PULSE

EMR
Schlumberger

The EMR-Telemetry News
Sarasota, Florida

VOL. IX, NO. 2 JULY, 1974

READYING ART SHOW

Shown here getting ready for EMR-T's first Employee Art Show are some of the exhibitors: Glenn Campbell with his ceramic roses; Caryl Faso with her painting, "Larry"; Tom Flannery with "Hippie" and Carolyn Cox, of Materials, who is in charge of putting the Show together.

Carolyn expects to discover lots more talent among EMR employees and their families for the August art show-- or maybe two or three shows, if there is enough material. Call Carolyn Cox, Ext. 363, for more information.

NEWS?

Want to see more news about your Department in PULSE? See one of our fine PULSE Correspondents:

Gail Brown, Don Buffington, Georgette Busick, Larry Dunham, Gerry Ecker, Jerry Johnson, Ann Mongillo, Mona Nainby, Pervis Sanders, Josephine Snyder, and Rosemary Williams.

CDC PLACES LARGE ORDER FOR EMR STANDARD UNITS

The largest single order for standard products received by EMR-T this year has been logged for 700 and 2700-series PCM decommutation equipment. Intial contracts awarded to EMR by CDC, of Minneapolis, are valued at over a quarter of a million dollars.

Our equipment will be used in connection with the Navy's Trident (submarine/missile) program in automatic checkout systems.

Considerable follow-on business is anticipated, according to George Tremain, TDM Product Line Manager. He credits the unique capabilities of the Model 2793 as forming the cornerstone for the PCM Decom system order.

EMR IN MEXICO

EMR-Telemetry was among the exhibitors at the Telecommunications Show in Mexico City June 24-28. Bob Brant, of Export Marketing, represented EMR-T as the Booth Host. The show served as a springboard for introducing EMR to the Mexican market.

"In addition to talking to potential customers at the Show, we surveyed sales representatives to find a sales agent for EMR in Mexico," Bob reports. "Attendance at the Show was beyond our expectations. Several customer contacts were made, and prospects for business in Mexico look very good," he said.

REVAMPED MANUFACTURING PLANNING SYSTEM NOW IN EFFECT

* *
* Work is under way at EMR-T on an improved Management Information System. *
* Here's a description of a major step forward in this long-range effort to pro- *
* vide detailed information needed for more effective work planning, cost control, *
* and data for management decisions. . . *
* *

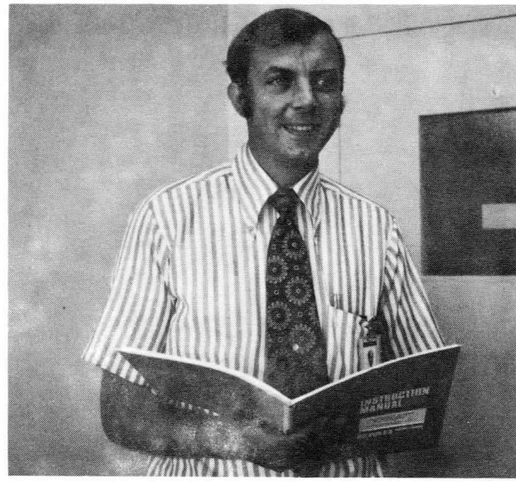
Heard any new "buzz" words lately, like "IMIC" "PFDR" or "Critical Ratio?" These are only a few new ones dropped along the way as Phil Reetz proceeded on the implementation of a revamped Manufacturing Planning and Control System for EMR-Telemetry.

When Phil joined EMR's Production Control Department in November, 1973, his primary assignment was to present us with a system that provides the details we need for planning and scheduling production, and the necessary reports to monitor our progress.

That sounds simple enough until you look closely at some of the details needed to plan and schedule: Fab Shop material, P. C. boards, P. C. assemblies, magnetics, plated and painted parts, purchased piece parts, in-house stock, available man power, machine capability, purchased equipment, and Assembly, Test and Shipping.

It took six months of long days and nights, many meetings, invaluable assistance from Phil Blecker, of Data Processing, a complete instruction manual and several dry runs. The system was officially implemented on July 1.

How's it working? Extremely well for the first few weeks of full operation. We have a few problems, but they will be corrected as soon as people are familiar with the system and our learning curve is over.



Phil Reetz, Manufacturing Analyst, talks about new Manufacturing Planning and Control System.

Phil Reetz came to EMR from Comco in Miami, where he initiated a similar system. Earlier he was with Honeywell in Minneapolis.

There is a slight smile on Phil's face these days as he sees his new system take shape. We should join him. This system, and other steps in an improved Management Information System, will help us do our jobs more efficiently.

PULSE - The EMR-Telemetry News
M. E. Herbst, Editor
Permission to reprint material herein may be obtained from the Editor, Pulse

FLYING FOR FUN--

Flying high -- that's what three EMR-T men are doing. The three flyers are Garrett Bowen, of Production Engineering; Wiley Dunn, of Engineering; and Bob Gardner, of Quality Assurance.

Among them they already have one plane, one Certified Flight Instructor, two Licensed Ground Instructors, plus experience in other flying clubs that makes them eager to promote a club here.

In addition to the Cessna 150 "Cloud Masher" they now have, they hope to have enough Club members soon to buy a second plane--a four-seater which would be ideal for hops to the Bahamas and other weekend vacation spots.

Advantages of a flying club are many, the men say. Foremost is the considerable saving of money--both for students learning to fly and for private pilots who would rent a plane for fun and recreation. Savings amount to 50% or better by flying Club planes, they report.

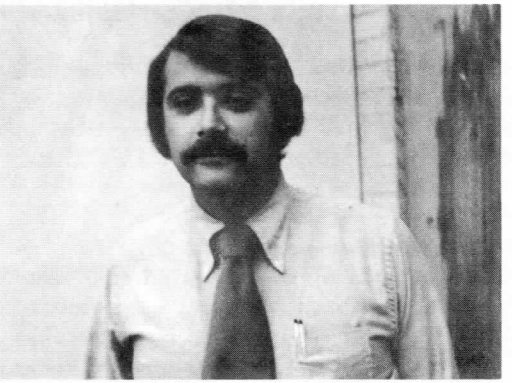
Bob Gardner, who has been flying since 1955, is a Flight Instructor and has his private, commercial, multi-engine, instructor, instrument and sea plane ratings.

Gary Bowen, a pilot and also a licensed ground instructor, has had years of flying experience with flying clubs. "I belonged to a Club in Cincinnati, so I'm enthusiastic about the advantages. One group in Cincinnati started with two or three guys and developed to a Club with 200 members and seven planes," Gary says. Gary's son Michael has already gotten his license through the Club.

Wiley Dunn, currently a student flyer, has soloed and is completing the required hours of solo time for his license.

The Club is now being incorporated and is ready to take off. Want to join?

EMR CREDIT UNION HAS NEW TREASURER/MANAGER



Phil Blecker, of Accounting, has been named new Treasurer/Manager for the EMR Sarasota Employees Credit Union. He succeeds Bettye Bunn who held the post for the past 15 months.

Phil earned his bachelor's degree in Accounting and Master of Business Administration degree from Florida Atlantic University. He is a Senior Systems Analyst in our Accounting Organization.

Cindy Butler continues as Credit Union Clerk and Loan Officer, succeeding Diane Watkins now on maternity leave.

In addition to Treasurer/Manager Phil Blecker, the Credit Union Board currently includes: President, Ed Domrzalski; Vice President, Skip Bailes; Secretary, April Benson, and other Board members: Bettye Bunn, Bill Gregory, Frank Guinn.

Credit Committee: Dick Frye, Lillian Pridgeon, Mike Russell

Supervisory Committee: Carolyn Cox, Jim Rexrode, Stu Ulfers.

Dividend Declared: The Credit Union declared a 2.9% dividend for the first half of 1974 (equivalent to 5.8% annual rate).

Improved service plans include: 1) a convenient mail slot to deposit loan applications, etc., when C. U. Office is not open; 2) phone service -- members will be able to arrange withdrawals by phoning the Credit Union Clerk.

LEN ZEILER IN JAPAN

TRAVEL IS BROADENING -- UNLESS YOU'RE EATING

Installing a giant 14-rack EMR-T ground checkout system at Japan's Tanegashima Island launch site was an exciting two-week assignment for Engineer Len Zeiler of Applications. Engineering.

Shortly before he arrived at the site, Rack 8, containing EMR equipment, had accidentally slipped and dropped some 13 feet as it was being lowered by cable into the block house. Despite extensive damage to the equipment, Len and the Japanese (Marubun) Engineers had the system repaired and accepting signals from the Q rocket by June 17--on schedule.

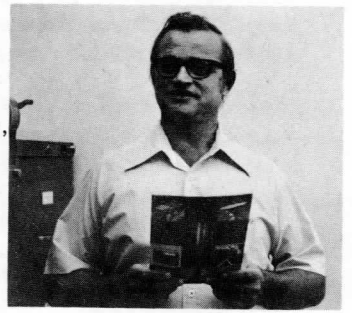
The damaged rack of equipment will be replaced by new EMR equipment. This system is now being readied here in Sarasota for shipment to Japan in August.

What's it like living on Tanegashima? "Different" is the way Len describes his adventures on the small island--site of the new Japanese launch facility for scientific and communications satellites.

After a weekend in bustling, crowded Tokyo, Len and his Marubun escorts headed for Tanegashima where he stayed at the local Japanese Inn. As the first and only foreigner at the Inn, Len was given the "Western" room--with a bed--in contrast to sleeping on the floor as is the Japanese custom. But his private toilet was Japanese style--a hole in the floor.

"A fresh, clean ukata (a large, wrap-around robe) was left in your room each day and was standard attire after your day's work was over and after your shower," Len relates. "At the local Inn, there were no towels--guests were supposed to bring their own. So for nearly two weeks, I drip-dried after showering," he says.

Food at the Inn was standard Japanese fare--raw fish and other seafood; rice, sea weed, vegetables, uncooked eggs, delicious beer. I became proficient with chop sticks. Of course, you bring the bowl up close to your mouth and slurp a lot, which is good manners in Japan," Len says.



Len Zeiler reviews his visit to Japan.

"The Japanese are polite, friendly, gracious people," Len reports. "They are excellent housekeepers, too. For example, you remove your shoes upon entering the Inn, and slip into slippers for the hallways and Western-style rooms. For lavatories, there are wooden clogs to wear. In the dining and Japanese-style rooms, where there is a straw mat on the floor, you go in your stocking feet, or barefoot. Also, there is a proper way to kneel or sit at the low dining table, and if you sit improperly, you might insult your host," Len says.

"There were no salt shakers on the table. Shortly before I left the Inn, they made some hard-cooked eggs for me, and served the egg in the shell with the salt all over the shell. To eat it, you rubbed off the salt, peeled the egg, then used the salt--very ingenious."

Other highlights of Len's trip: the cost of living in Japan -- up 25 to 30% a year... beef at $14 a pound... a small steak

RAW FISH

dinner might cost $20... a coke, 40 cents to a few dollars... a hamburger $5... very skilled taxi drivers... rice paddies on the hilly island... Japanese educational TV, with our 9th-grade-level of Algebra being taught to sixth graders... School and work six days a week... older women doing heavy manual labor on road-building projects, while men drove mechanized equipment...

種子島宇宙センター

TANEGASHIMA SPACE CENTER

"Returning from Tanegashima Island to Tokyo was like returning to Western civilization -- the contrast was so great. Tokyo's 12 million population swells to 15 million on Sunday--family shopping d... roof-top playgrounds atop depart- t stores... marvelous mass transit systems..."

In addition to Len's trip, other EMR-T personnel who have traveled to Japan on business lately include Roy Paxton, of Product Design, and Gerry Breyton, of Export Marketing. Roy describes their accommodations as "slightly more western" when they stayed in Tokyo, Kagoshima (near Tanegashima Island) and Nagoya.

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(Illustrations by Gladys Beard)

IT'S YOUR VOTE

A voting reminder from Supervisor of Elections Mary Orr: To be able to vote in the primary elections, you must register by 5 p.m., July 27. Registration books will be open through Sept. 21 for the November 5 general election.

STOL SYSTEM HAS COLOR TV AND PSYCHEDELIC PICTURES

Color TV monitors are featured in a computerized ground station EMR-T is supplying to NASA Ames Research Center. Now being readied for shipment to California, the system will be used in support of STOL (short take-off and landing) aircraft flight testing. NASA-Ames will install the system in an air conditioned van.

The ground station includes dual DEC PDP 11/45 computers and EMR telemetry equipment up front. Working on the system are Jack Cain and Randy Mitchell, with Bill Doe writing the software for acquiring data in real time. Gary Sorlien is arranging to have one computer talk to the other, and Pete Burnahm is the proud creator of the exotic color-graphics software, according to Program Manager Ed Kucharski.

ANNIVERSARY GREETINGS

Major service anniversaries are being observed during July by the pictured EMR employees:

15 years: George Bennett, Frances Crawford, Wayne Norman, and Marianna Campbell.

10 years: Robert Williams (at right) and (insert) Charlie Hall, rounding out a decade with EMR this month.

The Household Energy Hogs

No, there isn't any "sideways" thinking in this reprint. Just tilt the page, and share these energy-saving tips with your family and friends ----

THE HOUSEHOLD ENERGY HOGS

Estimated Power Consumed by Home Appliances in a Year

	Average Wattage	Estimated Kilowatt Hours Consumed Annually
FOOD PREPARATION		
Blender	386	15
Broiler	1436	100
Carving Knife	92	8
Coffee Maker	894	106
Deep Fryer	1448	33
Dishwasher	1201	363
Egg Cooker	516	14
Frying Pan	1196	186
Hot Plate	1257	90
Mixer	127	13
Oven, Microwave	1500	300
Oven, Self-cleaning	4800	1146
Range	8200	1175
Roaster	1333	205
Sandwich Grill	1161	33
Toaster	1146	39
Trash Compactor	400	50
Waffle Iron	1116	22
Waste Disposer	445	30
FOOD PRESERVATION		
Freezer (15 cu. ft.)	341	1195
Freezer, (Frostless 15 cu. ft.)	440	1761
Refrigerator (12 cu. ft.)	241	728
Refrigerator (Frostless 12 cu. ft.)	321	1217
Refrigerator/Freezer (14 cu. ft.)	326	1137
(Frostless 14 cu. ft.)	615	1829
LAUNDRY		
Clothes Dryer	4856	993
Iron (Hand)	1008	144
Washing Machine (Automatic)	512	103
Washing Machine (Non-automatic)	286	76
Water Heater (Standard)	2475	4219
Water Heater (Quick Recovery)	4474	4811
COMFORT CONDITIONING		
Air Cleaner	50	216
Air Conditioner (Room)	1566	1389
Bed Covering	177	147
Dehumidifier	257	377
Fan (Attic)	370	291
Fan (Circulating)	88	43
Fan (Rollaway)	171	138
Fan (Window)	200	170
Heater (Portable)	1322	176
Heating Pad	65	10
Humidifier	177	163
HEALTH & BEAUTY		
Germicidal Lamp	20	141
Hair Dryer	381	14
Heat Lamp (Infrared)	250	13
Shaver	14	1.8
Sun Lamp	279	16
Tooth Brush	7	0.5
Vibrator	40	2
HOME ENTERTAINMENT		
Radio	71	86
Radio/Record Player	109	109
Television (B&W)	237	362
Television (Color)	332	502
HOUSEWARES		
Clock	2	17
Floor Polisher	305	15
Sewing Machine	75	11
Vacuum Cleaner	630	46

1000 watts equal 1 kilowatt hour
100-watt bulb burning 10 hours equals 1 kilowatt hour

(Source: The Electric Energy Association.)

By Georgia Dullea
New York Times

New YORK

Sitting around thinking up ways to save energy and maybe some money? Well, you could wrap up the house in plastic like the Alfred Paulys did in Belle Plain, Minn. All it took them was $5.60 worth of plastic—"plain, clear plastic that you see in the supermarket. Ten-foot rolls."

Christo—he's the celebrated wrappist who specializes in big jobs such as art museums or mountains—wishes the Paulys had wrapped the roof, too. "If the roof is not wrapped in winter," he warned, "then water gets in between the plastic and the house."

Suppose you cannot bring yourself to wrap your house, to chain your car to the garage, to shoot your major appliances. Here then, from the experts, are less spectacular ways to cope.

In the home:

"You cannot save the world by throwing away your electric toothbrush," says Russell W. Holt.

Holt is director of corporate comminications for Con Edison in New York City. Embroider his words on a sampler. Because, as the chart shows, gadgets that brush teeth, whittle hips or grind garbage don't use lots of watts. The real energy eaters are the classic appliances that produce heat or cold.

Water heater. Everybody out of the tub. Shower and save five gallons of water. Set thermostats at 140 to 160 degrees Fahrenheit. Use warm-wash, cold rinse cycle in washing machienes. Better still, cold water detergent.

Washing machine. Pack it in there, no small loads. For normally dirty clothes, a 10-minute wash cycle is plenty.

Dryer: Don't bake clothes. It takes 10 to 15 minutes for synthetics, 20 to 25 minutes for permanent press clothes and sheets (30 to 40 minutes for towels and such). Clean lint traps. Disconnect outside vent on electric—but not gas dryers and vent in for heat and humidity bonus.

Range: Pre-heat oven for baking, not broiling. Thaw frozen foods before cooking. Use flat-bottomed aluminum pans with straight sides, firm-fitted lids. Turn off a roast 30 minutes before serving time—it can roast on retained heat. And pot-watcher's beware: a peek in the oven costs 25 degrees.

Refrigerators — freezers. "If I put my refrigerator next to my range, will it lose its cool? The Association of Home Appliance Manufacturers says, "No, but . . ." The insulation will prevent heat transfer but the A.H.A.M. worries about refrigerator browsers.

Freezers work best when full. "Then the foods can keep each other cold," one manufacturer explained. The coldest part of the fridge is the top back shelf. That's where you stash your most perishables (milk, butter) so then you can use a lower setting. Suggested ones: refrigerators, 36-42 degrees; freezers, 0-10 degrees.

Standard versus frost refrigerators: frost-free types use twice the juice and cost $45 a year more to run. Cold cash test: close the refrigerator door on a dollar bill. If it slides out easily you need another nine $1 bills or so to buy a new gasket.

Television. Back to plain old black and white. It operates on about 60 per cent less power than color sets require. Off with instant-on.

Beauty. For a while there, the blow dryers were waging "the war of the watts," as one cosmetician put it. Their wattage ranges from 350 to a gusty 1000. An A.H.A.M. spokesman said, "more of a curiosity than a concern."

"The question is, do you need the larger unit for the amount of hair you have?" The answer? "Now don't come out saying I'm suggesting shorter hair to save energy," the spokesman said. But obviously it helps. Facts of light: one 100-watt bulb burning 'round the clock for one year wastes more than 60 gallons of oil and adds $28 to the electric bill.

But does it pay to switch lights on and off for short periods? Definitely, says Con Ed. The power needed to turn off a 100-watt bulb (.0000213 kilowatt hours—at about three cents per kilowatt hour) amounts to

Fluorescent vs. incandescent: a 40-watt fluorescent bulb gives more light than a 100-watt incandescent one. What's more it lasts ten times as long and uses half the energy. For forgetful ones: timers on the yard lights. For romantic ones: dimmers (the newer, solid-state ones) in the dining room.

Don't fuel around: storm windows up, thermostats down, fireplace dampers closed, blinds and drapes open on sunny days.

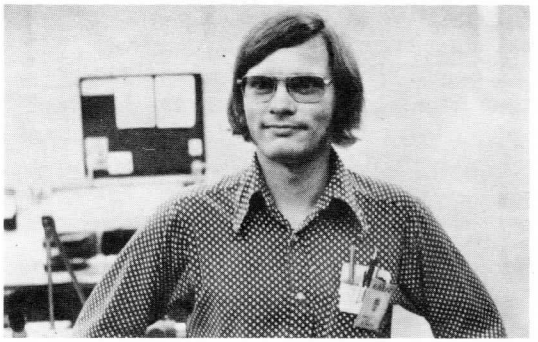
Predident Nixon says we won't catch cold at 68 degrees in the daytime. Drop down five degrees at night and we save 8 per cent more fuel, according to the American Society of Heating, Refrigerating and Air Conditioning Engineers. Drop down 10 degrees and the saving goes to 12 per cent, it said.

Chilling intelligence: a gap of one-quarter inch at the base of a normal 36-inch-wide door equals a nine-square-inch hole in the side of your house.

So, weather strip around windows and doors (and caulk the framework). It will cut fuel bills by four per cent, says the United States Department of Agriculture. In a pinch, you can run masking tape along the cracks. And insulate ceilings—even with an older home, this can be done easily and cheaply. Here, the estimated fuel savings is put at 17.5 per cent.

After all that work, indoors and out, it would be nice to relax before a roaring fire, but that would be foolish. A good draft may draw off 20 per cent of the heat, say the experts. Up the chimney it goes.

ARNS DEGREE



Congratulations to Alan Marion, Tooling Inspector in our Fabrication area, who has completed the requirements for an Associate of Science degree in Electro-mechanical Design Drafting at Manatee Junior College. Recently Alan attended school full-time during the day while working the night shift at EMR-T. Previously he went to MJC on a full-time basis.

Alan hopes to go on for an Engineering degree when University of South Florida facilities become available locally.

a member of our Quality Assurance team, Alan is concerned with the quality of fabricated mechanical parts destined for use on our numerous products.

Larry Dunham
QC Correspondent

VOLLEYBALL

EMR-T's Volleyball season is off to a great start with at least four teams of EMR men and women ready to do battle Tuesday afternoons at 5 p.m. The official season starts on July 23, and as interest increases, more teams can be added. Volleyball courts are located at the southeast corner of EMR property.

Best suggestion heard at the organization meeting: skinny dipping in the lake after the games!

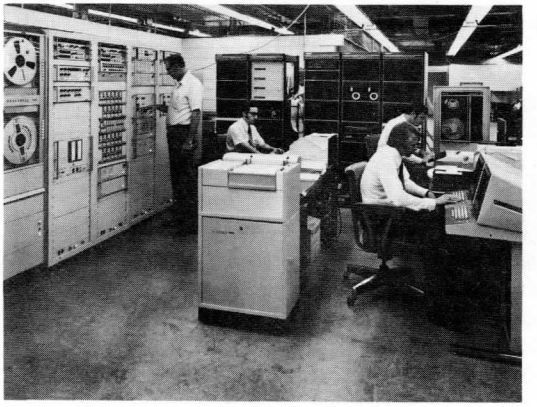
BOEING SYSTEM INSTALLED

A complex telemetry/computer system has been successfully installed for the Boeing Company, Seattle, Washington. Jack Cain, Randy Mitchell, Jon Altenbernd, Dick Crete and Paul Weller participated in installing the system.

Described as the "most complex DEC computer system we have yet delivered," it employs dual PDP 11/45 computers and dual banks of telemetry equipment, plus a wide variety of peripherals.

The system is to upgrade and replace the data processing ground station which Boeing maintains to support Commercial and Military flight test programs.

Valued at $650,000, the system is employed for post-flight processing of data recorded in pre-defined formats on analog magnetic tapes. Ed Kucharski was Program Manager.



Randy Mitchell, Paul Poehler, Jon Altenbernd (in background) and Ed Kucharski with Boeing T/C System.

EARLY RETIREE

James L. Beebe, Engineering Technician in our Calibration Lab, has elected early retirement under the Schlumberger Retirement Plan, and left EMR-T on July 5 after 15 years in EMR's Quality Assurance organization. Jim becomes our 10th retiree.

JIM BEEBE, of Cal Lab -- does a final check before he checks out.

A native of New Castle, Pa., Jim worked in the Pittsburgh area before moving to Florida. His EMR career started in 1958 in Receiving Inspection, and he progressed to Fab Inspection, and later to the Cal Lab. Recently he has been involved in maintenance and calibration of our mechanical standards, thermometers, micrometers, dial indicators, vernier calipers, etc. -- some of the many measurement tools which help EMR employees make quality products.

Jim and his wife, Gladys, will continue to reside in their Ridgewood Estates home in Sarasota. With his new leisure, Jim says they plan to enjoy the beach and fishing -- and Jim might even take up golf again.

Best wishes for good luck and good health, Jim, from all your EMR friends.

GOLF LEAGUE WINNERS

Final standing of EMR-T's Summer Golf League show Ty Rigdon and Bob Petrey winning first place in the 13-team league; Eloise and Ed Pakish took second place; Skip Bailes and Preston Cox were third.

The mixed League ran from April 9 to July 9 on Tuesday afternoons at Rolling Green Golf Club. Prizes will be awarded at an EMR Open Golf Tournament which is planned for late August -- watch for details to be announced soon.

ACHIEVE P. E. STATUS

Two EMR Engineers have just passed their exams for certification as Registered Professional Engineers in Florida. Joe Lehmann, Principal Engineer in our Development Group, and Hal Roberts, Senior Engineer in our Product Design Group, went to Tampa recently for the second of the two eight-hour exams required for certification as a P. E. by the Florida State Board of Engineer Examiners.

Other EMR-T Registered Professional Engineers include Pete Farinas, Bill Hardman, Graham Hildebrand, and Bill Waggener.

Hal Roberts and Joe Lehmann