



The EMR-Telemetry News

Sarasota, Florida

11 April 1969

Vol. III, No. 25

NEW PRODUCT LINES TO BE SHOWN AT NTC

EMR-Telemetry will be well represented at the National Telemetering Conference and Show in Washington, D. C., April 22-24, by our equipment and technical personnel.

The EMR 4000 Tunable Series FM Products will make their collective "debut" in this show for the telemetry-buying public. Operating side-by-side at the NTC Show will be EMR-T's new line of computerprogrammable FM equipment and their manually-controlled counterparts. An EMR PCM Decommutator system, featuring 2700 Series products, will also form part of the EMR-Telemetry booth at the NTC Show.

Preview Here

Sarasota employees can get an advance look at the EMR-T display booth and equipment to be shown in Washington. Product Marketing Manager Gerry Breyton and his staff have arranged for the booth and equipment to be on display in the S-3 Building. Employees interested in visiting the booth may do so during lunch time on Tuesday, April 15, between the hours of 11:30 a. m. and 1 p. m. After that, the display must be readied for shipment to Washington.

In a separate display in Washington during the NTC, specially-invited EMR customers and prospective customers will see EMR-T's 4000 Modular Series High Frequency equipment; 4000 Modular Series Constant Bandwidth products; new 4900 Series FM Multiplex Electronics; Model 3620 UHF

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FUN FOR THE YOUNGSTERS AT EMR EASTER EGG HUNT



Over 120 youngsters were busy hunting Easter eggs, winning prizes, eating ice cream, and talking to the Easter Rabbit at the Easter Egg Hunt sponsored by EMR-Telemetry last Saturday on the grounds of nearby Cardinal Mooney High School. Social Club workers who helped make the children's party a success included Chairman Frank Blakeley, Carolyn Cox, Mary Ann Gallagher, Dale Hefke, Pat Power, George (Easter Bunny) Rubin, and Dan Toler. (See page 2 for more photos.)



FUN FOR THE YOUNGSTERS AT EMR EASTER EGG HUNT



NEW PRODUCT LINES TO BE SHOWN AT NTC (CONT'D)

Telemetry Transmitter; a new demonstrator unit for our 1000 Series Airborne PCM Encoder modules, plus our Model 2721 PCM Signal Conditioner.

Martin Belkin, Manager of Analog Products Engineering, has been invited to take part in an NTC technical panel discussion, "PCM Bit Synchronization in the 1970's," on April 24.

Other Sarasota EMR-T personnel expected to attend the NTC sessions or assist in the demonstration of our equipment are: J. F. Bost, G. E. Breyton, L. G. Chappell, P. J. Germond, J. E. McQueen, W. N. Moody, R. L. Ritenour. Area Field Sales personnel will also be on duty to assure that EMR equipment and customers get together.



Early activities on our NTC display show Andy Foppe (seated) and Harry Durrett with some of the equipment.

ATTEND TECHNICAL MEETINGS

EMR-Telemetry attendees at the IEEE Show in New York City in March included Martin Belkin, of Analog Products Engineering, Lake D. Brown, of our Microelectronics Lab, and William E. Hardman, of Digital Products Engineering. The trio also participated in a technical seminar at Schlumberger Limited in New York City where representatives of Schlumberger companies from this country and abroad exchanged information on advanced technical developments.

SPORTS BRIEFS

"It was pretty good luck for a weekend duffer," is the way Stan Sniffen, of Marketing, describes his hole-in-one on March 26. Stan sank the ace on the 160yard eighth hole at Sarasota Golf Club using a No. 5 wood.

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The EMR Social Club's Softball Team has racked up 3 wins and 3 losses for the season so far. Team Manager Tom Toler says the EMR team is a good one, but the competition is mighty tough. Next game is Thursday, April 17, at 8:45 p.m., at the 12th Street Diamond. Y'all come and root for our team!

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THEY HELP TO KEEP OUR NEW MOTR (MOTOR) RUNNING

It's spelled MOTR and pronounced MOTOR. You could call it a powerful tool which helps keep the wheels turning more efficiently. But this MOTR doesn't run on gasoline--it runs on brainpower.

MOTR stands for Modified Order to Reuirements. Our MOTR plan, already familiar to many employees, is a modern method of dealing with the problems of inventory planning. That is, ordering sufficient parts and components for manufacturing. Facets of the problem involve: When should we order parts? How many should we stock? For how long? How much money can we afford to have tied up on the shelves in this inventory?

"When you consider that we have 10,000 different parts to order and keep track of, it's easy to see how important inventory control can be," explains Don Parker, Manager of Material Planning. The Material Planning group has the responsibility for keeping a steady flow of necessary parts available for Production's use.

The success of the MOTR plan depends on two factors: first, intelligent and cooperative effort among many employees in several areas; second, the recognition of commonality among parts used across the product lines, enabling us to use a computer to process a mass of information quickly.

How does it work? Engineering Support personnel code the various components of new products into a 10-digit number for easy computer handling. (A certain transistor becomes 263-10-30540; another transistor is a 263-10-30550.) Meantime, careful sales forecasts by Marketing are used to estimate how many parts to order and when. A meticulous reporting system by Stockroom Attendants tells the computer how the stocks are dwindling. Fast and complete computerized reports from Accounting's Data Processing Department summarize all of this information for evaluation.



Don Parker, Manager of Material Planning, (standing, center) with Planner-Schedulers (left to right) Jim Huff, Sr., Jo Snyder, Tracey Hardy, and Marshall DuBois.

In Material Planning, Planner-Schedulers use the computer reports in many ways. A four-months marketing model forecast (plus orders on hand) is "exploded" into a piece parts requirement for each month and compared to the inventory. This results in an EDP report which suggests the parts to be purchased.

A monthly report shows which parts had no issue activity for the previous year, so decisions can be made as to the proper course of action which will result in the greatest savings for the company--return the parts; substitute for another item; salvage them.

EDP reports also show where the dollars are. Do we have \$5,000 tied up in hundreds of 2¢ items, or \$50,000 in several \$1,000 items?

Put into effect in 1968, the MOTR plan was only recently declared "debugged" by Ernie Wright, Manager of Materials. It represents a prodigious effort by many people and many departments. The system has resulted in a significant reduction in inventory dollar value, and the inventory turnover rate has increased substantially. Our MOTR plan is one of a number of improved, modern "management information system" methods which EMR's management is implementing to help make EMR-Telemetry more efficient and profitable-factors vital to staying in business and meeting competition these days.

TWO SYSTEMS FOR ESSA SHIPPED TO MINNEAPOLIS

Two new EMR systems will soon be part of the digital data handling system used in processing weather data derived from a new series of Improved Tiros Operational Satellites (ITOS). Ordered by the Environmental Science Services Administration (ESSA) of the U. S. Department of Commerce, the two EMR automated systems combine EMR-Telemetry equipment with four EMR Computers.

ESSA representatives came to Sarasota in March for acceptance tests of the EMR-T portion of the system. Our equipment is now at EMR-Computer, Minneapolis, for integration with the EMR 6130 and 6050 Computers. (EMR-C is prime contractor for the ESSA contract.) Later this year, the two EMR parallel systems will be installed at the National Environmental Satellite Center (NESC), Suitland, Md.

The new TIROS-M satellite and subsequent ITOS spacecraft will provide daily observations of global cloud cover and will perform other scientific functions, such as solar proton density monitoring and radiative heat budget measurements, useful in long range weather prediction and analysis.

After the satellite sends data to earth, ESSA's far-flung environmental satellite data handling stations will process the data. The weather satellite data received at Command and Data Acquisition Stations at Gilmore Creek, Alaska, and Wallops Island, Va., will be sent over special telephone lines to NESC, Suitland. There, two identical EMR systems will handle the information -- one EMR system for the Alaskan data, the other for data received from Wallops Island, EMR's equipment is designed to take the raw data from the phone lines and convert it into a digital form which can be processed by NESC's large-scale computer system. This computer, in turn, processes the data to a form which can be sent to meteorologists as weather maps, pictures of global cloud cover, etc.



ESSA and EMR participants in acceptance tests of the EMR-T portion of the ESSA systems in Sarasota recently included (left to right): Faris Kahwajy, ESSA; Leonard W. Heiselt, EMR-C; Jack Cain, EMR-T; William E. Raynore, ESSA; Bill Waggener, EMR-T, and Melvin E. Welch, ESSA.

The EMR-T system includes EMR Model 287 Discriminators, Model 2701 Analog Multiplexer/Quantizers, Model 2761/62 Telemetry Data Channel, Model 280 Calibrators, and a special 2700-series unit containing the unique features of the system. The special unit detects synchronization signals in the satellite picture data, interrupting the computer at the beginning of each picture frame and line. The unit also provides a variable digital sampling rate to the 2701's and can vary the sampling rate in accordance with the wow and flutter of the satellite tape recorder.

EMR-Computer personnel who came to Sarasota for instruction on EMR-Telemetry equipment involved in the ESSA system included Joe Cleveland, Bill Dawson, Wayne Gunnufson, Ken Helget, Leonard Heiselt, Michael Scholz and Roger Selander. In addition, EMR-C's ESSA Program Manager John R. Turner, Applications Engineering Manager Bob Klein, and Product Service Engineer Leonard Heisel participated in the acceptance tests here. Project Engineer for the EMR-T portion of this contract was Bill Waggener, of Systems. Jack Cain and Bob Voss are currently in Minneapolis for integration of the EMR-Telemetry system with EMR-Computer equipment.