ARRL Periodicals Archive – Search Results

A membership benefit of ARRL and the ARRL Technical Information Service

ARRL Members: You may print a copy for personal use. Any other use of the information requires permission (see Copyright/Reprint Notice below).

Need a higher quality reprint or scan? Some of the scans contained within the periodical archive were produced with older imaging technology. If you require a higher quality reprint or scan, please contact the ARRL Technical Information Service for assistance. Photocopies are $3 for ARRL members, $5 for nonmembers. For members, TIS can send the photocopies immediately and include an invoice. Nonmembers must prepay. Details are available at www.arrl.org/tis or email photocopy@arrl.org.

QST on CD-ROM: Annual CD-ROMs are available for recent publication years. For details and ordering information, visit www.arrl.org/qst.

Non-Members: Get access to the ARRL Periodicals Archive when you join ARRL today at www.arrl.org/join. For a complete list of membership benefits, visit www.arrl.org/benefits.

Copyright/Reprint Notice

QST Issue: May 2004
Title: Greenkeys--A Roundup of RTTY
Author: John H. Dilks III, K2TQN

Click Here to Report a Problem with this File

Greenkeys—A Roundup of RTTY

During World War II, Radioteletype became a reliable form of communication. Every branch of the military used it to provide written communication. After the war, returning hams and radio operators who became hams wanted to use Teletype on the ham bands. It took a while.

At first they were limited to VHF, but on February 20, 1953 the FCC authorized HF RTTY using "F-1" Frequency Shift Keying. They were permitted on the following bands: 80 meters (3500-3800), 40 meters (7000-7200), 20 meters (14,000-14,200) kHz.

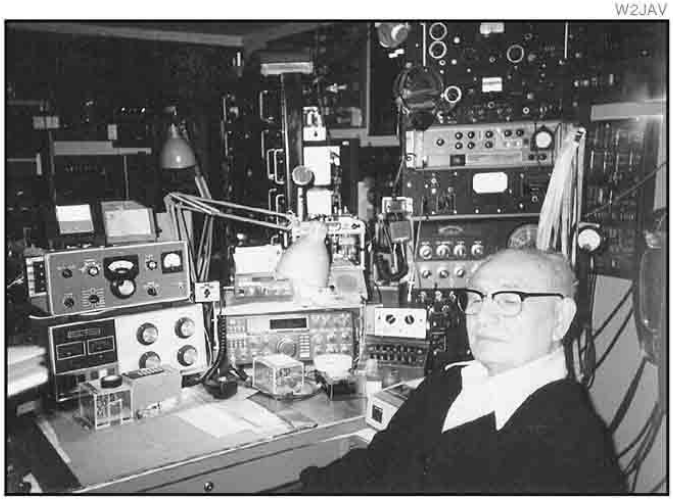
Hams everywhere were delighted; the FCC had adopted most of the suggestions they had made. The very minute F-1 was allowed, hams started to make contacts with each other. In no time at all, they were in contact worldwide.

Phil Catona, W2JAV

One of the true RTTY pioneers lived near me in southern New Jersey: Phil Catona, W2JAV. Phil was one of the movers and shakers who brought about ham RTTY. Phil was very active—so much so that he earned WAS RTTY certificate number 2.

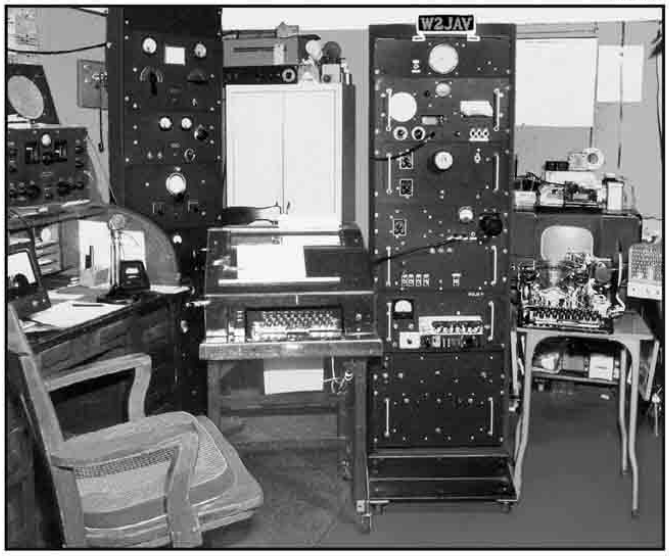
An engineer for RCA in Camden New Jersey, he contributed and designed many circuits for RTTY use. Many are still in use today. One of his most famous was a 1957 Radioteletype Converter, called the W2JAV Converter. Built with miniature tubes, it was published in *CQ* magazine and later in *The New RTTY Handbook*, by Byron Kretzman, W2JTP.

W2JAV



Phil's last ham station from the late 1990s. His Model 32 Teletype machine is behind him, just out of view.

W2JAV



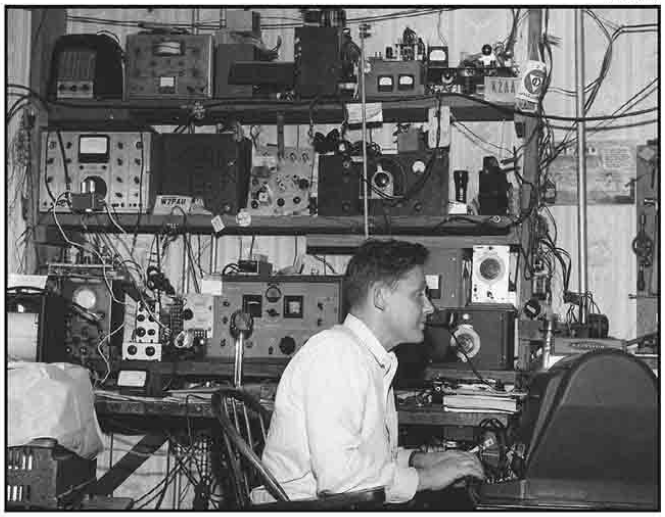
Phil Catona, W2JAV's, 1952 RTTY station in Hammonton, New Jersey. The large TTY in the center is a Teletype Model 12, and on the right with the cover removed is a Model 14. The relay rack with his call on top, contains all of the circuits needed for radio teletype. The other relay rack, left, is his homebrew transmitter. His Hammarlund Super-Pro receiver is on top of the desk.

W2JAV

These are some of the men who helped develop and promote RTTY for ham radio. This meeting was in the 1950s, in New York City, I believe. They gathered for a couple of days to share their knowledge and promote RTTY. There were seminars, equipment demonstrations and an evening banquet. I'm told a couple of them even brought their TTY machines and had them working in the hotel rooms—no small feat. They finally all got together and posed for a photo. From the left: Seated are Stew Davis, W4ZC/2; Ed Kephart, W2SPV; Wayne Green, W2NSD, and Merrill Swan, W6AEE. Second row, standing are Tom Howard, W1AFN; Al Hughes, W1FGL; Frank Gibson, W3MHD; Bob Weibrecht, W9TCJ; Frank White, W3PYW; Dick Urian, W3CRO; Ed Clammer, W2BDI; Phil Catona, W2JAV; Ken Payne, W1RBF; Bob Straub, W2PBG, and Boyd Phelps "Beep," W9BP. Third row, standing on stairs are Tom Stewart, W2TBD; Clay Cool, W2EBZ; Tom, W1WRP(?); Roy Weise, W2TKO; Cecil Gregson, W9CNN, and Ed Brown "Brownie," W2PAU. Not shown are Keith Harris, W3UWM, and Jim McCurley, W8KYL.

John Dilks, K2TQN ♦ 125 Wharf Road, Egg Harbor Township, NJ 08234-8501 ♦ k2tqn@arrl.org

W2JAV

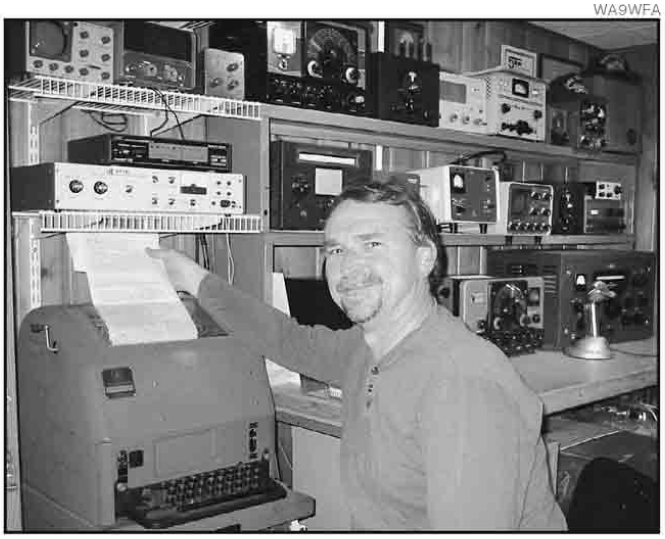


This is the 1958 station of Phil's lifelong friend Brownie, Miles Brown, W2PAU. Brownie is using his Model 26 Teletype. Behind him is just part of his station. In spite of the cluttered look, everything worked. Brownie was Technical Editor for *CQ* magazine for a number of years.

W1EVZ

Jim King, W1EVZ, from Holyoke, Massachusetts sent this photo to confirm a QSO on August 27, 1952 with W2JAV. Jim was using a Model 12 Teletype and a Hammarlund HQ-129X receiver. Behind him is his homebrew transmitter. This contact was on VHF, as HF RTTY was not permitted at that time.

WA9WFA



Here is a vintage RTTY station still being used today. It belongs to Scott Freeberg, WA9WFA. Just above the Model 15 Teletype is his vintage solid-state HAL ST-6 Demodulator. He also uses the Heath Monitor Scope for tuning in the RTTY signal. Scott's first experience with Teletype was back in the early 1970s aboard the USS *Okinawa*, sitting off the coast of Vietnam. Later, in college, he learned about ham radio RTTY and has been active since.

K9EUI

Bob Roehrig, K9EUI, owns a Model 28 Teletype. This model was much improved over the Model 15. It ran much more quietly and looked more modern.

Phil's design was not original and he did not claim that it was; instead, it gave credit to each of the earlier designs he adapted it from. The big thing he did, though, was to create an ultrareliable converter that would give good copy through some rough conditions. It was easy to build and easy to set up.

Phil was famous for filter design and finding better ways to copy stations. Later he designed a solid-state converter that fit inside the Polar Relay cover. I built both of his converters during the 1970s, when I was on RTTY. (A Polar Relay is a device that moves a center contact in two directions, between two other contacts, depending on the direction of current flow through its coil. These were adapted from landline Teletype circuits and usually worked reliably. Polar Relays were used in almost every ham's RTTY setup.)

Phil also developed one of the earliest solid-state QRP transmitters for RTTY, and used it regularly on 40 meters with 45 mW. The circuit was published in the RTTY column of the August 1957 *CQ* magazine. One of his first DX contacts with it was VE2ATC.

After retirement, Phil remained active and continued to help new RTTY enthusiasts get on the air. He became an SK a few years ago. I'll have more about Phil in future columns.

The Price is Right

I'm going to keep this short so you can see a lot of photographs this month. These are from some nice shacks of the past and a couple still in use today. I do have a message to share, though:

Today you can have a lot of fun with your computer on RTTY and other digital communication modes. It sure is easy to hook up and participate that way. But for a real thrill, you should try an old Teletype machine and an RTTY converter hooked to your receiver.

It seems that a lot of Teletype machines are available now, most of them for free. Many old-timers are reducing their shacks and moving into smaller homes. Think about saving one of them. It will be an effort to get it home and then past your significant other. You will need to clean it and oil it and find a spot to set it up in the shack, but it will be worth it. Believe me, you'll never forget the look in your SO's eyes the first time you fire it up and get it working.

A good place for more information on RTTY is **www.rtty.com/index.htm**.

I'll see you at the hamfests. Look for my hat and say hello.—*K2TQN* QST