

K9YA Telegraph

Robert F. Heytow Memorial Radio Club

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Where is our Eric Sloane?

Who Will Document Amateur Radio History?

Philip Cala-Lazar, K9PL

I have been a fan of Eric Sloane's books ever since, as a 6th-grader, I discovered his *American Barns and Covered Bridges* in my elementary school's library. This profusely illustrated book provides an overview of the buildings,

structures, tools and implements that helped shaped a young America both literally and figuratively. Everything from the timeless shapes of pioneering farm outbuildings to the tools that built them: the classic forms of hammers and saws to the forgotten devices that leave us scratching our 21st century craniums, all are lovingly rendered and faithfully described.

Eric Sloane (1905-1985) was an artist, author and illustrator. For me, his most memorable books document early American culture through his iconic writing style and detailed drawings that capture the very spirit of the times. In his books Sloane paints a panoramic landscape of early American life and the weather lore, tools, lost trades, rural lifestyles and an ethos remembered, however faintly, even today.

Doubtless, no one who has read any of his books can come away with anything but admiration for our forefathers' ingenuity in performing complex and mighty tasks with simple tools and basic materials; their awareness of and their ability to work with the natural world; and of simply making do with what was at hand.

Amateur Radio's History

Now, as amateur radio enters its second century who will document our history? Even a cursory glimpse of amateur radio starting at the earliest years of the

20th century reveals the same type of genius for doing the most with what was readily available in tools and materials, and in observing and coping with nature's laws. In addition, our inventive radio ancestors broke new ground in the pure and applied sciences and in creating new and still evolving forms of human communications.

One look at the open circuitry on breadboard receivers and transmitters reveals straightforward designs using the same architecture of "make do" and "make work"

that applied to early American structures and devices. Frequently eschewing those manufactured parts that were available, early electronics gear was assembled on wood planks, employed hand-wound coils and transformers and incorporated condensers and batteries comprised of household items like glass, paraffin and foil. And, let's not forget the spidery and vertigo-inducing wooden towers and

antennas that preceded today's stringent zoning and safety regulations.

Arguably, the best known and most recognized amateur radio illustrator was Philip Gildersleeve (1908 - 1966), W1CJD. Known as "Gil," his Jeeves cartoons and other illustrations amused generations of hams

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"...an ethos remembered..."

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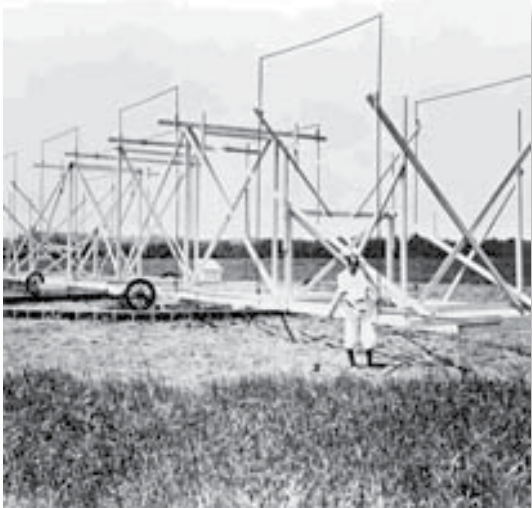
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VHF Historical Notes

Part III

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The World's First Radio Astronomy Antenna

On October 27, 1927, the Federal Radio Commission affirmed amateur wavelength allocations set forth in the Fourth National Radio Conference, which specifically allotted 5-meters and $\frac{3}{4}$ -meters to amateur use. Significantly, the FRC added telephony privileges to 5-meters and some short wavelengths. Spark transmitters were completely prohibited, after having been restricted to 200-meters in the Fourth National Radio Conference in 1927.¹

Further administrative changes were afoot, as well. An international radiotelegraph convention in Washington, D.C. in late 1927 gave international recognition to amateur radio for the first time, and approved international amateur frequencies on 160-, 80-,

40-, 20-, 10- and 5-meters (although the international 5-Meter authorization was more limited than in the U.S.).²

In all, the Washington Treaty ensured the existence of a worldwide amateur radio hobby. The loss of domestic frequencies had the primary effects of pushing U.S. amateurs towards greater efficiency in their operating abilities and providing the impetus for improving one's own equipment. Signatory nations were required to implement provisions of the Treaty by January 1, 1929. Even as Congress was debating the Treaty in early 1928, the League quickly funded a technical development program, with articles on "1929" amateur transmitters, receivers, voltage supplies, tuners and antennas. The program was a serious effort at bringing the amateur's equipment up to date with the technical requirements of the 1927 Treaty.³

1 "Changes in Amateur Regulations," *QST*, Dec. 1927, p. 24.

2 *QST*, Jan. 1928, pp. 15-22; Feb. 1928, pp. 28-29.

3 Ross A. Hull, *QST*, Aug. 1928, pp. 9-19. Further articles on the subject: Sept. 1928, pp. 9-14; Sept. 1928, pp. 25-30; Oct. 1928, pp. 9-19; Nov. 1928, pp. 9-17; and Dec. 1928, pp. 13-16.

Three New Bands

5-Meters was developing a reputation for being rather quirky and unpredictable, and there was a general disappointment that the band seemingly did not support long distance traffic typical of the short wavelengths.⁴ Further, virtually all the equipment was homemade and difficult to work with even under the best of circumstances. To keep problems to a minimum, many UHF receivers employed super-regenerative circuits having a simple design while still possessing good gain. Feedback problems and self-oscillation were notoriously common, however, with "super-genny's." Most transmitters were extraordinarily unstable and exhibited severe drifting. It was quite normal for listening operators to follow meandering transmissions up and down the UHF wavelengths. Some transmitters even utilized broadly resonant, untuned grid circuits. In England for instance, a TNT transmitter circuit was regularly used. This circuit had two valves arranged

in a push-pull pattern with broad resonance.⁵ In the U.S., 852 tubes came into common use by 1928, and these tubes were ideal for UHF work.

In early 1928, the U.S. Senate debated the Washington Conference Treaty, ratifying it on March 21, 1928.⁶ Amateurs were eager to explore the new wavelengths authorized by the Treaty.

At the League's urging, the Federal Radio Commission on March 6, 1928 opened 10-meters for amateur use ahead of both the Treaty's ratification date and effective date.⁷ Between the difficulties being experienced at UHF as well as experimentation occurring on short wavelengths, 5-meter activity had already dropped off before 10-meters was authorized. With the arrival of the newest UHF band, many more amateurs simply moved to 10-meters.⁸ There was great interest initially in 10- meters, and

"...bowl-shaped electric heaters..."

4 *QST*, May 1934, p. 20-26; *QST*, July 1931, pp. 9-20, on p.9.

5 See, VHF/UHF Manual, 4th ed. 1991, RSGB publ., on p. 1.1.

6 See, "Recent Changes in Radio Law and Regulations," *QST*, May 1928, pp. 14-15.

7 *QST*, May 1928, pp. 14-15.

8 Bill Tynan in "Our Early Heritage," Proceedings of the 28th Conference, Central States VHF Society, 1994, p.67.



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early radio articles described the activity with the same unabashed enthusiasm as had been the case with 5-meters just a few years before.⁹ In an effort to try out the band, a Ten Meter DX Party took place in late May 1928.¹⁰ Other 10-Meter tests both in the U.S. and Australia occurred in August 1928.¹¹ In a rush to get onto 10-meters, many amateurs actually transmitted on 14 mc and then deliberately radiated a second harmonic onto 28 mc! In commenting on almost two dozen calls being heard by W6DZL, the League's Communications Department wondered: "If a small amount of 'harmonic' energy was responsible for some of these signals, what might a real bunch of 28 mc. transmitters do?"¹²

The new band proved no panacea, however. Far from it, many hams experienced the same frustrations they did on 5-meters. Some amazing distances could be traversed upon occasion.¹³ But, overall, the wavelength was far less supportive of consistent DX work than was 20-meters. The following design was from one of the earliest construction articles on 10-Meter equipment. With the early start-up of 10-Meters, many 10-Meter articles quickly appeared.¹⁴

With the implementation in the U.S. of the 1927 Washington Conference, 5-meter activity then became limited on January 1, 1929 to the internationally recognized frequencies of 56,000 to 60,000 kc.

It was during this time frame that a revolution in antenna design occurred: In 1927 and 1928, Hidetsugu Yagi and Shintaro Uda invented the beam antenna. Early UHF antennas were merely vertical or L-type wires resonating at an ultra-high frequency. Yagi and Uda experimented with their antennas on frequencies as high as 6 GHz, obtaining telephony contacts as far as 10-30 kilometers.¹⁵ Others quickly began experimenting with beam antennas on 10- and 11-meters, where the physical size of the

"...worthy
of note."

arrays was more manageable.¹⁶ In the years ahead, UHF frequencies would prove to be ideal for these new types of antenna arrays, owing to their relatively small size at UHF frequencies. The 28,800-kc. antenna on the cover of the October 1928 *QST* closely followed Yagi and Uda's specifications, and was possibly first experimental beam meant for amateur use.¹⁷

With the general disappointment of the 1927 5-Meter Tests, interest shifted to 28 Mc. Reports continued into 1928 and 1929 of great international activity in far-away stretches of the world, but propagation remained a mystery. There was also a lack of predictability to the wavelength, and interest in 56 Mc and to some extent, 28 Mc waned from 1928 into the early 1930s. Activity reports of 56 Mc evaporated. Indeed, the only ultra-high reports noted in 1929 *QST*s in either the Experimenters Section or in the Communications Department involved 28 Mc.

Military and commercial interests began to upgrade their communication equipment in the late 1920s, as European patents had become available in the U.S. by then, and there was a general desire to improve the quality of and standardize electrical component manufacture. AC radios were supplanting old battery receivers in broadcasting, and amateurs quickly made use of the newer receivers. The ARRL embarked on an equipment improvement program of its own by 1928 and 1929, and many amateurs upgraded their equipment on the lower frequencies to "1929 standards," some with crystal control.¹⁸ Within a few years, commercially made receivers designed for the amateur market arrived on the scene, including the National SW-3.

9 In "Ten-Meter Results!" *QST*, May 1928, p. 46, initial reports were quite encouraging.

10 "Ten-Meter DX Party Coming," *QST*, May 1928, pp. 46-47. *QST*, July 1928, pp. 49-50.

11 *QST*, July 1928, p. 50, and *QST*, Aug. 1928, p. 51. *QST*, Sept. 1928, at I, *QST*, Oct. 1928, pp. I-II.

12 "About 28-mc. Work", *QST*, Nov. 1928, at IV-V; *QST*, July 1928, pp. 49-50.

13 *QST*, July 1928, p. 50; "Ten Meters," *QST*, June 1928, p. 44; *QST*, Dec. 1928, pp. I-II.

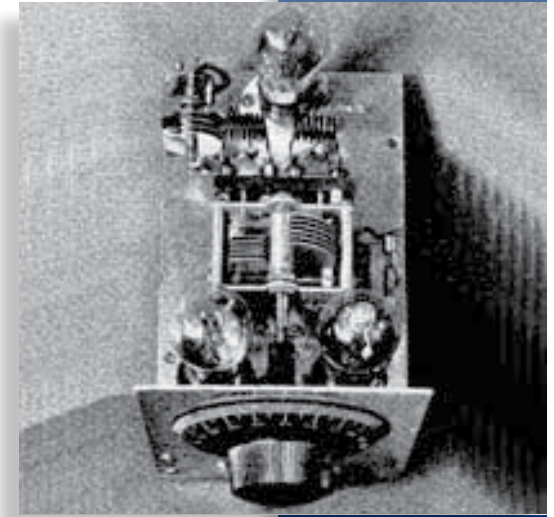
14 Harold P. Westman, *QST*, Aug. 1928, pp. 37-42, on p. 37.

15 See, VHF/UHF Manual, 4th ed. 1991, RSGB publ., on p. 1.1.

16 Proceedings of the I.R.E., Nov. 1927; The watershed article among amateurs was "High Angle Radiation," Paul S. Hendricks, *QST*, Oct. 1928, pp. 31-32.

17 See, *QST*, Oct. 1928, pp. 31-32.

18 *QST*, Feb. 1929, at 29; "Another 1929 Receiver" (Hendricks), May, 1929, p. 15; (Hull), April, 1929, p. 8.



Super-Regenerative
56 mc. Receiver



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CONTINUED - VHF ON PAGE 7

There's a Sterba Curtain in My Yard

It Will Fit in Yours Too

Darron Sanchez, WA5TCZ

Let me tell you about my new antenna. Perhaps you're thinking, a city lot is too small—this antenna won't fit. But, if you have room for a quarter-wave dipole on 80-meters or a half-wave dipole on 40-meters, you have enough room.

I am no antenna expert; I know nothing about antenna theory or how to model an antenna with a computer. I can only try to copy a design that an expert in the field of

antennas built and tested.

If you decide to build this antenna measure and cut all the wires as close to these dimensions as you can. The top and bottom wires are 49 feet 1.5 inches long. Both sides are 16 feet 4.5 inches. The antenna forms a rectangle. Diagrams and additional information can be found at: <http://www.hamuniverse.com/sturba.html>

Be sure to install a 1:1 current balun from the transceiver to the tuner, then from the tuner install a 4:1 current balun connected to the 130 feet of ladder line feeding the curtain. I think this puts more RF into the antenna and keeps the feed line from radiating. The 130 feet of ladder line is a must do, I evenly distributed the excess in my attic and then down into the shack.

My antenna is mounted at 29.5 feet at one end and 24.5 feet at the other end; these figures put the high end 13 feet from the ground and the low end 8 feet from the ground.

A ground system may be installed for enhanced performance. I added the counterpoise system and built a simple home brew LC tuner using a coil, variable capacitor and microammeter to tune the ground system for the highest ground current. The ground system comprises seven buried quarter-wave

(minus 10%) radials for 40-meters directly under the antenna.

This is no one or two day antenna project. It took me two months to gather all the supplies needed to build, erect and tune the antenna.

As you can see, the antenna is actually cut for the 20-meter band. All you have to do is prune the 130 feet of ladder line for the lowest SWR on 20-meters. After you do this, the antenna will tune up on all bands 160- through 6-meters using an antenna tuner with good results.

The antenna has been up and working since August 2008. After two months and running 5 watts my station log shows 77 contacts on 40-meters despite poor band conditions. My lowest received report was RST 439 and included many 599 reports. With 5 watts I also worked several DX stations in South America, Europe and Mexico, again on 40-meters.

*"...you have
enough room."*

There's no reason you must work QRP, I have used 100 watts with great results. I have no other antenna to compare this antenna to as my other wire antenna was such a poor performer I took it down to put up this one.

After two months with this antenna my QSO count has gone up to three to five per evening from one or two per evening. I know I'm stronger at 5 watts because of the replies to my CQs.

In my 41 years of hamming this is the best wire antenna I've had the pleasure to use.

The Tuners

There are two choices for the artificial ground tuner: MFJ Enterprises, MFJ-931 1.8-30 MHz artificial ground, \$109.95 or homebrew one like I did for around \$10 if you have a good junk box.

Artificial ground tuner plans by Hans Remeus, PA1HR, can be found at:

http://www.remeus.eu/english/hamradio/artificial_ground.htm



An Elmer's Tale

W9NUF Personified TOHS, That Old Ham Spirit

Rod Newkirk, VA3ZBB/W9BRD

"Amateur radio was more fun before hams got money," lamented my old friend W9PBI. John had patiently Elmered a young fellow to a General license and looked forward to helping him build his first rig from scratch. But the kid, whose family had bucks to burn, chose to start at the top. He filled his hamshack with a top-grade, floor-to-ceiling Collins KWS-1 kilowatt. John settled for helping him raise an antenna.

During days of the Great Depression, spending money on a hobby was considered sinful folly. Old toothbrushes became feeder spreaders, foil and wax paper made capacitors. No one was better at scrounging than young Bud Nibbe, W9NUF. Bud was a legend before his time, his picture having appeared in a 1930 *QST* as an 11-year-old with a 5-meter bicycle mobile. Nobody took apart more defunct old radios for parts down to the last nut, bolt and solder tab.

I didn't know W9NUF in his earliest years, but he was well known on the north side of Chicago and beyond. He was a walking junkbox par excellence who enjoyed putting and keeping new hams on the air. A capable orator, he could cajole a reluctant neighbor into letting you use his house as one end of an 80-meter Zepp. An excellent operator, he could put you in touch with code buddies to sharpen up your Morse. Dozens of Chicago hams owed their tickets and first equipment to W9NUF.

After his teen years the largess of family and friends enrolled him in the University of Illinois. He soon was doing extracurricular work in electrical engineering. The Mon-Key, the first mass-marketed electronic keyer, was his design. I was working at ARRL in the early 1950s when W9NUF showed up there with plans for a phasing SSB transmitter that made an interesting article for *QST*. He had brought with him the first transistor radio we had seen.

His visit turned in to a rollicking hamfest. By that time Bud had moved to California and became W6BES. His Elmer franchise went with him. As a

founder of Silicon Valley with his Canoga Corporation, he said being president of your own company was definitely the way to go. You edited your own expense accounts. He bought my XYL and me a humdinger of a lobster dinner with all the trimmings and wouldn't let us spend a dime.

Bud had it made in spades and this couldn't have happened to a nicer guy. Thereafter we kept schedules on 20 CW, he with a rig adjacent to his swimming pool. Then in the early 1960s he missed two skeds in a row, three-ways with brother-in-law W9VES and me. That wasn't like him. A stunning long-distance telephone call shocked us with information he had died of a heart attack. This explained why he had a military deferment during World War Two, something he always regretted. Lively and convivial, it was hard to accept super Elmer as a Silent Key at only 42. Bud Nibbe *was* That Old Ham Spirit. Enjoy your QSOs, OM. It may be later than you think. ■



MON-KEY

"...foil and wax paper made capacitors."



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K.D. Wilson and the Byrd Expedition

K.D. Wilson was no newcomer to the world of exciting events. The Vista Press, "The Progressive Newspaper of Northern San Diego County," January 24, 1929, featured this page one, captioned photo, item.

Talks Daily With Byrd Expedition

Every day since the Byrd Antarctic expedition sailed from Los Angeles, Sergt. K.D. Wilson, operator of W3GT Bolling field, Washington, has maintained contact with WFAT, the Eleanor Bolling, of the Byrd expedition, which is now near the South pole. Wilson's apparatus is mostly home made and operates on a wave length of 42.2 meters with a power consumption of 50 watts.

The vessel *Eleanor Bolling* honored Byrd's mother. Bolling Field, located near Washington, D.C., was adjacent to Anacostia Naval Air Station. Bolling Field bears the name of Colonel Raynal Cawthorne Bolling, the first U.S. Army Air Service officer of high rank killed in combat during WWI. ■



"Arctic Patrol" Update

The unidentified fourth aircraft (page 7) in last month's lead article, "The 1930 'Arctic Patrol' Maneuvers," has been identified. The "unidentified transport" was actually a Douglas O-2K observation plane. Aboard the O-2K was pilot, First Lieutenant Ennis C. Whitehead and passenger, Hans Christian Adamson, "...public relations man on Secretary (F. Trubee) Davison's staff." The presence of a USAAC public relations man further underlines the importance of this flight to the still-fledgling service arm.

Powered by a 420 hp V-1650 Liberty V-12 piston engine and with a cruising speed of 103 mph the O-2K soon trailed the 160 mph Curtiss P-1 Hawks. Whitehead and Adamson never reached Spokane, abandoning their westward path, they returned to Dayton, Ohio.

(Source: *Aviation in the U.S. Army, 1919-1939*, Maurer Maurer, United States Air Force Historical Research Center, Office of Air Force History, United States Air Force, Washington, D.C., 1987) ■

North American QRP CW Club

From Paul Neuman, KD2MX, NAQCC Membership Recruiter.

Come join the NAQCC and help us in our mission to preserve and encourage CW activity on our amateur bands. The NAQCC (North American QRP CW Club) is for ALL CW enthusiasts around the world.

Our members include "Big Gun" contesters, hard-core QRP'ers, experimenters, ragchewers and SWL'ers- young and old alike. As different as we may be, we all share one thing in common, and that is our love for CW.

We welcome all who want to help support CW and have at least some interest in using QRP from time-to-time. Our club runs monthly sprints and challenges and we sponsor additional special on-air activities during the year.

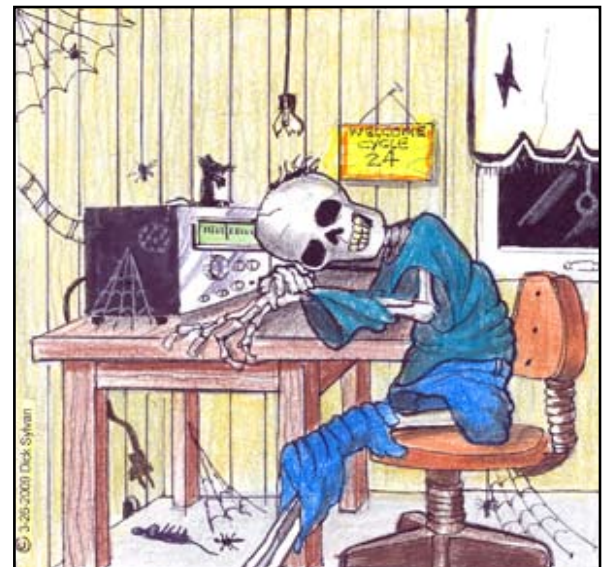
Membership is free and once you join you're automatically a lifetime member! So sign up today and help us keep CW alive and well.

Visit our web site at <http://www.arm-tek.net/~yoel/>. You'll find info on our various activities plus an online membership application.

We look forward to your support and hope to soon see your call added to our membership roster. ■

Ham Quips

DICK SYLVAN, W9CBT



STILL WAITING FOR CYCLE 24!



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On April 5, 1930, the FRC issued new regulations under the 1927 U.S. Radio Act. The regulations changed 10-meters and 5-meters from a shared experimental basis to an allocation reserved exclusively for amateur use. The regulations also reserved 400,000 to 401,000 kc for amateur stations, thus providing authorization under U.S. law to continue amateur operations on $\frac{3}{4}$ -meters. Phone, television, facsimile and picture transmissions continued to be allowed on 5-meters.¹⁹

A radio engineer for AT&T Bell Labs in New Jersey, Karl Jansky, in 1931 was given the assignment of finding various sources of shortwave noise. Working with a large antenna at 22 MHz, he found that most of the noise was related to thunderstorms and other earth-bound reasons. He found that one source of noise could not be readily explained, however—it methodically appeared in the skies four minutes earlier each day. Jansky was convinced the radio static emanated from beyond the earth. After further study, he realized he was listening to the background noise from the center of our own Milky Way. Jansky described his efforts as listening to “star noise,” as “radio astronomy” would not be commonly used until after WWII. Jansky’s findings were publicly disclosed in a page one story in the New York Times in May 1933. Virtually all the professional astronomers of the era ignored Jansky’s discovery, keeping their attention focused on their own optical observations. It took many more years before others would further advance Jansky’s efforts.²⁰

The world’s first radio astronomy antenna was mounted on a square wooden structure that could be rotated for added directivity. After tracking down the sources of radio static, Bell Labs was satisfied that the noise would not interfere with their electrical designs, and assigned Jansky to other projects. He never conducted further radio astronomy observations, directing his studies instead towards radar in WWII and microwave repeater technology after the war.²¹

Microwave experimentation occurred in 1931 when Andre Clavier of Paris made the first trans-English Channel microwave contact on 1.7 GHz using a 3-meter parabolic dish antenna. A decade later, Clavier would go on to test tropospheric scatter at 3 GHz. The magnetron was also developed in this

19 *QST*, May 1930, pp. 16-20; *QST*, May 1930, pp. 7-8.

20 From the NRAO web-site, Ham Radio Connection sub-page located at: <http://www.nrao.edu/>

21 Photo from the Bell Labs Web-site, at: <http://www.bell-labs.com/news/1998/june/4/jansky2.jpeg>.

same time period. The British Admiralty enlisted the University of Birmingham in England in efforts to produce a microwave generator for the “microray” wavelengths.

The Communications Act of 1934 was enacted on June 9, 1934. The Act replaced the FRC with a new body, the Federal Communication Commission, effective July 1, 1934. The new body took over all functions of the FRC. The overall scope of the new Commission was expanded somewhat by the 1934 Act, but no substantial changes adversely impacted amateur radio activities.²²

On June 22, 1934, amateurs were authorized the non-exclusive right to operate at all frequencies above 110 mc, on an experimental basis. In addition, general mobile work was authorized above 56 mc. Both of these actions were taken at the League’s request.²³

The League quickly moved towards developing activity on two UHF bands that were harmonically related to 56 mc – 112 to 120 mc (2½-meters) and 224 to 240 mc (1¼- meters), as well as proposing activities on other UHF frequencies.²⁴ Some experimentation was also occurring by this time on 400 Mc and higher, although most of the activity was still on 5-meters. A few years before, in 1932, Marconi conducted his now famous experiments off the Italian coast at frequencies near 500 Mc. He was able to achieve consistent transmission paths over 150 km (90 miles).²⁵

Thus, within 10 years of the initial 1924 authorization of the first experimental UHF frequency allotment at 56 mc, five separate wavelengths existed for amateur radio activity on the ultra-highs: 28-30 mc, 56-60 mc, 112-120 mc, 224-240 mc, and 400-401 mc. The framework of what we consider today as the four lower VHF bands was firmly established by the time of the Great Depression. VHF has deep historical roots.

Exploration of UHF Propagation

By the early 1930s, amateurs were beginning to modulate their oscillations. The unstable voice signals could not be received properly by the selective receiv-

22 “The New Law,” *QST*, August 1934, p. 34.

23 *QST*, “What the League is Doing,” August 1934, p. 32.

24 “The Editor’s Mill,” *QST*, June 1934, pp. 7-8; Ross A Hull, Sept. 1934, pp. 13-17. Ross A. Hull, *QST*, Nov. 1934, pp. 8-11; Ross A. Hull, *QST*, Dec. 1934, pp. 8-9.

25 Marconi’s tests were noted in Tynan, p. 68, and in the *VHF / UHF Manual*, 4th ed. 1991, RSGB publ., at pp. 1.1-1.2.

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ers of that time on 40- and 20-meters, but sounded much better on super-regenerative and broadly tuned “rush boxes.” Plenty of room existed on 5-meters for these wide signals, and modulated oscillators and super-genny’s made for ideal short-range equipment. So long as the two stations were transmitting on somewhat different frequencies on the 5-meter band, duplex phone operation could result. This was an entirely new concept in radio, and was an instant hit on the amateur bands, as it allowed for telephone-like conversations.

The equipment was rather easy and cheap to build by this time, with tubes from household broadcast sets being pressed into service as transmitting tubes for a 5-meter rig. As Ed Tilton commented, “these were the magnets that drew countless newcomers, including the author of these lines, into amateur radio in the early thirties.”²⁶

Ross Hull had been working at ARRL Headquarters as a technical editor. Hull and other pioneering experimenters wrote a series of popular articles detailing portable 5-meter equipment. This sparked tremendous interest on 5-meters.²⁷ The following picture is a receiver based on one of the articles.

After building the equipment from the construction articles in the 1931 *QST* issues, the Bloomfield Radio Club in New Jersey held an event on Washington’s Birthday, 1932. A record 56 Mc distance may have been established in that event when W2AFP worked W2TP over 48 miles using “buzzer” modulation. High Point, N.J. served as the western end of the contact.²⁸ Numerous 5-meter airplane and glider tests were also conducted in 1932 and 1933, generating further activity.²⁹ Within a short time, hundreds of 5-meter stations populated the airwaves in the New York, Boston and Philadelphia areas.

Most UHF communication at the time involved only local distances. Still, questions persisted regarding UHF propagation characteristics. While it was becoming increasingly clear that reflection or refraction of radio waves off different layers of the atmosphere was responsible for the DX characteristics of the short waves, 5-meter propagation remained one,

²⁶ VHF Manual, 1965, Ed Tilton, editor, p. 8.

²⁷ See, *QST*, 7-31, pp. 9-20; *QST*, 7-31, pp. 21-25; pp. 8-31, pp. 9-13. Photo from: “Five Meter Receiver Progress,” Ross Hull, *QST*, July 1931, p. 21.

²⁸ *QST*, 5-32, pp. 22-24.

²⁹ *QST*, 5-32, pp. 34-36; 6-32, 20-23; 9-32, 29; 10-32, 32-33.

deep, unending mystery. Engineers and physicists generally believed ionospheric refraction could be used for extended communications only up to around 12- or 13-meters, and possibly up to 10-meters during great solar conditions. Yet, scattered reports and rumors continued to circulate of transcontinental and transatlantic reception of UHF signals. ■



CONTINUED - ERIC SLOANE FROM PAGE 1

from the pages of *QST* and other amateur radio publications. Gil’s output was devoted to making us smile, not to recording contemporary radio gear for posterity.

Today, occasionally in print, but more often found on the Web, are articles and books devoted to amateur radio’s earliest years, through its golden age, on up to the present day. Written by a range of authors from professional historians to aficionados, these articles vary greatly in quality and the fact checking of their contents. To which I say, “Great! I’d like to see more interest in recording our history including firsthand accounts by the oldest of our old timers whose memories stretch to recollections of the first generation of amateur radio operators now dispersed to the ether.”

That brings me back to Eric Sloane and what he indelibly captured of early Americans and Americana. Who will do this for amateur radio? In the likelihood we are not so fortunate to have a master illustrator who is also a talented writer come forward, perhaps there’s a team with the requisite abilities. A book or series of books preserving in word and image our shared history, would fill a gap I perceive in the available amateur radio literature and appeal not only to hams, but also to SWLs and other electronics hobbyists. Page through one of Sloane’s books at your local library, I think you will agree. ■

Photo courtesy of New Hampshire Department of Transportation.