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# The EMR-Telemetry News Sarasota, Florida

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# DEVELOP NEW TRANSMITTER FOR McDONNELL DOUGLAS

McDonnell Douglas Astronautics Company's Western Division, Santa Monica, Calif., has awarded EMR-Telemetry a contract to develop a new low-power telemetry transmitter for use on UpSTAGE, an advanced technology flight test program.

The new solid state S-Band telemetry transmitters will be developed and qualified for McDonnell Douglas under this contract. Design work is currently underway in RF Engineering, under Tom Maresca's direction.

# LOCKHEED BUYS MORE TELEMETRY FOR L-1011

Lockheed-California Company has ordered additional EMR-Telemetry equipment to be part of the advanced EMR computer-controlled processing system for handling flight test telemetry data from Lockheed's new L-1011 commercial jet airliner.

The add-on is for 10 more channels of EMR 4146 CBW Discriminators. Work on the huge Lockheed telemetry/computer system--valued at more than \$1 million-is currently underway in Systems, with Barry Barton as Project Engineer.

### TRAIN ON EMR EQUIPMENT

Personnel from Martin Marietta Corp., Orlando, attended a two-day training course at EMR in Sarasota last week. The course, taught by Don Shumaker, served to acquaint a group of 10 Martin Engineers and Technicians with the operation of EMR 2700 products and FM equipment. Martin has purchased two EMR systems for use on the Pershing missile program.

# ADAPT BRITISH SIMFIRE FOR USE IN U S MARKET

A new project, based on a successful British system developed by Solartron, has been launched at EMR-T. (Solartron is a Schlumberger electronics company in England.) Work is now underway in Systems on the development of an Americanized version of the Solartron SIMFIRE system--a Tactical Tank Gunnery Trainer.

EMR-T is applying electronic, optical and mechanical skills in this new project to train tank crews in combat techniques. The Solartron system, sold successfully to British, Swiss and Norwegian armies, permits tank crews to undergo realistic training via a simulator.

"This project represents a reversal of our past experiences in which overseas Schlumberger companies have taken on the development and manufacture of EMR designs," says Peter Smith, International Sales Manager for EMR-T. "We are importing ideas which will help generate new business with a much smaller engineering investment, making us more competitive and potentially more profitable. We hope to see more of this type of activity."

Smith, W. N. Waggener, and S. Kent Morgan, of Systems, visited Solartron in England to arrange for the technical liaison and exchange of ideas required for this project. Project Engineer Randy Schaubs, of Special Systems, and his team are working closely with Manufacturing and Engineering Support on the SIMFIRE project.

### US ARMY ORDERS MORE EMR INSTRUMENTATION

An add-on order has been received for EMR-Telemetry to supply additional telemetry for the Army's Advanced Instrumentation and Data Analysis System (AIDAS). The equipment will be used by the U. S. Army Aviation Systems Test Activity at Edwards Air Force Base, Calif., for real-time flight safety and data monitoring of new Army aircraft such as helicopters.

The original order, placed with EMR in late 1969, called for EMR to supply an Airborne System, a Central Ground Station, for processing data from test flights, and a Remote Ground Station, van-mounted for mobility in traveling to helicoptertest sites for quick-look evaluation of test data.

The current add-on is for front-end telemetry, mainly 2700-series equipment, which will interface with the EMR 6135 Computer and peripherals in the Central Ground Station. Acquisition and implementation of AIDAS will span a 3-year period, and the Army's contract with EMR specifies options to buy additional equipment during 1970, 1971 and 1972.

## MICROCIRCUITS ORDERED; OUTPUT HITS NEW HIGH

EMR-Photoelectric, of Princeton, N.J., has placed an order with EMR-T for 1000 high voltage resistors. The microcircuits, produced by our Microelectronics Lab, will be used with EMR-P's photomultiplier tubes.

#### Production Up

"During the month of March, we achieved an all-time high for microcircuit production in our facility," reports Lake D. Brown, head of our Microelectronics Lab. Nearly 3000 tiny precision circuits were designed and manufactured in March.

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### ANNIVERSARY GREETINGS

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Here's a doubleheader of employee anniversaries—for March and April—since <u>Pulse</u> ran out of space in March. Among 90 employees observing anniversaries of employment in March/April are the following, marking 3, 5, 7, 10 or more years with the company:

MARCH (Contid)

MARCH	MARCH (Cont.d)	APRIL
1957 - Mable Altman Opal Black Betty Cobb Tracey Hardy Lottie Kincaid Richard Kolchakian Eddie McDonald Don Roberts James Thurmond Mary Ann Williams Eugene Willie  1958 - Margaret Herbst George Phillips  1959 - Don Jones  1960 - Bob Klessig Ernie Wright	1963 - Joe Barnett Julie D'Amelio Emma Green Charles Harris Sam Piatchuk Claude Smith Dora Warren Delta Wildermuth  1965 - Ray Claflin Belva Fields  1967 - Jack Bishop Joan Brothers Betty Downing Jane Eicholtz Mary Foxworthy Billie Godwin Julie Henry Cliff Hord Ed Perdew Virginia Ward	1955 - John Sherman  1957 - Grace Bryan Arsenia Davis Lela Kallio Randy Mitchell Grace Mullinnix Peter Smith Hazel Taylor  1958 - Roland Olson  1959 - Gerry Proper  1960 - T. J. Maresca  Shirley Bogusz Audrey Borzykowski Richard Bridgman Mary Brown Charles Butler Mike Gerack Clarence King Dottie Martin Joe Vargha  1967 - Vi Blair

### NAMES IN THE NEWS...

#### LIBRARY WEEK

This is National Library Week--a good time to stop in and find out about the many technical periodicals and services which Librarian Ruth Standley provides EMR-T employees... Did you know our Library has some 2000 books and 225 periodicals, plus access to technical information resources of several major University libraries? Ruth can help you find the information you need in a hurry.

#### THE CHAMP

Glenn Veal, of Manufacturing Engineering, is the new Champion of the Bobby Jones Men's Golf Association.
Glenn shot a steady 74 or 75 right through the matched play and elimination tourna-



ment. His prizes included a Bobby Jones Club membership for one year; a Men's Association membership for one year and a gift certificate.

#### THE REAL FLORIDA...

A weekend canoe trip down the Peace River is highly recommended by Jim Wachob, Joe Lehmann and Chuck Netherton, of Engineering. The trio, plus Larry Dodson, paired up in two canoes and navigated the quiet Peace River from Zolfo Springs to Arcadia on a two-day camping and canoe trip. The distance was about 35 miles, but the distance from crowded highways and noisy confusion was immeasurable. "We didn't see or hear a personjust some alligators, a young family of ducks, and distant lowing of cattle on the ranches bordering the river," they report. And they had catfish for breakfast!

#### NURSES VISIT

Twenty-three members of the Florida West Coast Association of Industrial Nurses visited EMR-T on Thursdaynight, April 9. R. W. Ireland, of Personnel and Services, and Mrs. Mary Jo Meyers, EMR-T Nurse, served as EMR-T hosts and escorted the group on a plant tour.

#### FIFTY MILES ? ? ?

Kent Morgan, of Systems, chose Good Friday for his annual 50-mile hike from El Jobean to Placida to Sarasota. This year he made it in 13 hours, 37 minuteshis best time in the five years he's been doing it!

#### VISIT PLANT

Three groups of students from Sarasota schools visited EMR-T during March for plant tours and briefings by our personnel. Schools represented were: Riverview High School chemistry/science students; Sarasota Vocational-Technical School radiotv-electronics students, and Sarasota High DCT students. EMR-T tour guides who participated in this community relations activity included Jim Adams, Clyde Brackett, Joe Goodrich, Bill Henry, Don Roberts, Bruno Stillo.

#### MORE COMMUNITY RELATIONS

Microelectronics Engineer Clyde Brackett addressed a group of engineering students at Manatee Junior College last month. Clyde told the Manatee Engineering Technology Club about EMR-T's microelectronics capability and other advanced technologies used in electronics today.

#### A TALL ORDER ...

April 19-25 is National Secretaries Week. According to the National Secretaries Association, "A secretary shall be defined as an executive assistant who possesses a mastery of office skills, who demonstrates the ability to assume responsibility without supervision, who exercises initiative and judgment, and who makes decisions within the scope of assigned authority." A tall order -- capably filled by many of EMR-T's skilled secretaries!

# PULSE - The EMR-Telemetry News

M. E. Herbst, Editor

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# WHO'S WHO -- FRED THORNTON

At work, Fred Thornton, of Fabrication, is a skilled machinist—helping turn out the precision metal parts required for EMR-T's high quality products.

After work, Fred is a Florida Highway Patrol Auxiliary volunteer-giving his time, without pay, to assist a Florida Highway Patrol Officer perform his duty.



Fred Thornton (right) with Trooper Ray Brown demonstrating new computer device for clocking speeders.

Accompanying Trooper Ray Brown, of the Bradenton State Highway Patrol head-quarters, Fred has devoted an average of 90 hours a month since 1968 to this volunteer activity sponsored by the American Legion. He assists at the scene of accidents; helps with traffic control; handles radio calls; serves as an extra pair of eyes during high-speed chase, or arrests—under Trooper Brown's supervision.

"About two years ago, my wife had an auto accident on the Trail," Fred explains. "That was the first time I saw a Florida Highway Patrol Auxiliary volunteer in action. He helped my wife and directed traffic around the accident." Fred soon made application to join the Auxiliary through his American Legion Post. After screening, he was accepted in the program. Monthly training meetings are held, and each volunteer is checked out in first aid, radio operation, and the use of firearms.

"Riding with the State Patrol you learn a lot," Fred says. "It can be routine, or exciting, or eventragic. Helping stranded motorists... chasing a stolen car at 120 miles per hour ... a grinding head-on crash with two young victims dead...

"You become aware of the dangers of speeding or careless driving--especially drunk driving," Fred says. "I now realize

that the Patrol is out to savelives--not just to nail speeders.

"Trooper Brown's patrol car is one of the few in this area equipped with a new computer device for clocking speeders," Fred notes. Called VASCAR (Visual Average Speed Computer and Recorder), the device permits fast, accurate clocking of speeders from a distance.

To clock a violator, the officer flips on the "time" switch as the speeder passes a selected landmark, and flips it off when the suspect passes a second landmark. When the patrol car hits the first mark, the operator turns on the "distance" switch, and switches it off at the second. The time and distance are fed into the computer which calculates the average speed to the nearest tenth of a mile per hour. That figure is displayed in bold, illuminated numbers on the readout panel mounted near the Officer's right hand. "It works like a charm," Fred says.

A native of Indiana, Fred's had 25 years of experience as a machinist. Before joining EMR in 1960, he worked for McDonnell Aircraft and Emerson Electric in the St. Louis area. The Thorntons have a son, 19, and two younger daughters. Fred's an Army veteran, enjoys camping, fresh water fishing, and has hunted bear and deer from Florida to Canada and Alaska. Nowhe spends most of his spare time with the Patrol Auxiliary.

"For me, working with the Highway Patrol is a community service -- just as other people like to work at the Hospital or with Boy Scouts. I get a lot of satisfaction from it," Fred says.