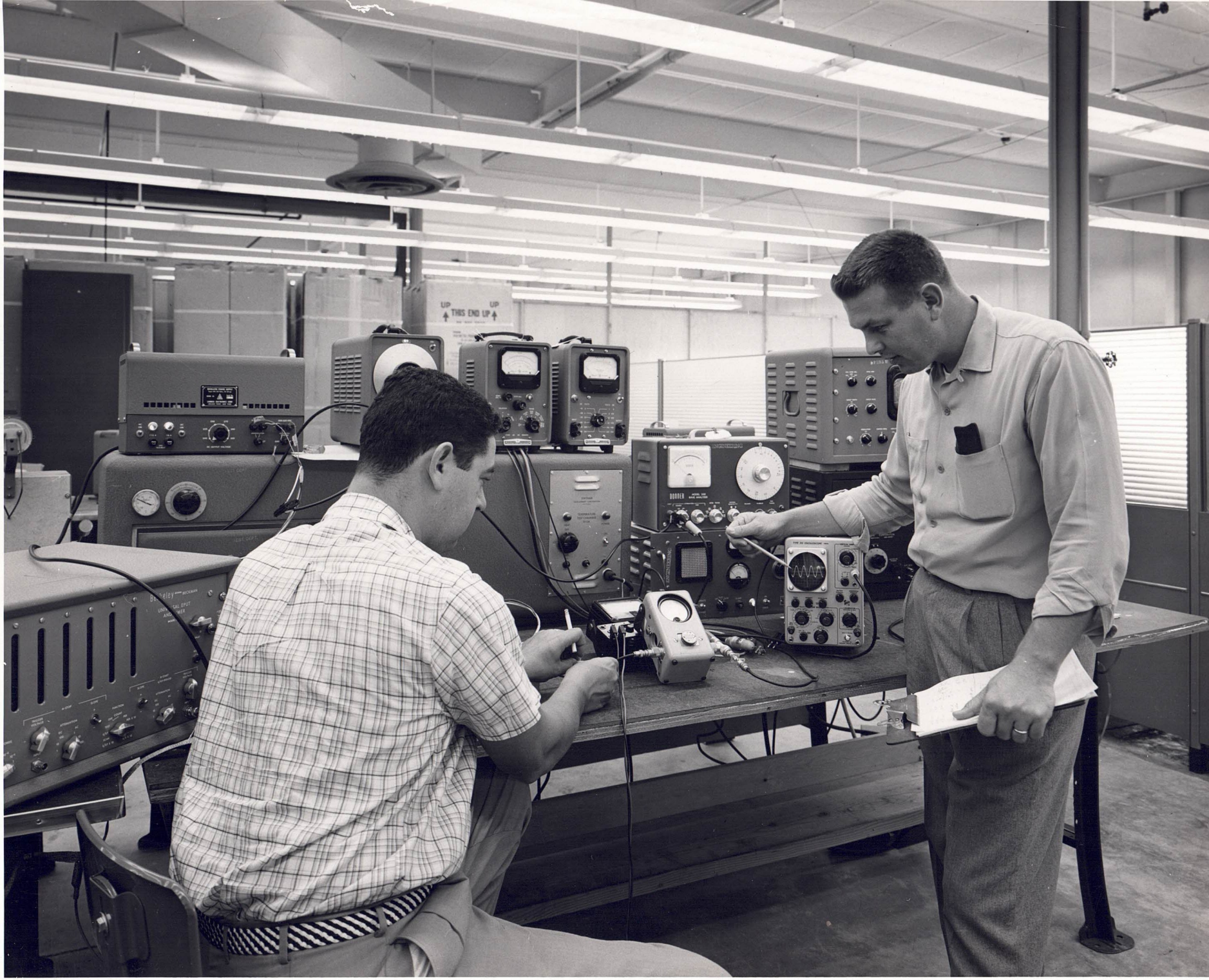
The ENGINEERING Story at e·m·r


UP
THIS END UP
UP

EMR's future laboratory and plant facilities in Sarasota.

Electro-Mechanical emr Research, inc. SARASOTA, FLORIDA • RINGLING 6-1148

ELECTRO-MECHANICAL RESEARCH, INC.

Progress in all fields of technology is based on the acquisition and assimilation of knowledge -- the collection, analysis and interpretation of empirical data. EMR provides research instrumentation and data processing equipment for the scientist or engineer, so that the information needed for technical progress can be gained more effectively.

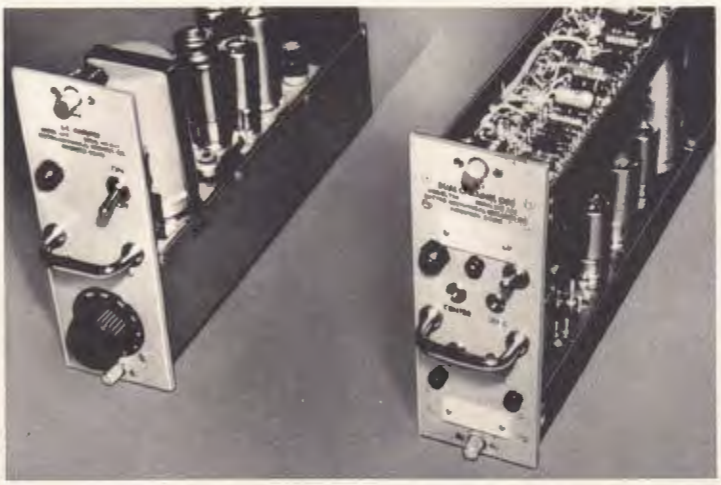
Since EMR serves research and development, our organization is itself research-oriented. Engineering is both our point of departure and the underlying foundation of all EMR operations. We ensure continued emphasis on this engineering approach by initiating within the Company the major part of our research and development, by guaranteeing the excellence of our products through comprehensive inspection testing, and by placing engineers in key positions -- from production to personnel -- throughout our organization.

This philosophy has proved eminently successful in the service it enables EMR to provide. We wish, therefore, to present this general information about our organization to members of the research and development community.

J. C. LEGRAND
President

...for excellence in telemetry

What We Make...



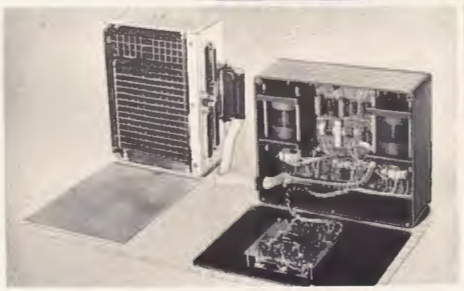
DATA PROCESSING EQUIPMENT

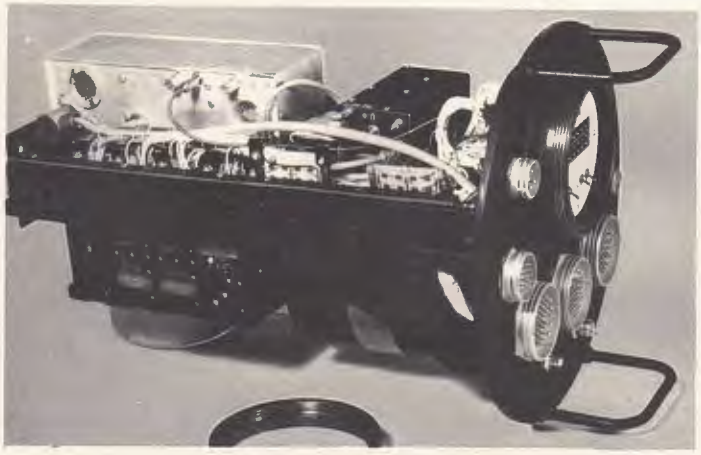
EMR produces a variety of data handling equipment designed for general laboratory use as well as for specific instrumentation applications. Shown here, for example, is the Model 73 Voltage Controlled Oscillator with its complementary unit, Model 62 Stabilized DC Amplifier. This combination permits full deviation for input signals with a range of ± 5.0 millivolts.

TELEMETRY COMPONENTS

In the field of telemetry, EMR's reputation is based on the reliable performance of such components as the Model 54 Voltage Controlled Subcarrier Oscillator and Model 67 Precision Subcarrier Discriminator.

Design excellence is typified by the newly-developed Model 99 Electronic Commutator, an airborne electronic switch that permits high speed data sampling for time division multiplex telemetry systems.



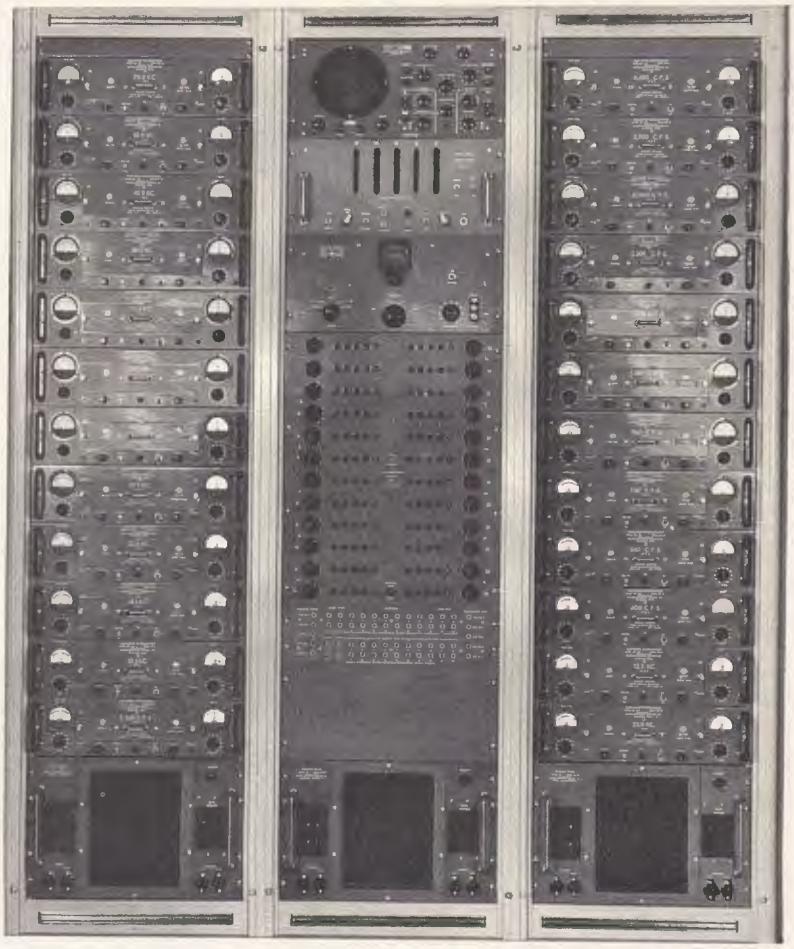


TELEMETRY SYSTEMS

As a result of component development programs, EMR can provide telemetry systems engineered to meet the most exacting operational requirements. Since both airborne packages and ground station installations are based on standard EMR-produced components, customer needs are matched by design flexibility.

Pictured above is telemetry equipment now being developed for use in ballistic missiles. Incorporating the new electronic commutator, this system combines light weight compactness with high performance even under adverse environmental conditions.

At right is a typical ground station rack assembly. This equipment is used for the analysis of many channels of transmitted or recorded subcarrier data. Such installations can readily be modified or expanded with changing system specifications.



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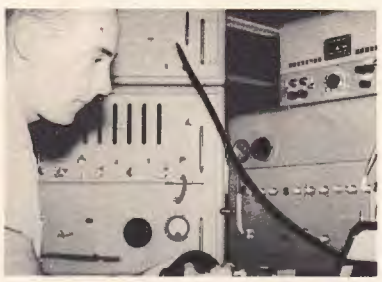
How We Do It...

RESEARCH

Basic to EMR's operations is a continued engineering effort directed toward creating new products through fundamental research in the fields of physics and electronics. This strong emphasis on research leads to the early recognition of fresh ideas and exploitation of advanced designs.



DEVELOPMENT

Every new product must conform to EMR's high standards of performance and reliability. As design concepts evolve, each engineer works in close cooperation with technicians to check his theories against test data. It is this development process which results ultimately in design excellence.

ENGINEERING PROTOTYPES

An essential part of the development process is prototype construction. At this stage, engineers can explore the possibilities of a more compact design, using alternate materials and components. This is also an opportunity to test the new equipment under severe environmental conditions.

SYSTEMS ENGINEERING

Component development enables EMR to provide telemetry systems made to customer specifications. The design of these telemetry links requires additional engineering analysis, the study of interaction phenomena such as the "cross-talk" effect of multiplexing individual subcarrier channels.

PILOT PRODUCTION

Once an engineering prototype has been tested, the design of each new EMR product is reduced to sound manufacturing practice through pilot production. Production engineering personnel work out the processes and methods required for the early volume production of newly-developed equipment.

STANDARD PRODUCTION

In its new 45,000 square foot Sarasota plant, EMR has the facilities needed to meet today's increasing demand for telemetry equipment. Here, trained electronic assemblers provide the skilled versatility necessary to manufacture the wide variety of EMR components now in standard production.

INSPECTION and TEST

EMR maintains product excellence not only by modern manufacturing techniques but also by careful inspection and complete performance testing of all products. This ensures that EMR equipment will meet technical specifications in every respect, and guarantees reliable operation in the field.

FIELD ENGINEERING

To help provide effective customer service, EMR field engineers—at local offices in Ridgefield, El Paso, the Los Angeles area, and Eau Gallie, near Florida's missile-testing center on Cape Canaveral—assist in the design and installation of EMR equipment for any particular telemetry application.

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Where We Work...

SARASOTA

The major part of EMR operations are now located in Sarasota, Florida. Full production has already been reached in the first completed building of EMR's planned new facilities. Our 30,000 square foot engineering, laboratory and administration building will be occupied in 1958.

RIDGEFIELD

Since 1946 EMR has been established in Ridgefield, Connecticut. EMR engineering offices and electronic laboratories on Main Street have been the scene of outstanding developments in the field of telemetry. The Grove Street plant shown here represents more than 15,000 square feet of production and test area.

Where We Live...

SARASOTA, FLORIDA

In Sarasota, on Florida's Gulf Coast, the semi-tropical climate, the beaches, fishing and other sports, and the year-round atmosphere of casual outdoor living offer an ideal setting for EMR employees and their families. Sarasota boasts modern schools and municipal facilities, and enjoys a reputation as one of Florida's finest residential and cultural centers.

RIDGEFIELD, CONNECTICUT

Located in Connecticut's finest resort area, Ridgefield has long represented the ultimate in suburban living to EMR employees. Ridgefield's rural setting, its lakes and streams, its historic inns and fine estates are typical of the traditional New England community.

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Our Opportunities ...and Rewards

Members of the engineering and technical staff at EMR are offered unique opportunities for professional development. Engineers, for example, assume individual responsibility for complete projects, and at the same time develop increasing competence in their own fields of technical specialization. The future of imaginative, forward-looking EMR employees provides much that is gratifying . . . in job satisfaction as well as salary progression based on accomplishment.

Because of their individual contribution to the Company's success, EMR employees participate in a generous profit-sharing program, which includes bonus additions to their salaries. There is group life and hospitalization insurance . . . and a non-contributory pension plan. Paid holidays, sick leave and vacations of progressively increasing periods are an important adjunct to the well-being of our personnel.

The employees of EMR are the real asset of our organization. The term "Excellence" upon which EMR policies are based is intended to apply not only to the Company's research, engineering and production activities . . . but to the working and living standards of our people as well.

Our Company...

A young, expanding organization, EMR has already attained an exceptionally sound operating position. This must be attributed to the outstanding accomplishments of our engineering staff and supporting personnel.

EMR has a broad base of self-engineered products . . . more than three-quarters of our sales consist of equipment which is standard production in our plants. The future of EMR is based on a continuation of our policy of technical excellence and product diversification.

Excellence in facilities—for research, engineering, development and production—support this future growth. Inauguration of the new multi-unit laboratory and plant in Sarasota permits EMR to provide the newest and best in the field of electronics.

At EMR there is a future for men who can contribute to the realization of today's technical achievement . . . tomorrow's technological progress.

electro-mechanical research, inc.

sarasota, florida • ridgefield, connecticut


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