



The EMR-Telemetry News
Sarasota, Florida

Vol. III, No. 1

10 May 1968

LATE BULLETIN ... AIRLOCK AWARDED

Word has just been received that EMR-Telemetry has been awarded a large order by McDonnell-Douglas Corporation, St. Louis, to supply the on-board telemetry system for Airlock/Orbital Workshop on NASA's Apollo Applications Program.

EMR FAMILY PICNIC TO BE HELD JUNE 8

EMR-Telemetry's Family Picnic will be held Saturday, June 8, at the Sun N Fun Resort, Fruitville Road, east of the plant. A conflict in scheduling the use of the facilities caused a shift from May 11 to June 8.

The Company Picnic is free to all employees and their immediate families this year, with the EMR Social Club doing the planning and administering. All EMR-Telemetry employees and their immediate families are invited. Other guests will be admitted for a nominal fee. Save the date--June 8--and watch the bulletin boards for further information.

"PULSE" IS TWO YEARS OLD

With today's issue, Pulse rounds out two years of publication. Vol. I, No. 1 appeared on May 13, 1966. Pulse extends special thanks to the following for their expert help and cheerful cooperation over the years: to Photographer Randy Minter, to Press Operators Pearl Point, Ernelda Kragel and Betty Austill, and to Supervisor Olie Becker, of Reprographics; to Jim Horvath, Jill Steinhoff and Morrie Wild, of Drafting, who prepare the Typositor headlines for Pulse; to Art Director Don Smith and others who contribute willingly and generously. Thank you. Now, on with Vol. III, No. 1 --

EMR AD PLACES FIRST IN STATE COMPETITION



EMR's Don Smith, at left, and Joe Volpe receive awards for their prize-winning ad. Charles Schmalz, of the Sarasota Herald-Tribune, displays the EMR ad.

EMR-Telemetry's ad in the Sarasota Herald-Tribune's Mail-Away edition captured first prize in the industrial advertisements category at the Florida Newspaper Advertising Executives convention held last weekend in Fort Lauderdale. Copy and art work for the ad were prepared by Technical Editor Joe Volpe and Art Director Don Smith, of Advertising and Sales Promotion. The ad appeared in the November 5, 1967, Mail-Away edition of the local newspaper.

DIGITAL DECOM PATENT AWARDED EMR, MAGNIN

Dr. J. P. Magnin and EMR have received a U. S. Patent for the broad electronic concepts of the digital decommutator, based on early development work of the EMR Model 185 PAM/PDM Digital De-commutator. The patent, entitled Telemetering Decoder System, was applied for on March 17, 1961, and awarded on April 9, 1968. Dr. Magnin headed the R & E section which developed the Model 185 and much of our subsequent digital telemetry equipment. He is now President of EMR.

ATTEND NBS WORKSHOP

George Strait and Dewayne Lipp, of Product Assurance, attended a five-day Microwave Calibration Workshop conducted by the National Bureau of Standards, Boulder, Colorado, this week. The advanced training they received in calibration of test equipment and measurements at microwave frequencies will be applicable to our new RF product lines. George is Supervisor of our Calibration Lab and Dewayne is in Reliability Engineering.

HEADS NAVY RESERVE UNIT

Lt. Commander J. W. Gregory (better known to us as Engineer Bill Gregory in Digital Products Engineering) has been appointed Commanding Officer of the U. S. Naval Reserve Surface Division 6-34. As Commanding Officer of the local Navy Reserve unit, Bill has administrative responsibility for training a group of 45 active Reservists in this area. His unit includes new recruits as well as experienced Reservists who have completed active Navy duty. They meet one evening a week at the Naval Reserve Training Facility in Bradenton.

Bill is a veteran of 14 years of Navy service and is experienced in underwater demolition team (UDT) work.

CHAPPELL DISCUSSES BUSINESS SITUATION

In his first appearance at an EMR-Telemetry quarterly business review meeting on April 25, General Manager Leo G. Chappell told professional, managerial, and supervisory personnel, "Frankly, at this point, I have more questions than answers."

He summarized the first quarter's performance and emphasized that the main requirement is for EMR-Telemetry to get in the black in 1968. Orders and shipments were slightly below goals set for the first quarter. "I would not consider the lack of profits in the first quarter as critical, but rather as a challenge," Mr. Chappell said.

Citing a long series of questions he is asking himself, the General Manager touched on problem areas, such as identifying other market areas, diversification, and heavy dependence on U. S. Government orders.

"One of the most enjoyable parts of my job is the plant visits I have recently begun," Mr. Chappell said. He plans a series of visits to each area and will talk with individual section managers about their responsibilities, goals and objectives.

CREDIT UNION FACTS

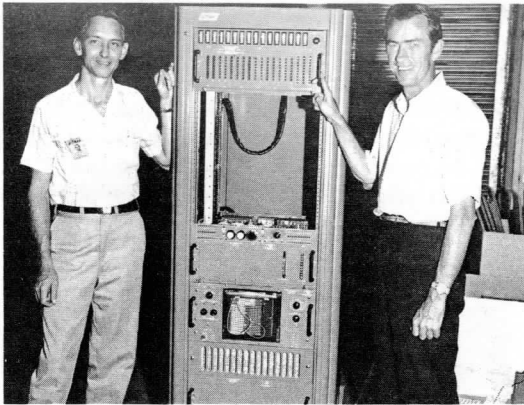
Did you know that a 1-1/2% service charge on accounts at stores is really 18% per year? A loan from the EMR Credit Union is 1% per month on the unpaid balance, or 6.6% per year. Don't be fooled by interest rates--compare the total amount it's going to cost you. For information, stop at the Credit Union -- 11:30 to 12:30 on Tuesday, Wednesday, or Thursday.

PULSE

EMR-Telemetry News

M. E. Herbst, Editor

SPANNING GENERATIONS OF DIGITAL TELEMETRY

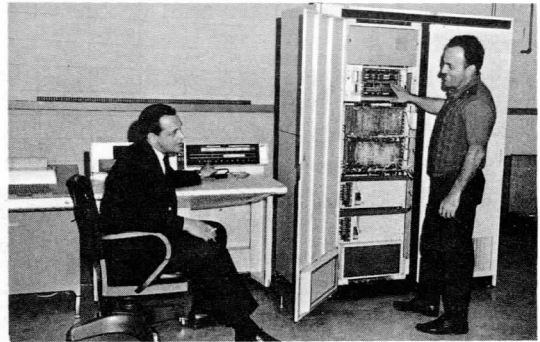


The last Model 185 PAM/PDM Digital Decommutator got a send-off in Shipping last week from Technician Stan Fusselle and Engineer Curt Dyke. This Model 185 went to NASA-Kennedy Space Center to join other telemetry equipment, much of it supplied by EMR, which will be used in NASA-KSC's Telemetry Checkout system on the Apollo program.

The first Model 185 Decommutator, sold in 1960, was designed in our R & E digital telemetry section composed of a number of Engineers and Technicians who transferred to Sarasota from Schlumberger's Ridgefield (Conn.) laboratories in late 1958. Section Manager at the time was Dr. J. P. Magnin, now EMR President. Curt Dyke was also in that group. Among the customers who bought our Model 185 Decoms over the years were: RCA, Goodyear, Beckman, Bell Telephone Laboratories, Hughes Aircraft, GE, Sandia and NASA. Then came succeeding generations - the Model 285 (installed in NASA's world-wide Manned Space Flight Telemetry Range), the Model 385, and now our newest modular digital telemetry line - the 2700 series.

Systems is currently working on system integration of EMR 2700-series telemetry modules with an EMR 6130 Computer for NASA-KSC, where our newest system will join earlier generations of EMR digital equipment (185's, 285's) in Apollo checkout.

Pictured here is the first EMR Model 6130 Computer delivered to EMR-Telemetry.



Shown with EMR 6130 Computer are Gene Huffman (left) of EMR-Computer, Minneapolis, and Joe Faso, EMR-Telemetry.

The Computer, temporarily located at the west end of the Engineering Building, will be combined in Systems with EMR 2700-series telemetry modules to form an automated telemetry data processing system. NASA-Kennedy Space Center ordered the system for use on the Apollo program.

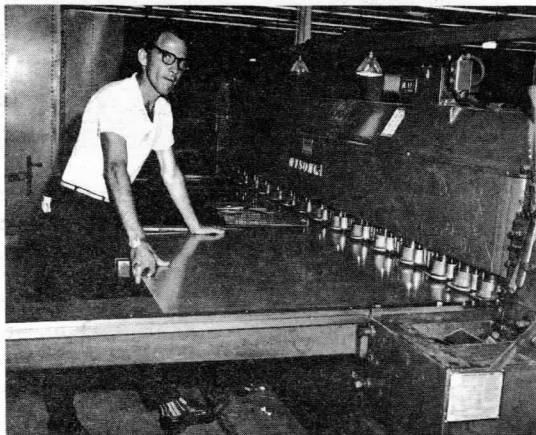
The 6130 Computer shown in the photo has a teletypewriter (at left), an operator's console with paper tape punch and paper tape reader, and (right) a double cabinet containing an 8K core memory Central Processor and auxiliary modules.

Both the 2700-series and 6130 Computer equipment use a modular concept design. Customers can order "a la carte"--expanding their telemetry and computer systems with additional modules as their requirements grow.

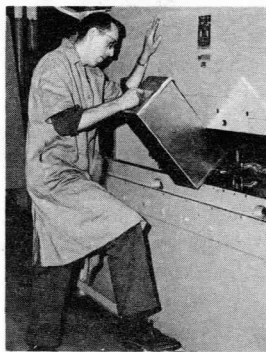
The present NASA-KSC system combines the 6130 Computer with our Model 2701 Analog Multiplexer-Quantizer, 2710 PAM/PDM Signal Conditioner, 2721 PCM Signal Conditioner, 2730 PCM Frame Synchronizer, 2761 Telemetry Data Channel, and special interface modules. The 2761 Telemetry Data Channel will be making its debut in this system.

MACHINE SHOP MAKES PARTS FOR SCHLUMBERGER TTR

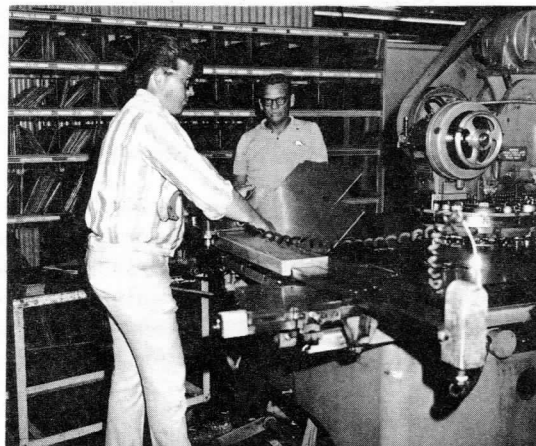
Over in the Production Machine Shop, fabrication has been underway on the mechanical parts for 44 TTR's (Truck Tape Recorders) ordered by Schlumberger Well Services, Houston. Besides the complex electronics which goes into the incremental tape recorder, each TTR has some 150 metal parts to be fabricated. That means shearing, drilling, shaping, milling, welding, sanding, electroplating, inspecting and painting or finishing. Machine Shop Supervisor Archie Colwell and his 16 men are now winding up the TTR metal fabrication work on the TTR's tape transport, signal conditioner, and portable power supply. Here are some pictures of the action--



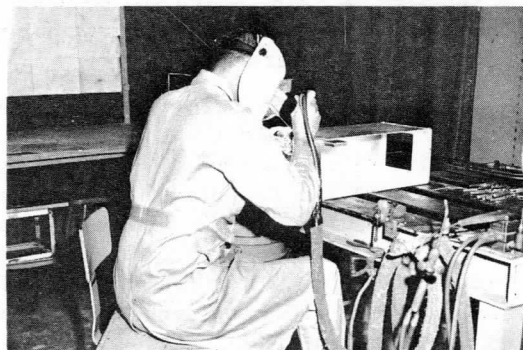
Leonard Rhines shears the 4' x 12' sheet of aluminum to appropriate workable size.



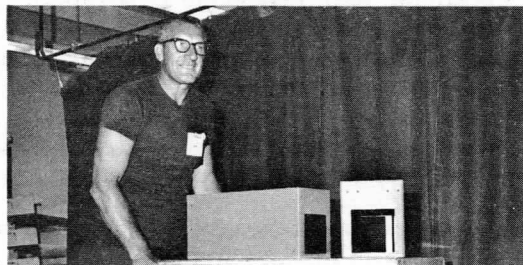
In photo at left, Dick Peck at the press brake is shown with a TTR power supply case which has been shaped. The flat piece of metal is bent or formed to the right size box.



At Wiedeman turret punch press, Leonard Fletcher (left) holds one of the metal pieces already cut. The turret punch press operator cuts the flat metal sheet to the right shape and punches the correct sized holes in the specified spots. Supervisor Archie Colwell is at right.



Man from Mars? No, that's Dale Aylward welding the formed box.



Wes Johnson with two of the finished cases for the TTR power supply after completion of sanding, electroplating, inspection and paint finishing steps.