



The EMR-Telemetry News Sarasota, Florida

Vol. IV, No. 21

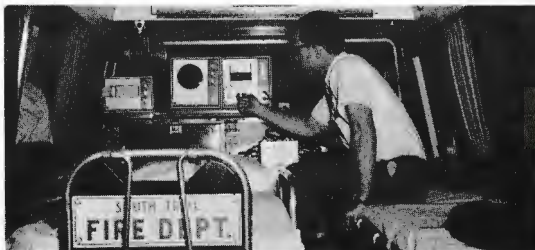
13 March 1970

LOCAL CARDIAC SYSTEM USING EMR-T EQUIPMENT

Telemetry transmission of electrocardiograms from the heart patient in an ambulance to the Sarasota Hospital--that's the function of an experimental EKG telemetry system now under evaluation by the South Trail Area Fire Control District, with an assist from EMR-Telemetry.

As a community service, EMR-T has loaned some equipment for the experiment and helped install and check out the system in the ambulance. In addition, Sarasota Memorial Hospital and General Electric Company have cooperated with South Trail Area Fire District personnel to get the system in operation.

"The experimental system is installed in one of our ambulances. We've already used the system on many patients, and we're getting very good data," reports Marshall DuBois, of EMR-T's Materials Planning. Marshall is a Lieutenant in the South Trail Fire District, and has been



Inside the ambulance, Marshall DuBois with cardiac monitor unit. EMR Model 307 VCO (not visible) is part of this system. At the Hospital, our Model 287 Discriminator handles the telemetered data.

TEAMS TIED FOR FIRST IN EMR-T GOLF LEAGUE

Two teams tied for first place in the final standings of the EMR Employees Association Par 3 Golf League. The winning teams -- Tony Brancati/Judd Bodycote and Glenn Veal/Bob Bush--captured 67-1/2 points each during 11 weeks of play.



Heading for the first tee -- Dale Hefke, Bob Bush, Glenn Veal, Judd Bodycote, Don Norris, Wes Johnson, Joe Manning. (Photo by Arnie Rounds.)

Individual winners were:

Low Gross: J. Appledorn, J. Bodycote, T. Brancati, G. Veal - all with 55

Low Net: W. Dunn, 44; 2nd Low Net: J. Manning, 46

Low Putts: G. Veal, 22

Most Improved Golfer: Joe Manning, 7 strokes

A new Summer Golf League is now forming. EEA Publicity Chairman Dale Hefke urges interested employees to sign up by March 27, via bulletin board notices. Play is open to all EMR-T men and women--whether experts or duffers!

EMPLOYEE BENEFITS PROGRAM —

This is the fourth article in a series about EMR-T's Employee Benefits Program. Earlier articles dealt with the benefits program in general; Emergency Protection Plans, such as group insurance; and "Time Off With Pay" benefits such as vacations, holidays, coffee breaks, sick leave.

RETIREMENT, INVESTMENT PLANS ARE AMONG EMR-T BENEFITS

A large part of EMR-T's \$1,500,000-a-year Employee Benefits Program is devoted to benefits plans designed to assist employees in meeting future financial needs.

For most of us, our total retirement income and long-term security will come from four sources:

- Schlumberger Retirement Plan
- Social Security Benefits
- Schlumberger Contributory Investment Growth Plan
- Personal Investments

The company makes direct contributions to three of these plans. In 1969, EMR-T paid over \$231,000 into the Schlumberger Retirement Plan for employees. The company's portion of Social Security taxes totaled over \$226,000. This sum of \$457,000 amounted to more than \$650 per employee for 1969. In addition, it is estimated that in 1970 company contributions for our new employee Investment Growth Plan will be about \$120,000 for the first year.

Retirement Plan - A revised Schlumberger Retirement Plan went into effect January 1, 1969, and the company pays the entire cost of the plan.

All EMR-T employees are automatically enrolled in the Schlumberger Retirement Plan after one full year of continuous service as a regular full-time employee and after attaining age 25. After ten years of continuous service, and after attaining age 35, you are "vested" in our Retirement Plan. That is, you are entitled to a pension based on this service, beginning at age 65. For long-time employees, prior pension credits earned under our former pension plan are added to retirement benefits earned under the new plan. Some 148 EMR-T employees who have been with the company for ten years or more are already fully vested.

Your retirement benefits are proportionate to your earnings and years of membership in the Plan. The formula for calculating Plan benefits is detailed in the booklet, "Schlumberger Retirement Plan," which has been distributed to employees.

Social Security - The Social Security tax rate is currently 9.6% on earnings up to \$7,800 -- for a total of \$748.80 a year. Employees and employers each pay 4.8%. The company matches each dollar you pay toward Social Security up to the present annual maximum of \$374.40.

Investment Growth Plan - This new Schlumberger Contributory Investment Growth Plan, initiated January 1, 1970, offers employees an opportunity to share in the company's profitable growth. All employees who have completed one full year of continuous service as a regular full-time employee are automatically enrolled in the Plan. Each year the company will pay out of profits an amount equal to 1% of your annual admissible compensation into your Contributory Investment Growth Account. The Board of Directors may increase this amount in any given year if the company's profits and financial situation justify it.

In addition, employees may elect to contribute a percentage of earnings (from 1% to 6%, depending on length of service) and the company will contribute a minimum of \$0.25 for every dollar you contribute. When profits and financial situation justify, the Board of Directors may vote to increase



INVESTMENT GROWTH



the company contribution up to a maximum of \$1 for each of your dollars. Your account, as part of a Trust Fund, will also share in the earnings of the Trust.

Employees are fully vested after eight years of continuous service. Over 200 EMR-T employees have been with the company for eight years or more, and are already fully vested. If you terminate your employment prior to completing eight years of continuous service, there is a sliding scale of percentage of vesting. (For details, see booklet, "Schlumberger Contributory Investment Growth Plan.") If you participated in our previous profit-sharing plan, these funds are automatically deposited in your new Growth Plan account.

Of 586 eligible employees, 501 (85%) have enrolled in the contributory portion of our Investment Growth Plan.

Together with your personal savings and investment program, these EMR-T benefits will go a long way toward augmenting your retirement income and long-term security.

Next: Other Kinds of Benefits

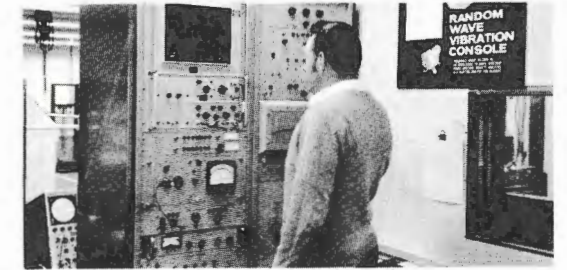
WESTON INSTRUMENTS ORDERS MICROCIRCUITS

Weston Instruments, Inc., Newark, N. J., has placed an order with EMR-T for 5000 additional thin film microcircuits. The precision resistor microcircuits are produced in our Microelectronics Laboratory.

This is the third order for a quantity of the same thin film resistor networks to be used in Weston Instruments' new Model 1240--a 3½ digit multimeter. The original order called for 2000 microcircuits to be delivered in 1969, and a follow-on order for 5000 was logged late in 1969. The current add-on is for another 5000 of the highly reliable precision microcircuits. Delivery is scheduled to reach 1000 a month in July.

RANDOM VIBRATION CONSOLE ADDED IN ENVIRONMENTAL LAB

A new Random Vibration Console has been installed in EMR-T's Environmental Lab. The valuable new equipment gives our Environmental Lab a more sophisticated capability for producing and evaluating the effects of extreme vibration which our equipment must withstand when used in missiles or high-speed jet aircraft.



Environmental Lab Technician Bill Henry with new Random Wave Vibration Console.

"We simulate the actual environment that our equipment will encounter by generating random forces in our vibration test equipment," Bill Henry explains. If an EMR-T Transmitter or VCO is installed in a spacecraft booster or an antiballistic missile, it may be subjected to vibration forces of up to 20 g's. (A "g" is one gravitational unit. Hence, a 10-pound object at 20 g's vibration weighs 200 pounds.)

In the Environmental Lab, the EMR-T equipment to undergo vibration tests is placed on a shaker table and vibrated at specified frequencies and intensity. An accelerometer generates an electrical signal which shows the response. The operator at our new Random Vibration Console determines the acceleration power spectral response by observing the analyzer oscilloscope indications and the 80 individual "g" voltmeter readings. Equalizer controls are adjusted until the system power spectral response meets the test specifications.

HOLIDAY MOVE -- Friday, March 27 (Good Friday) is a company holiday, so PULSE will next be issued on April 3.

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

Permission to reprint material herein may be obtained from the Editor, Pulse

COPYRIGHT © 1970 EMR DIVISION OF WESTON INSTRUMENTS, INC.
A SCHLUMBERGER COMPANY

LOCAL CARDIAC SYSTEM USING EMR-T EQUIPMENT

active in developing the experimental system for nearly a year.

"EMR-T personnel have been very cooperative from the early feasibility study right through to the installation," he said, "and I feel that the company has made a valuable contribution to the community via this project.

"We're using EMR's Model 287 Discriminator and a Model 307 Voltage-Controlled Oscillator as part of the system. GE, Tampa, loaned cardiac monitoring equipment and a transmitter for use in the ambulance and in the Hospital Emergency Room," Marshall explains.

"We're currently using limb leads, easily attached to the patient's forearms and just above the ankles. The leads are plugged into the Cardiac Monitor, and a Cardiac Scope and a Strip Chart show the heart waveform right in the ambulance. These same data are being transmitted via telemetry while the ambulance is en route to the Hospital," he said. "In the Hospital, at the receiving end of the system, the Doctor can read the data on a scope and record it on a strip chart. The Doctor begins diagnosing the patient's cardiac condition while we're en route, and he can tell us, via mobile phone, the degree of the emergency.

"Leads remain on the patient as he is wheeled from the ambulance to the Emergency Room, and then they are simply plugged into the Hospital system, with a



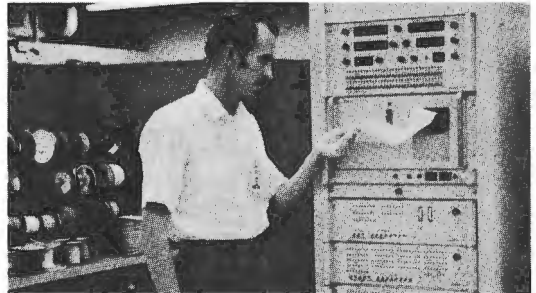
John McQueen, Marshall DuBois, Andy Foppe installed EKG telemetry system in South Trail ambulance.

loss of only about 30 seconds worth of cardiac data," Marshall notes. "Our transmission range is now 15 or 20 miles, but we expect to increase it to about 30 miles.

"After a month of operation, our evaluation is not complete, but I believe we have a fine, functional system which will assist Doctors in the Hospital Emergency Room to make prompt, accurate cardiac diagnoses and may save lives.

"I hope our system proves so successful that ambulances and hospitals throughout the country will be buying EMR Discriminators and VCO's!" Marshall concluded. This application is another example of potential non-Government uses for our products.

READY TO GO TO JAPAN



All checked out and ready for the long air journey to Japan is this EMR-Telemetry PCM Decommuration system. The system, shown here with Systems Engineer Curt Dyke, will be used in Japan's Radio Research Laboratory on an experimental satellite application.

The PCM Decom consists of 2700-series digital telemetry equipment, including the first Model 2758-02 Printer Drive drawer. The equipment was personally inspected by Dr. S. Koizumi, of Japan, who visited the plant in February.

EMR-T's Japanese representatives, Marubun Co., of Tokyo, are handling the equipment installation. This new system joins an EMR Model 185 Decom system installed at the same Japanese site several years ago by Curt Dyke.