meeting a need for economical automation of a tedious and expensive testing procedure. In the past, engine vibration monitoring was done by an operator sitting at a monitoring console. The operator had 14 oscilloscope screens to observe, associated with 14 different test points or test cells. Oscilloscope displays were hard to interpret, and the operator was subject to fatigue and distractions during long engine tests.

Our 1510 has taken over most of these monitoring functions. The Spectrum Analyzers scan and analyze the test points. If, at a particular point, there is an excessive vibration level, a bell sounds to warn the operator, and the level of the vibration and the point at which it occurred are displayed for him. This gives the operator more time to run the tests instead of simply monitoring.

Automatic monitoring by the 1510's can also serve to avoid catastrophic failures which have been known to result in the destruction of a multi-million dollar engine.

The effective job being done by the 1510 helps identify dangerous vibration levels and reduces total test time. Currently,

the system depends on the operator to shut off the engine when an alarm occurs. However, during production tests, GE is planning to let the 1510 actually initiate the engine shutdown whenever an alarm condition is detected.

Eleven 1510's are already at work at the GE Evendale plant, Ron Ruiz, Instruments Product Line Manager, reports.

WALT DISNEP'S MAGIG KINGDOM GLUB®

SPECIAL MAGIC KEY TICKET BOOKS NOT AVAILABLE TO THE GENERAL PUBLIC

Includes use of Walt Disney World Transportation System (Monorails, ferry boats, and trams) for one day, Magic Kingdom Theme Park admission, and ANY 8 attractions of your choice.

ADULT (\$12.45) JUNIOR (12 thru 17) (\$11.45)	\$6.25 \$5.75 \$5.25
CHILD (3 thru 11) (\$ 8.65)	\$5.25
(Parking — 50° per car)	

Available ONLY to Magic Kingdom Club Members. Present Magic Kingdom Club Card at Main Entrance Box Office.

Effective thru May 31, 1975

Another exclusive for club members

Cypress Gardens

Now, the membership card entitles you and your entire family to a special admission price at CYPRESS GARDENS near Walt Disney World in Florida.

	REGULAR PRICE	CLUB MEMBER PRICE
Adult	3.50	3.00
Junior (12-16)		2.00
Child (6-11)		1.00
Annual Admission	5.00	4.50
Children under 6, FREE with parent.		
Prices subject to ch	ange without no	tice.

OPEN EVERY DAY OF THE YEAR

FOUR WATER SKI SHOWS DAILY: 10:00 — 12:00 — 2:00 — 4:00



PARTICIPATING HOWARD JOHNSON'S MOTOR LODGES OFFER A 10% DISCOUNT ON DOUBLE-OCCUPIED ROOMS AT THE DIRECTORY RATE TO ALL MEMBERS OF THE MAGIC KINGDOM CLUB.

FIRST AID TRAINING GIVEN TO EMPLOYEES

A special First Aid training course for EMR-T employees was given in-house recently to provide on-the-spot, trained first aid attendants in each of our buildings.

Classes were taught by an American Red Cross first aid instructor and an Oxygen Service attendant. EMR employees who participated were:

Manufacturing Bldg.: Ed Mongillo,
Paul Shetler, George Zimmerman

Engineering Bldg.: Milton Litwiller,
Bernie Lombard

Administration: Richard Brogan

Employees requiring first aid treatment will continue to follow the established procedures:

- a) Report the accident or emergency to the Department Supervisor
- b) If "victim" is ambulatory, go to the Dispensary (Administration Bldg.)for treatment.
- c) If employee requiring first aid can not be moved, the Supervisor should notify the first aid personnel located in your work area for immediate attention. Also, advise Dispensary (Ext. 292) immediately.

LUCKY WINNERS

Bill England (of Test) and his wife, Andrea, are the fortunate winners of a three-day trip to the Bahamas. Bill solved the contest puzzle of how to unlock the safe at the DeSoto Shopping Mall by following the clues to the safe's combination as given over Station WYND. The lucky couple hopes to take the trip during EMR's Memorial day holiday plant shutdown.



LEARNING FIRST AID-- Milt Litwiller, Ed Mongillo and George Zimmerman attend Paul Shetler whose leg was "broken."

BACK FROM INDIA

Pursuing more export business, Gerry Breyton, Manager of Export Sales, returned recently from a month's business trip to India.

His visit to Bangalore, India, and other stops, included seeking out future business prospects, and visiting the big EMR computer-telemetry system which was shipped to India's Aeronautical Development Establishment in late 1974.

Other EMR equipment is at work on Indian scientific satellite projects, and at least one item -- a Model 410 Discriminator -- is currently in Russia. The EMR instrument is on loan from India to the Russian launch complex and monitored the prelaunch checkout of the Indian scientific satellite which was just launched from the Russian space site, Gerry reports.

"Outlook for export business continues quite good," Gerry says. The weather in India? "HOT!" he reports.

PULSE - The EMR-Telemetry News
M. E. Herbst, Editor

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A SCHLUMBERGER COMPANY

WHO'S WHO

TWENTY YEARS TICK AWAY ON JOHN'S CLOCK COLLECTION

John M. Sherman, a member of EMR's Field Sales force since 1955, observed his 20th service anniversary with the company on April 25.

Known among his EMR colleagues for his technical competence and his very effective selling abilities, John is also widely respected among EMR clients as a knowledgeable telemetry Sales Engineer. He has ranked among the top EMR Salesmen in dollar volume for many of those 20 years.

His base of operations for EMR has taken him from Alamogordo, N. M., to Los Angeles, El Paso, Sarasota, back to El Paso, and currently San Diego, Calif.

Before joining EMR in 1955, he had been a Research Engineer with Hobart Manufacturing, and held engineering positions with Witco Manufacturing and Land-Air, Inc.

A native of Fremont, Ohio, John is a graduate of Ohio State. One little-known fact (which may explain his arrowstraight posture) is that John attended the U. S. Military Academy at West Point before transferring to Ohio State.

John and Marie Sherman are the parents of a son (a physician) and a daughter who is married to a physician. In recent years the Shermans frequently used their travel trailer to cover the vast spaces of the Texas-New Mexico area when John needed to be on the road calling on his clients. The ingenious travel arrangement was efficient and comfortable for both the busy Sales Engineer and his devoted wife.



John Sherman

John has seen some big changes in technology and in EMR's product line--changes from vacuum tube technology to solid state... from the old Model 27 and 67 Discriminators on through generations of new discriminators and other products...

to the more recent computer-controlled telemetry in which EMR led the way...

"You could say we have spawned a lot of competitors," he commented.

"One of the great things that has happened in recent years," John said, "is that we have improved our scheduling through Production. This means a lot to a Sale man talking to his clients. Improved a livery makes selling easier, and it has enhanced our acceptability and credibility with our customers."

John is a skilled craftsman. His hobbies include woodworking (furniture making) and clocks. As an horologist, he collects and repairs clocks--even making parts for some of the more unusual ones. In his collection is one 140-year-old clock. (Yes, John keeps it working!) This unusual time piece is a weight-driven, eight-day wall clock which belonged to his grandfather.

For his 20th service anniversary with EMR he received--you guessed it-- a gold watch! John's many EMR colleagues and <u>Pulse</u> join in sending him good wishes on 20 successful years with EMR.