

FTR NEWS

Federal Telephone and Radio Corporation



Volume 3 · September 1945 · Number 9

FTR Starts Production on First I. T. & T. Rotary Telephone Equipment Installation in United States

O. W. I.'s 200-K.W. Transmitters Beam Surrender Terms

Delano and Dixon, Cal., Stations, FTR Units, Send Ultimatum to Japs

The products of FTR workers played a major role in the intensified United Nations war to defeat Japan in recent days when the two giant radio transmitters, 200-k.w. each, at Delano and Dixon, California, drove home to the enemy the surrender terms formulated by the "Big Three" at Potsdam, and then "blanketed" Japan with the subsequent warnings of devastation to come which preceded and followed the world's first "atomic bomb" annihilation, loosed upon the strategic Japanese mainland city of Hiroshima, on August 5.

The full power of Station KCBR, operated by the Columbia Broadcasting System, and Station KNBX, of the National Broadcasting Company, Pacific Coast transmitting points of the Office of War Information, was hurled at the Japs as the climax of America's "war of nerves."

The tempo of the radio bombardment which sought to induce an early end of the conflict, was maintained at a high pitch over both stations, which were reported to have gone on a 20-hour schedule August 21. Before that date, various degrees of power and shorter schedules had been the rule.

H. P. Miller, Jr., engineer at 200 Mt. Pleasant Avenue, who, with numerous colleagues, had been active in the design and construction of the transmitters, received word early in the month that KCBR had been performing beautifully. The news came in a message from R. S. Boyce, FTR engineer in charge of the Delano project who has been in California for some time. It read:

"KCBR has really been seeing a lot of combat duty in this 'war of nerves' with Japan. They sure have been giving out with the terms the United Nations offered Japan. We were only modulating with four F-125's, but we decided to push it up to six, since, to those of us around the station, it seemed that these latest broadcasts of the OWI were about the first real use of the transmitter as a propaganda machine. I think I previously said that we could modulate 100 percent with four tubes, but this is not true, as we only reached about 80 percent on program. However, with six tubes, they can ride the modulation high, wide and handsome.

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This photograph was made in the I. T. & T. Building, New York, at the formal signing of the contract for the production of the new automatic telephone system of the Rotary type which FTR will build for the Lexington Company. The company is planning to place its new system in operation in 1947. A new main office building

also is proposed. Left to right in the picture: R. T. Kieren, chief engineer, Lexington Telephone Company; L. O. Evenson, vice president, General Telephone Company; Colonel Sosthenes Behn, president, I. T. & T. and FTR; H. V. Bozell, president General Telephone, and R. A. Gantt, vice president and director, I. T. & T.

L. O. Evenson and Colonel Behn Sign Historic Contract

Automatic System to Be Built for Lexington Telephone Company

Engineering and production work on the new automatic telephone system of the rotary type which FTR is manufacturing for the Lexington Telephone Company of Lexington, Kentucky, an operating subsidiary of the General Telephone Corporation, is now actively under way, it has been announced. When it has been completed, the system will be the first installation in the United States of I. T. & T. standard automatic telephone exchange equipment of the Rotary type which is manufactured and installed throughout the world by the various manufacturing subsidiaries of the I. T. & T. System.

The contract for this installation was signed August 11 at I. T. & T. headquarters, 67 Broad Street, New York, by L. O. Evenson, vice president and general manager of the Lexington Telephone Company, and Colonel Sosthenes Behn, president of I. T. & T. and FTR.

The complete central office equipment, including toll boards, and consisting of 15,000 lines and 25,000 terminals will be installed by FTR engineers in a proposed new main office building of the Lexington Telephone Company at Lexington, Kentucky. Lexington

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Foiling of Historic "Sneak Raid" On Toulon Revealed by E. Labin

Assistant FTR Lab Head Tells How Radar Saved Mediterranean Fleet

The role which radar, developed by engineers of Le Matériel Téléphonique, Paris affiliate of I. T. & T., played in saving the French Mediterranean fleet from destruction in a "sneak" air raid by Italy on Toulon Harbor, has been disclosed by Emile Labin, Assistant Director of the Federal Laboratories.

The dramatic episode, long a closely kept secret, only now confirmed by the French Navy Ministry, occurred June 7, 1940, three days before Benito Mussolini declared war on France. Had it been successful, many units of the French navy assembled at Toulon might have suffered a fate similar to that of our Pacific Fleet warships, 18 months to a day later, at Pearl Harbor.

In telling of the historic event Mr. Labin asserted that the raiders were detected while at "a great distance" from Toulon by instruments located on a small island in the Mediterranean, off the French Coast, and driven back with losses. Mr. Labin at the time was an officer in the Army of France and, with numerous other scientists of LMT, had provided the services with many types of radio equipment for the national defense, under the direction of E. M. Deloraine, Director of the LMT laboratories.

"Turned Back With Losses"

"About 10 o'clock in the evening of June 7," Mr. Labin said, "our radar instruments indicated aerial activity approaching from the east, at a great distance. Details of the methods which were used are not yet available for publication but French defenses

(Continued on page 3)

FTR Plants Made Atomic Bomb Parts

Because it was the best-kept secret of the war, FTR workers never knew until the other day that they, too, along with workers in many other plants in the Newark area, had made parts for the atomic bomb.

When some of the details of the highly restricted "Manhattan Project" were revealed, a spokesman for the WPB in Newark explained that the company which had the best reputation for turning out a similar product was enlisted to manufacture the new part. He said also that machines for producing the new gadget were not used for any other purpose even when idle.

He explained that this was necessary so that the machine tools would not be disturbed between operations. Raw materials used in this manufacture were on the top of the priority list.

Laboratories Add Third White Star To Army-Navy Flag

A third White Star was added to the FTR Laboratories Division's Army-Navy Production Award "E" flag at a ceremony near the new Laboratories Building in Nutley on August 11 when "E" pins were presented to new employees by Colonel Sosthenes Behn, I. T. & T. and FTR president. The ceremony largely duplicated a similar event held less than three weeks previously when the manufacturing units of FTR received an "E" award.

The occasion marked the fourth time the Laboratories Division had won the Army-Navy Production award for "outstanding achievement in producing materials essential to the war effort," the original presentation having

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LABS "E" STAR

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been made on April 20, 1943.

In his official notification, Robert P. Patterson, Undersecretary of War, stated that "By maintaining the distinguished record which previously brought you distinction, you are once again proving your leadership on the production front."

Enviably Record

During his address at the Nutley ceremony Colonel Behn also commented upon the previous awards, saying that "The repeated honors bestowed upon the entire personnel of the Federal Telephone and Radio Laboratories will reflect proudly throughout our laboratories in Paris and London in the International Telecommunication Laboratories' world scientific system. Our group of laboratories has made an enviable record in the war against aggression," he continued. "We can confidently expect to open new scientific horizons in the era of technical advancement unfolding before us as the war draws to a close. Through your efforts, the Federal Laboratories, soon to move into their beautiful new home across the lawn, will provide the scientific developments for our expanding manufacturing program in this country."

Lieutenant Commander W. T. Hamilton, officer in charge of the Assistant Inspector of Naval Materials Office, was to have represented the armed services at the event but was unable to be present.

Howard E. Viney, an engineer, was master of ceremonies.

Tribute to Service Men

"We are very fortunate to have with us today one of our co-workers who is on leave in the Navy. Another of our fellow workers, H. R. Dittenhoefer, on leave to the Army, was to be with us today but, unfortunately, was taken ill and is now in Hal-loran Hospital. However, I would like to tell you something about him.

"Tech. 4th Grade Harold F. Dittenhoefer, now a member of the Field Artillery of the U. S. Army, has been awarded the Bronze Star Medal for Meritorious Service in direct support of Combat Operations in Italy.

"Thracey Petrides (Radar Technician 2/c) has just returned from a year of action in the European theatre. Thracey was assigned to an LST, Landing Barge during the invasion of Germany and subsequent invasions and as a consequence of his participation in these actions has been given a battle star for recognition of his services."

William T. Moy, an engineer's assistant, accepted "E" pins from Colonel Behn for new workers.

The singing of the "Star Spangled Banner" and "America" was led by C. J. Cornell.

N. E. Wunderlich Appointed Head of Radio Sales in FTR

Norman E. Wunderlich, long prominent in the radio industry, has been appointed executive sales director of radio equipment and allied products in FTR. He came to Federal from the Galvin Manufacturing Corporation where he was manager of the communications and electronic division. His office is at Mount Pleasant.

In his new position, Mr. Wunderlich heads up six sales sections embracing broadcast equipment, industrial electronics, rectifier equipment, aerial navigation, mobile radio equipment, and components. Some of the equipments and products included under these general classifications are FM, AM and Television broadcast; pulse time modulation; two-way emergency radio; point-to-point; induction and dielectric heating; instrument landing systems; direction finders; transformers; high frequency cable; quartz crystals and transmitting rectifier and industrial power tubes.



Norman E. Wunderlich

Previous to his association with Galvin, which extended over a period of five years, Mr. Wunderlich operated the Rauland Corporation, and some time prior to that was director of engineering and research for the Victor Talking Machine Company and later RCA-Victor. Mr. Wunderlich also has been prominent in radio developments being responsible for the Wunderlich tube, the first dual purpose tube, and he holds original patents on amplifier automatic volume control and coaxial antennas.

Haraden Pratt Is Elected Chairman Of Radio Planners

Haraden Pratt, vice president and chief engineer of the American Cable and Radio Corporation, and a vice president of FTR, has been elected chairman of the Radio Technical Planning Board, the world's leading engineering group concerned with the technical future of the radio industry and related services. Mr. Pratt will take office October 1. He succeeds Dr. W. G. R. Baker, vice president, General Electric Company, who has

been chairman since the RTPB was organized in September, 1943.

Long recognized as one of the leading contributors to radio, Mr. Pratt now assumes a position of even greater influence with an organization that is responsible for the scientific development of radio as applied to both communications and industry. The Radio Technical Planning Board is a non-profit group, sponsored by the Institute of Radio Engineers, the Radio Manufacturers Association, the American Institute of Electrical Engineers, and a long list of organizations in allied fields.

Mr. Pratt, in addition to his position with the American Cable

Curtailed Travel Order in FTR Wins Praise from O.D.T.

Federal has been commended by Col. J. Monroe Johnson, director of the Office of Defense Transportation, for its action in curtailing travel by officials and employees, District Manager Samuel Roberts announced.

In order to "comply fully" with the request by President Truman and Colonel Johnson that the public curtail its travel and thereby minimize the burden on transportation facilities, FTR ordered its Traffic Department to handle requests for passenger accommodations "which pertain to company business."

Commending the corporation for its action, Colonel Johnson said:

"This is a type of action which will help in keeping travel to a minimum, and I recommend it to other companies. I am glad to note such an intelligent and practical effort to help keep non-essential travelers off our overburdened railroads."

ELECTED BY I. T. & T.



Colonel George P. Dixon, who was Chief of Air Communications for all United States Air Forces in the European Theater of Operations, has been elected a vice president of I. T. & T.

A native of Worcester, Mass., Colonel Dixon was graduated from Worcester Polytechnic Institute and joined the Pacific Telephone and Telegraph Company in 1912 as a traffic manager. He left that company to serve in World War I with the Signal Corps of the 91st Division, seeing action in France and Belgium. He was awarded the Silver Star for gallantry and the Belgian Croix de Guerre.

Called to active duty again in September, 1940, Colonel Dixon served for two years as signal officer of the Second Corps Area in the United States. He went overseas in September, 1942, and was credited with overcoming a critical shortage of signal supplies and facilities in time to prepare the Twelfth Air Force for the North African campaign.

For his services in World War II, Colonel Dixon was awarded the Legion of Merit, the Bronze Star, and the Croix de Guerre with palm, being decorated with the latter by General de Gaulle for "exceptional services rendered during the operations for the liberation of France."

TRIBUTE PAID TO FTR PROTECTION FORCES



This photograph was made at the ceremony in City Hall, Newark, at which Mayor Vincent J. Murphy formally presented the certificate to FTR. Left to right: Hugh Gartland, chief steward, Guards' Union; Harry Gommoll,

chief of fire department; St. George Lafitte, assistant vice president, FTR; Mayor Murphy, Raymond C. Sprow, director of plant protection for FTR and Thomas Fallon, chief of plant protection forces

A certificate of high merit, accompanied by a public expression of "gratitude and praise" from Mayor Vincent J. Murphy, of Newark, has been awarded to FTR for "maintenance of a superlative standard of security and protection" in all the premises of the company in the New Jersey area during the war.

Ceremonies marking bestowal of the award were held in the council chamber of the Newark City Hall July 31, when Carl Withers, chairman of the Newark Defense Council announced the honor. Representing FTR

were St. George Lafitte, Assistant Vice President in charge of general services; Raymond C. Sprow, Director of Plant Protection; Thomas Fallon, Chief of Plant Protection Forces; Harry Gommoll, Chief of Fire Department and Hugh Gartland, Chief Steward of the Guards' Union, C.I.O. Mr. Lafitte, formally received the certificate from Mayor Murphy.

The award comes from the Newark division of the National Defense Council and Chairman Withers cited the fact that in the Newark area 30,000 persons

had been recruited as a volunteer protection army, in addition to 15,000 air wardens and more than 8,000 women members of the Civilian Defense Volunteer Organization.

"All this was very necessary," he said, "for in the period since Pearl Harbor there was at all times more ammunition in our territory than in any other state; more men in transit for the armed forces and consequently more protection needed than elsewhere—and the whole job was done perfectly and to our great credit."

MANY VISITORS IN FTR

Visitors in 1944 to FTR requiring proof of citizenship numbered 58,050.

Public Enemy No. 1

by Kenneth McKim
Assistant Vice President,
I. T. & T.

Man's only enemy, they say, is Man,

But I say, it is Fear—
Say I, who year on year,
Have fought them both,
Nor found them loth
To use what means, or strike
what blows they can.

For Man fights Man, because to
Fear he's slave.

The slave, for Fear, fights Man:
For fear of Man began—
Now mark this well:
The records tell—

When Man foreswore the Free-
dom that God gave.

For craven Fear, Man leaps upon
his kind,

But not we find, too late,
Because of intra-hate;
To serve—my word—
A coward lord!
So thus you see how Fear's the
Master Mind.

Now, how to cut the shackles is
the point:

Each man must break his chain,
Each one, his Freedom gain;
We who would live
No proxies give,
Nor leave the task to those whom
we anoint!

W. E. Ogilvie, Jr. Aids in Handling Federal's Finances

From handling the affairs of an express company in Havana to the assistant treasurership of Federal Telephone and Radio Corporation is quite a jump, geographically, but that's the kind of jump made by Walter E. Ogilvie, Jr., who helps handle the company finances at 591 Broad Street.

After attending Manlius School in Manlius, N. Y., Mr. Ogilvie was graduated from Hamilton College in 1915 with an A.B. degree and immediately went to work for the Havana Terminal Railroad Company in its New York offices. After one year with that company he was sent to Havana with the Cuban & Pan-American Express Company, with which organization he remained for more than twenty years, rising to the position of executive vice president.

His stay with this company was interrupted for a short while by



Walter E. Ogilvie, Jr.

the war, during which Mr. Ogilvie was commissioned a first lieutenant and served as aide-de-camp to General J. A. Gaston, commanding officer at Fort George G. Meade. The general was hoping to get over to the other side and Mr. Ogilvie was anxious to go along with him but fate ruled otherwise.

Due to economic conditions caused by the depression, the Cuban & Pan-American flew the business distress signal and Mr.

Ogilvie was appointed to liquidate the affairs of the company. He wound up these duties in 1940 and after a short period with the Postal Telegraph Company came to the International Telephone and Radio Manufacturing Company, predecessor of FTR, and was appointed assistant treasurer in 1942, the position he holds today.

Mr. Ogilvie was married in 1919 to the former Marie Spaulding, of Buffalo, whom he met while in Havana. They have three children. A son, Walter, III, was recently commissioned lieutenant (jg), following his graduation from the College of Physicians and Surgeons, Columbia University. Another son, Douglas, is a hospital corpsman (first class) on the staff at Philadelphia Naval Hospital. His only daughter, Dionne, "isn't quite old enough to get into the Waves," so there's at least one child at home.

An ardent fly fisherman, Mr. Ogilvie looks longingly forward to "the day when a fellow can get enough time to go up to the Canadian woods and do a little casting. By that time my family will be back," he added, "and I'll be away. But that's life."

Mackay Radio Link To Tokyo Reopens

The reopening of direct radio-telegraph service between the United States and Tokyo took place on August 28 when the facilities of the Mackay Radio and Telegraph Company were placed in operation for the first time since Pearl Harbor. Services initially will be limited to official military and government, press and prisoners-of-war messages.

Earlier, Mackay inaugurated a new direct circuit between New York and Berlin, Germany. This station was formerly assigned to the Ninth Air Force.

The company is now operating radio telegraph circuits to Denmark, France and Czechoslovakia.

Commercial Cable Company, another I. T. & T. affiliate, is operating services to Finland, Greece, Belgium, the Baltic states, Italy, Norway and to Czechoslovakia.

Censorship requires that messages be limited to those of a non-transactional nature and reserves code and language rights also.

HONOR COL. ALLSOPP



In the above picture Major General Frank E. Stoner (left) director of Army Communications, Signal Corps, U.S.A., is bestowing the Legion of Merit upon Colonel Clinton B. Allsopp, vice president of I. T. & T., for performing "exceptionally outstanding services" while serving in the office of the Chief Signal Officer of the United States Army. The decoration was bestowed at ceremonies in the I. T. & T. Building, 67 Broad Street, New York. Colonel Allsopp entered active service the day after the Japanese bombed Pearl Harbor and immediately helped organize the Army communications system.

HURL BOMB ULTIMATUM (Continued from page 1)

I think they went all out last night (July 28), riding about 90 percent on the negative modulation peaks and up to 110 percent on the positive peaks. The transmitter took it without any trouble."

According to newspaper reports the radio bombardment was the greatest in history. Manila and Chungking have reported that the OWI signals reached those points "with great power."

CHESS VIA RADIO

The recent international chess game between chess champions of the United States and the Union of Socialist Soviet Republics in which the Americans lost

FTR Rotary Equipment For Peru Is in Service

The first central office Rotary telephone equipment manufactured by FTR for the Peruvian Telephone Company, Lima, Peru, an I. T. & T. associate, is now in service. Word has come from Lima that 400 lines of an ultimate 1000-line Rotary automatic extension to a Lima exchange went into service during the latter part of May to relieve traffic congestion.

to the Russians, was played via Mackay Radio.

The ten man American team sat at chess boards in the Henry Hudson Hotel, New York. Their opponents played in Moscow. All moves were by radio.

SNEAK RAID (Continued from page 1)

along the coast went into action with completely successful results. The enemy's air armada was broken up and turned back.

"Radar unquestionably averted a disaster to the French warships based at Toulon, similar to that which later overtook the United States Pacific Fleet units based at Pearl Harbor. Many of France's most important war vessels were at Toulon at the time. It was known in France that an armed attack was impending from Italy, but the possibility of a large scale air attack had not been contemplated."

He added that, in the light of subsequent events, it is not impossible that "either Mussolini or Hitler may have supplied the pattern, and even the plan, of the Pearl Harbor assault."

ON JOB 35 YEARS



Miss Celia Madden, an employee of International Standard Electric Corporation, recently celebrated her 35th year in the I. T. & T. System and its predecessors. She was honored by her associates at a dinner

Patents To Engineers

Patent No. 2,381,727, will issue in the name of G. Deakin to ISEC for "Automatic and Semi-automatic Telephone Exchange System."

Patent No. 2,381,715, will issue in the names of C. F. J. Boehlen and M. A. Biske to FTR for "Voltage Regulating System."

Patent No. 2,381,905, will issue in the name of R. B. Hoffman to FTR for "Vacuum Tube Mounting."

Patent No. 2,383,456 will issue in the names of A. Alford and G. K. Patterson to FTR for "Modulation Circuits."

Patent No. 2,383,475 will issue in the name of S. H. M. Dodington to FTR for "Transformer."

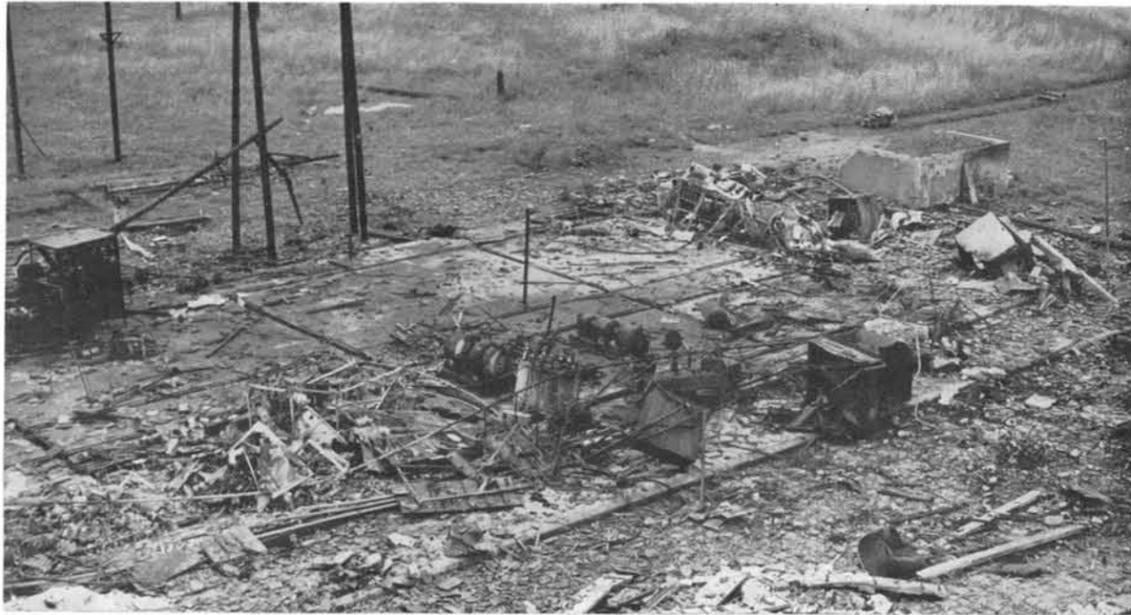
Patent No. 2,383,490 will issue in the name of A. G. Kandorian to FTR for "Loop Antenna."

Secret Radio in LMT Labs Helped To Beat Germans

H. Busignies Reveals How Trappes Station Kept Gestapo Fooled

How a group of engineers of Le Matériel Téléphonique, Paris affiliate of I. T. & T., drove the Gestapo to desperation through the operation in France of a secret radio station for anti-Nazi propaganda, which Hitler's best engineers were fooled into believing was underground in Germany, has been revealed by H. Busignies, of the Federal Laboratories who was in charge of the station from September, 1939, until it was blown to bits by French troops to erase its identity on the eve of the occupation of Paris Friday, June 15, 1940.

Known in Germany as "Deutschland Freiheit," and by its operators as the "Voice of Free Germany," the transmitter was situated at Trappes, a few miles from Paris, the entire time of its operation. It never was mobile and never operated within Germany, although the Nazi authorities became convinced that it was a vital part of the Reich's underground menace. The Gestapo tried every means at its disposal to silence the station and listening to "Deutschland Freiheit" became a treasonable act, punishable by death.



This was "Deutschland Freiheit" sender, the LMT radio station at Trappes, in France, which the Germans believed was part of their own "underground." Destroyed by a detail of French soldiers as the Nazis entered Paris, the ruins shown were all that remained, giving no hint of the propaganda voice that could not be silenced

Mr. Busignies said that at the outbreak of the war in Europe, the need of spreading anti-Nazi propaganda inside Germany became of great importance and the French Government called upon the scientists of Le Matériel Téléphonique to produce a radio station with enough power to do the job. At that time, in LMT's laboratories was an unused transmitter, whose power was built up to 10 kilowatts, enough to reach everywhere in Europe. This was taken to Trappes, where LMT maintains a

testing lab, and sent into action, with immediate effect.

Expertly Programmed

"Deutschland Freiheit" gained its authentic personality, Mr. Busignies said, mainly because it was programmed expertly in Paris studios by German women and men refugees from Gestapo persecution. These refugees, some of whom later became active in the French underground, were developed into high-power anti-Nazi propagandists. Their job was to lead as many Germans

as possible away from Hitler, and to generate as much anti-Nazi activity as could be sustained in war plants and elsewhere. The work always was carried on under close guard of French troops, both at Trappes and in Paris. This guard never was relaxed until after the station, bombed to its last stick, went up in flames, while its technicians and some 500 others from the Paris laboratories were evacuating the region for safer places in unoccupied France.

Within a few days after

"Deutschland Freiheit" went on the air, German radio technicians succeeded in jamming it. The LMT staff at Trappes then shifted the station's wave. The Germans shifted too. Then our engineers built a receiving station close to the German line, Mr. Busignies said, and began an intensive anti-jamming study. Out of this came a system of shifting frequencies automatically, which later became of great value in all areas where enemy jamming to disrupt communications had to be overcome. An automatic system which the Germans themselves developed could not stop the flow of propaganda.

The engineers knew the frequencies which could be received on the average European receiver and had to limit their shifts within those bands. The eventual result was that it became possible to maintain broadcasts for an average of two minutes. The knack of preparing scripts to fit these periods was developed in the studios and by means of this and the automatic system of skipping about from one wave length to another, the propaganda was kept pouring into German ears.

The manipulation of antenna phasing was the factor which kept the enemy from discovering the whereabouts of the station.

ANOTHER MEGATHERM USE

A rapid, highly efficient process for the drying of textiles, using high frequency heat, has been announced as another outstanding performance by FTR Megatherm.

Figures Show Picnic Folk Were Hungry, Thirsty and Merry

Miles of Frankfurters, Many Gallons of "Pop" Consumed at Nutley

When the 1945 series of Sunday picnics for FTR workers and their families came to a close on August 26 with the outing for Radio Sales and Engineering, Federal found that it had amassed some food statistics that were slightly colossal.

Among other things it was revealed that 2,400 to 3,000 frankfurters with accompanying rolls were served under the trees at Nutley. These frankfurters if laid end to end before consumption would reach pretty far—in fact they'd reach far enough to create a first class riot if anyone were foolish enough to lay them from end to end in these still scarce meat days. Incidentally, every frankfurter served had the official blessing of the OPA, the red points for their purchase having been granted on a "per meal" basis.

Lots of Liquids

It also became known that the merry-makers were a thirsty lot. They managed to dispose of from 5,000 to 6,000 glasses of beer per Sunday, 40 to 50 cases of soda pop and from 20 to 30 cases of milk. A case of pop contains 24 bottles and there are 60 containers in a case of milk. That's a lot of liquids.

Getting back to frankfurters again, people who know about such things say that the quality of this season's franks was far better than that of last year. They also say that the job of rounding up a sufficient quantity of "dogs" was a week long task that began on Monday and continued through the week until the needed amount was at hand.

The 1945 picnic season opened in late June and continued until August 26. Throughout the season the weather was generally fair but even on stormy Sundays, rain failed to dampen the spirits of those present. One outing that could not be rained out was the annual picnic for workers of the Laboratories Division in New York. It took place on July 15 and the weather, as you may recall, was hardly suitable for an outdoor event. So they took their picnic inside, making use of the new Laboratories cafeteria. There, in what was once a locker room, they danced, played ping pong, had a general good time and used up the refreshments.

The average attendance this year was 1,000 persons. However, it was less than the average for the previous season for the reason, probably, that attendance this year was restricted to workers and to the members of their immediate family.

The pool, of course, was the most popular spot on the grounds but there was little work for the life guards. Only on three or four occasions was it necessary for the guards to help people who had wandered into the deep end.

Sports Events Popular

Softball games and other athletic events also were well patronized. For the younger guests there were ponies to ride upon, a pool in which to wade and men dressed up outlandishly as clowns to laugh at.

No statistics were kept as to the number of "Boy Meets Girl for First Time" events that took place during the season. The only thing that FTR provided in that respect was the setting: music, flags and bunting, whispering trees, lilting laughter—ah, the gaiety of it all!

FTR Outings Lured Thousands from Company Shops, Laboratories, Offices For a Day of Wholesome Recreation



Now that the series of Sunday outings held at the Nutley grounds under the sponsorship of FTR are over for the season, the photographic record would indicate that everyone attending had a grand time. The picnics, presented each Sunday from June until the end of August, were FTR's way of providing wholesome relaxation for the men and women of its plants, offices and laboratories who contributed so loyally to the Company's war effort.

The pictures on this page comprise an interesting study of Americans at play. They reveal also that people attending an FTR outing have widely varying ideas about having a good time. Many were athletically inclined, and had ample opportunity to work off their excess energies participating in the many

contests and sports. Others preferred to take it easy, content to lie under one of the many shady trees that dot the Nutley grounds and enjoy the restfulness of nature. Most everyone, however, joined in partaking of the hotdogs, soda-pop and other fixin's which were a highlight of each Sunday picnic.

The average attendance at these Sunday picnics was 1,000 men, women and children and the programs that were presented for the entertainment of these visitors were gay and diverse. People danced, plunged into the pool, took part in softball games, races and other sports. They chatted, they ate and in doing those things they had lots of fun. Even when it rained there was something doing at Nutley, as you will notice in the pictures.



LEXINGTON PHONE CONTRACT
(Continued from page 1)

ton Telephone is planning to place the new Rotary automatic system of the 7A-2 type, into operation by the middle of 1947.

"Under the contract," Mr. Evenson stated, "faster and better service will be made available to Lexington and the surrounding area, which the local company serves. This move marks the initial step in our company's post-war plans to convert its system from manual to modern dial service. It will bring about greatly improved service, as the Rotary automatic system embodies some of the most modern advancements in telephony."

Federal has manufactured similar equipment for Puerto Rico and Brazil and now has contracts for installing additions to the same system in Mexico and Peru. Officials of the company said that the facilities for manufacturing this equipment are ample to supply the expected demand for both export and domestic markets.

Colonel Behn announced at the signing of the contract, that FTR currently is tooled up to manufacture on a single-shift basis 100,000 lines of automatic telephone equipment annually. The company's program, he added, calls for an increase in this capacity up to 200,000 lines an-



Officials of I. T. & T., FTR, the General Telephone Corporation and the Lexington Telephone Company are pictured at 67 Broad Street, New York, as the contract was signed for the production of the new Lexington system. Seated, left to right: R. E. Smith, vice president FTR; R. T. Kieren, chief engineer, Lexington Telephone Company; Gerald Deakin, vice president and chief engineer, I. T. & T. and FTR; H. C. Roemer, vice president and director, I. T. & T. and FTR; T. M. Douglas, vice president FTR; standing, W. H. Freng, vice president and general solicitor, I. T. & T.; Constant Boehlen, assistant chief engineer, Rotary Systems, FTR;

Lee Fraser, manager, Switching Systems, FTR; R. H. Workman, comptroller, FTR; T. A. Boyd, vice president, General Telephone; L. O. Evenson, vice president, General Telephone; G. H. Semler, general counsel, General Telephone; H. V. Bozell, president, General Telephone; R. F. Briggs, secretary and treasurer, General Telephone; Colonel Sosthenes Behn, president, I. T. & T. and FTR; Colonel C. B. Allsopp, vice president, I. T. & T.; R. A. Gantt, vice president and director, I. T. & T.; Warren Lee Pierson, president, American Cable and Radio and director, I. T. & T.; C. D. Hilles, Jr., secretary and director, I. T. & T. and FTR

nually at the earliest possible date.

Today I. T. & T. has installed over 2,000,000 lines of Rotary automatic equipment in many of

the larger cities in Europe such as Brussels, Antwerp, Paris, Marseilles, Budapest, Prague, Copenhagen, Oslo, Madrid, The Hague, Zurich, Bucharest and in several

large communities in Italy. The equipment also is in operation in Mexico City and many important cities in South America and elsewhere throughout the world.

FTR Restaurant System A Model 'Nutrition Plant'

Solving the problem of providing the best of foods at minimum prices for FTR's army of home front plant workers was the wartime job of Jules Nickels and the more than 65 trained members of his staff at the company's Nutley restaurants.

Similarly, it also called forth the best energies of Charles Shafer and his efficient group in East Newark. There the real pioneering was done, in FTR's first large restaurant. By their united staff efforts, a soundly functioning "nutrition plant" within the organization of Federal was established.

From a well-organized commissary centered at Nutley, the number of persons in that area supplied with the best the market affords in edibles sometimes reached 4,000 a day and in the recent past, the total went to a high mark of 6,000, with everybody satisfied. The totals were smaller at East Newark.

The Nutley restaurant itself, with its five dining rooms, was just one phase of the development. Cafeterias in the Vacuum Tube and Intelin plants, and their newest addition, in what was formerly the "19th Hole," or locker room of the once famed Yountak Country Club, as well as those in the East Newark area, tell the present-day story of good wholesome mass nutrition for the men and women whose energy has contributed so liberally to the whole success of FTR.

Innovations on the Way

Plans for the future include a new consolidated dining room of large dimensions for the Nutley-Clifton plants. They also include the further modernization of Jules Nickels' commissary, for at an early date in the postwar period, the large quantities of fresh, quick-frozen vegetables, fruits and other foodstuffs which FTR workers consume, will be defrosted by the magic of Megatherm, an innovation which will place his kitchens in the vanguard of a new electronic era in food preparation.

"We never serve canned vegetables," the restaurant manager said. "Nor seconds of fruits, nor



Upper left (l. to r.), Michael Behan, maitre d'hotel; Margaret Hesselberg, acting special service clerk; Jules Nickels, manager and Franchi, chef, chart the day's work at Nutley. Upper right, Manager Charles Shafer, East Newark and three of his assistants, Amelia Moretti, Meta Stelter and Ruth Landerr. Middle left, lunch time in the grill room of the Nutley Club. Middle right, a section of the cafeteria in the Vacuum Tube plant at Clifton. Lower left, a typical noon scene in the cafeteria of the Intelin plant. Lower right, Chef Franchi and his kitchen staff at their stations during a busy moment

odds-and-ends of meat, either. Every ounce of food served in every restaurant and supplied to every cafeteria in our system has to be strictly fresh and strictly first-grade. Our people rate the best—and they get it."

Assisting Mr. Nickels as maitre d'hotel is Michael Behan, whose service at the Nutley property goes back 14 years. Also with him are Clarence Van Stenberg, as comptroller of the restaurant budget, which is operated upon the system devised by the American Hotel Association; Charles LaFranchi, as head chef and Miss Pauline Rodman who takes pride in the accurate booking of special occasion service for the company's officers and executives

and their guests.

An equally happy situation exists in Mr. Shafer's food domain, where Pietro Page is head chef and the assistant manager is Miss Meta Stelter. Pietro had four kitchen aides and for table service in the two dining rooms there were 16 waitresses. In addition, the daily patronage of the cafeteria averaged well over 300.

Here, as at the Nutley establishment, only the best grades of meats, quick-frozen vegetables and fruits, and tempting salads and desserts are offered to the workers. Here, as at Nutley, the average service costs the workers about 40 cents and provides ample nourishment.

Softball Leagues End Season's Play

The two FTR softball leagues for men and the league for girls have closed their seasons. In the National League Doscher's Reamers, last year's champions, repeated and were to meet the Veterans American League champions, for the FTR title.

In the FTR Girls' League, the Sad Sacks, Mount Pleasant entry, were champions, winning all of their six scheduled games.

The Reamers went through the 12-game National League season without a defeat. Maintenance was second, Engineers were third and Shippers finished fourth.

Veterans, American League title winners, won 12 and lost two, finishing far in front of the Robins. Third place went to the Navigators. Intelin, Rectifier and Sportsmen ended the race in that order.

FIVE BEST PUPILS



Pictured above are the five students in the FTR Baseball School who showed the most progress during the nine weeks the school was in session. The school was conducted at FTR's Athletic Field, Nutley, and was operated for children of FTR workers and residents of nearby communities.

Left to right: Pitcher Julius Funicelli, Center Fielder Donald Robertson, Third Baseman Albert Kritt, Outfielder Bob Decker and First Baseman Jimmy Miller.

Another prize winner, Pitcher Joe Buttles of Nutley, received his award at his home. He was ill at the time prizes were distributed.

A complete Brooklyn Dodger uniform, autographed baseballs and bats were the awards.

Four New Officers Elected To Serve In Mackay Company

Three new vice presidents and a new assistant vice president have been elected to office by the board of directors of Mackay Radio and Telegraph Company, an I. T. & T. affiliate. The officials are C. E. Scholz, E. H. Price and I. B. Brown, vice presidents, and J. T. Chatterton, assistant vice president.



C. E. Scholz

Mr. Scholz is a veteran of the old Federal Telegraph Company, Palo Alto, Cal., having joined the engineering department of that organization in 1917 following his graduation from Stanford University. He later became chief engineer for Federal.

In 1929 Mr. Scholz joined the engineering department of I. T. & T. For the next two years he was in charge of the construction of South American radio stations. Since 1931 he has been engaged in radio engineering for I. T. & T. and for Mackay. Mr. Scholz was born in Campbell, Cal. He is a vice president of the Radio Corporation of Porto Rico, a senior member of the Institute of Radio Engineers and a member of the American Institute of Electrical Engineers.



E. H. Price

Mr. Price, who is also a director, has been with Mackay since 1922 when he joined the company in San Francisco as an operator. Later he became chief operator and assistant manager there.

After that he served as district manager in San Diego, Portland and Los Angeles and commercial manager for the California unit. In 1941 he was transferred to New York as commercial manager and in 1943 he became general manager of the Marine Division. He is a native of Nebraska.



I. B. Brown

Mr. Brown, who will represent Mackay in Europe, has been with the company since 1934. Stationed in Tokyo as Mackay's Far Eastern representative in China and Japan, he was made a prisoner at the outbreak of the war with Japan. After a stay in a concentration camp he was repatriated on the Gripsholm in January, 1943. Last year he was made district manager and Washington representative. Mr. Brown is a native of California.



J. T. Chatterton

Mr. Chatterton, business manager of All America Cables and Mackay Radio, joined Mackay in Chicago in 1933 as an operator. After serving as district manager there he was transferred to the Washington office in the same capacity. In 1944 Mr. Chatterton was appointed commercial manager of Mackay Radio and in 1945 to the post he now holds. He was born in Chicago and is a member of the Illinois bar.



First Lieutenant Fred Giltzow, former sheet metal man at the Verona Avenue Plant, is the first resident of Roseland to be discharged from the service on points, his total having been 93. Lieutenant Giltzow holds the Air Medal with four oak leaf clusters, the Distinguished Flying Cross, two Bronze Stars, two Presidential citations and took part in 35 missions.

Humbert Castelli, of the stockroom at Verona Avenue, is ready to go in the Navy, if he hasn't already done so by the time this edition goes to press.

UNDER THE PALMS



Pfc. Armando Palmieri, who once worked at the Verona Avenue plant, is pictured beneath a palm at a base in the South Pacific. He has been in the infantry for three years and is a squadron leader, an expert machine gunner and holds the Expert Infantryman's Badge. He has also been awarded a War Bond for highest rating on the pistol range

Pfc. Joseph Zappulo, who was a supervisor in the grinding and stud department of Rectifier in 1942, recently enjoyed a surprise reunion with his brother at an advanced army base in the Western Pacific. They had not seen each other in nearly three years. Brother Vito, a seaman 1/c, has been in the Navy for 14 months. Staff Sergeant John Keegan, formerly of the Thomas Street

ON FOREIGN DUTY



Pfc. William Simboli, a Telephone Division plater from October, 1942, until April, 1943, is now serving in the Pacific theatre with the 72nd Chemical Mortar Battalion

Maintenance Department, and now with the 15th Air Force in Italy, has received the Air Medal and Oak Leaf Cluster. In a recent letter home Sergeant Keegan wrote that inasmuch as he expected to be in Italy for some time, he might as well be comfortable and would his family please send him several bed sheets?

Chief Warrant Officer Stanley L. Cabot, 339th Field Artillery Battalion, has received the Bronze Star Medal for distinguished service in combat action in Italy. He is a son of Harry Cabot, a guard at the 536 Broad Street plant.

Charles Diaz S 2/c, formerly of the Receiving Department at 725 Broadway, was a recent visitor there. Mail has been received at that plant from Pfc. Abe Pollack, formerly of the Cost Department, and now in France, Sergeant Joseph Testa, in the Pacific, and Cletus Loughlin, now in Idaho.

Former Wire Transmission employees now in the service include Pvt. James Simboli, serving at Camp Blanding, Fla., and Johnny DiCicco, who is undergoing Navy training at Sampson, N. Y.

Jack Ralph, now in the Army, recently visited his old co-workers at the 1000 Passaic Avenue Radio plant. Norman Lee is back at his old job as Shipping Department supervisor at that plant after serving in the Navy.

Among the returned veterans working at 320 Orange Street is Anthony Cardullo, formerly of the U. S. Army.

Petty Officer Frank Weage, whose mother, Caroline, works at Washington Street, was one of two men chosen from a group of 100 to attend a Navy technical college in California.

Johnny Popola, former FTR employee and nephew of Erma Larusso, of Intelin, recently was awarded the Purple Heart as a result of wounds received aboard the U.S.S. Franklin.

Marine Private Johnny deRiggi paid a visit to his old friends at Ogden Street recently. Johnny is enjoying a furlough after the battle of Iwo Jima.

At Intelin we learn that Theresa McEnerney's brother, Sgt. Martin B. Schreiber, is back home on furlough after two years in Europe.

Pvt. Jack Breenan, formerly of the Vacuum Tube Shipping Department, after being home on a short leave has returned to Fort Sill, Okla. He is now learning to be a code instructor in the Field Artillery.

Mike Vetrano, Navy seaman second class, visited his former associates at Verona Avenue recently.

Corporal Philip F. Zito, who was with FTR in 1942 as a maintenance man, suffered gun shot wounds in the chest, May 14 on Okinawa, and is now recovering in a naval hospital in Hawaii. He enlisted in the Marines on July 22, 1942.

Bill Dooley, former chemist with Intelin, was with a chemical warfare outfit in Germany. He was recently married to Elaine Lovelace as a result of a romance beginning when he was stationed in England.

The engagement of Margaret Blanche Dedinsky, of Wallington, to Sgt. Gottfried Ziegler, of Clifton, has been announced. Sgt. Ziegler, a former welder at the Verona Avenue plant, has been in the service two years and wears two battle stars for the Ruhr and Rhine campaigns.

James M. Kurtz, S 2/c USNR, who worked at the Vacuum Tube plant last year before entering the service, celebrated his eighteenth birthday on August 2 at Newport, R. I., where he was stationed.

Two former workers, now in the services, were recent visitors at Mount Pleasant Avenue. They were Pvt. John Oord, on furlough from Fort Knox, Kentucky, where

he completed his basic training, and Mary L. Galbraith, yeoman first class, on leave from Washington.

T-4 Harold Dittenhoefer, formerly in R-1 Laboratory, returned for a visit recently, and received congratulations from the gang for his Bronze Star. In the army for two and a half years, "Dit" has seen service in Sicily, Italy, France, and Germany, and wears four stars on his ETO ribbon. His last assignment was doing radio maintenance work with a field artillery unit. At present he is undergoing treatment at Halloran Hospital.

Sgt. Frank Malett came in on the Queen Mary after more than two years in the service. For the past thirteen months he was stationed in Iceland. Frank used to be a draftsman in R-3 Laboratory.

Another sailor from an LST visited the Labs recently after a long tour of sea duty. Radarman 2/c Walter W. Weintz said hello to the R-3 gang after a year and a half in the service. Besides a lot of ocean Wally saw some of North Africa and Italy, but in his opinion the U. S. is mighty good to come home to.

HE'S IN NAVY



It is a far cry from production scheduling at the 536 Broad Street plant to a post with the Navy at Sampson, N. Y., but that was the step taken by Joseph Pellegrino, pictured here

The latest word from RT 3/c Edward R. LaBossiere, formerly employed in R-1 Laboratory, says "everything going full speed ahead." Eddie's latest address is Co. 116, Billet 203, Navy Pier, Chicago, Ill.

Service Men Aided Buddies in Battle By Working at FTR

Anxious to utilize furlough time and spare time as well, to take up the slack in manpower and aid their buddies in battle, sailors, soldiers and Marines, too, tramped into the personnel offices of FTR until recently.

Anxious, too, to aid in the rehabilitation of returned service men, the company put them to work on a part-time basis. In plants, warehouses, wherever they could be used these men were doing a full day's work.

At Ogden Street where almost a dozen of them were recently engaged in packing materials for Navy use, Paul Fantl, in charge of the department, said, "They did a good day's work. It may be that they have a better idea how badly certain things were needed and worked with that in mind."

Commenting on the employ-

Commendation for T. Sgt. Walter Dix At Southern Fort

For his efforts in consolidating details connected with scheduling and training control for five battalions to the point where this work is now accomplished by the amount of personnel formerly required for one battalion, thus relieving four men in each battalion for other work at Fort McClellan, Alabama, Technical Sergeant Walter Dix has been officially commended.

Sergeant Dix, who was a payroll supervisor for FTR before entering the service, received the commendation from Major J. B. Colegrove, his commanding officer. There was a further endorsement from Colonel Fred G. Clark, commanding the Seventh Training Regiment, IRTC.

In his commendation Major Colgrove wrote that "It is my belief that the success of your work and effort has contributed greatly toward attainment of the Regiment's goal, i.e., 'to give the trainee the best possible training and send him out adequately equipped to become a valuable member of the combat line.'"

Colonel Clark stated that he had "noted with pleasure the commendation and wish to add my congratulations for the work you are doing. This type of devotion to duty is in keeping with the high standards of training set by this Center."

Thracey Petrides, Radar Technician 2/c, was in the Labs the other day on military leave after twelve months' active duty on an LST overseas. Prior to entering the service Thracey worked in the R-1 Laboratory.

Corp. Donald Ruff, USMCR, writes from the South Pacific Theatre and says, "I still think it is very beautiful out here, but even beauty can get boring. I miss the skyscrapers and the subways. Oh, yes, and the girls, too."

Marine Private Al DeCarlo, formerly in the stockroom of the R-5 Model Shop, dropped in to say hello to the gang while on furlough after completing four weeks' training at Camp Le Jeune, N. C.

Chief Radio Technician Ed H. Enos, R-3 old timer, visited the Laboratories recently after a long absence. Ed is a veteran of nine engagements in the Pacific Theatre of Operations, and is attached to an amphibious assault cargo ship.

FROM MISSOURI



This picture of Pvt. John Esposito was made at Fort Slamond, Mo., but at the time he did not know how long he would be located there. Pvt. Esposito was formerly employed in Wire Transmission

Marine Pvt. Nixon Killed at Okinawa

Word has been received of the death at Okinawa on May 4 of Marine Pvt. William J. Nixon, Jr., who had been employed as a wireman in the Direction Finder laboratories, 1226 South Broad Street, from September 6, 1943, until February 12, 1944.

Pvt. Nixon enlisted in the Marines on March 17, 1944, and trained at Paris Island. In January of this year he went overseas. He was a son of Mr. and Mrs. Tony Nixon, of Linden, and was a graduate of Linden High School.

Girls Provide Gifts for Camp Upton Soldiers

Girls of the International Standard Electric and I. T. & T., members of the Broad Upton Club who have made regularly scheduled visits to Camp Upton, have provided two public address systems, a radio phonograph and a voice recorder for use of the soldiers there. They gave sweets and cigarettes also.

BUY WAR BONDS



Uncle Sam's soldiers worked for the Navy in FTR packing divisions. Shown here are several soldiers who used their spare time packaging material for Navy use at Ogden St. They are: (l. to r.) Cpl. Henry Barge, Pfc. Carl Houtz, Sgt. Harold Robinson, S/Sgt. Thomas Turner, T/Sgt. Joseph Guogen and T/5 Frank Steele

ment of servicemen, J. A. Abbott, Personnel manager, said that, "It has been our policy, whenever the occasion arose, to give work on a part-time basis to service-

men, particularly returned veterans." He pointed out, however, that such help was used infrequently during the war period.

PROFILES



William N. Boyd

Mr. Boyd of R-5 Laboratory was born in Paisley, Scotland and went to the College of Science and Arts in Glasgow, which is a college comparable to Massachusetts Institute of Technology, Boston.

Upon his arrival in the United States in 1907, he joined the J. G. White Company for whom he worked as a field engineer until 1910.

He then left that organization and went to the Panama Canal Culebra Division for three and a half years as assistant to James McDonald, who was chief engineer of all construction in the Culebra Division. Upon his return to New York, he became associated with Hoggson Brothers as general superintendent of all construction west of Chicago. This position was short lived since he was drafted into the Shipping Board during the first World War and was appointed assistant manager of the Sparrows Point Shipbuilding Yard, Baltimore. In 1920, Mr. Boyd joined Marc Eidlitz & Sons, builders, for whom he supervised all construction on such buildings as Rockefeller Institute, New York Hospital and Laboratory Buildings, Columbia Presbyterian Hospital, New York Hospital, Rockefeller Riverside Church and others.

Mr. Boyd operated his own construction company for nine years before he came with Federal in July, 1944.

Construction work is not only Mr. Boyd's profession, but also his hobby. He built his own home in Irvington on the Hudson, New York, and also has quite a collection of model yachts which he built.

He is a keen golf enthusiast, "wields a wicked club," and as he jokingly confessed "is still good."

Though Mr. Boyd is a comparatively new member of the Laboratories, he is very well known not only for his many capabilities "on the job," but for his gracious manner and sly "SKAWTCH" burr.

Marilyn Stier, engineer's assistant, junior engineer, was born in Evanston, Ill. She, with her family, moved from state to state until she was 12 years old at which time the family located in Ridgewood, N. J., where she was graduated from Ridgewood High School.



Marilyn Stier

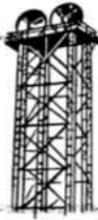
Marilyn then attended Wellesley College as a mathematics major and graduated in May, 1944. While there, she received honors in her major for which she was elected to Sigma Xi. During her Junior and Senior years she was treasurer of her class, and is now class alumni treasurer.

Marilyn's favorite hobby is music. She claims it is a "listener's hobby", and has quite a collection of records which grows with every pay check. She is also a swimming and horseback riding enthusiast.

She joined Federal in July, 1944, and is enthusiastic about laboratory work. At present she is working on a high frequency development project but is also interested in ultra-high frequency research. Marilyn started in Mr. Lehmann's group, which group she changed from "bachelor's quarters" to "co-ed."

"Maral" is especially popular with her fellow-workers because of her technical ability and her cheerful and sunny disposition.

RESEARCH



Laboratories

Tower at Nutley Serves as Link Between New York by Radio

A tower, 212 feet high, on the FTR property at Nutley is part of a radio link between Telegraph Hill, N. J., the I. T. & T. Building in New York and Nutley. Its height is necessary in order to obtain a line of sight between these points. It is one of the highest of its kind ever built.

In plan, the tower is triangular in shape, tapering upward from 39½ feet at the bottom, to 16 feet at the top. At each point of support of the triangle is a concrete foundation 12 feet square and 12½ feet in depth. Except for bolts and certain steel gusset plates, the entire structure is of pre-fabricated timber. It is entirely free standing and does not have any guys or cables. As expected, there is a small amount of sway at the top; this however, its negligible, as far as working comfort and the sensitivity of the electrical instruments is concerned.

At the 200 foot point, there has been erected an operating enclosure 12 feet high, hexagonal in plan view, and having an area of 90 square feet. Around the perimeter of this house is an observation and working balcony, and the roof also is designed for placement of experimental equipment. Parabolic antennae have been erected on the sides of this enclosure, facing Telegraph Hill and New York.

Because of its height, the structure is painted in identifying colors of international orange and white, to conform to Civil Aeronautics Authority requirements. For identification at night, a flashing code beacon and other obstruction markers are placed at the top and on the edges of the tower for air craft visibility. The structure and all of its apparatus are protected by lightning rods properly grounded.

The present method of reaching the operating enclosure is by a



This tall tower at Nutley, part of a radio link between Nutley, Telegraph Hill and the I. T. & T. Building in New York, is triangular in shape. Except for bolts and steel gusset plates, the structure is of pre-fabricated timber

ladder running along one corner of the triangle. As a future method of access, a lift is planned which will be guided by a square tower within the present structure and will facilitate moving men and materials to the operating area.

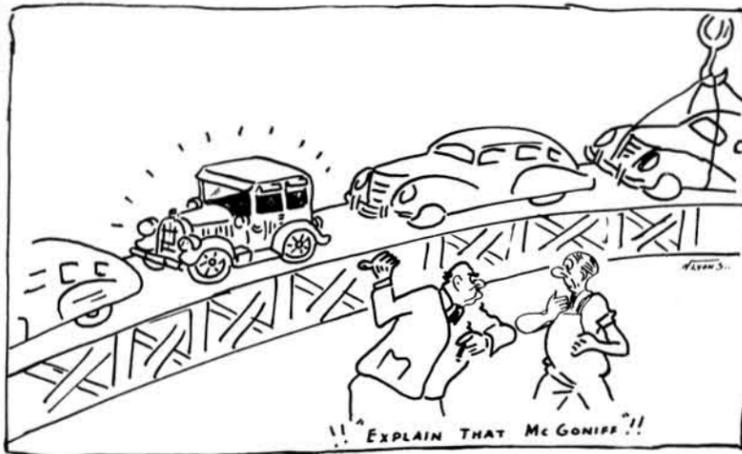
Considerable preliminary engineering was performed by the R-3 Laboratory in connection with their requirements. In the fall of 1944, the Plant Engineering Department of R-5, was formed under the direction of J. K. Whittaker. This group supervised the coordination of the various contractors selected to perform the work. Carpenters

and steel workers performed the fabrication work followed by the pouring of cement into the foundation. The erection at the site required carpenters and riggers for the proper positioning of the structure. Painters put a finishing coat on the members in the colors required for identification and also as a protective measure. In order to safeguard the various tools and machinery used, and also to prevent strangers from entering the tower area, a wire fence was built around the base.

The success of this project is due in a large measure to the cooperation of the R-3 and R-5 Laboratories.

LAB ECHOES

PRODUCTION LINE HANGOVER



are obtainable in the Library. The Lab candy and cigar contributions are well supported by: Seymour Wassing of R-7, a baby girl named Wendy, born June 26. Jimmy Lyons of R-9 for his second

son, George Philip, born May 9. Walter Velitchko of R-9 in honor of his daughter, Christina, born July 8. Frank Sokoloff of R-6 a baby boy, named Roger, born August 29. Bill Zahm of R-12 for his second daughter, Carole, born August 21.

Atomic Bomb News Arouses Interest Of Lab Workers

(Editor's Note: The following brief summary is published because of the great amount of interest that has been aroused concerning the atomic bomb.)

In the fall of 1939, President Roosevelt appointed an informal "Advisory Committee on Uranium." In October 1941, he wrote to Winston Churchill offering a plan whereby British physicists would work with those in the United States already engaged in nuclear research. This plan was accepted.

Scores of physicists, chemists and mathematicians were recruited from universities and industrial laboratories here and in Great Britain. They worked under the most dramatic circumstances and in the greatest secrecy.

The results of their researches first became known to the world on August 6, when the atomic bomb was dropped on Hiroshima. On August 14 at 7 p.m. President Truman announced at a press conference that the Japanese had surrendered unconditionally.

The atomic bomb ended the war but it also created a new world problem. The layman public are still very much overwhelmed by this new discovery.

Much has been written about the "Atomic Age" in newspapers and technical journals since that famous date, August 6. Listed below are three of the most concise and informative sources for those wishing to know more about it.

"Time," August 20, 1945, page 29-36.

"Science for Life or Death," a full page article by Brig. Gen. Sernoff in the N. Y. Times for August 10, 1945.

"Chemical & Engineering News," August 10, 1945, pp. 1401-1408.

Technical Works Given to Library

George Lewis, assistant vice president of I. T. & T., recently presented the Laboratories' Library with a collection of over 100 books dealing with mathematics, radio and electrical engineering.

Among them were some valuable out of print volumes such as Maxwell's "Electricity and Magnetism" and Genneck's "Elektromagnetische Schwingungen Drahtlose Telegraphie."

This interest and generosity is greatly appreciated and in this and all similar cases book plates will be designed, which will bear the name of the donor, to be placed inside the book.

Softball Team Wins Two by Close Margins

Nosing out its opponents in two close games, the FTR Laboratories softball team won its first two games of the season recently. Guaranty Trust bowed to the Lab gang by a score of 9 to 8, while I.S.E.C. went down by a score of 7 to 6. The I.S.E.C. game evened the inter-system series at one all.

At the recent picnic at Nutley the Laboratories team lost, 3-0, to the league-leading FTR team, Doscher's Reamers. So far this season the Lab team has won two and lost three of its games for a .400 standing.

BUY WAR BONDS