

How Telegraphers Are Made

First of a Series By T. R. McELROY, World's Fastest Telegrapher

PART I

SEATED before a "mill" with a set of phones clamped on my nerve-tingling ears, watching the judges and awaiting the whiz of a Wheatstone with code batting out around 50 or 60 words per minute—hey, it's a cinch—compared with sitting in front of this typewriter right now trying to find words with which to start some kind of an article that will be worth the time of "RADIO" readers wading through. So here goes! Stay with me, ops. I'm no Shakespeare nor Wilde, nor Poe. And no matter how greatly I may admire some of the personal proclivities of those writing gents (?), I couldn't even attempt to emulate their facile pens with my rusted typewriter. But I will try to tell you, truthfully, something about code working. And I pledge you my word that if you'll sweat half as much in reading it as I do in writing it, you'll start yourself on the road toward better operating. Let's go!

Back in '14 following my "graduation" from school (they threw me out for the good of the school), I proceeded with the usual matriculatories attendant full fledged membership in the fraternity of "all day trotters" in the University of Western Union. Those were the happy days when you'd deliver a message to a non-English speaking addressee and painstakingly explain that there was a small charge of one dime! We used to pool the dimes and buy cans of beer. I remember we had an empty pickle tin that held about a gallon. It was really a vitally necessary adjunct to the providing of good service. Tramping through hot, dusty streets was thirst provoking—and when you recall the large numbers of horses in those days you'll readily realize that a messenger boy's throat required the thorough cleaning attendant the sluicing down of gulps of beer.

A few months on the streets taught me the necessity for "higher education", and the greatest heights to which any messenger might ever aspire—was the third floor, where the Morse operators sat in the midst of a clatter greater than any steel mill produces. I can remember as though it were only yesterday, sneaking up the backstairs to watch those fellows sitting there with their legs crossed and "putting ten on a line" with the greatest of ease. This guy that we're singing about these days who plays around with a flying trapeze—why he is a hard worker compared with those old time telegraphers who turned out 50 and 60 messages an hour with Murad-like nonchalance. I can remember one guy, Bucky Kane. He used to work Pittsburgh. And to this day I can see him sitting there copying, chewing tobacco with the priceless sense of security that was his in the knowledge of his own personal spittoon—a paper cup in his shirt pocket!

I started doing little odd jobs. Running errands to deliver personal notes for the operators. Boston was a wicked city in those days. And we had what the evangelists might term "sinks of iniquity".

So, anyhow, in return for my efforts, some of the Morse men would give me a little practice on their "shorts"—their 15-minute respites from the grind. And out of a few weeks of this smoking room tuition I emerged what I fondly figured to be a good operator. Well, sir, the first few minutes on a wire when they finally decided to try me out, convinced me that maybe there was another operator or two who might be better. You've

all been through it probably. That, anyhow, was my start as an operator.

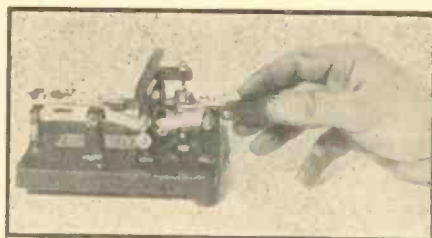
I went through the various stages of working in the woods, moving up to the ways, and finally to the trunks where a man would work bonus, and have a chance to make a real week's pay, with the aid of a peculiar telegrapher's style of mathematics which skipped ten numbers occasionally. Be that as it may, however, I went through the grades and finally wound up as an operator at Camp Devens where I fought the battle



T. R. McElroy, Holder of World's Record for Fast Telegraphing.

for the outlawing of war—with a telegraph key. All I need now is another good war to sell some of my own telegraph keys! About 1918 or 1919 things were pretty dead at Devens, so I was let out. Coming back to Boston I found no telegraph jobs and thus commences the entry into radio work.

A few weeks loafing in Boston convinced me that eating was a habit so firmly entrenched in my system that I couldn't get over it. A kind of a senseless habit, but there it was and I had to make the best of it. So I managed to borrow a few bucks from some of the Morse men I had worked with, and, on the basis of a rumor that the RCA were hiring Continental code operators at their trans-oceanic station in Chatham, WSO,



The "Bug" that McElroy used when he won the Championship.

I hopped a train for the Cape. Kripes! One way fare and I hardly knew Continental code.

Fortunately for me, and rather unusual, too, there was an American assistant superintendent who hired the operators. A real gentleman for whom it was a pleasure to work, Fred Heiser. It developed that Fred had been a real high grade Morse operator and during my test which brought out a palpable lack of knowledge of radio code, he threw some Morse at me. It was a cinch. A guy would have to be deaf, dumb and blind not to be able to copy the kind of Morse he sent.

So on the strength of that he hired me. So began the career of Mac as a radio operator. They were sorry! They could pay me only \$140 a month! Whoops! A first class Morse man was drawing only about \$125 in Boston at the time.

We used to work POZ, Nauen, Germany, and LCM, Stavanger, Norway. Sometime I'd like to tell you all of some of the experiences on those circuits. We had two and sometimes three landlines to New York, and it was on these circuits that I worked most of the time. Continental code. It was murder for about two weeks but then easy. They had some wonderful operators down in New York, too. All Morse men who had learned Continental as I did in a few days. There was Jack Dorien, and Jim Shea, and a fellow named Henderson, and a flock of other wonderful operators. And I remember especially Joe Chaplin who was probably as fine an operator as there ever was in the business. And Benny Suter and others. I wonder where they are now?

We had some great operators at WSO, too. I remember Joe Lynch who used to send with a straight key almost with Wheatstone perfection. Funny about Joe, too. He was about the only operator I'd ever met who was a real good operator and yet hadn't been a Morse man. I guess it ought to prove that an operator can be a first class man without first being a Morse operator.

I guess it was about 1920 when RCA decided to work the trans-oceanic stuff from New York and a lot of we operators were taken from Chatham down to the big city. That was the beginning of the end. You see I lived in Boston most of my life among American people. And I fondly congratulated myself upon my six or seven generations of Bostonese antecendency. And naturally I liked to talk about it. It didn't enhance my standing with the boys "from home" who ruled RCA. And they ruled it with an iron hand. So that between my propensity for voicing the virtues of our American citizenry, and my espousal of the cause of "collective bargaining", it was only a matter of time before I was out "for the good of the service"—they couldn't take it!

I remember I used to work POZ much the same as I'd work a Morse bonus wire, turning out faultlessly beautiful copy at extremely high speeds. But what did exceptional telegraphic merit amount to when the finer sensibilities of His Majesties' expatriates were offended by uncouth Americanisms! So sometime during 1920 I found myself back in Boston. Still a good American though somewhat befogged as to the consequences thereof. It cost me a job.

I "boomed" around the country, working here as a broker operator, there as a press operator, and again somewhere else with a packing house, and finally wearied of the road and its belly-reducing vicissitudinousnesses, (what a word to ripple out of a guy's fingers). So I returned to the bosom of good old Uncle Wess at Boston where my original boss and the kindly father to all Boston operators, took me again under his supervision. I'll never forget the debt I owe him: J. B. Rex, the chief operator of the Western Union in Boston.

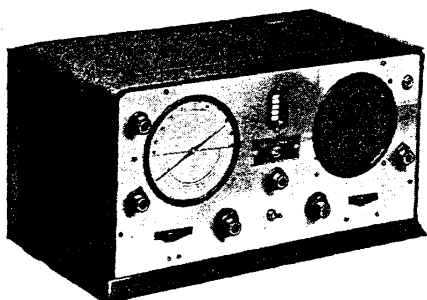
Sometime late in 1921 or early 1922 there was a radio exposition at Boston wherein were displayed the latest models in salt box wound induction coils and basket wound vario-couplers, to say nothing of those new

(Continued on page 28)

Scooped!

..... by 9 months

Nine months ago, the Hallicrafters introduced the SKYRIDER—no recent imitations offer ALL these exclusive SKYRIDER features.



WHEN the Hallicrafters' SKYRIDER was announced nine months ago, it heralded a new advance in short wave receiver design. It was the first compact, efficient communication receiver to offer truly professional standards at a reasonable price. Naturally, it has been widely imitated. But no one has been able to offer ALL the features that make the Super SKYRIDER the outstanding radio value of today.

Examine the features that contribute to the Super SKYRIDER'S leadership. Note, for example, that by using four short wave bands, each with separate coil, instead of the usual three, the LC ratio is increased 33%—affording a tremendous improvement in the signal to noise ratio. Note, too, that though the Super SKYRIDER has a measured overall sensitivity greater than any receiver, the I.F. transformers are operated at only 50 microvolts—an indication of its amazing sensitivity in the R.F. stage.

Compare the SKYRIDER, feature for feature, with any set offered today. Con-

vince yourself of its genuine superiority—its truly amazing sensitivity—its vibrant power. For perfect reception on all bands—for real dollar for dollar value—the SKYRIDER offers you more than any set of comparable price.

Check these important features:

Built-in power pack and speaker. An important hallicrafters' contribution to short wave set construction.

Four bands—instead of the usual three. Fifth band—10 meter or broadcast band—optional. Full seven inches of band spread on the 40 meter band. Greater spread on all bands.

Pre-selection. Built into the Super SKYRIDER—subdues noise; makes signal reading easy.

Five band selector switch. No plug-in coils.

Two stage dual air-tuned intermediates. Designed for best ratio for both gain and selectivity.

Crystal filter. Flexibly designed to give absolute single signal reception without reduction of sensitivity.

Accurately calibrated dial scale—for all ranges. Easy to locate any frequency.

Less than 3 microvolts sensitivity. At a 50 mill-watt output—hear CW signals at a fraction of a micro-volt.

Power output of 3 watts maximum in the speaker.

Transmit-receive switch—with special control to compensate for power delivered by transmitter. Eliminates blocking in the receiver.

Frequency meter and monitor. Receiver functions as frequency meter and monitor in conjunction with the calibrated dial on the band spread scale.

Write today for complete descriptive literature

W. J. HALLIGAN, Pres.

the hallicrafters, inc.
3001 Southport Ave. Chicago, Ill.

the hallicrafters, inc.

How Telegraphers Are Made

(Continued from page 17)

fangled audion bulbs invented by some guy named DeForest. Well, sir, one of the features of that radio show was to be a code speed contest. I thought it might be fun to enter it, and besides it would give me an excuse to get a night off. So "the old man", as the operators affectionately referred to Mr. Rex, said okay for Mac to take the night off. So after working Morse all day and not having heard Continental for about a year, I entered the tournament. Very fortunately for me there were no good operators so it was a cinch. I think I copied 51 words per minute, which as you now is not fast. But they thought it was in those days and we had a lot of fun.

Sometime later there was another tournament at New York. And again "the old man" secured the good offices of another wonderful friend to telegraphers: a gent named Shute who was one of the real big shots in the Western Union. Mr. Shute arranged to let me have some practice on Continental code and then go over to New York where it was the greatest thrill of my whole life to sit down and thoroughly and unmistakably beat the other entrants. I think the speed was around 55 wpm that time.

Some time later there was still another tournament at Chicago and again those two splendid gentlemen who are typical of what I believe Western Union executives all are—again they sent me to Chicago to participate.

We had a lot of fun out there and I returned to Boston with a beautiful diamond

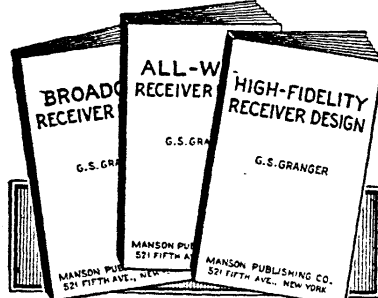
times in its ever-ready availability as a pawable asset. You know how it is? I copied 56½ wpm out there that time for three or five minutes with perfect copy.

And so on and on. Always with the big thrill in proving to the world that we Americans are the finest operators. You and you and you, the American hams who read "RADIO", you are the finest operators in the world. I know. I've met them in tournaments. And the best of them can't compare with the average fair-to-middlin' American operator. So go to it. Develop yourselves into the kind of operators you are capable of becoming.

In another article in "RADIO" for February I am outlining what I believe to be the correct method for use of semi-automatic ("bug" type) keys. And a few pointers which will, I believe, help any operator to become a better operator. And isn't that what we all want? If you are operating for a living, you are anxious to hear anything that will make your job easier, aren't you? And if you are operating as a hobby, you want to get the most out of that hobby. And the more skilled you are as an operator, the greater will be the measure of your enjoyment in the pursuance of your hobby.

THE LAST WORD On RADIO DESIGN!

3 books every "Ham" and Service Man "should read," says The N. Y. Sun



Have the benefit of newest developments. These books, by expert, tell all—give modern as well as anticipated improvements. All explained simply and clearly illustrated.

Broadcast Receiver Design. } By G. S. GRANGER
High-Fidelity Receiver Design. }
All Wave Receiver Design.

\$1.00 complete set. Order direct from per copy 50c.
MANSON PUBLISHING CO.
521 Fifth Ave., Dept. R New York City

CLASSIFIED ADS

QSLs, 75c per 100. 2 colors. W9DGH, 1816 5th Ave. North, Minneapolis, Minnesota.

CRYSTALS—Dependable X Cut, 1-in square. Fully finished and unconditionally guaranteed. Specify frequency desired. \$2.00. Holders \$1.00. W8DLM, Rochester, Michigan.

NEW AND USED Weston, Jewell Meters. Bargain prices. All types. Perfect condition. Individually checked. Low prices on meter repairs. Want burned out meters. Free bulletin. W2EDW, Far Rockaway, New York

TRANSFORMERS—1 K.W., 1,500-2,000 each side. \$18.50. 1200 watt 1200-2200-3200 each side. \$24.00. Quotations given. Frank Gerben, W9CES, 2012 S. Peoria St., Chicago, Illinois.

COMPLETE file of "RADIO" year 1934, in heavy leatherette ring binder. \$3.75, postpaid. "RADIO". Pacific Bldg., San Francisco, California.

THE FRANK C. JONES 222 Communications Superheterodyne described in this issue, with 20. 40 and 80 meter coils. Made by the author. Will sell as have no further use for same. Cost \$39.00 to build. Sell for \$35.00, complete with tubes. First money order takes it. Frank C. Jones, 2037 Durant Ave., Berkeley, California.