



The EMR-Telemetry News

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MICROELECTRONICS GROUP HOLDS SEMINAR AT EMR-T

Fifty members of the Southeastern Chapter of the International Society for Hybrid Microelectronics (ISHM) met at EMR-Telemetry on Friday, August 21, for an all-day seminar which included technical sessions and a tour of our Microelectronics facility.

"Attendees represented 20 different companies, mainly from Florida, but some came from as far away as Alabama, North Carolina, Tennessee, New York, and California," reports Lake D. Brown, Manager of Microelectronics at EMR-T, and a past Vice President of the ISHM Southeastern Chapter.

"Hybrid Microelectronics" concerns itself with design and manufacture of complex circuits of very small size, utilizing the many specialized disciplines of the broad

(Continued on Page 4)



ISHM Southeastern Chapter officers here for seminar: President C. J. Peckinpaugh (ECI); Acting V-P, C. E. Brown (Martin Marietta); Vendor Chairman Bill Grace (Gra-Mar); L. D. Brown (EMR); Treasurer Martin Stanquist (ECI); Secretary J. O. Horvath.

EMR REPRESENTED AT AIDAS RIBBON-CUTTING CEREMONY

Representatives from EMR-Telemetry were among the distinguished guests at the official Ribbon-Cutting Ceremonies for a new Advanced Instrumentation and Data Analysis System (AIDAS) at the U. S. Army Aviation Systems Test Activity at Edwards Air Force Base, Calif., last week.

General Manager Leo G. Chappell and Systems Organization Manager Clarence G. Byrd attended the official ceremony along with U. S. Army VIP's.

The large AIDAS station is used for real-time flight safety and data monitoring of new Army aircraft such as helicopters. EMR supplied the AIDAS Central Ground Station (a telemetry/computer system), a Remote Ground Station (a mobile, van-mounted T/C system) and an Airborne System. EMR telemetry equipment and two Model 6135 Computers have been installed at the Army's facility at Edwards.

Participating in equipment installation and checkout at the California site were: Project Engineer R. J. Haase, J. A. Faso, A. L. Kelley, R. E. Olson, M. A. Scardello, and J. D. West, from Sarasota; C. R. Steineckert, D. L. Shumaker and F. V. Hinkel, of our Lancaster, Calif., office; R. J. Klessig, Western Area Sales Manager, and representatives from EMR-Computer, including C. B. Bailey.

SECURITY IS YOUR RESPONSIBILITY!

CANDIDATES TOUR PLANT IN PRE-ELECTION VISITS

As election-time nears, candidates for State and National office are visiting the EMR-T plant as part of a non-partisan "meet your candidates" program.

"Through these visits, candidates have an opportunity to become better acquainted with EMR and our employees--an important segment of our community," says O. W. Noble, Manager of Personnel and Services. "The visits also serve to remind us--as citizens and voters--that we have a responsibility to keep informed about the candidates and issues. The company does not endorse any political party or candidate, but encourages responsible participation in civic affairs."

To date, visits to the plant have been made by Jack M. Eckerd, Republican candidate for Governor, and Congressman James A. Haley, Democratic candidate for re-election to the U. S. House of Representatives. The visits are educational and non-partisan in nature, and no electioneering is permitted.

EATON YALE & TOWNE ORDERS EMR-T VEHICLE TEST SYSTEM

Eaton Yale & Towne Inc., of Southfield, Mich., has placed an order with EMR-T for a vehicle testing system.

Eaton Yale & Towne designs and manufactures heavy equipment such as fork lifts, tree harvesters, logging equipment semi-trailer trucking rigs. EMR's instrumentation will be used at the customer's Research Center in development and testing new equipment for handling and performance characteristics.

The EMR vehicle testing system consists of an 11-channel Constant Bandwidth system, including discriminators, VCO's and transmitter, plus a 14-channel signal conditioning package for signal conditioning of strain gages, thermocouples and frequency-to-voltage converters.



Candidate Jack M. Eckerd shakes hands with Terry Cutler in our Magnetics Assembly area. At right, Bill Thompson of Personnel and Services.

MOHRFELD IS REGISTERED PROFESSIONAL ENGINEER

Robert W. Mohrfeld, Manager of Plant Engineering and Maintenance at EMR-T, has received certification as a Registered Professional Engineer. Bob recently passed the second of two eight-hour written exams which are required for certification as a Professional Engineer by the Florida State Board of Engineer Examiners. The exam was conducted at the University of South Florida.

He joined EMR in 1965 as a Mechanical Design Engineer, and was Supervisor of our Environmental Lab prior to his appointment last year as Manager of Plant Engineering and Maintenance. He received his BA and MA degrees from the University of Florida in 1950 and 1951, and his degree in Mechanical Engineering from the same University in 1958.

Other EMR-T Registered Professional Engineers are: W. B. Bernard, Graham Hildebrand, C. C. Holderman, and W. N. Waggener.

PULSE - The EMR-Telemetry News

M. E. Herbst, Editor

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WEAR SAFETY EQUIPMENT TO AVOID PAINFUL INJURY

TAKE CARE -- WEAR YOUR SAFETY EQUIPMENT, to avoid injury and loss of pay!

In recent months a number of incidents have been reported to the Dispensary which point out quite dramatically that employees avoided serious injury by wearing protective safety equipment.

Wearing safety shoes, glasses, gloves, hard hats, and protective coverings by our employees has meant the difference between lost time injuries and no harm incidents.

Mary Jo Meyers, EMR-T's Industrial Nurse, gives us the following examples illustrating the importance of wearing safety protectors:

- Eddie Sleeman, of Receiving, had a heavily-loaded pallet dumped on his foot by the fork lift. Safety shoes prevented a crushed foot.
- Dennis Wilson's heavy duty electric cart ran over his foot. His foot was bruised, but the steel-tipped safety shoes prevented broken bones.
- James Ewton dropped a heavy piece of sheet metal on his foot--slashing the leather covering of his safety shoes, but his toes were spared.
- In our Plating Room, employees wear special, cuffed acid-proof gloves, plus safety glasses, aprons and shoes when handling caustic materials. One employee recently wore the wrong gloves, minus cuffs. He suffered acid burns on his forearms and hands because the gloves he was wearing that one time did not have cuffs.
- Arc welders wear protective, long-sleeved jackets, head shields, and gloves. When a regular Welder was on vacation recently, his substitute made the mistake of not wearing a long-

sleeved protective covering. Consequently he sustained burns on both arms.

- Glenn Campbell, of Plant Engineering, was working with a piece of lumber when it snapped, splintered, and hit him in the face. He suffered a cut and bruised nose, but safety glasses protected his eyes.

"Right now," Mrs. Meyers pointed out, "we are also exposed to more hazards than usual at home and on vacation -- lawn mowers, hedge clippers, swimming, too much sun, boating and auto accidents. Please remember to be careful at home as well as at work.

"And here at the Plant, do yourself a favor -- WEAR YOUR SAFETY EQUIPMENT, and always take care."

ANNIVERSARY GREETINGS

More than 50 of our colleagues are observing anniversaries of employment with the company in August. Listed here are those marking 3, 5, 7, 10 or more years of service. Happy anniversary to:

<u>1956</u>	<u>1960</u>
Chris Freeberg	Don Buffington
<u>1957</u>	Everett Layton
Alice Rollyson	<u>1963</u>
<u>1958</u>	John Belt
Larry Dunham	Carolyn Cox
Pervis Sanders	<u>1965</u>
<u>1959</u>	Jim Huff, Jr.
Wyatt Bishop	Wes Johnson
Don Bolt	Carll Van Dorn
Carmen Ireson	Rosemary Williams
Ethel Ray	<u>1967</u>
Dorothy Watson	Shari Mullinnix

OVER \$1 MILLION

EMR Sarasota Employees Credit Union passed a major milestone last month when the total loans issued since the EMR Credit Union was formed in 1967 reached a grand total of \$1,000,000. Current assets are just under \$300,000, according to Treasurer Ruth LaCroix.

HERMETICALLY SEALED VCO'S TO BE USED ON NIMBUS-E

EMR-T has delivered the Engineering Model of an airborne VCO package for Nimbus E, an advanced NASA meteorological satellite, under a contract with General Electric's Valley Forge Space Center, Pa.

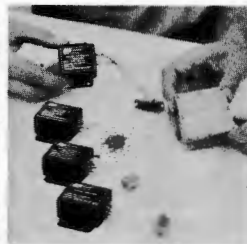
Our equipment, consisting of VCO assemblies, mixer amplifier, and power supply, includes the first hermetically-sealed VCO's produced by EMR.

Equipment design was based on the field-proven EMR 300 series equipment, with the additional requirement that the VCO assemblies must have inert gas fill hermetic sealing. The delivered VCO's were filled with helium and solder-sealed. Mass Spectrometer leak testing in our Environmental Lab revealed that these hermetically-sealed units will maintain positive pressure for up to 7 years -- in other words, it would take 7 years in a space vacuum for all of the very minute helium molecules to leak out of the sealed VCO's.

GE will use this EMR Engineering Model equipment to prove compatibility with the Nimbus E spacecraft. In addition to the Engineering unit of this airborne VCO package, EMR-T will supply GE with a prototype, flight hardware and spares.

Nimbus E is a NASA weather and earth-studying satellite, and EMR's multiplexer electronics will be part of the FM data handling system for a sophisticated scientific experiment called a Surface Composition Mapping Radiometer (SCMR)--one of seven experiments planned for Nimbus E. SCMR will make scientific observations of the earth's rock surface.

Responsibility for this airborne VCO package centers in Special Systems, headed by Kent Morgan. The Project Team includes John Norton, Joe Pipala, Walter Reed and Cliff Hord. Microlab personnel Jim Adams and Hellen Grow provided technical assistance.



Above, VCO's, mixer amplifier and power supply for Nimbus E scientific experiment.

Looking like Dr. Faustus waiting for Mephistopheles, C. B. Hord, of Engineering Support, observes vapor cloud as hermetically-sealed VCO is leak tested in Helium Mass Spectrometer. Liquid nitrogen produces extremely cold temperature in the test chamber in our Environmental Lab.

MICROELECTRONICS GROUP

(Continued from Page 1)

engineering field of Microelectronics. These varied disciplines include ceramics, micro-components, film circuits, monolithic circuits, miniature assemblies, etc.

Among the five technical papers presented at the sessions was one by Dietrich E. Riemer, EMR-T Microelectronics Engineer. His paper was entitled "Fine Line Geometries for Screen Printing."

EMR-T members of ISHM include Gene Baker, James Bicknell, Clyde Brackett, Lake Brown, Eugene Harbert, Elmer Hitchings, Dietrich Riemer, and Richard Schneider.

EEA SPORTS CORNER

Now Forming--EEA's Winter Mixed Bowling League starts September 9 at Sarasota Lanes. Regular play will be on Wednesdays at 6:45 p. m. To join, call Arch Brumfield, Ext. 373.