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Highlights in Radio Broadcasting

# THE BROADCAST ENGINEERS' JOURNAL



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#### THE BROADCAST ENGINEERS' JOURNAL

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Broadcast Engineers'

Journal for May, 1943

### N.A.B.E.T. President Jim Brown Visits Cleveland

**P**RESIDENT JIM BROWN stopped over a few hours hours in Cleveland on his way to New York. Harold Brandt, Cleveland's dapper Chapter Chairman, took care of things in great style.

A meeting was held in Parlour "F" at the Hollenden Hotel. General discussions took place from 2 till 6 P. M. President Brown gave us the low-down on the future outlook of things as he sees it. Heckling was held to a minimum and the Cleveland Chapter made NABET history by agreeing 100% or less on all issues . . . including the weather. We thought the heat (weather) was throwing a right hook at the Chapter's chin, 81 degrees, but we cooled off considerably when California Brown demanded an overcoat. Ah well, what good native Californian wouldn't gladly give his life for the dear old state of Gold Rush fame?

The most interesting part of the proceedings, to my way of thinking, began at 6:30 P. M. when steak-starved NABET members started carving \$3.50 porterhouses . . . or were they sirloins? Expert carving was done in the stylish Flemish room. How Harold Brandt managed to have steak served is a mystery that kept most of us awake throughout the night of May 6. Or could it have been the secret weapon that came from an odd looking vat labled "Vat 69"? Most of us hadn't seen a steak for months, therefore we would naturally like to see genial Jim stop in Cleveland on his way back to Hollywood. We took pictures of the steak . . .



(Left to right): S. E. Leonard, Division Engineer; NABET's President, Jim Brown, and C. C. Russell, Station Engineer. Note to the skeptical — This picture was taken after our secret meeting behind doors guarded by George Washington Abraham Lincoln Bolivar Jones.

-

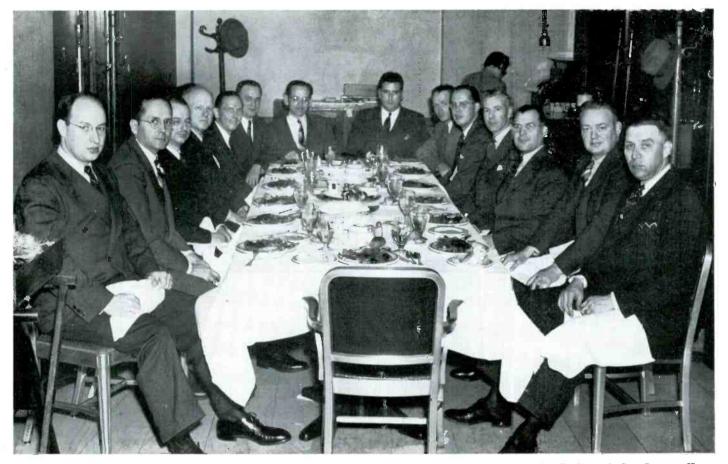
President Jim Brown tells Bert Pruitt what he thinks of Pruitt's dogerel. Pruitt isn't telling you what Brown told him.



(Seated, left to right): Harold Brandt, Jim Brown, Frank Whittam, John Hyatt, (Standing, left to right): Harry Caskey, Jerry Jerome, Hugh Walker, Charley Ames, Bert Pruitt, W. C. Pruitt and Fred Everett.



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STEAK! (Left to right): Frank Whittam, Bert Pruitt, Fred Everett, Hugh Walker, John Disbrow, C. C. Russell, Jim Brown, Harry Caskey, W. C. Pruitt, John Hyatt, Charley Ames, S. C. Leonard, Jerry Jerome and Harold Brandt. (Note: Mr. Brown went down to the other end of the table for the picture. That's his steak nearest you.)

We're going to pay for the party by putting the pictures on exhibit in the NBC building.

Harold called me when he was informed Mr. Brown intended stopping in Cleveland. Harold wanted to know if I had any ideas as to doing things up proper for NABET's Bigwig. "Well," says I, "we might hire a rickshaw and meet him at the Union station . . . We could dress in Oriental splendor . . . That ought to wow him!" Harold seemed a little skeptical when he asked if I could get the rickshaw.

I told him I'd try. I did, but without success. It's like this. Chug Chung out on St. Clair Avenue had two or three old rickshaws but he couldn't furnish a coolie due to the shortage of labor. I told Chug Chung I'd pull the rickshaw myself. He thought this over for a moment, then asked me if I had my union card. I told him I wouldn't think of being caught without it. "Fine," says he. "Let's see it." After one glance he advised me that my NABET card would not hold water in the Ancient and Honorable Society of the Rickshaw Coolies Union of Whung Tung Choo, China.

Initiation fees prevented me from joining the union so I called Harold and explained my failure. "It's just as well you didn't get the rickshaw," said Chairman Brandt .... "You complain if you have to carry an ND-10 across the street to the Hollenden . . . I hate to think of what you'd say if



(Left to right): Harold Brandt, Jim Brown and Frank Whittam

you had to haul Brown from the Union station to the NBC building!"

Harold met NABET's potentate at the train and brought him over to the NBC Building via hoof. He believes he (Continued on Page Four)

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Broadcast Engineers' 4

#### President Brown

(Continued from Page Three)

thoroughly impressed His Highness with the financial stability of the Cleveland Chapter. I reminded him that shoes are rationed . . . He countered by saying genial Jim was wearing new shoes, "and furthermore," said he, "a mere studio engineer shouldn't try to take too much responsibility on shoulders that already have a curve like a Mohawk's bent

bow." This outspoken remark pierced me like the dart from an African blow gun. I made it plain to Brandt that I absolutely refused to give him another word of publicity. Then what happened? We had an election of officers, and although it pains me to have to retract the above statement, I must, in all fairness, advise you that Brandt was reelected Chairman of the Cleveland Chapter. The vote was unanimous so you know how I feel about it. Frank Whittam rode the wave of popularity to the beach of re-election. "What the heck," questions Frank



Persistent rumors were heard to the effect that a Kilowatt spy had been seen crossing the street, at C. 6th and Superior, heading toward the Hollenden Hotel. We decided to play safe by placing a guard at the entrance to Parlour "F". Possibilities of intended Fifth Column work were thereby held to a minimum. We called our bodyguard "George Washington Abraham Lincoln Bolivar Jones". We aren't sure what he called us.

.... "is the job of Sec. Treas. a lifetime proposition in this Chapter?" "You won't have to worry about old age, if that's true," countered a wisecracking Victory Gardener from the transmitter.

#### SHURE BROTHERS AWARDED ARMY-NAVY "E"

The men and women of Shure Brothers, Chicago, were awarded the Army-Navy "E" for high achievement in the production of war materials. The "E" Burgee was presented to Mr. S. N. Shure, general manager of Shure Brothers, by Lt. Col. Nathan Boruszak. The presentation was made at Thorne Hall, Northwestern University. Other Army and Navy men and women on the rostrum were: Lt. Col. John M. Niehaus, Lt. Comdr. George C. Norwood, Lt. Comdr. T. M. Brautigam, Major Eldon A. Koerner, Lt. Robert D. Morgan, Lt. Barbara Rode, Ensign Miriam Fullbright, S. I. Neiman. Presentation of the "E" Pin was made by Lt. Comdr. George C. Norwood. Acceptance of the "E" Pin was made by Marion De Block, Shure employee. Master of ceremonies was Jack Berman, Shure sales manager. Over 800 Shure workers and guests filled Thorne Hall to overflowing and participated in the presentation. It was the first "E" awarded to an exclusive microphone manufacturer.

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### Highlights in American Broadcasting

KDKA gets credit for being the first station to broadcast regularly scheduled programs in the United States. In 1909 Lee DeForest had his electricians hook a gadget, with a vibrating diaphragm, to telephone wires. The other end of the telephone circuit terminated in a laboratory near the Harlem River. Lee De-Forest sent the wired program, Enrico Caruso singing from the stage of the Metropolitan Opera House, into space with his spark-transmitting set. Fan mail was born. Two hundred radio operators. on ships at sea, wrote letters to DeForest telling of the thrill they received when Caruso's voice came through their headphones. That went down in history as the first broadcast. Seven years later, in 1916, Guglielmo Marconi stood on a hillside in Italy sending his voice through space to a nearby hill. Radio Broadcasting was in the making.

By 1920 the sales of radio equipment totalled \$2,000,000. The sales increased to \$60,000,000 in 1922, doubled the '22 sales in '23 and predictions were made that \$350,000,000 would be a conservative estimate for the '24 sales.

The roofs of apartment buildings began to sprout poles like quills on a porcupine's back. Antennas appeared on the farms. Kerosene lamps smoked, headphones howled and the listeners laughed with delight.

Cuckoo clocks, chimes, metronome ticks, crowing roosters and whatnot became the station identification. Production men hadn't been heard of, dress rehearsals weren't necessary, carbon mikes hissed and pioneering engineers O. B. Hanson, Carl Dreher and Peirre Boucheron said, "Isn't the quality wonderful?" Weekly pay checks indicated that "The Honor of the System" was paramount. Five day weeks were years in the offing and the announcers pleaded for fan mail ... and got it.

The first Popularity Poll had been taken in 1922. During this year WHN broadcast the third remote control program. George McClelland of WEAF leased wires to link WEAF with stations in Boston, Philadelphia, and Washington. WJZ answered by leasing Postal Telegraph wires joining six cities including Chicago! Network broadcasting had begun.

Bigtime programs such as the "Eveready Hour," Lucky Strike and the A & P hours were beginning to replace the chatter of previous years. Vaughn de

#### By Bert Pruitt

Leith became the popular New York original radio girl. Jones and Hare, The Record Boys, Vincent Lopez, Harry Reser, Frank Black, Nat Shilkret and Harry Horlick were a few of the many cashing in on the ether waves.

In 1912, the Titanic struck an iceburg in the Atlantic. This tragedy occurred on the Titanic's maiden voyage. The radio operator on the Carpathia received the Titanic's SOS. The Carpathia sped to rescue the Titanic's two hundred survivors. At a wireless station in New York City, radio operator David Sarnoff remained at his post forty-eight hours without relief, maintaining the city's only contact with the rescue ship. David Sarnoff was later to become the President of the Radio Corporation of America.

The first championship prize fight to go on the air via the microphone was the Jack Dempsey-Georges Carpentier fight. This fight was aired by Major Andrew J. White and the listeners responded favorably.

One "first" in Radio Broadcasting that didn't have such a happy ending was the first football broadcast. A Pittsburgh sophomore did the announcing for KDKA. It seems that the mikeman had a good sized bet on the home eleven. Pitt was trailing by one point with seconds to go. Pitt had inches to go for the winning touchdown. The players huddled. The sophomore-mikeman talked a blue streak. The players took their positions . . . the play began and the Pitt star fumbled! "Ooooh!", screamed the mikeman, "The \*\*\*\*\* bonehead fumbled!" Rumor has it that the mikeman dropped his microphone and disappeared forever, at least as far as Pitt and KDKA were concerned!

This unhappy sophomore should have heard Uncle Whip tell the kiddies a good-night story over a Philadelphia station. Uncle Whip finished with a dainty little fairy tale one evening and poked a button that was supposed to disconnect the mike. Uncle Whip's surprising statement proved that the mike didn't disconnect. "I'm a ..... if this isn't a hell of a job for a he-man!", commented the story teller.

Another classic is told about an announcer and engineer assigned to a remote pickup. They were using two mikes, one for the orchestra and a table



NBC Pioneers in Student Engineer Training Course — January, 1929. (Left to right): Student Engineers F. A. Wankel, now NBC Eastern Division Engineer; G. M. Hastings, now member of NBC Audio Facilities Group, and F. R. Rojas, now NBC Control Engineer. (Extreme right): Ex-NBC Development Engineer R. M. Morris, now Chief Civilian Aide to the Chief Signal Officer, U. S. Army.

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mike for the announcer. The announcer cut in his mike, announced a tune, turned a switch that was supposed to cut off his mike, or perhaps he didn't turn the switch. Well, anyway, he resumed his argument with the engineer. He insisted that blonds were far more interesting than the cuties with dark hair. He backed up this theory with some first hand knowledge! The engineer went him one better, using the dark haired one as the basis of a theory obtained from living a practical life. This spicy discussion went on the air with a musical background. Fan mail reached unheardof proportions when truck after truck backed up to the station and emptied mail. Legend has it that one Senator became so indignant he took pen and paper and told them what he thought. "Haven't these men," began the Senator, "ever been out with a redhead?"

By 1923 the United States had 1,000 licensed stations operating in the 360meter band. Today, with many new bands in use, there are less than 900 licensed stations in operation. Imagine the confusion taking place in the 360meter band a decade ago. Lovers of classical music had to listen to their favorite program with "She'll Be Comin' Round the Mountain" competing with the classical. And vice versa. The FCC put a stop to that in the early 30's, but not before Col. Henderson sold coffee for a dollar a pound to foot the bill of telling one and all what he thought of Chain Stores. The FCC likewise clipped the ether-wings of Dr. Brinkley, the Goat-Gland-Wonder from Milford, Kansas. The good doctor originally opened a station at Milford, Kansas. Pressure from the American Medical Profession, and people who didn't need goat glands, became embarrassing, so he built a 100,000watt transmitter at Villa Acuna, Mexico. This is just across the Rio Grande from Del Rio, Texas. The price of goats hit a new high. Dr. Brinkley thrilled thousands with his promise of rejuvenating anything but a mummy. It is said that the good doctor had a wonderful sense of humor. He took great pride in telling his listeners about his early experiments. According to him, his first operation was too successful. Rejuvenation worked, but the doctor's sense of smell told him that the goat gland operation had given the patient the well known characteristic of a goat! He improved his method of operating, or changed goats, and that was the end of his troubles of goat nature. It wasn't necessary for him to worry about his sense of smell after the FCC went to work on him. On March 29, 1941, the

radio stations in the Western Hemisphere shifted frequency in a wholesale manner. Of the 833 stations in the U. S., 755 had to inform their listeners to retune their sets. Mexico's ratification of the Treaty of Havana, signed in 1937 by Cuba, Canada and the United States made the mass frequency shift necessary. This shift sounded the death knell to all outlaw stations such as the one operated by John Brinkley.

Graham McNamee announced his first World Series in 1925. The New York Giants and the Washington Senators were playing for the World's Championship of Swat. Walter Johnston, the colorful pitcher, played in the series. Public interest reached a new high in baseball.

Two years later the Popularity Poll for Announcers placed the leading ten mikemen as follows: (1) Milton J. Cross, WJZ. (2) Lewis Reid, WPCH. (3) Norman Brokenshire, WPCH. (4) Ralph Wentworth, WEAF. (5) Major Andrew J. White, WJZ. (6) Phillips Carlin, WEAF. (7) Ted Husing, WJZ. (8) Colin Hager, WGY. (9) Graham McNamee and (10) John B. Daniel, WRC.

In 1928 the German war aces, Koehl and Baron Huenfeld, flew across the Atlantic and lost themselves in Newfoundland. Floyd Bennet, world war ace, gave his life in the search for the German fliers. On October 11, 1928, the Graf Zeppelin made her first trip to the United States.

On April 21, 1930, the Columbia Broadcasting System scooped the nation with a broadcast describing the horrors of the fire at the Ohio State Penitentiary.

The Newspaper interests began open warfare with the Broadcasters shortly after the Columbus broadcast. Newspapers had published many glowing words in favor of the innocent looking infant, Radio Broadcast. When this infant donned long pants the glowingwords faded like the light in a burnt out electric light bulb. The radio stations were scooping the Newspapers in news reporting and offering competition in the field of Free Enterprise. Everything ended happily when the United Press and INS renewed service to the radio stations. "Consult your Daily Newspaper for Further Details" is a present day reminder of disagreements in the past!

Quality improved along with improvement in equipment. Quality in the studio was considerably improved when radio went commercial. During the first years of broadcasting the talent offered their services free. As more and more stations took to the air the talent problem became acute. The listeners demanded higher class programs, and got them. Nineteen twenty-nine surveys show that there were 9,000,000 radio sets in the American homes at the turn of the year. Sales of radio time climbed yearly. A.C. sets were replacing the battery operated ones. International broadcasts were beginning to be taken as a matter of fact. Radio stars such as Kate Smith, Jessica Dragonette, Amos & Andy, and Stoopnagle and Budd were the talk of the nation. Paul Whiteman made his radio debut in 1929, and Bing Crosby was an unknown member of the Whiteman quartette. Sound pictures were going through the adolescence stage and many good neighbors argued the merits of their Victor, Atwater-Kent, Brunswick or whatever make of set they dialed.

President Roosevelt spoke to the Nation regarding the Bank Holiday in March, 1933. This speech set a new high for listening audience. Radio had gone a long way since DeForest's experimental broadcast from the stage of the Metropolitan Opera House in 1909.

Competition became a prime factor as radio became more commercialized. The leading networks did everything within their power to scoop their rivals. If you were scooped it was because the other fellow was a villian. When you scooped him it was due to superior ability and ingenuity!

During May, 1935, the Town Hall program, originating in New York's Town Hall, went on the air. The first program drew 3,000 fan letters. The fad of tuning for distance had given way to tuning for quality back in 1930. Milton J. Cross had been awarded the American Academy of Arts and Letters award as the finest announcer in radio. Jack Pearl, better known as Baron Munchausen, skyrocketed to fame on the Lucky Strike Hour. Ed Wynn, Eddy Cantor, George Jessel and others were soon mentioned in every crossroads town from Maine to California. W. H. Hickey of WTIC was going strong with his quiz program Ask Me Another" that went on the air in 1928. Madam Schuman-Heink, Floyd Gibbons, Will Rogers and Joe Penner flashed into the Ether Sky to Radio Stardom. The University of Chicago's Round Table, radio's oldest forum, was going strong. This forum began in 1931 over NBC's Chicago station WMAQ. Joseph Pasternack dropped dead in a Chicago studio during a Carnation Contented Hour rehearsal.

In 1936 the National Broadcasting Company celebrated its Tenth Anniversary by staging a four-cornered radio conversation across the world. Robert Jardelier, French Minister of Communications, accompanied by Fred Bate, NBC's British representative, spoke from an American Air Liner flying between Buffalo and Washington. Max Jordon, NBC's European representative, made part of the broadcast. David Sarnoff, President of the Radio Corporation of America, spoke in behalf of the American listeners. They conversed with Guglielmo Marconi stationed on his yacht near Genoa, Italy. Quite a change since the year 1916 when Marconi startled the world by hurling his voice from one hillside to another in Italy.

The three weeks following September 12, 1938, were without doubt the most exciting days radio had experienced since KDKA first went on the air in November, 1920. On September 12, Adolf Hitler told the world of his latest demands upon Czechoslovakia. Hitler warned the world that the German war machine was ready to roll. During these three weeks, that led to the Peace of Munich, NBC, CBS and MBS carried more than 1,000 broadcasts pertaining to the world crisis. Approximately 100 hours, at a cost of \$90,000 were devoted to furnishing the American listeners the latest news. Refunds during this period are estimated to be approximately \$1,500,000.

If you have not been using or have not yet tried Allied's New Glass Base Discs, a trial will convince you of their merits and superior quality — at no premium in the cost to you. We invite you to try this disc — that is how we obtain new customers. We feel certain that you will Sunday evening, October 30, 1938, two weeks after the Peace of Munich, Orson Welles sent his program "The War of the Worlds" over the CBS network. Men from Mars floated to the Earth via his mythical invasion, and the result is history. Psychologists say the panic that followed resulted from the Nation's jittery nerves caused by the world crisis. Orson Welles soared to fame, regardless of the cause.

In August, 1939, another crisis arose over Danzig and the Polish Corridor. The German War Machine began rolling and the Broadcasters kept the U.S. well advised as to the latest trend of the war. Mayor Stefan Starzinski of Warsaw defied the Nazis and their dive bombers. The Warsaw station was bombed off the air repeatedly, but Warsaw's fearless mayor continued to defy the invaders until the last. It is reported that Mayor Starzinski became a victim of the Nazi firing squad. Lord Haw Haw, (William Joice), the American born English Educated Irishman, heckled the English from a Berlin radio station. Today the English are going strong and Lord Haw Haw the heckler has faded like a shooting star.

On a quiet December Sunday afternoon the radio audience of the United States was stunned when the regular programs were interrupted with the flash that the Japanese had bombed Pearl Harbor. Confusion rode the air waves. Listeners got the jitters. Confusion soon became a thing of the past when properly supervised news reporting became the order of the day. Listeners of the U. S. soon became the best informed people in the world.

After December 7, 1941, the Broadcasters swung their unlimited facilities into the fight to defeat the Axis. Pickups from all over the world became an everyday occurrence, Presidential speeches reached millions of people. Through the medium of radio the White House could reach the American millions within a matter of seconds. Compare this to the Presidential election of 1920 when reports of the election were being phoned to New York and sent out over onlyone station!

Radio's leading stars began staging their programs at Service Training Centers. Short waves sent the programs to our fighting forces stationed on land and at sea. Twenty-five years, to the day, after our entrance into the First World War, NBC aired the first "Army Hour" program.

It is no surprise that Secretary of War Henry L. Stimson has proclaimed radio a "Weapon of War!"



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Broadcast Engineers' 7 Journal for May, 1943

### Notes From the Nation's Station WLW-WSAI-WLWO

#### By Bob Brockway

WHAT does a radio man do in his time off? This is an oft-repeated question and the answer isn't always amateur radio-at least, not these days. In any station there would probably be as many answers as there are men to the question "What is your hobby?" It would be impossible to talk about all of our hobbies in one article, so we'll take a few at a time and over a period of several issues cover the entire Crosley staff of engineers and perhaps, from time to time, we may unearth some very unusual hobbies. Stamp-collecting is probably considered the world's most widely-practiced hobby and we have an expert right in our midst. Our philatelist is Russ Hoff, Master Control Engineer. Russ has an enormous collection of stamps and he is continually adding to it, and he would be glad to correspond with other readers of the Broadcast Engineers' Journal who are fellow philatelists. We will gladly endorse Russ as an honest man and he will make a fair deal with anyone who sends him stamps. Like all true devotees of philately (I just had to get in that last combination of words-it sounds so purty. Ed.) Russ spends countless hours rummaging through waste-paper baskets, so if any of you readers have any old waste-paper baskets worth rummaging through, I'm sure Russell will be tickled pink to grouse through them. Two of our brethren who are fliers and active in the Civil Air Patrol are Studio Engineers Phil Underwood and Louis Barnett. Phil has been flying for several years and Barnett has recently completed his "ground school" courses pertinent to aviation. Barney hasn't soloed yet but he has quite a number of hours-in-theair in his log book. Naturally, Underwood and Barnett are championing for travel-by-air, but they are always being heckled by William "Casey Jones" Aughenbaugh, who pooh-poohs their method of locomotion and insists that the railroads are possibly here to stay. This column cannot find enough words to praise Aughenbaugh's hobby of railroadin' because the writer prefers the snort of a Baldwin Pacific to the clatter of a Remington Portable. Aughie has an impressive collection of photographs and negatives of railroads and equip-

ment, while yours truly has an unimpressive collection of employees' timetables. We are both avid swappers, so railfans, please write.

Johnny Brill's hobby is the new daughter who recently arrived at their house. Our congratulations to Mr. and Mrs. B. and apologies for not publishing the news sooner, but for the last few months the stork has been working overtime on the Crosley Square route.

Randolph Baer has fully recovered from a recent attack of too-many-telephonesitis that took ten years off his life the other night. Randy was holding down the seat of the mighty in master control when he had two consecutive long-distance go-aheads to give. The eleven o'clock news show was a partial origination from Washington, D. C., and the following show was from upstate Ohio. Baer had Washington on one phone and the Ohio point on the other. He had just given cues to the Ohio pickup and still had the Washington line open for one last GA, so heyou guessed it-hung up the wrong phone on the wrong hook and picked up the remaining instrument to talk to Washington which was the wrong phone off the wrong hook and he darn near fainted when he discovered his plight. His little ticker just about stopped ticking as he simultaneously grabbed up all the phones in the place and muttered a little prayer for salvation to the kind Providence who watches over us radio men. The Journal correspondent is pleased to report that the Washington connection was still established and after we had revived our hero, his normal color returned, albeit he was a bit shaky after the incident.

We were happy to greet two members of the engineering staff who are on leave while serving in the fighting forces, and who were recent visitors to the studios: Corporal Bob Kleiber of the Signal Corps and Private Charley Guffin of the Air Force Communications.

Another Crosley Square mystery has been solved—The Mystery of the Poetic Doodles. Our operatives have been reporting the discovery of mysterious

words scrawled on the master-control schedules, calendars, log sheets, and other scraps of paper. We thought that maybe it was some secret code connected with the Captain Midnight show or some similar program. There would be a list of words like "June, moon, spoon, honeymoon" or "beak, bleak, peak, cheek, squeak" and even, "lyre, mire, pyre, fire, desire." But now, the secret's out-while we weren't looking, our own Donald R. Neil, the Bard of Mill Creek, has placed high in the running in a poetry contest. To say it was a poetry contest would be a slight misstatement of fact because it was a contest for any type of literature, however unenduring it may be. Our Donald contributed a bit of verse as his bid to fame.

The contest, sponsored by the Mu Delta Epsilon, was open to undergraduate students of the University of Cincinnati. At present writing it is hard to estimate how many thousands of undergraduates entered the contest, but we do know that the Crosley Square Philosopher will have his entry in the forthcoming national contest. Not satisfied with winning his mark in the contest, "NX" has been penning little limericks about the members of the staff, all very clever, although of dubious flattery. Modesty, no doubt, has prevented Neil from writing one about himself; so we've written one about the Elm Street Tennyson. It may not win any national contests, but it ought to give the boys a run for their money in Section 30, Township 3, Fractional Range 2, of the Miami Purchase, in Millcreek Township; it goes thus:

An enterprising young poet is Neil, Who pens little verses with zeal; What gives us a shock Is his rhyme about Brock; It's really not very genteel.

Speaking of mysteries, detectives, etc., here is a story, that although it doesn't concern a member of the engineering force, it is a good yarn and proves that there is still some romance in the world. Our heroine of this little piece of sleuthing is Sally Thompson, night telephone operator at Crosley Square. This story appeared recently in the local papers, but Broadcast Engineers' Journal can

Broadcast Engineers' **8** Journal for May, 1943

still claim a "scoop," because the facts in the newspaper story were all mixed up, and the Broadcast Engineers' Journal reporter got the true facts from Sally, who, by the way, enjoys reading the Journal. The story begins (and ends) on the night of March 12.

One of the Crosley employees answered a knock on his door, and there stood an Air Force Cadet. Guess what he was looking for. Give up? A GIRLnot just A girl, but a particular one named Alice Jones, to whom he was engaged. It seems that Alice formerly lived in the same building, but had moved, and the Cadet was looking for her as he had arrived unexpectedly in Cincinnati and had a two-hour layover between trains and-well, you guys know how young love is-you want to see each other, and hold hands, and all that sort of stuff. Our Crosley man, one Dave Partridge, called the large manufacturing plant where Miss Jones is employed for her new address, but the personnel office was closed at that hour and they could not receive any information from that source.

Time was fleeting, as usual, and Dave knew just what to do in such an emerg-ency-he called Sally-and at that moment, the machinery really started rolling. First, Sally called the big manufacturer and was referred to a Mr. Peterson, of the personnel department, and explained to him what was cookin' and Mr. Peterson contacted five other people to start tracking down the elusive Miss Jones, but to no avail. In the meantime, Dave Partridge conveniently recalled that before Alice Jones moved from his building, she had mentioned moving to the YWCA for a few days, and then moving out to an apartment on Madison Road. Now, Madison Road is a particularly long street here in the Queen City and I would estimate that there are several hundred apartment buildings along its reaches. At this juncture, Sally brought into the picture, a weapon which is beyond the ken of mere man; I refer to her woman's intuition. She called a Mrs. Mills who manages the Hyde Park Manor on Madison Road, and sho 'nuff, Mrs. Mills had a new tenant named Alice Jones, and she promptly supplied her phone number.

When Sally finally reached Alice and told her that her boy-friend was in town, she, Alice, was so excited that she didn't know what to do. This was relatively simple for Sally, who had just found her in a city of 451,000 souls. Sally told the girl to get ready to meet her boyfriend while she, Sally, contacted him.

(Continued on Page Ten)

Broadcast Engineers' Journal for May, 1943



Simplify sound pickup problems in studio and remote broadcasting with the Shure Broadcast Super-Cardioid Microphone. Its pickup pattern rejects 73% of all reverberation and random noise energy. It is highly immune to mechanical vibration and wind noises. These features insure clear penetrating signals. Use a Shure Super-Cardioid for better performance.

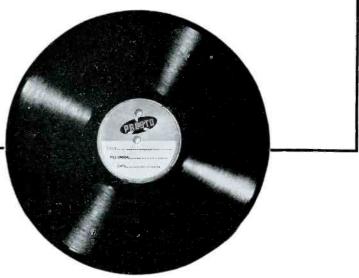
SHURE REACTANCE SLIDE RULE

SIULI BROTHER

Offers quick, easy solutions of problems in resonant frequency and in circuits involving inductances and condensers. Covers frequency range from 5 c.p.s. to 10,000 MC. Send 10c in coin or stamps to cover handling.

SHURE BROTHERS, Dept. 174 - 225 W. Huron St., Chicago Designers and Manufacturers of Microphones and Acoustic Devices

### WHEN YOU NEED AN UNBREAKABLE RECORDING BLANK



### USE THE PRESTO MONOGRAM

... a paper composition base disc that will safely withstand mailing, all ordinary handling, shipment anywhere. Monogram discs are lightweight, unaffected by temperatures above 40°F. or excessive humidity, have a remarkably long shelf life.

While the composition base is not as smooth as the glass base used for the highest quality recording discs, the coating material is exactly the same, giving the same cutting qualities, frequency response and long playing life. Surface noise is slightly higher than that of glass discs but at the same time well below that of the best commercial phonograph records.

With metal discs withdrawn from use, the Presto Monogram has become the most practical disc for recording in the field, for recordings to be mailed to distant points and those subjected to frequent handling. Thousands of monograms are used by the military services of the United Nations and by the larger radio stations for delayed broadcasts. Made in all sizes, 6, 8, 10, 12 and 16 inches. Order a sample package of 10 discs today.

PRESTOIn Other Cities, PhoneATLANTA, Jack. 4372BOSTON, Bel. 4510ChilcAGO, Har. 4240CLEVELAND, Me. 1565DALLAS, 37093DETORDING CORP.242WEST55thST.N.Y.World's Largest Manufacturers of Instantaneous Sound Recording Equipment and Discs

#### WLW

#### (Continued from Page Nine)

as he was now at the Union Terminal, waiting to be paged on the PA system. Sally called the Station Master and arranged for the couple to meet at the taxi stand at the Terminal and then passed the information back to Alice who tearfully asked, "But how will I get a cab in time at this hour of the night?" Sally replied, "Leave it to me, sister."

Sally then phoned her good friend, the night operator at Parkway Cab, and explained the now rather thick plot, and a cab was immediately dispatched to the waiting girl. Upon reaching the Terminal, Alice became so excited that she had forgotten where the rendezvous was to be, so she appealed to the Station Master for assistance. That official called Sally and said, "Well, we have the girl—now where's the boy?" The happy ending of the story is that the boy was located and the two lovers had forty minutes to hold hands—and all that sort of stuff; and the studio switchboard quited down to a mere trot.

Proud owner—nay, the inventor of a simply marvelous garage door is Glenn Merriam, who rigged up the door with assorted motors, gears, and pulleys so that the door opens by remote-control from the driver's side of the car, without leaving his seat therein. We understand that Merriam is going to further refine his gadget so that the door will open when he yells "Yoo-Hoo" at it from half a block down the street. In this case, we will nominate his door as the greatest invention since the seedless pean however, if the door yoo-hoos back at you, Glenn, you'd better check the wiring again.

The Micamold Radio Corp., 1087 Flushing Ave., Brooklyn, N. Y., announces a new miniature capacitor, rated at 120 v dc working, and available up to .01 mfd. These units measure  $\frac{3}{4}''$  long by 7/16'' wide by 7/32'' thick. This new series of condensers is hermetically sealed, and meet government humidity and immersion specifications. Additional information may be obtained from the manufacturer.

The Hallicrafters Company, Chicago, who were awarded their Army-Navy "E" Burgee on September 9, 1942, have again been cited for continued excellence in the production of communications equipment by the addition of stars to their Army-Navy "E" Burgee.

### From San Francisco

#### By E. L. Parkhurst

**B** IG EVENT of the month was the celebration of station KPO's twenty-first birth-law T with an hour's special program tracing the development of radio from Marconi's time to date, followed by speeches of commendation, etc., all from the swank Bohemian Club in San Francisco. An added feature of the celebration was the awarding of the General Electric Plaque for most efficient operating record to KPO. The award, symbolized by an elaborate engraved plaque, was presented by Mr. Raymond M. Alvord, Commercial Vice-President of the General Electric Company in San Francisco, to George Greaves, Engineer-in-Charge, National Broadcasting Co. San Francisco. In his speech of acceptance, Mr. Greaves said, in part, "--- I regret that Mr. Baker, Chief Engineer for station KPO, is ill and therefore unable to personally accept this coveted General Electric Award for the best transmitter operation record for 1942.

"The engineering personnel of station KPO are proud to receive and bring to San Francisco this award, sponsored by the General Electric Company, who pioneered fine radio equipment and who are today acknowledged leaders in the electrical industry.

"We at KPO are putting forth every effort to again win this Merit Award for 1943."

The General Electric Award, made annually to the NBC owned or operated station with the most efficient operating record, was won by KPO for losing only 12 seconds due to equipment or personnel failure during a total time-on-air of 8,382 hours. The record is even more phenomenal when it is realized that this operating time represents CONTIN-UOUS operation, with the exception of one 6-hour period once a week for routine maintenance. We agree with the rest of you that Chief Baker and his men are to be heartily congratulated on their performance, and we hope they can repeat in 1943.

CHANGES. April found Harry Puccetti returning to the KPO transmitter from SF studios to fill the vacancy left when Lieut. (jg) McAulay reported for active duty with the Navy. Apprentice Phil Ryder was promoted to Studio Engineer, and is performing admirably on the 12 - 7 "graveyard" trick. Also at SF studios is Art McDermott, a longtime San Franciscan, but new to radio.

ADDITIONS. The Mort Brewer (KPO-TE) baby, a boy, reportedly looks just like his dad, arrived this month. Next on the list should be the Summers heir.

GENIAL JOE Baker, KPO Station Engineer, recuperating from a minor overhauling at the hands of local M.D.'s. Rumor hath it that Joe grieved so much over the lost 12 seconds in 1942 (see story above) that he wasted away to a mere shadow of his former self, and was ordered to bed by his physician. We don't believe it, Joe.

ROTHERY vs. JEFFERSON. Eggs-per-day. Rothery ahead due to superior numbers. Jefferson extolling his chicks to do better, promising them an outing in the forest (tethered like a goat, however), if they'll produce more next week.

VACATIONS Melnicoe and Schuknecht are the leadoff men on a vacation schedule extending from now until October. Former to the Santa Cruz mountains, and latter to Denver to complete arrangements for his permanent residence in San Francisco.

VISITORS. Messrs. Stewart and Richardson looking over plant in general and recording in particular, with an eye to increasing the latter's business. O me!

BLUE ENGINEERS welcome their new manager, Don Searle, from Omaha-Council Bluffs area.

SUPERVISORS assigning studio engineers, wondering about the rivalry between T (Senator) Watson and S (Beau Brummel) Blank for duty on an audition, shown merely as "Sound Effects". Wonderment ceases when it develops that Chief Sound-Effects Creekmore is conducting a class for feminine Sound-Effects Technicians!

KOLM, CR-Supr., attending the annual Policemen's Ball under duress, as the price of talking himself out of a ticket for possible violation of dim-out regulations.

SPEAKING of Supervisors, they, too, have their bad moments. One of them (name withheld by request), was



Mr. Raymond M. Alvord, G.C. vice-president (left), congratulates George Greaves upon presentation of the General Electric Plaque to KPO for most efficient operation record for 1942.

writing in some changes on the next day's schedule, when his mind was diverted momentarily. Just then, he was brought back to this earth by hearing a sign-off announcement, and, out of consequence of long experience, this supervisor took a quick glance at clock, then at TOMOR-ROW'S schedule. THAT schedule called for a TC program out of San Francisco, but with no engineer assigned, no switch-banks set-up, no nothin', even no harm done. But the shock must of been something!

At KGO. No one has much to say, but we did wheedle the information that Shorty Evans, who is just that, is planning a reception in honor of the newest arrival at the Evans estate. Hay and oats will be the order of the day. The filly, the filly's mother and Shorty are all doing nicely, after a few hectic hours spent by all three at the equine maternity home. Didn't know there was such a thing, did you?

Broadcast Engineers'



HOW ELECTRONIC TELEVISION WAS CREATED BY RCA LABORATORIES ... HISTORIC STEPS IN THE EVOLUTION OF THIS NEW SCIENCE

**B**ACK IN 1929 a modest man with a quiet voice calmly announced two inventions ... two amazing almost magic devices that made it possible for radio to "see" as well as to "hear."

This man was Dr. V. K. Zworykin of RCA Laboratories. And his research in electronics gave radio its electronic "eyes" known as the Iconoscope and the Kinescope. The former is the radio "eye" behind the camera lens; the latter is the receiver's screen.

Since that red-letter day in television history, ceaseless research in the science of radio and electron optics has established RCA Laboratories as the guiding light of television.

The decade of the thirties saw television's coming-ofage. It brought new scientific instruments and discoveries; it developed new techniques of showmanship; it even created new words—televise, telecast, teleview, and telegenic.

In the evolution of television there have been "high spots"; historic milestones of progress; definite "firsts" -made possible by the services of RCA.

#### 1928—1932—FROM THE FIRST EXPERIMENTAL STATION TO ALL-ELECTRONIC TELEVISION



Station W2XBS, New York, was licensed to RCA in 1928 to conduct television experiments. Transmitter located at laboratory in Van Courtlandt Park, was later moved to Photophone Building, 411 Fifth Avenue; then to New Amsterdam Theatre until 1931, when operations were transferred to Empire State Building.

On Jan. 16, 1930, Television pictures were transmitted by RCA from W2XBS at 411 Fifth Avenue and shown on 6-foot screen at RKO-Proctor's 59th Street Theatre, New York.

Television station W2XBS, operated by National Broadcasting Company, atop New Amsterdam Theatre, New York, opened for tests July 7, 1930, with the images whirled into space by a mechanical scanner.

Empire State Building, the world's loftiest skyscraper, was selected by RCA as the transmitter and aerial site for ultra-short-wave television experiments using both mechanical and electrical scanners. Operation began October 30, 1931.

Field tests of 240-line, all-electronic television were made by RCA at Camden, N. J., with television signals relayed

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by radio from New York through Mt. Arney, N. J., for the first time, May 25, 1932.

#### **1936—OUTDOOR TELEVISION**



Television outdoors was demonstrated by RCA at Camden, N. J., on April 24, 1936, with local firemen participating in the program broadcast on the 6-meter wave.

All-electronic television field tests of RCA began June 29, 1936, from ultrashort-wave transmitter in Empire State Building and aerial on the pinnacle

releasing 343-line pictures.

Radio manufacturers saw television demonstrated by RCA on July 7, 1936, with radio artists and films used to entertain.

#### 1937—ELECTRON "GUN"

Electron projection "gun" of RCA was demonstrated on May 12, 1937, to Institute of Radio Engineers, with pictures projected on 8 x 10-foot screen.

Television on 3 x 4-foot screen was demonstrated by RCA to Society of Motion Picture Engineers on October 14, 1937; pictures were transmitted from Empire State Building to Radio City.

Mobile television vans operated by RCA-NBC appeared on the streets of New York for first time, December 12, 1937.

#### 1938-BROADWAY PLAY TELEVISED



Scenes from a current Broadway play, "Susan and God," starring Gertrude Lawrence, were telecast on June 7, 1938, from NBC studios at Radio City.

> RCA announced on October 20, 1938, that public television program service would be inaugurated and com-

mercial receiving sets offered to the public in April, 1939;

#### 1939—BASEBALL—KING GEORGE VI— FOOTBALL

Opening ceremonies of the New York World's Fair televised by NBC on April 30, 1939, included President Roosevelt as first Chief Executive to be seen by television.

"A first from the diamond." Columbia vs. Princeton, May 17, 1939, televised by NBC.

www.americanradiohistory.com

**TELEVISION TRAIL** 



Improved television "eye" named the "Orthicon," introduced by RCA on June 8, 1939, added greater clarity and depth to the picture.

Television spectators in New York area on June 10, 1939, saw King George VI and Queen Elizabeth at the World's Fair, telecast by NBC.

Brooklyn Dodgers-Cincinnati game telecast by NBC on August 26, 1939, was the first major-league baseball game seen on the air.

First college football game-Fordham-Waynesburg-televised by NBC, September 30, 1939.

Television from NBC station in New York was picked up by RCA receiver in plane 20,000 feet over Washington, D. C., 200 miles away, October 17, 1939.

Television cameras of NBC scanned the scene in front of Capitol Theatre and in lobby at premiere of motion picture "Gone With The Wind," December 19, 1939.

#### 1940 — HOCKEY—COLOR—TRACK BIRD'S-EYE TELEVISION



Color television was demonstrated on February 6, 1940, to Federal Communications Commission by RCA at Camden, N. J.

First hockey game was televised by NBC camera in Madison Square Garden, February 25, 1940.

Basketball: Pittsburgh-Fordham, also NYU-Georgetown at Madison Square

Garden were televised by NBC, February 28, 1940, as first basketball games seen on the air.

First Intercollegiate track meet at Madison Square Garden telecast on March 2, 1940.

Using RCA's new, compact and portable television transmitter, a panoramic view of New York was televised for the first time from an airplane on March 6, 1940. Television sightseers as far away as Schenectady saw the bird's-eye view of the metropolis.

Premiere of television opera on March 10, 1940, featured Metropolitan Opera stars in tabloid version of "Pagliacci."

First telecast of religious services on March 24, 1940, from NBC Radio City studios, were seen as far away as Lake Placid.

Ringling Brothers-Barnum and Bailey circus viewed on the air, April 25, 1940, through NBC electric camera in Madison Square Garden. Television pictures on  $4\frac{1}{2} \times 6$ -foot screen were demonstrated at RCA annual stockholders meeting May 7, 1940, at Radio City.

Republican National Convention was televised on June 24, 1940, through NBC's New York station via coaxial cable from Philadelphia.

Democratic National Convention films rushed by plane from Chicago for NBC were telecast in New York, July 15, 1940.

President Roosevelt was seen by television throughout the Metropolitan arcas 2s he addressed Democratic rally, October 28, 1940, at Madison Square Garden.

Election returns on November 5, 1940, televised for first time by NBC, showed teletypes of press associations reporting the news.

#### 1941—COMMERCIAL TELEVISION



Television progress demonstrated to FCC on January 24, 1941, included: home-television receiver with  $13\frac{1}{2}$  x 18-inch translucent screen; television pictures 15 x 20 feet on New Yorker Theatre screen; pictures relayed by radio from Camp Upton, Long Island, to New York; also facsimile multiplexed with frequency modulation sound broadcast.

Television pictures in color were first put on the air by NBC from Empire State Building Transmitter on February 20, 1941.

Large-screen television featuring Overlin-Soose prize fight on May 9, 1941, at Madison Square Garden was demonstrated by RCA at New Yorker Theatre; also, on following days, basebail games from Ebbets Field, Brooklyn.

Commercial operation of television began July 1, 1941, on a minimum schedule of 15 hours a week. NBC's station WNBT, New York, the first commercially licensed transmitter to go on the air, issued the first television rate card for advertisers, and instituted commercial service with four commercial sponsors.

Entry of the United States in World War II, enlisted NBC television in New York to aid in illustrating civilian defense in air-raid instructions in the New York area.

#### 1943-AMERICA AT WAR!

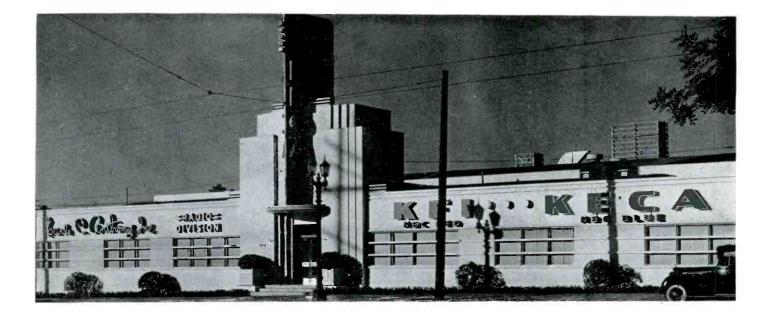
Today RCA Laboratories, pioneer in the science of electronics, is devoting all its efforts to the war.

Yet, from the discoveries, developments and inventions made under the urgency of war, will come greater wonders for the Better Tomorrow of a peacetime world.

**RADIO CORPORATION OF AMERICA** 

RCA BUILDING, NEW YORK CREATOR OF ELECTRONIC TELEVISION

Broadcast Engineers' 13 Journal for May, 1943



### Los Angeles News By H. M. McDonald

WO more KFI-KECA men have been commissioned by the Army, Norman Leonard a First Lieutenant, and Leland Patterson a Second Lieutenant. Along with four others at these stations they responded to Captain Harwood's (Officer Procurement Section, Adjutant General's Office, U. S. Army) request for Engineers experienced in the installation and maintenance of 10 to 50 kilowatt stations. The other four applications have not as yet been approved. Both Leonard and Patterson are good all-around radio men. Norm was with Western Electric five years and other radio stations six years before coming to KFI-KECA Studios in 1939. His forte is construction and maintenance. "Pat" had six years of experience in various branches of commercial radio before coming to KFI Transmitter two years ago. The send-off given to Leonard at Charley Young's home hit an all-time high for farewell parties here; between 50 and 60 well-wishers dropped in and tottered out during the evening and early morn.

Two other broadcast Engineers, well-known in Los Angeles, were commissioned for the same service in the Signal Corps, Lloyd Sigmon, a Captain, and Roger Love, a Lieutenant. Sigmon was Chief Engineer of KMPC and came here a year or two ago from KCMO, Kansas City. He is an authority on directional arrays and several of his articles on the subject have appeared in "Electronics." Roger Love had been in Los Angeles broadcast stations for thirteen years and was Chief at KMPC before going to the BNC about a year ago. All four men are now at Fort Monmouth, N. J., receiving their basic training, which will be followed by a course in advanced radio.

Lloyd Roe, KFI TE, has resigned and gone to one of Hughes Aircraft Company's nearby plants to delve into industrial electronics.

Al Laurent is back at KFI Transmitter, after serving nine months in the Army as a Technical Sergeant with an Anti-Tank Company. He took advantage of the over-38 ruling and returned to continue the fight on the home front with bonds, a Victory garden, and a dozen rabbits. Al has been in commercial radio since 1924 and was with Globe Wireless at Cypress before coming to KFI a year ago.

Harold Christensen, ten years at KFI Transmitter before going to Harvard last year to engage in NDRC activities, has been commissioned a Lieutenant-Commander in the Navy. After a refresher flying course at Dallas he will probably continue NDRC work at Harvard and M.I.T. Prior to coming to KFI "Chris" had been in the Air Corps, the Signal Corps, KZRQ Manila, and helped install and operate KZRM Manila with old duplicate transmitters of WJZ, Aeolian Hall, New York, in '25, 26, 27.

Jay Tapp, Chief Engineer of KGER, Long Beach, for the past seventeen years, is now with Radio Facilities Engineers, San Francisco.

The two new men at KFI Transmitter are Raymond W. Grammes, formerly at an Arizona station and instructor at L. A. City College and National Schools; and William H. Pardee, whose radio experience dates back to the last war when he was radio electrician first class on the S. S. Julia Luckenbach then in Navy service. Welcome to KFI fellows, and keep that 50 spouting.

New men at KFI-KECA Studios: Charles L. Cook, who hails from Lexington, Ky., had often been before the mike as a musician and wondered how stuff was transmitted from the mikes to receivers, took a course, got a 1st Phone ticket, and now behind the mike, pushing it out; Frank M. Cotter, at WHOM Jersey City, 1933-1942, later teaching radio fundamentals in technical schools thereabouts; Robert P. McGaughey, Chief at KPRO Riverside for the past year and a half and previously at several Arizona stations; Ernest A. Tavares, formerly at both the Honolulu stations, KGU and KGMB; all are adept at the art of inserting 50 syllable transcribed spots between network shows, and brother do we have them!

Eugene Beauchamp from OWI in San Francisco, and at KFI-KECA Studios a few days before going to KNX, reports that OWI is reducing their staff up there. Eddie Ruggles, formerly of KFWB Los Angeles and OWI Master Control (Continued on Page Fifteen)

Broadcast Engineers'

**4** Journal for May, 1943

### Who's Who at WPTF—Raleigh

By J. Willard Dean

By J. V B ORN in Longbranch, New Jersey, February 18, 1906. Upon completion of high school be did Upon completion of high school he did a stretch in the Merchant Marine and now boasts of better than

a score of years in Commercial Radio. His first radio job was with the Radio Corp. of Virginia, doing service work in and around Norfolk; and it was here that he gained his initial experience in construction while helping with the



Henry Hulick, Jr. Chief Engineer, WPTF

kilowatts and then to fifty kilowatts and a change in studio location taking place on three different occasions, with the WPTF Engineering Department affecting these changes in each instance under Hulick's eagle eye. Having assisted the Consultants engaged for the purpose of making Proof of Performance Tests, Henry has without a doubt covered every nook and corner of this section of the state and says running Radials in the form of a nightmare are quite frequent .

Henry married Dorothy Davis, a member of WPTF's musical staff on February 17th, 1933, and is now the father of one daughter, five years of age .... Word has it that the line will be forming on the right sometime in the near future as he starts tossing out the "Stoggies" in honor of Henry the 3rd

When time permits, ole SKIP—as he is known to us all -finds relaxation in hunting and fishing; and take it from me, brother, he is CHIEF again.

installation of station WSEA at Virginia Beach, atop the Cavalier Hotel.

Departing from Virginia during June of 1928, Henry moved to Raleigh, North Carolina, to accept a position with WPTF as assistant chief engineer, elevating to the number one spot of PTF's engineering department on April 26, 1935. Since he has been supervising the station's technical operation h is headaches have been numerous and experiences wide and varied. The station having increased power twice, first from one kilowatt to five **B** ORN in Raleigh, N. C., November 10, 1910. While attending the local Public Science at the second attending the local Public Schools, just a normal course of events took place, playing hooky with his chums for

a swim at the old swimming hole and participating in athletic activities. His first serious thought came at the age of thirteen, when he decided to play around with the newfangled contraption called radio. He built his first receiver and modestly admits "It

worked."

After the curtains for his school days, he did a little barnstorming with one of the up-and-coming aviators during the summer of '26. Later, he joined the firm of Wholesale Radio Corp., doing field radio service work. After becoming fed-up with traveling, decided he would settle down in a permanent spot, so joined the WPTF staff on July 15, 1929, as control operator. After a couple of years, the love bug got him and he married staff pianist Peggy Fussell on February 28,



H. Felton Williams

1931, with the wedding vows eminating in front of a WPTF microphone. Son, Lea Hart, born December 14, 1931. In 1934, after having been transferred to the transmitter, Felton moved from Raleigh to Cary ... Nearer to the Pay Check. At the present and since 1941, he has been on the graveyard shift, using his early evening hours teaching a ESMWT course at North Carolina State College.

During his leisure hours, Felton says he enjoys such hobbies as repairing auto carburetors, raising viviparous fish, and gardening. Looking at the lighter side of life, he can always yell his head off at a good baseball game-also likes hunting, fishing, and swimming. His one desire is to be nominated the official executor of Herr Schicklegruber and Tojo .... Leaving Mussolini, for someone else as he doesn't consider it very sporting to kill an imbecile.

#### Read THE BROADCAST ENGINEERS' JOURNAL-Of, By, and For the Broadcast Engineer

#### Los Angeles News (Continued from Page Fourteen)

New York, is now a Supervisor at OWI M C in San Francisco.

Adolphus Alexander, formerly of KPAS Pasadena, and also at KFI-KECA Studios for a couple of days, has gone to KNX Transmitter, fancying the pastures to be greener out there

Heard Lieutenant Tom Gootee, ex-NBC Chicago, (and Journal feature writer) being interviewed by George Hicks somewhere in Great Britain, on the Blue's Men of the Land, Sea and Air program, April 28. Tom gave a vivid description of his unpleasant experiences during a recent air raid when a bomb struck an air raid shelter only a few feet away, knocking him to earth. Neglecting his own injuries he im-

mediately set to work removing and caring for the maimed and was later cited for services beyond the line of duty.

The vacation period for the thirty Engineers at KFI-KECA started April 5 and will end about mid-November. Sedate and cheerful Bob Cook was the first man off and spent the time moving to and improving his new home in the Los Feliz district. Mr. 5x5 Dave Kennedy, five feet five tall and about the same waist measure, was second man away. In spite of excruciating daily workouts (he says) in his Victory garden he returned to work in the Recording Room nattily attired in an Easterish powder blue suit, radiating cheer, but with no perceptible diminution of waist.

It's better to buy bonds than wear them.

Broadcast Engineers' 15 Journal for May, 1943

### Cleveland News By Bert Pruitt

THE frozen face of Lake Erie has long since been lifted by the thawing rays of old Sol. Shipping on the Great Lakes is in full swing with iron ore from the mines in Michigan, Wisconsin, Minnesota and Canada, going into the mills that dot the shores of the lower lakes from Chicago, Illinois to Buffalo, New York. Shippers predict an all-time high in the shipment of iron ore this season. The first ore of the season went into the holds of the L. E. Block and Phillip Block at the docks in Escanaba, Michigan, the



Victory Gardening seems to be a timely subject, so we pass along the information that W. C. Pruitt (CS) and John Hyatt (SE) are well along the road to Vegetable Independence. W. C. has an acre of ground at his place in North Olmsted. He uses a tractor for convenience, a gadget that he made from an old Chevrolet car. To my way of thinking, it resembles a huge grasshopper cross-bred to a turtle. But inasmuch as the tractor hasn't shown its resentment toward me by causing me painful blisters, I'll not blister the tractor with causeless resentment.

John Hyatt, shown here, has a tractor, too. He bought it from his neighbor, and according to John, the tractor used to be a lawn mower, butter churn and corn planter.

John Hyatt

week of April 1st. A Coast Guard ice breaker had to break a passage through seven miles of ice to make this early shipment possible.

Chapter Chairman Harold Brandt tells me that the boys at the transmitter have a sizeable garden out there ... Not a bad idea, eh? . . . And Fred Everett (TE) was recently elected Chairman of IRE for this Section. Which leads one to wonder what Fred does with his free time ... Besides standing his regular watch at the transmitter, teaching radio classes at Fenn College, IRE activities, and the usual amount of standing in line for this and that, Fred must find the time rather boresome.

The FCC reports that the weekly pay roll for the 22,954 employees and executives of the nine networks (791 stations) is \$1,200,000. And we believe you would be missing a lot in life if we failed to inform you that the sale of radio time amounted to \$178,091,043 last year

Radio station WJW, Akron's Mutual outlet, will become Cleveland's fifth station by the first of July of this year. WJW will be the Blue Network's outlet in Cleveland. Their new transmitter will be located at North Royalton, Ohio. William M. O'Neil, son of the President of the General Tire and Rubber Co., is manager of Cleveland's future station that will operate on a frequency of 850KC with a power of 5000 watts.

No individual, according to Crossley Ratings, comes close to matching the vast listening audiences President Roosevelt commands when he addresses the nation. Eightythree percent of the nation's radio sets were tuned to the President's speeches three different times during the past year. This report is the result of investigators working simultaneously in thirty-three cities 168 days during 1942. Two of the Presidential speeches obtaining the 83 percent ratings were immediately following Pearl Harbor. The other was his February 23rd speech on "The Progress of the War.

The "Call to Arms" program, heard over WTAM each Sunday at 4:30 p.m., is creating a lot of interest among the WTAM listeners. Soldiers from Camp Perry, Ohio, are the entertainers and they plug the sale of War Bonds. The Camp Perry Recreation Center Orchestra was organized a year ago and its members include former professional musicians. Leader Frank Strasek played first trumpet with Horace Heidt, Alvino Rey, Sammy Kay and Emerson Gill. Doris Lee, vocalist, is the only non-military member of the band. (Sorry, Miss Lee is not represented in this picture.)

George Molnar (Studio) and Franklin Anthony (Transmitter) are the latest additions to the WTAM Technical Dept. Perhaps I'd better qualify that statement by saying Franklin Anthony began working here the first of the year. Oh yes, Glen Moor (SE) began working here the first of the year, too. Gilbert Buchannan (SE) passed his



Camp Perry Orchestra, Director Frank Strasek, seated back row, third from left.

physical and is now learning the fundmentals of buck privateering in the U.S. Army. Gil is gifted with a pleasant personality and we know he will be liked wherever the Army chooses to send him. Lots of luck, and we'll tip a beer to the privateer.

#### OHIO NEWS

WMRN Marion, Ohio: Engineer Joe Peters is scheduled to leave for the Armed Forces, first of May. Karl Livensparger, high school senior, is breaking in as replacement for Joe. Chief Engineer Robert Morrison the man with the microphone and fire truck, puts in a claim for the shortest Nemos ever nemoed. Bob says they conduct a lot of their nemos right outside the Studio "A" window. They let the program of interest drive in, hand them a microphone and there we are. Programs in the past include Red Cross Mobile Unit, Mobile Dental Unit for Examination of School Children, OCD Gas Warfare School conducted with the gases, etc., on a lot back of WMRN's studios.

WHIO Dayton, Ohio: WHIO employees are doing some victory gardening, too. WHIO Engineer Kenneth



WMRN - Bob Morrison

Weller borrowed a horse and plow from a farmer living behind the WHIO transmitter. Then with the aid of Announcer Jack Peyser, who appears to be bossing the job, and Engineer Jack Hodgkinson, who is handling the plow, proceeded to break the ground behind the transmitter building for the WHIO Victory Gardens. All employees who want to do the work can raise victory gardens at the transmitter site. In the picture, reading from left to right, are: Weller, Peyser and Hodgkinson.



WHIO Victory Gardeners

Ralph E. Patterson writes that WOSU (Ohio State University Station) is now being manned by six ops . . . All with number one tickets. Three of the ops are full-time men and three are E. E. Seniors at Ohio State University. The two non-ex-ham-engineers, Al Boggioni and Warren Merritt, spend the test-the-line-to-the-transmitter period before sign on every morning playing code practice transcriptions. Rumor has it that they are solid at six per, after two weeks. Ralph ends by saying Mr. R. C. Higgy, Director; Charlie Boehnker, Chief Engineer, and the gang are all glad to see a newsy magazine featuring the "Forgotten Men of Radio".

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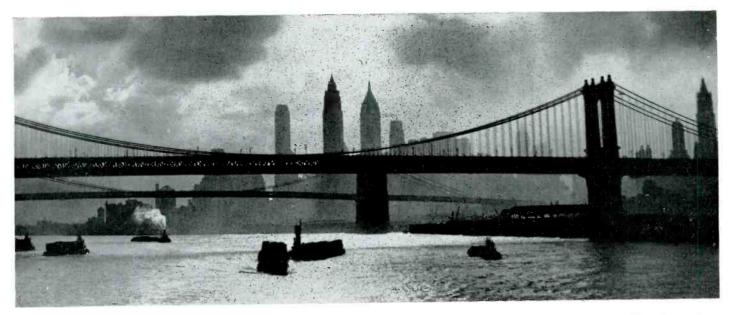
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Photos by Joe Conn

### New York News By C. A. Younger

**S** URPRISE OF THE MONTH is supplied by ME Frank Connolly. Without fan fare or other ado, Frank stole off and speared himself an appointment as Second Lieutenant in the Signal Corps, reporting to Fort Monmouth in mid-April.

This step by Frank marks another milestone in the progress of a typical NBC-ite. He joined NBC as a Page on September 15, 1931, and advanced step by step through the Program Division to the position of Audition Clerk. On May 1, 1937, Frank became an Apprentice Engineer and was assigned to the Maintenance Department. Then, after supplementing a Fordham education with study at the RCA Institute, he achieved full Engineering status in the spring of 1939.

The first member of the Maintenance Group to receive a Military Commission, Frank was given a testimonial dinner by his colleagues in that Department shortly before he reported for duty.

SE JOHNNY O'NEILL deserves the Army-Navy "E". He is probably the only member of the NBC-Blue Staffs who can boast of a daughter in the SPARS, one son a Naval Air Cadet and another son in the Army Air Force.

LEGAL EAGLES declare that the Markle-Westover wager still holds good. Fulfillment is predicated upon the appearance in the NY Lounge of a certain individual wearing the oak leaves of a Major on his shoulders. Witnesses



aver that no other conditions were specified so it is presumed that SE Gil Markle will ultimately make good his promise to perform a distinctly unique feat of acrobatics. Since it appears that said individual will receive his promotion to Major sometime this spring or summer, the ice-skate feature of the trick may delay the show temporarily.

Broadcast Engineers' 18

GATHERING GOSSIP for this column from the Recording Department is particularly difficult because the fellows over there are always moving so fast that they are out of earshot before you can phrase a question. However, we managed to fall in step with one of them recently and before collapsing from exhaustion found out that RE Caranchini has been transferred to the Hollywood Office and that Recording Supervisor G. E. Stewart is visiting the San Francisco Office. During the boss's absence, RE Johnny Holmes has been holding the reins in New York.

FIFTH FLOOR FACTS: ME Archie Cooper has received the NBC Award for ten years of service with the Company ... Pete Prinz has been transferred from the Studio Group to the Transmitter WEAF, at Port Washington, L. I. ... ME Emil Del Era continues to be in serious condition at Mount Sinai Hospital, New York City, after several months of protracted illness ... Field Supervisor Jacobson has installed a blackboard in the Field Shop in order to provide visual, as well as verbal instruction for his apprentices ... Dance Nemo Hoppers were not amazed when Police closed a well-known Harlem Ballroom ... When SE Joe Silva wins at Rumme, Silva treads among the gold.

MILITARY MANEUVERS: Ensign Ed Bertero has been transferred from the Naval Training School at Tucson, Arizona, to Boston, where he is continuing study at the Cruft Laboratory, Harvard . . . Jimmy Coleman is now a First Lieutenant in the Marine Corps and is stationed at Camp Le Jeune, New River, N. C. . . Wonder what happened to ex-SE Jack Stoody? Nobody has heard from him since he left for Fort Monmouth . . . Special Agents report Lt. Rudy Bauer, USNR, and Lt. Phil Falcone, Signal Corps, were seen in Hurley's not long ago . . . Phil returned to the Signal Corps Labs at Astoria, L. I., after graduating from OCS . . . Ted Korday, ex-NBC Production, was a visitor recently. He, too, has graduated OCS and is now Second Lieutenant, Signal Corps.

Journal for May, 1943

POW WOW: A quiet NABET General Meeting was called on April 17 for the purpose of instructing Chapter



Photo by A Horwath, NYS

Chapter Chairman Harry Hiller listens attentively as Secretary Charles Bennis reads a motion before the April meeting of the N. Y. NABET Chapter

Chairman Harry Hiller re coming negotiations. The usual precaution of serving drinking water in paper cups rather than glasses was observed.

THE FOLLOWING IS TRANSCRIBED from Division Engineer Wankel's "Get Acquainted" Bulletins:

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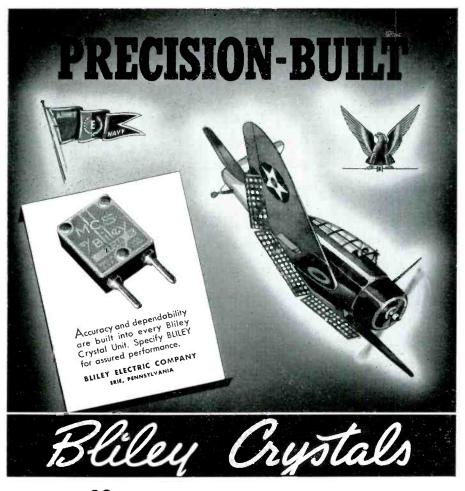
Engineer on March 25, 1943. He has recently been teaching Radio at the University of Alabama, and was born at La-Grange, Georgia. His broadcast experience includes studio and transmitter work at WAPI, Birmingham from 1939 to 1942; at WBRC, Birmingham from 1938 to 1939 and WMSD, Sheffield, Alabama, in 1937. Previously he was an operator with Radiomarine. His Amateur call is W4DGZ."

"Mr. Jack Babkes was employed as a Recording Engineer on April 5, 1943. Mr. Babkes was employed as a Civilian Aide at Fort Monmouth from July, 1941 to March, 1943. His work included the development of direction-finder equipment and the installation and operation of Recording Equipment. From 1938 to 1941 he was employed by the Audiophone Company designing and testing PA and Recording amplifiers. Other experience includes testing of Amateur and Commercial transmitters with Temco and receiver construction with Rigale Radio. He is a graduate of Textile High School and attended N. Y. U. evenings."

THANK YOU, Bob Brooke of Hollywood, for the Honorable Mention and thanks again for the info on Reticent Ralph Reid. We can just see him strolling along Hollywood Boulevard, nattily clad in a slack suit of pastel shade, twirling his mustache and yearning for the Twenty Meter Band to reopen. Re blondes and thermometers, we don't have time to look at them. Ask Knight, he knows !!!

LATE FLASH: SE Herb Florance has left us to take up his appointment as Warrant Officer, U.S.N.R. He will work for the Bureau of Ships at Washington, D. C.

\* \*



Broadcast Engineers' 19 Journal for May, 1943





#### A digest of leading technical articles in the current contemporary press. [In these busy times few engineers can spare the time required to read all the current technical literature. It will be the purpose of this regular feature to provide an index of current technical articles on radio broadcasting and related subjects.-Ed.]

#### **Proceedings of the IRE - (April, 1943)**

#### Frequency-Modulation Distortion in Loudspeakers By G. L. Beers and H. Belar

As the frequency response range of a sound reproducing system is extended, the necessity for minimizing all forms of distortion is correspondingly increased. The part which the loudspeaker can contribute to the over-all distortion of a reproducing system has been frequently considered. A type of loudspeaker distortion which has not received general consideration is described. This distortion is a result of the Doppler effect and produces frequency modulation in loudspeakers reproducing complex tones. Equations for this type of distortion are given. Measurements which confirm the calculated distortion in several loudspeakers are shown.

#### Some Recent Developments in Record Reproducing Systems By G. L. Beers and C. M. Sinnett

Several factors of importance in obtaining satisfactory reproduction of sound from lateral-cut phonograph records are considered. An experimental record reproducing system employing the principles of frequency modulation is described and data are supplied on the measured and calculated performance characteristics of the system. Curves are included showing the vertical force required for satisfactory tracking with the experimental frequency-modulation pickup as compared with other pick-ups of conventional design.

#### Effects of Solar Activity on the Ionosphere and Radio Communications

By H. W. Wells

The relationship of solar activity on the ionosphere and radio communications may be roughly classified as follows: (1) There are occasional solar flares or outbursts of ultraviolet light which instantaneously produce radio fade-outs of short duration. (2) Occasionally solar streams of particles sweep across the earth's orbit producing magnetic storms and auroral displays. The associated ionospheric disturbances may seriously affect radio communication for several days although the effects are more pronounced in polar regions. (3) The general change of solar ionizing wave radiation in the course of the sunspot cycle governs the average intensity of ionization in the ionization in the ionosphere. This trend is an important factor governing selection of operating frequencies for radio communication.

#### Radio-Frequency-Operated High-Voltage Supplies for Cathode-Ray Tubes By O. H. Shade

The operation of tuned step-up transformers in selfexcited oscillator circuits as high-voltage sources for kinescopes is analyzed. General information and data are given for optimum radio-frequency-transformer design and

operating conditions with specified rectifier loads. Practical high-voltage supplies are illustrated ranging from 1 to 50 kilovolts with power output values of one-quarter watt to 50 watts, respectively. The performance of these supplies in television equipment is discussed.

#### Network Theory, Filters, and Equalizers By F. E. Terman (Part I)

In Part I the fundamental properties of networks are reviewed with particular emphasis on two and four-terminal networks. The use of reactive networks for impedance matching is covered. Fundamental network definitions and network theorems are reviewed. The general mesh equations of the network are given, together with their solution for input and transfer impedance. Properties of two-terminal reactive networks are presented in terms of zeros and poles from the viewpoint of Foster's reactance theorem. Methods of synthesizing any impedance realizable by a two-terminal reactive networks are given. Reciprocal impedances are discussed and the methods of deriving a reciprocal network given. The general properties of four-terminal networks are reviewed in terms of image impedance and image transfer constant. The alternate presentation on terms of iterative impedance and iterative transfer constant is also covered briefly. The subjects of impedance matching and insertion loss are considered and formulas are presented for the mismatching factor and for insertion loss. Properties of four-terminal networks based upon T, Pi, L, and lattice sections are summarized. The use of reactive T, Pi, and L networks for impedance matching is reviewed, and charts are presented for designing a matching network to meet any given requirements.

#### (April, 1943) Electronics **Graphical Symbols**

By B. Dudley

A compilation of the graphical symbols most commonly encountered in the electronics field is presented as a war aid in interpreting schematic wiring diagrams.

#### Rochelle Salt Crystal Devices of Low Impedance By R. W. Tibbetts

By bonding a thin gold foil to the surfaces of a rochelle salt crystal a low impedance unit is provided for oscilloscope, microphone, or pickup use.

#### Adjustment of Directional Antennas By W. S. Duttera

A method of measuring resistance and reactance values at radio frequencies with an ordinary three-inch cathode ray oscilloscope while full power is being fed to the broadcast antenna. Width and height measurements of an elliptical pattern give the required constants.

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#### Performance of Self-Biased Modulated Amplifiers

Bv R. I. Sarbacher

A procedure is given for determining the dynamic characteristics and optimum performance of self-biased modulated amplifiers. The manner in which polarizing voltages vary during tube operation is determined as a function of bias resistor and its location in circuit. Improved linearity of circuit operation and reduced peak driving power are shown by this analysis.

#### Chart for Equivalent Series and Parallel Circuits By R. Toombs

Semi-circle diagram permits rapid conversion of series values of an impedance to the equivalent of an impedance composed of parallel elements, and vice versa. Charts may be applied over wide range of impedance values.

#### Communications (April, 1943)

#### Video Amplifier Low-Frequency Correction By W. A. Lynch

The resistance coupled amplifier exhibits a departure from an ideal characteristic in both the high and low frequency regions of its spectrum. At low frequencies, from a few hundred cycles on down, the amplitude vs. frequency response falls off and the output voltage assumes a leading phase angle. Where fixed bias and screen voltages are used, these departures may be assumed to be attributable entirely to the grid-coupling circuit acting as a resistance-capacity voltage divider across the load circuit. An analysis of plate filter compensation follows.

#### Transmission Lines as Reactors By Dr. V. J. Andrew

The specific problem of inductive antenna loading is successfully achieved, by breaking up the antenna tower by a sectionalizing insulator, connecting a quarter-wave line across the insulator, and shunting the other end of the quarter-wave line with a condenser, which, by virtue of the properties of a quarter-wave line, reflects an inductive reactance across the sectionalizing insulator. This high-Q loading makes it possible to realize the theoretical gains from inductive loading. This system is used by CBS at WBBM, Chicago, and WABC, New York.

#### **Characteristics of High Fidelity Systems**

By A. J. Ebel More on the subject of "what is high-fidelity" with emphasis on the electro-acoustic equipment.

#### **Bell Laboratories Record - (April, 1943)**

Trigger Action From Secondary Electrons By A. M. Skellett

A vacuum-tube of the trigger type has been developed which is free of the disadvantages of the gas type trigger tubes, which are generally noisy, and their ionizing and deionizing times introduce a delay in the trigger action of about a thousandth of a second. The new trigger tube reduces the operating time to less than a millionth of a second, and is noise-free in operation. The tube contains a cathode, grid, and a first anode which completely encloses these elements except for a small slit which permits about ten percent of the electrons to reach a second anode which has a good secondary emitting surface. Another important feature is that the control grid never loses control; with gas-filled trigger tubes, it is necessary to reduce the plate voltage before the grid resumes control; with this new tube, the grid has control at all times.

#### Using High Crystal Harmonics for Oscillator Control By I. E. Fair

It becomes impractical to grind quartz crystals thinner than 0.006 inch, which corresponds to a fundamental frequency of approximately ten megacycles. In the past, it was necessary to use vacuum tube harmonic generators if the advantages of crystal-control were desired beyond ten megacycles. This equipment, in addition to being costly and space-consuming, required careful adjustment by operating personnel. It is shown that a crystal can be made to oscillate at odd multiples of the crystal fundamental. Circuit development is also presented, and direct crystal control has been attained as high as the twenty-third harmonic of the crystal fundamental. This mode of operation should be considered by all those concerned with ultra-high-frequency communication.



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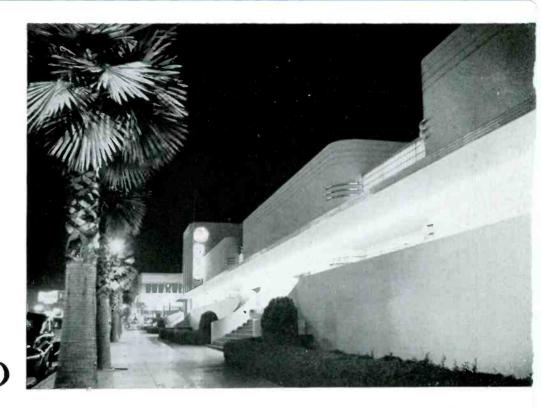
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Broadcast Engineers' **21** Journal for May, 1943

## H NEWS By Bob Brooke



#### PRING ARRIVES . . . Capstaff Transfers to Production . . . Rationing Gets Tough . . . VP Egner and Stewart Look Over Recording . . . More Men to the Army . . . Summer Shows Audition . . . Amos 'n Andy Due Back to NBC in Fall . . . Visitors Galore . . .

SUN ... To contrast the War, Spring arrived with more than her usual abundance of roses, lilies, and orange blosscms Desks at NBC are laden daily with profuse assortments of colorful spring flowers brought in by our many employees owning valley ranch homes . . . Most of the bouquets are so perfect in color and shape that you look twice to make sure they're not some idealistic artist's creation from Saks Fifth Avenue .... And with spring comes more sun than usual and less of our typical coastal fog .... Hence many a deep tan or peeling nose .... Few get to the beach or mountains these days but experience has proven that as good a tan can be had in your own back yard . . . White shoes and summer clothes have been in evidence for many weeks and the arrival of Easter at a later date gave most people a fine opportunity to parade their hats, clothes, and flowers, even if the hats were hold overs from last Easter . . . So with such a start, matters of sun should help much to improve morale in the months to come . . . \*

CAPPY .... Bert Capstaff, S.E., has transferred to Hollywood's NBC production department . . . Since coming to Hollywood from New York about five years ago, Cappy has run many of the top shows on the air . . . Among them Bob Hope, Kay Kyser, Jack Benny, Ginny Sims, and others We are all sorry to see Cap leave the department as he has always been a grand guy and a lot of fun . . .

RECORDING ... A recent visit by recording Vice-President C. Lloyd Egner and NY's recording supervisor "Stew" Stewart, marked the opening of a great recording campaign for the Army and OWI, to come from the NBC Hollywood studios .... We have been originating and recording many famous programs for troops overseas but the new plans for recording and dubbing may call for 24 hour a day operation of the recording room in order to take care of the load within the limits of our available equipment .... A new

room to house the re-recording "Jeep" has been added off the artist corridor and these facilities will assist the Army production personnel to assemble, rehearse, and re-record program material not already in a single unit . . . We are happy to welcome a New York recording engineer to our Hollywood gang, Silvio Caranchini . . . And understand we have a Chicago man, Bob Jensen, due out soon . . . Sil hails originally from WGY where he announced before joining their engineering group at about the time Al Korb transferred from WGY to Hollywood NBC . . . Good luck with all the new recording work.

BLUE NEWS ... Acoustic treatment of the Blue Playhouse is held up temporarily due to war and WPB rulings . Roger Love commissioned Second Lieutenant in the Signal Corps thru the channels of officer procurement and has left for training at Monmouth . . . Doc Knight has returned to his old stamping grounds, Chicago Blue ... Gang will all miss weekly appearances of Dinah Shore as her Blue show for Mum goes off the air .... Coca-Cola still sailing high, wide and handsome with its Camp shows . . . Blue boys get some nice trips and some hectic workouts on Coca-Cola and I might add are still batting a 1,000 percent . Congratulations Denny and the Blue . . . Lorenz oiling the trout rod for May 1 opening of trout season . . . More new Blue men expected ... Jake O'Kelly looking like a million as he reported back to the Blue following a stretch in the His sister, Gert, back in California now with him Army . . ... NABET's National Secretary Treasurer, Thor LaCroix, getting many fine writeups and local purple hearts over his handling of the big Whiteman welcome to the Blue ... The Blue front office including Chief Denechaud and Secretary Helen Wendt say hello to all ....

MISC ... Met Charley Correl (Andy) in the hall other day and he reports good old Amos n' Andy will be back in

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the fall with a new half hour weekly show .... Also visited Bill Hay at his beautiful Palm Springs place and find that Bill is now doing Bible readings on Mutual daily with a CBS commercial on Sunday . . . Bill sez he comes in only on Sunday and records all the Mutual shows for the week then heads back to Palm Springs and his golf . . . Senior Control Super, Pickett, reports his famous cow "Annabella" still giving milk and not meat . . . Cappy raising chickens by the hundreds and supplying all the studio including the Ginny



"SIL" AT WORK ON "ELECTRONIC COFFIN"

Almost overnight NBC created a new re-recording studio in its Hollywood Radio City to fulfill its contract with the Special Services division of the War Department for recording of all programs originated in the film capital under the direction of Lt. Col. Tom Lewis.

Here, in the new dubbing room, are (left to right) Capt. Tom McKnight, producer; Lieut, Victor Quan, recording expert; Private Ed Dela Pena, technician; Silvio Caranchini, NBC engineer in charge of the re-recording setup; Private Bob Welch, producer.

Command Performance, Mail Call and Jubilee are among the programs produced by Special Services, recorded at NBC, and shipped overseas for entertainment of U.S. armed forces.

Sims Service Man's Birthday Party ... Pickett still bringing eggs by the dozen dozen . . . New Athletic Association deal will offer bulletin board for trading victory garden vegetables and plants . . . Lt. (sg) Fullaway, ex-SF Engineer, in for a brief hello .... Some of the Hope loops lately sound like they were sent over harbed wire fence to fence lines like the one we had to 29 Palms once . . . Hollywood standardizing on "E" schedule cue loops instead of Morse . . . Much cheaper and have the advantage of not needing a qualified Morse man along ... Joe Kay, new Field Supervisor, has designed some good switching gags to make the new "E" loops more versatile ... "Pop" DeWolf has two daughters in pictures ... Dorothy now working on Sonja Henie Picture at Fox and Marjory due to start work at Paramount .... De reports he now has a Victory garden sixty by a hundred and with water piped in by City of Beverly Hills and only cost to him is a buck a month for water ... Rumors have it that a new

arrival is due in the Les Culley household .... Jim Thornbury really getting around these days . . . Suspect his draft status has stepped up his night life . . . Brooke as a test case again was given another 2A classification for six months . . . Brooke also scheduled to conduct three weeks course in control room operation for new NBC Radio Institute at UCLA ... George Foster taking over Cappy's Ginny Sims show and Harry Bryant inheriting Kay Kyser and Jack Benny as well as doing Dr. IQ and Heidt . . . Well, fellers, that's about all from Hollywood for this day and date cuz this has got to hit the airmail or else . . . May we repeat our annual invitation as vacations begin .... Be sure and drop in and see us if you're lucky enough to get transportation out this way .... And if you arn't, stay home and buy Bonds . . . 73.

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Broadcast Engineers' 23 Journal for May, 1943

### Behind the Mike

#### By Con Conrad

**T**EADING our column this month again is a note on Lt. Tom Gootee, formerly of the Journal Staff and NBC Engineering in Chicago. He broadcast from the British Isles on April 28, 1943. At this time he was interviewed on the Blue Network in regards his having received the award of the Purple Heart. Our congratulations to Tom and our best wishes.

M. F. Royston of the Blue Engineering Staff in Chicago has taken military leave to join the Navy. He has been commissioned as a full Lieutenant and reports for duty in Washington, D. C.

D. J. Wilson, R. H. Knowles, and W. Schooley, all having completed their periods on the apprentice staff of NBC Engineering in Chicago, have been placed on the full engineering staff.

F. E. Golder of the NBC Engineering Staff in Chicago has been added to the control room staff for the summer.

Captain P. J. Moore, formerly of the engineering staff of NBC Chicago, visited in Chicago recently; however, the Captain was very busy and few had much chance to talk over his Army experiences with him.

Lt. C. L. Pierce, formerly of the NBC Engineering Department, Chicago, went into the Army as a Second Lieutenant some time ago, upped to First Lieutenant and latest reliable reports tell us that he is soon to become a Captain.

It's a small world! The man who originated that certainly could not have put it better. Major P. H. Clark of he U. S. Signal Corps, formerly of NBC Engineering, Chicago, and Lieutenant T. G. Bombaugh, formerly of the WENR Blue Network transmitter, Chicago, recently had dinner together on a remote island in the South Pacific.

W. T. Knight, formerly of Chicago, Hollywood, New York, Hollywood, NBC and Blue Engineering, returns to home grounds and takes up new duties with the NBC Engineering Staff in Chicago.

George Sprague of the transmitter staff of WIOD has been commissioned in the Navy and has reported for duty at the Naval Air Base, Opa Locka, Fla.

David Jefferies, recently connected with the Naval Research Lab, has resigned to become resident engineer with KINY, Juneau, Alaska.

Frank Kirton of the engineering staff of CKOC has taken military leave and has joined the Royal Canadian Air Force.

Frank Ridgeway, formerly of the engineering staff of WTOL, has been commissioned as a Lt. in the Air Forces. Garo Ray of the WICC staff has been commissioned a

Captain in the Signal Corps and has reported for active duty at Ft. Monmouth.

Ted Woodward of the WFIL Engineering Staff has been commissioned a Lieutenant in the Army and reports soon for active duty.

Byron Winget, formerly of the WLW Engineering Staff and more recently of the Sound Effects Department, has resigned to join the Sound Effects Department of CBS. Byron's brother heads the Sound Dept. for WLW-WSAL

J. Alusic of the Blue Engineering Staff in Chicago, has returned to work after a period of illness which kept him in bed for several weeks.

R. R. Jensen, formerly of the NBC Chicago Engineering Staff, has just informed us that he has arrived in Hollywood to take up duties with NBC there and likes it very much.

WOR News

#### By A. W. Stanford

H SPRING . . . Spring at last, three weeks late, but nevertheless it has arrived in the eastern regions of the United States. It has been said that strange things happen in the spring time and we duly confirm this oft' repeated uttering with the following bits of Spring Specials:-

In New York City, on March 20, 1943, one Mr. Elliott Ira (yep, that's his middle name boys) Bergmann, alias the "Stone Crusher," after due deliberations and compliance with laws and customs of the land, committed matrimony. His bride is the former Miss Eleanor Lifshutz of San Antonio, Texas. All this has been a great secret in the life of Bergmann, but it leaked out after the boys on the night trick began to notice how tired he looked when coming on watch. To all queries he evasively replied that "He didn't feel good." A couple of days later rumors began to fly around that Bergmann has been married some days ago. Finally he admitted that he has given up bachelor life.

In the Bronx, N. Y., on April 16, 1943, an exhausted stork deposited a six and one-half pound bouncing baby boy at the homestead of Mr. and Mrs. James J. Gavigan. The first born of the Gavigans was christened William James. Daddy Gavigan now alternates between WOR's 50,000 watt transmitter and his newly born.

In Briar Cliff Manor, N. Y., all during the months of March and April, J. MacKenzie Reid, jovial and capable supervisor of WOR's remote department, heen tenderly nursing his own special brand of vegetable plants which he is raising in his hot house for an extensive Victory Garden. The last word we received from him was that "Everything is coming along nicely."

In the Orange Memorial Hospital, on April 27, 1943, Mr. and Mrs. George W. Ruckstuhl were the happy recipients of a bundle from heaven. William George weighed seven pounds, ten ounces on arrival and is creating plenty of QRM. Pop Ruckstuhl, who is one of our TE, has been in a happy daze ever since his first born arrived.

All along the eastern seaboard, WOR Victory Gardeners got going full speed, after the recent spell of unseasonable weather. Many of the initial efforts were wasted because of the late freezing and heavy rains. Yours truly for one, had to re-seed carrots and beets which were planted on April 15, according to instructions by the best authorities. However, the boys report "Sprouting" all along the line and have visions of ripe tomatoes, etc.

The new Mutual Playhouse, formerly the Guild Theatre, on W. 52nd Street, New York City, was formally opened on April 30, 1943. Radio equipment and accoustical arrangements are as perfect as present day engineering developments will allow. The theatre is beautifully decorated and has a seating capacity of over a thousand.

Mack Benoit, who came to WOR about a year ago from B.M.I., used to play with Mal Hallett's orchestra. He is one of our SE and in his spare time does a lot of music arranging and composing. Recently, one of his compositions was played on the Rainbow House program. He received his B.A. degree in music at Yale. He is married and lives out on Long Island.

Don Hale, ex-prexy of A.T.E. of WOR, is now Ensign Don Hale and is out on the West Coast receiving his indoctrination. The very best of luck to you, Don.

Broadcast Engineers' 24 Journal for May, 1943



### Echo Gone

The myth of Echo is a sad one, indeed. This happy nymph contrived to engage Juno in conversation while her fellow nymphs frolicked with Juno's husband. The goddess, discovering the trick that had been played upon her, deprived Echo of her ability to converse. Saddened by her fate, she retired to the hills.

**Advance Glass Base Recording Blanks** are devoid of echo. And, unlike the Echo of mythology, they accurately reproduce **all** sounds, faithfully.

ADVANCE RECORDING PRODUCTS CO. 36-12 34th Street STillwell 4-7837 Long Island City, N. Y.

### Sincerely Yours...

WHEN the enemy struck at our country, American industrialists and business men, not content with their achievements of converting from peacetime to war production, turned the full power of their advertising, not only radio but publication advertising as well, to the gigantic task of bringing the war and its meaning to the American people.

Closely cooperating with the Government, they devoted, with characteristic energy and loyalty, time, money and great talent to the task of crystallizing the nation's thinking, to dispelling confusion and to clarifying the wartime duties of the individual.

Advertising agencies, too, have utilized all their skill and experience in bringing about the fullest understanding of all the problems of war in a manner which has done much to unite the American people.

It is to these leaders of American industry, to executives, copywriters and artists of American advertising agencies and members of the Advertising Council, that the American people owe a debt of gratitude.

It is their advertising support, their war-effort and entertainment programs, which make possible a broadcasting service without equal in the world—a free radio for a free people.

To these men radio pays tribute—history will write "well done" to their magnificent contributions to the war effort.

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