

Golden Anniversary Celebration Issue









GRQ = ZD

This cabalistic caption does not represent a mathematical relationship among a number of algebraic quantities but the use of General Radio's traditional practices and policies to satisfy today's need for reliability. The initials GRQ stand for General Radio Quality, a phrase that has come to mean reliable, honest design and workmanship, not only within the Company but throughout a considerable segment of the industry. The initials ZD stand for Zero Defects, the name of a motivational program promoted by the United States Air Force to improve the quality of military procurement.

How are they related? As electronic equipment has become ever more complicated, so has reliability become ever more difficult to achieve. Under quality-control programs, the mathematics of statistical sampling, testing methods, and inspection techniques have been highly developed. In the end, however, the culling out of defective work turns out to be an unsatisfactory solution. Both inspection and rework are costly and time-consuming. There is no better solution than doing it right the first time. Hear what the Air Force Systems Command says in its brochure on USAF Zero Defects Program:

"We are currently at a quality plateau which, to all intents and purposes, appears to be stabilized and not capable of being improved without inordinate expenditure of time and money in the inspection area. The only feasible approach for reaching a higher level in the quality of our hardware and software rests with the personal interests of our employees. There is little doubt that the machinist, the welder, the engineer, or the clerk thoroughly knows the quality of his own product. The present concept of detection through inspection can foster an attitude of leaving it to quality-assurance teams to weed out defects. No amount of inspection can guarantee a faultless product. A poorly fitted gasket can cause the loss of a missile. A cold soldered joint can render a space probe inoperable. The ultimate performance of the end product can be attained if, and only if, we motivate employees themselves to be responsible for quality, motivate them with the understanding that they are a part of the defense effort, and motivate them to the realization that their actions affect the health of their company as well as America's defense posture in world affairs."

Many of our customers have set up formal company programs to accomplish the ZD objectives, and seminars devoted to their organization are burgeoning. A few of our customers in the aerospace industry have written to us asking us whether we have such a program. We have therefore taken a good look at how we operate to see whether we can legitimately claim that GRQ = ZD.

Obviously, the individual is central to the operation of a ZD program, and GR's policies and practices, keyed as they are to the individual, fall in the proper pattern. Our

*GRQ Committee: M. J. Fitzmorris, Chairman, W. P. Buuck, J. A. Dunn, J. F. Eberly, C. J. Horne, D. R. King, P. W. Powers incentive systems of pay, employee ownership and personnel practices are aimed at encouraging a man to stand on his own two feet among friendly, cooperative people who have the same objectives and ideals.

What, then, are the specific problems? Do we solve them? As in all personal relationships, the most important need is good communication. We have successfully carried on, for many years, a suggestion system, which has stimulated, and made effective, improvements generated within the plant. Elsewhere in this issue is a note on its current status. Our Service Department has also, through records of repairs, provided feedback from outside the plant to stimulate improvements.

The indefatigable P. K. MCELROY for many years saw to it that this feedback reached the right man. His many hats, when he retired, descended upon many brows. His service-feedback hat descended upon a committee^{\circ} that functions broadly in analyzing service problems and assigning responsibility for solving them. In deference to GRQ = ZD this committee has been officially named the GRQ Committee.

Feedback of information about errors leads to corrections, which prevent future errors, but provides only half of what is needed — the negative half. The ultimate object is to do the job right. Feedback of information about instruments that are particularly well designed and built is also needed — the positive half.

To publicize the positive feedback, the GRQ Committee plans to post on the bulletin boards, monthly, the list of instruments that show better workmanship than average. As a measure, it is proposed to use the count per 100 components, compiled from the Calibration Laboratory trouble sheets, of errors falling into the following three categories:

- Etched-board defects other than defective components.
- 2. Wiring mistakes.
- 3. Defective hand soldering.

Records covering the nine-month period to June 15, 1965, show that electrical errors on 27 instruments averaged 0.28 errors per 100 components. The fourteen instruments that were better than this average, with their individual error counts, follow:

1531-0.015	1900-0.0915	1840-0.190
1230-0.021	1216-0.142	1217-0.201
1862-0.0695	1521-0.145	1396-0.209
1390-0.078	1201-0.147	1608-0.274
1615-0.086	1564-0.179	

Other companies have found it necessary to award medals and to carry on poster campaigns. We do not believe that these are appropriate at General Radio. We do believe, however, that pride of workmanship should be encouraged, and we intend to see to it that the man who does a good job is properly recognized.

D. B. SINCLAIR

Fourth International Sales Seminar



First Row: M. de Rooy (N), A. Korte (N), H. Molinari (Sw), M. Berlin (Fr), T. Imoto (J), C. Binetti (It), R. Peel (B), I. H. Sichel (GRL), P. Fabricant (Fr), W. Rietbergen (N), Mrs. K. L. Nyman (Fi); second row: A. R. O. van Lierop (N), I. G. Easton, T. Harashima (J), K. Lindenmann (Sw), U. Clementz (S), R. Bohl (S), D. Boyle (SA), I. Montgomery (A), G. Betotti (It), K. Teir (Fi), D. F. Osborne, A. Belotti (It); third row: A. E. Thiessen, E. Nielsen (D), K. Juul-Hansen (D), G. Molac (Fr), D. Schonhut (UK), F. J. Pfaffmann, K. Kuroha (J), S. W. DeBlois, J. de Saintilan (Fr), P. J. Macalka (GRO), H. Klip (N), P. Nyman (Fi), T. Østrup (D), R. Danziger (Is), F. Belotti (It), D. B. Sinclair. Not present for photograph: Miss V. Botto (Fr), R. Natarajan (Fr), G. Nüsslein (G), V. G. Motwane (In), Mrs. O. Curti (It), C. Breña (M), Ad. Auriema (USA), R. Auriema (USA), M. Conforti (USA).

A — Australia, B — Belgium, D — Denmark, Fi — Finland, Fr — France, G — Germany, In — India, Is — Israel, It — Italy, J — Japan, M — Mexico, N — Netherlands, SA — South Africa, S — Sweden, Sw — Switzerland, UK — United Kingdom

Over the years we have succeeded in building up an unusually strong organization of representatives who vigorously promote GR sales in every major country of the free world. The fact that nearly one-fifth of our sales are made abroad points up the importance of our export sales representation.

In Canada we have our own SEO, and in the United Kingdom our own subsidiary, General Radio Company, (U.K.) Ltd., represents us, but in every other major country the representative is an independent businessman, usually handling other lines in addition to GR. All are either themselves technically trained or employ a staff of sales engineers, at least one of whom is a GR specialist.

As with our own domestic sales engineers, those working abroad must be fully up to date on the latest instruments and measuring techniques. Also, commercial and business procedures in the export market are rather complicated, and an exchange of information in this area is essential for the smoothest possible flow of material into the international market.

Six years ago the First International Sales Seminar was held in Amsterdam, with our Benelux representative, Groenpol Company, as hosts. The program for the Seminar was patterned after Sales Week except that a part of the time was devoted to a discussion of commercial problems. This Seminar, attended by most of our representatives, was such a success that it was decided to make it a regular biennial affair. The Second was held in Paris, with Radiophon as hosts, and the Third in Milan, with Ing. S. and Guido Belotti as hosts. In each of these we paid some of the expenses and provided the speakers.

We were the hosts for the Fourth Seminar, held June 6 to 12. On the last day our visitors had the opportunity of joining with GR families at the Saturday Open House.

The week-long program included technical sessions, every morning but two, which were addressed by nineteen development engineers. Wednesday and Saturday mornings were reserved for general and business topics. Workshop sessions were held on three afternoons, with plant tours on the others.

The total attendance from abroad was fifty-three, including twelve ladies, wives of the representatives.

The welcoming social event was a buffet supper at the home of the









DONALD SINCLAIRS, and during the week, while the men were busy with the Seminar sessions, the visiting ladies were entertained by a committee of GR wives. Their program included tours of Boston and Salem, with luncheons, and trips to the homes of MR. and MRS. HAROLD M. WILSON and MR. and MRS. "GUS" LAHANAS. Another feature was a visit to the Concord-Carlisle Regional High School. As most of these ladies were on their first trip to this country, the committee wished to give them a good view of the American way of life.

The Seminar ended with a Farewell Banquet at the Algonquin Club in Boston, which was attended by all of the visitors, the GR people who took part in the programs and their spouses, and Management Committee. Following is a transcript of ARTHUR THIESSEN'S remarks at the Banquet:

Fourth International

"We think that we have the best export representation in the world! (Applause)

"This evening closes our Fourth International Sales Seminar. I say this with considerable regret because we are all very sorry to have you leave. It has been a great pleasure for us to have you here, and we hope that you have found the meeting to be as interesting, informative, and useful as we have. In the tradition of these Seminars, we shall have no speeches, but there are a few words that I should like to say.

"As a little memento of the occasion, you have found at the place of each visiting lady a charm bracelet and at the place of each visiting gentleman a book, A History of the General Radio Company. This book was written by me to record our progress over our first fifty years. The gentlemen whose ladies could not attend also have a charm bracelet to





Sales Seminar (Cont.)

take home to their wives to prove that they were here.

"A great many General Radio people have contributed countless hours of effort to make this Seminar a success. For these efforts, on behalf of the Company, I should like especially to thank Mr. Steve DeBlois, Mr. Fritz Pfaffman, Mr. Dave Osborne, and the secretaries of the International Division, Mrs. Pearmain, Mrs. Cutler, and Miss Kenney, who have carried most of the load. We should also like especially to thank the many speakers on the several programs throughout the past week. Most of them and their wives are here with us tonight.

"All of the tours and the social events, including this evening, were planned, organized, and handled by a diligent group of GR wives. We are very grateful to all of them. The several Ladies Committees were headed up by a Ladies Steering Committee, and as I call their names, I should like these ladies to come forward also to receive charm bracelets:

"Mrs. DeBlois, Mrs. Easton, Mrs. Sinclair, Mrs. Worthen, Mrs. Thiessen. (Applause)

"As many of you know, we have at General Radio a gold service pin that is given to employees when they have attained twenty-five years of service. This award has been very carefully restricted to our own employees, but a few years ago we changed the rules a little to give it to our then twentyfive-year representatives, Mr. Fabricant for Radiophon in France and Dr. Belotti for the Belotti organization in Italy. Tonight four more of our representatives are eligible, and it is my great pleasure to present them the twenty-five-year pin, together with a certificate of our appreciation:

"Mr. Ad. Auriema of Ad. Auriema in New York; Mr. Ulf Clementz for















Fourth International Sales Seminar (Cont.)

Lagercrantz in Sweden; Mr. Harold Molinari for Seyffer in Switzerland; and in absentia to Mr. V. G. Motwane, who has had to leave.

"I should also at this time like to give these Certificates of Appreciation to Mr. Fabricant and Dr. Belotti. (Applause)

"Now I believe that Mr. Van Lierop of Groenpol, Holland, has something that he would like to say. (At this point Mr. Van Lierop presented Mr. Thiessen for GR a handsome blue Delft china plate.)

"And Mr. Kuroha of Midoriya Electric Company, Japan. (Mr. Kuroha presented a large green cloisonné vase.)

"This intricately carved ivory box was left for the Company as a gift from Mr. Motwane of Motwane Private Limited in India.

(Mr. Molinari rose at this point to present a gold watch to Mr. Thiessen from Seyffer and Company of Switzerland.)

"And now, after a busy week, we hope that you all will relax here and enjoy yourselves.

"Thank you very much, ladies and gentlemen."



New Position

On August 23, WAR-REN WEBSTER will transfer from Manufacturing to Marketing Research and Statistical with a new title — Engineer, Inventory Control.



For many years Warren has played a key role in the preparation of the Stock Report, one of the Sales Department's most useful tools, which serves many other functions throughout the Company. He has also contributed in a large way to the ordering of catalog items for sales stock, so that the right instruments are on hand to fill customer orders. Recently, Warren gave the Stat Department substantial assistance in the big job of forecasting the sales rate of every catalog item in connection with the new "PPI" (Perpetual Parts Inventory) System. All these functions are related to finishedinventory control, a responsibility of the Marketing Research and Statistical Department. Warren will continue with this work.

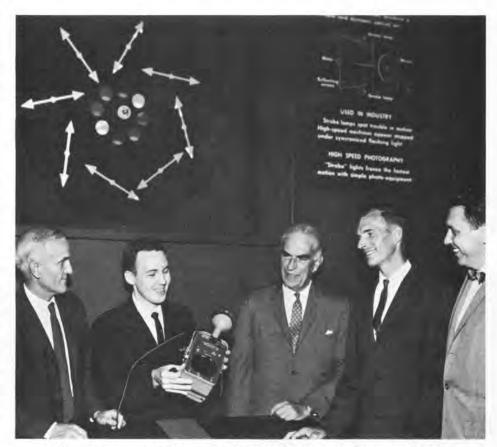
We have long had a difficult problem in maintaining a satisfactory supply of replacement parts and subassemblies for our repair work and for customer sales. Warren will develop new systems to take advantage of "PPI", for a more satisfactory supply of such items. This will help us improve our service to customers and should build good will. C. J. ("Matty") MATHESON, of Service, will cooperate with Warren in this new inventorycontrol project.

BAT MACHINE UPS GR BATTING AVERAGE

According to Government Sales' JOHN GRAY, GORDON PARTRIDCE, ably assisted by AL EAMES, managed to break two long-standing Navy precedents. Not only did we deliver experimental equipment ahead of schedule, but it worked the first time it was plugged in! (The "bat machine" is a device that analyzes and displays incoming signals as they occur.) So surprised was the Navy, expecting the late delivery and operational bugs characteristic of developmental devices from other suppliers, that no ship was available for sea trials of "Batso".

Two more firsts for GR and plaudits for Gordon and Al and their supporting cast.

"The Light Fantastic"



Charlie Miller, second left, holds the GR Strobotac that acts as a beacon for the display. Brad Washburn, Director of the Museum, Arthur Thiessen, Joe Belcher, and "Mac" Holtje are properly dazzled.

A new display illustrating stroboscopic effects was recently unveiled at the Boston Museum of Science. General Radio Company, long a museum sponsor, contributed equipment and engineering services. The display consists of a large plastic disk with 8 backlighted arrows and 8 different colored back-lighted windows. The display wheel, constructed by the Museum, rotates at 1000 rpm under the control of a completely automated program.

A tape recorder delivers a prerecorded running description of the various functions. At each step a program generator, supplied by General Radio, pulses the strobe lamps (also supplied by General Radio) to produce one of twelve different visual effects. Six of our new Type 1539-A Stroboslaves are used to back-light the display wheel. Incidentally, a limited number of free admission tickets to the Museum are available from the activities office.

GR Furnishes Air Force Acoustic Calibration System

GR has been the favored organization to supply the Newark, Ohio, Air Force Base, Heath Facility with a console assembly for the calibration of microphones, loudspeakers, amplifiers and other acoustic components used by the force. The console incorporates such instruments as the Types 1304-B Beat-Frequency Oscillator, 1396-A Tone-Burst Generator, 1521-B Graphic Level Recorder, 1564-A Sound and Vibration Analyzer, 1558-A Octave-Band Analyzer, 1559-B Microphone Reciprocity Calibrator and 1561-A Precision Sound Level Meter.

Since the Heath Facility is the Air Force's primary standards laboratory, the selection of GR equipment is a fine feather for our cap! All Air Force acoustic material calibrations will be referred to the GR console at the Heath Facility.

The contract, awarded in June, amounts to nearly \$30,000 and must be completed within 275 days.

75 Successful Years

Three individuals who came to us in 1940 have, in twenty-five years, compiled a remarkable record of accomplishment and responsibility. During their collective seventy-five years, they have done much to help achieve the present status of GR in the instrumentation field. We give you

To look at him, no one would believe that he had worked for General Radio for half its golden-anniversary age, but we all grow older, and, according to the records, that youth, IVAN EASTON, has been here for twenty-five years.

Starting as a Northeastern coöp in 1936, he worked at GR while he acquired his B.S.E.E. degree. He then continued for two more years as a temporary employee while he earned his M.S. degree at Harvard. When he joined General Radio in 1940 as a permanent employee he not only had accumulated his degrees but he had also been elected to the two major honorary engineering societies, Eta Kappa Nu and Tau Beta Pi, an early recognition of his outstanding competence in technical matters and his ability to work with others.

His first job at General Radio, with the Sales Engineering Department, took particular advantage of these talents. After a brief association with the Radiation Laboratory during the war, he was selected to be Manager of the New York Office in 1945, and his career has moved onward and upward ever since.

In 1949 he was pried away from a reluctant Sales Department to take charge of the development of bridges and of Variac® autotransformers in the Development Engineering Department; since then he has held, progressively, the positions of Administrative Engineer, Engineering Manager, and Vice President for Engineering, his present position. In 1962 he was elected a Director of the Company; he serves on the Management Committee, the Bolton Administrative Committee, the New Products Committee, and the Personnel Committee, and is chairman of the Development Committee. To round out his GR responsibilities, he is a Genradco Trustee.



Ivan Easton

His outside professional contributions mirror his manifold internal activities. He was long an active committeeman in the old AIEE and IRE organizations, and he is now a member of the Technical Advisory Board of the new IEEE. In 1960 he was elected a Fellow of the IRE, adding lustre to GR's reputation for technical excellence as well as honoring his demonstrated ability.

His active participation in instrumentation affairs has also strengthened this reputation. As one of the founders, and an early chairman, of the IRE Professional Group on Instrumentation, he helped to put it on a firm basis as early as 1949; in recent months he has been an important catalyst in merging it with the old AIEE Instruments and Measurements Committee to form a unified and strong organization within the IEEE. He has also taken an active part in the Conference on Precision Electromagnetic Measurements, holding jobs from Program Chairman to Chairman of Conference; he serves on Advisory Committees to the National Bureau of Standards. Locally, he has been chairman of NEREM, New England's own technical meeting; internationally, he has represented the United States at meetings in Munich, Stockholm, and Moscow.

Where do you stop, with a fellow like this? His interests extend into areas of all kinds, where his energy and his good common sense have been characteristic. He is active in Northeastern University affairs and a member of the Norwich University Advisory Committee. He was President of the Lexington Boys Club and helped establish the Josiah Willard Hayden Recreation Center.

How Ivan found time to court and woo Jennie, to acquire a home in Lexington, and to raise a family of four children and one grandchild is a mystery. Add to this his longtime love of bridge (duplicate, yet), sailing, and lawn manicuring (until his back said, "No!"), and it is apparent that Ivan's life has been far from idle.

A record like this makes one wonder where Ivan will find new worlds to conquer, but if his unique blend of inspiration and perspiration continues unabated, he will undoubtedly find them. His friends and colleagues hereby extend their congratulations in both retrospect and prospect!

HANK ("The Beard") LITTLEJOHN invaded the GR premises on August 12, 1940, bearing sheepskins attesting to his satisfaction of the B.S. and M.S. requirements at M.I.T. plus experience accumulated as a G.E. coöp between 1936 and 1939. He claims to have pursued such extra-curricular activities as sailing, golf, tennis, gymnastics, skiing, and girls, in that order. We trust he pursued the girls without the fuzz adorning his chops in his favorite photo, herewith.

Over the years Henry has risen through the ranks of Engineering to his present eminence as leader of the Electro-Mechanical-Industrial Design and Standards Group and member of the Development Committee. This enables him to make it rough for the de-



Henry Littlejohn

sign engineer who prefers non-GRstandard parts. Since GR standards are not always industry standards, there are many opportunities for controversy, usually resolved in Henry's favor.

Over the course of the years, Henry has undertaken and completed the monumental job of consolidating, classifying, and rationalizing the thousands of parts, mechanical and electrical, used in GR instruments. Without this program, the 20,000 or so different parts in our stockrooms would undoubtedly number nearer 40,000! His deft design touch has left its mark on practically every GR instrument. The most visible and obvious output of his creative efforts is, no doubt, the "fliptilt" cabinet. No one, not even those fumbling souls who sport bruised thumbs, has ever challenged the basic ingenuity of that design.

A Connecticut Yankee by birth (New Britain), Henry, his wife Betsy, and four daughters are longtime Lexington residents, whence they sally forth, en masse, to attack the ski-slopes and sea-slopes in winter and summer. Somehow, along the way, Henry finds time for handicrafts and the duties of treasurer of the Hodge Podge Lodge Ski Club.

Congratulations on the first twentyfive years, Henry; may the future be as rewarding.

September 3, 1940 marks the 25th anniversary of ARNOLD PETERSON's formal employment by General Radio. However, his association with GR started nearly 30 years ago, so let's tell the story from near the beginning.

Arnold, born in DeKalb, Illinois, received his Bachelor of Engineering degree from the University of Toledo

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in 1934. He then came to M.I.T. for graduate study and, while continuing his studies, was chosen to work on a research project sponsored jointly by M.I.T. and GR through the generosity of HENRY SHAW, then Chairman of the Board at GR. This project involved the development of high-frequency oscillators (100 Mc/s) for use in measurement work, and some results of the work were published in the October 1937 issue of the General Radio Experimenter. M.I.T. awarded "Pete" his S.M. in 1937 and the Sc.D. in 1941.

After joining the development engineering group at GR in 1940, Arnold continued work on high-frequency oscillators, and in August, 1941, the Type 757-A Ultra-High-Frequency Oscillator (150 to 600 Mc/s) was announced in the Experimenter. As the years continued we find a steady stream of articles in the Experimenter and other renowned journals authored by A. P. G. Peterson. However, by the late '40's it is interesting to note that the frequency range of his operations was dropping rapidly from uhf to audio, and it is in this field that he is now best known. In the specialized part of the audio field known as hi-fi, he is recognized for his co-invention of the "Sinclair-Peterson amplifier."

The Handbook of Noise Measurement first appeared in 1953 coauthored by Peterson and Beranek. It very soon became a best seller and has since gone through five editions and many printings to become a classic in its field. This book also helped to establish GR's "Dr. Peterson" as an international authority in the field of acoustics.

His stature in the engineering profession is attested to by his election to the grade of Fellow in both the IEEE and the Acoustical Society of America. He has also served as a member of the Executive Council of the Acoustical Society and as its Vice-President. For three years he chaired the American Standards Association Sectional Committee on Acoustics, and internationally he has been active in technical committees of ISO and IEC. At GR, Arnold has been a member of the Development Committee for many years and the leader of the Audio Group



Arnold Peterson

since the organization of development engineering groups.

For the past 8 years the Petersons (wife, Carolyn; children Duncan, Janet, and Alan) have lived in Weston where, among other things, they all have been active in foreign student programs. Addiction to reading and traveling, both here and abroad, fills the time Arnold can spare from his professional pursuits.

If anyone fits the phrase "a gentleman and a scholar" it is Pete; we all hope he feels as happy about the years he has spent at GR as those who have worked with him do. Although he won't be allowed to spend another 25 years at GR we do hope that all his future years will be successful, professionally and personally.

A Pat on the Back from

C. C. Hodgson, M.I.E.E.E. Rediffusion (North East) Limited Newcastle on Tyne, England

"You will no doubt be interested to learn that we have had one of your type 732B Distortion Meters and Associated Oscillator 733A, in regular all day and everyday operation, testing equipment in our 36 Regional Sub-Stations over the past 24 years. Not only have these instruments withstood the arduous transportation element involved in this type of service without failure, but - additionally - no individual valve or component has had to be replaced to date, in either instrument. Indeed, a striking tribute to the quality and reliability of General Radio Apparatus! Although withdrawn from such active service, both instruments are still giving us every satisfaction in their new role as bench units in our Test Dept. Workshop."

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OPEN June 12 -- Famili



What was so rare as that twelfth day in June, when the temperature was seasonably reasonable, the sky a clear Palo Alto blue, and the picnic spirit in the air at GR's Concord and Bolton plants? At Concord, a giant tent had popped up out of the back lawn (you could almost hear one chipmunk say to another, "But I tell you, it wasn't there when I went to work yesterday!"), and underneath all that canvas was a colorful pattern of yellow tablecloths against green grass, with gold balloons and multicolored flags for accents.

Inside the lobbies of the two plants, hostesses and greeters dispensed smiles, service, and souvenirs to the crowds of visitors. Guide books, grip disks, histories, newspaper reprints, and balloons, balloons, and more balloons moved off the tables. Although a reception room at each plant was literally filled in advance with inflated balloons, an emergency call went out early in the afternoon at Concord for more. It was the one near-crisis of the day.

The tourists dutifully followed DAVE LEBALLISTER'S arrows, which led them first by the never-to-be-forgotten "Living Catalog," that plywood-andburlap monument to JOE BELCHER'S resourcefulness and B art. Variac[®] had it log of autotransform Group had its sona and the Strobotac (JOANNE FRAWLEY, and PAUL D'ENTRES feverishly to take bursting balloons faces.

The Concord tou where Luther's leg 3000 servings of ic and pop. And at tw wonderful Concord the tentfolk for an I happy people eatin tent while listening — a cameo out of t to remember them.

Meanwhile, out a ton), 1000 or so vi quite a show. Th spaciousness, and o of everything we Lathes that looked displays at Tiffany's lobby — complete v mirror floors in th ever-present vie through the window the optical compa of well polished GR



HOUSE ies and Friends

BARBARA MELENDY'S it own living cataners, the Frequency ar height measurer, demonstration had CHARLIE MILLER, SMONT, all working Polaroid shots of and smiling little

ur led to the tent, gions whipped up ice cream, pastries, wo o'clock came the d Band to serenade hour. Hundreds of ing ice cream in a g to a band concert the 20's as we like

at the ranch (Bolvisitors were in for the sheer newness, over-all brightness ere overpowering. I more like window 's, the country-club with fig tree — the the stockroom, the ew of pine trees ws, the wizardry of arator, the display R900 items, and the compactness of the tour all contributed to Bolton's great success that Saturday. Most important at Bolton as well as at Concord was the congeniality of the greeters. What visitor could remain unmoved after a sunny "Hello, I'm Leo Chamberlain. Welcome to General Radio," or a warm hello from PHIL POWERS?

One of the nicest byproducts of Open House was the chance to show our International Seminarians another side of General Radio. Many of our overseas representatives, enjoying the Band Concert, marveled at the camaraderie apparent all around them, and at least one representative returned to Europe with a similar affair in mind for his employees.

The weather stayed just as the committee had ordered it throughout the day. And as the sun sank slowly over the magenta walls of the Reformatory, a handful of exhausted but pleased people sank into the chairs in the Concord lobby, amid scattered souvenirs and tattered balloon remnants. Sergeant Sweeney of the Concord Police (who, with Sergeant Hanley, handled all that traffic without a mishap) came by looking for a balloon to take home, and a committee member used his last breath to blow one up for him.













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OPEN HOUSE

June 14—Customers and Vendors







- Andrews

OPEN HOUSE

June 15 — June 17

NEIGHBORS









OLDTIMERS









SALES SHIFTS





Myron Smith

Leo Chamberlain

Sales Engineering has a new V.P. On March 19, MYRON SMITH was appointed Vice President for Sales, climaxing a GR career that started in '31 and which includes an extensive background in GR's sales engineering effort from the establishment of our first SEO in New York in 1934 to the position of Director of Sales, conferred in 1960.

Ably seconding Myron will be LEO CHAMBERLAIN, newly appointed as Sales Manager when the post was vacated by BILL SAYLOR'S June 30th retirement. Leo has risen through Sales Engineering in just ten years. He joined us in 1955 after a three-year U.S. Navy hitch.

Congratulations from the *News* to both these outstanding GR-ites.

SUGGESTION AWARDS

During the past year, 30 men received bonus awards for devising better ways of doing their jobs. Between July 1, 1964 and July 1, 1965 these people turned in 112 suggestions and earned a total of \$4,689 extra.

The top contributors, measured in dollars saved, were LEONARD LAM-PORT and RONALD BUFTON in Bolton and DANA MACINTOSH in Concord. They were closely followed by PETER GAILIS, PAUL COOPER and GEORGE ROBERTSON at CONCORD. Add ALBERT GOTTSCHALK in Bolton plus RICHARD EVANS, WALLACE DOE and GEORGE EASTMAN from Concord and you have the top ten in order. The outstanding proposals from this group amounted to \$3,587.

Others who thought out worthwhile changes in the work they were doing are SHERWOOD WARREN, JEFFREY HOL-WAY, GERALD BATCHELDER, FRANCIS WHITE, ROBERT TRUDEAU, ERNEST MACINTYRE, ALBERT TAYS (paid after he left GR), JAMES SYLVIA, WILLIAM ANTLE, LEO MCCANN, JAMES STEVEN-SON, WILLIAM MORGAN, GEORGE LYNCH, SIDNEY TITUS and ANDREW

Bloodmobile



The Red Cross ladies serve light refreshments to a few of the 181 employees who donated blood. (Below, left) Bob Sheehan, Don Sinclair, and Mrs. Charles J. Wenzel, executive director of the Concord Chapter of the Red Cross, discuss the success of the drive. (Below, right) Gallon Club members Russ Hatch, Alice Anderson, and Harvey Newhall display the symbol of their club, to which many GR employees belong. Congratulations to all for a fine job.



MORRIS, all at Concord, plus JAMES SCANZILLO, EDWARD WOOD, CHARLES COCHRAN, RICHARD COLLETON and GERALD CHAULK at Bolton.

Every regular employee on the General Radio team knows more about his own particular assignments than anyone else. He is, therefore, best qualified to suggest changes that will make his efforts more effective.

Please remember, also, that quality is at least as important as quantity; suggestions resulting in better work are often worth more than those that save direct labor because they eliminate measurable scrap, rework or extra time on subsequent operations.

HMW



An Author's Reward

ARTHUR THIESSEN, GR board chairman, has been inundated by a flood of letters from grateful recipients of his "History of the General Radio Company," published in connection with our recent 50th anniversary. The missives run the gamut from simple thanks to sentimental nostalgia for the "old days." A perusal of this spate of mail reveals the respect and, even, reverence inspired by MELVILLE EAST-HAM in those fortunate enough to have known him. We, of the News, congratulate Author Arthur on this fine work and are heartened by the realization that, judging by the volume of thanks, courtesy is not dead.

Trudy Beaudoin Retires





Poetry and speeches (!) highlighted the retirement party given Trudy by her fellow workers and friends. After 17 years as a draftsman, Trudy is embarking on a new career. We know that with her charm and abilities Trudy will be a success in any venture.

(Photos courtesy of Mel Niemi)



Walther Bastanier shows our latest decade resistance box to Dr. Issac Koga, Professor Emeritus, University of Tokyo.



Don Sinclair and Harold Wilson smile approval as Phil Powers graciously accepts a Liberty Mutual Safety Award for 304,900 manhours at Bolton without a "lost-time injury." Flash — as we go to press the record is still unbroken.

Here 'N There



Balls, Bats, and Bases

Each year summertime brings to GR songbirds, sunshine, shortsleeves, and softBALL. This year, with five teams participating, the General Radio Inter-Departmental Softball League (better known as GRIDSL) is more active than it ever has been.

"Excitement" is the key word at every game. From the 4 to 0 slugfest of Sales over the Co-ops to the 19 to 16 pitchers' duel between the Lab and Bolton, action is always hard and fast.

The standings as of this writing are: Team Won Lost Pct. Games Behind

Lab	4	2	.007		
Sales	4	2	.667	-	
Co-ops	2	3	.400	1½	
Bolton	2	3	.400	11/2	
Eng'g	1	3	.250	2	

In the course of play, some enviable records have been established at the GR field, among them:

Most pitches thrown to a single bat-

ter in one inning — J. Ebacher to N. Swanson (642)

Most catches made with eyes closed by a bald second-baseman in one inning — J. BARR (3)

Most times being hit in the head as a catcher by a foul ball in a single game — H. MCALEER (84)

Don't get the wrong impression, however; this isn't bush league! After all, it's not in every league that the center-fielder makes perfect throws (to the left-fielder) or that perfect games are pitched (perfectly ridiculous).

Although not many players have a .300 batting average or a flawless fielding record, there is one thing that everyone does have . . . a good time! PETE PREVITE



GENERAL RADIO NEWS

16

Recent partings and parties include

a. Hank Willard and his sendoff by his Production pals.

b. Sales Promotion's Carole Meers enjoys a baby shower.

c. Al Sanderson leaves us in the pursuit of a higher education while continuing here as a part-time consultant.

d. Maureen McBride, of Production, is showered before marrying GR's Paul Jones.

e. Carole Bennett leaves Sales Promotion for greener pastures.

f. Barbara Nagle leaves Bolton Production for a new job.

g. Purchasing's Karen Soroka has changed her last name to Hiscoe (Ernie works in Drafting).















JULY-AUGUST, 1965

The David J. Martin Foundation

About a year ago the General Radio Birdwatchers formed the David J. Martin Foundation as a memorial to one of their departed members.

By virtue of donations received, this year we were able to send a boy to the Massachusetts Junior Conservation Camp for two weeks.

WARREN MARTIN approached the minister at the church that Dave attended, and he selected, from his congregation, a deserving boy who nor-

Massachusetts has approved call sign number plates, and they will soon be seen in the parking lot. We are the 49th state to do so, only Kentucky is holding out.

WAIDZE, LUCY and her OM spent a nice weekend in Essex Junction, Vermont at the annual International Field Day sponsored by the Burlington Amateur Radio Club on July 4. They won mally could not afford to go to camp. Arrangements were made and our first venture achieved fruition: the youngster was delivered to camp on July 4.

This camp stresses outdoor life swimming, boating, firearms, archery and nature study. Certificates are issued to the youngsters at the end of their stay.

We hope, through subscriptions or donations, to continue this work.

J. P. MOREY, Chairman

Ham Slices

many friends through eye-ball QSOs but no gear.

W1DBM is really having a time with SSB on 75 meters.

W1NXM has come back to the fold by making an appearance on the GR 75-meter net Saturday mornings. How about more members doing the same?

Al W1BSX



STATION OF THE MONTH W1KXP CONCORD, MASS.

Roger S. Hotaling, Operator

Roger's radio career started on November, 1937 with his first license, W1KXP, operating on vhf and hf bands from Arlington Heights, Mass.

After graduation from Massachusetts Radio School in 1939, he received his Commercial Radio Operator license and taught International Morse code and theory at Mass. Radio until 1940, then worked as radio operator with Northeast Airlines until 1941. During World War II Roger was assigned flight duty with the Air Transport Command, North Atlantic Wing, as a radio-navigator. In March 1944, he was assigned to the University of Vermont as assistant chief instructor of the Airmen Transition Training Program. With the end of the war, W1KXP returned to the air in Burlington, Vermont, for several years on 20 meters. The QTH was changed to Concord by the way of Arlington in 1953.

Roger's main interest has always been cw (code to you) and working long-distance communications known as DX. During 1958 W1KXP received membership in the DX Century Club, by working and receiving confirmation from 100 different countries. His present score is 231 worked and 217 confirmed.

The station equipment consists of a National NC300 receiver and a Heathkit DX100 transmitter. The antenna is a Telrex three element 20-meter rotary beam on top of a 65-foot tower,

THE PEOPLE BEHIND OPEN HOUSE

Good show, gang!

50th Anniversary Committee Fred Van Veen, Chairman Joe Belcher Charlie Riemer Dick LaJeunesse

Exhibits

JOE BELCHER DICK RIENSTRA DAVE LEBALLISTER JIM SODERMAN

> Publicity DICK LAJEUNESSE

> > Refreshments

CHARLIE RIEMER BOB SHEEHAN BILL LUCAS

Transportation

JOHN SULLIVAN

Exhibit Design

PAUL D'ENTREMONT BARBARA MELENDY

50th Anniversary Symbol LILLIAN KENSLEY

> Invitation Design CONRAD MASSON

Invitation Coordinators

ALICE ANDERSEN THELMA MATTSON

n 1		
Bad	JPRS	

NANCY HARPIN

Parking

JUDY BEAULIEU

AL HART LES WILLARD FRED MEURLING

Guide Captains

KIP ADAMS JACK BREEN George Clemow Dick Rienstra

Greeters

WALTER ALDENBERG PHIL POWERS LEO CHAMBERLAIN PAUL RICHMOND GEORGE CLEMOW MYRON SMITH DAVE PILKINGTON LEO VANNI

Hostess Coordinators

Hostesses (Concord)

PAUL RICHMOND WALTER ALDENBERG

***************	(Concorta /
NANCY ANDERSON	"KRIS" KRYSIENIEL
SANDY ANDERSON	MIDGE LUNNY
LORENE ATKINS	MARGO MCBRIDE
ELAINE BARTELS	FRAN NAUGLER
MARIE CONLON	ROSEMARY ORPIK
PAT DEAN	PAT PLANSKY
DONNA FRAWLEY	ELEANOR POULIN
GRACE FRENCH	JEAN RUSSO
NAOMI GORDON	PAULA RUSSO
PAT GOUGH	KAREN SOROKA
CINDY GRESKA	SUE SPANGLER
JUDY HUME	MARGE SZYLVIAN
RUTH W	ALCOTT

(continued on next page)

The People Behind Open House (Cont.)

Hostesses (Bolton) MAY ENNEGUESS JUDY HARRIS DIANA JACKINS DONNA LOUREIRO SANDY LOZIER

LEE MARA LINDA MORRISON MARY MULLANEY SUE QUA SUE STORER Guides (Concord)

RANDY ALEXANDER DAVE BERGLIND MARSHALL BIBBER CHARLIE CADY DUDLEY CHUTE IIM DUNN ARTHUR EDGECOMB STAN PODLENSKI DALE FISHER SAL GILIBERTO GEORGE HAMILTON ROGER HOTALING PHIL INESON HAROLD JENSEN ROY KIZINA DAVE LEBALLISTER HENRY STIRLING "MATTY" MATHESON NORM SWANSON LARRY MOUNCE GEORGE NEAGLE

DAVE NIXON IIM NYE DAVE OSBORNE BOB PARSONS ED PASHO FRITZ PFAFFMANN PETE PREVITE CHARLIE PROUDFOOT BILL REICH CHARLIE RICE BOB RUPLENAS GIL SMILEY IIM SODERMAN DON WALDEN AL WENTWORTH

PHIL POWERS

AL SANDERSON

ROGER SMALL

LES THOMPSON

JACK YETMAN

CARL WHITTIER

DON WITHERELL

DON SMITH

WENDELL SHEPARD

Guides (Bolton) GEORGE PILKINGTON

BILL BYERS CHUCK EVANS "BUD" HIGGINBOTHAM BROWN PULLIAM ANDREW LAGON FRANK LEWIS GEORGE LOHRER TOM MACKENZIE BOB MONTAGUE DICK MORTENSON ATH NOYES AL PARLEE

LEO VANNI

Thank You

We at GR send our sincere thanks to Mrs. Charles J. O'Donnell, of Stow. for her gift of a wheelchair and an exercise bicycle. From her daughter, PHILLIS TREBENDIS, Accounting, Mrs. O'Donnell learned of GR's policy of loaning crutches and similar equipment to employees. The wheelchair and bicycle will be appreciated.

Engagements

Marie Oliva to Russell Harvey **Eleanor Poulin to Neil Malcolm**

Weddings

Maureen McBride to Paul Jones July 17

Births

Mr. & Mrs. George Pilkington July 5 8 lb 7 oz Jay Talbut

Mr. & Mrs. Thomas Naleway July 8 (Beverly) 7 lb 3 oz Michael John

Mr. & Mrs. John Normile July 10 Jean Patricia 6 lb. 1 1/2 oz

Mr. & Mrs. Paul Westphalen July 12 (Carole) Neal Christian 7 lb 13 oz

Mr. & Mrs. Robert Meers July 13 (Carole) Robert 6 lb 8 oz

Happy Birthday

Age 7 - John Riordan 2 — Kevin Ryan JULY Age Age 8 - Linda Walsh Age 12 - Margaret Ross (Cont) Sarah Pfaffmann (Cont) **Diane Edwards** (Cont) Eric Eskeland 1 - Diane Harper - Deborah Gorton Wayne Mohler Dennis Donati Age Age 7 Michele McCulley Age 11 ---**David Doucet** 6-Carl Swoyer Age 6 - Nancy Parsons Age Amity Pulliam **Donald Hochard Earl Robertson** Laura Linton David Alsen **Kristine Rogers Rita Demers** 5 - Susan Reynolds Age Sandra Burne David Manchester Glenn McCullough Robert Aldenberg Jeff Meikle Stephen Doe AUGUST **Deborah Kent** Judy Gottschalk **Richard Hotaling** Jane Whitehead Wendy Martin 5 Sandra Dunnells Age 12 - Joy Bickford Age Owen Hill, Jr. Katherine Hall Wayne Moalli Cynthia Casey Kelley Loring Age 10 - John Robinson Susan Jokinen Daniel Casey **Cheryl Meikle Margaret Scanzillo** 4 - Mark Schofield Johnathan Reckard Age **Elaine Fish Michael Foss Catherine Mayer** Age **Charles Whitehead Cynthia Byers** Gary Brown Scott Fisher Age 11 — Anthony Woodward Denise Cochran Margo Hurlbut Anne Littlejohn Stephen Larsen 9-Mark Horne **Dianne** Cochran Jacqueline Daley Age **Edwin Lamport** Michael Walsh Doreen Cronin 3 -- Dana Brown Age Age 10 - Robert Reynolds Andrea Collins **Cheryl Szidat** Age Andrew Castle 9 - Nancy Newell Age Linda Dunnells 3 - Edward Tarka Age 2 - Michael Harris Wayne Michealsen Age Kelli Cromidas Eric Mortenson Sarah Held Jacqueline McAleer Susan Szidat **Judith Herbs** 1 - Colleen Comerford Linda Manchester 8 - Joellen Stanley Age John Scanzillo Age Lauri Hall

Glen Fitzmorris

Douglas Hotaling

JULY-AUGUST, 1965

7.

Age

Joanne Lydon

Kathleen Cox

2 -

Age

Shawn Hunt

John Normile

We Goofed

Young Roger Spurrell has called our attention to an error in the birthday listings. Roger was 7 last September, not 10. Our apologies, Roger; we didn't mean to age you prematurely.

Service Anniversaries

JULY

Five Years Robert Brooks Frank Finizio **Roswell Greenlay** Ann Raikunen

Ten Years Richard Burne Leo Chamberlain Stanley Carroll

Twenty-five Years Ivan Easton

Thirty Years John Morey

AUGUST

Five Years Dorothy Cashin Christopher Lombardi **Charles Miller Richard Mortenson Robert Oakley Benjamin Rice Ten Years Diana Jackins Fifteen Years**

Mabel Beliveau **Twenty-five Years**

Henry Littlejohn

Kevin Parmenter





















