

The Art of Low-Power Hamming

More FT-817 and QRP-Related Treats

Thanks to miniature “do it all” transceivers such as the Yaesu/Vertex FT-817, many of today’s amateurs are acquiring a favorable introduction or new-era re-introduction to the world of low-power hamming. Indeed, almost every day we are hearing folks running FT-817s on popular QRP frequencies such as 14.060, 21.060, and 7.040 MHz; on various SSB frequencies; and on HF Pack “hot spots”—i.e., 18.157.5 and 14.342.5 MHz. This little rig is proving low-power “works out” in a big way, and it is also being supported by a continuously expanding mini-industry of clever accessories. Many of these items were highlighted in our December 2001 and February and April 2002 “QRP” columns. The list continues to grow, however, so we are delighted to bring you more views of new FT-817 and QRP-related goodies this month.

4941 Scenic View Drive, Birmingham, AL 35210

If you missed the previously mentioned columns or want more information on all kinds of FT-817 complementing treats, incidentally, check out my new book “*Ultralight HF’n: Portable Fun and Survival Ready*” (photo A). It is loaded with ideas and details for “Walk-and-Talk HFing”; an autographed copy is \$16 plus \$2.50 book rate or \$3.95 Priority Mail direct to you from me (Dave Ingram, K4TWJ, 4941 Scenic View Drive, Birmingham, AL 35210). Now let’s look at some just-announced goodies and treats!

FT-817 Speech Compressor

First in the spotlight is a custom item with real appeal for operating SSB with an FT-817: the W4RT Electronics One Big Punch speech compressor shown in photos B and C. This add-on PC-board item mounts inside a (supplied with rig) MH31 hand mic or inside the FT-817’s case and produces up to 5 dB improvement in audio punch and “talk power.” You can install it yourself (It takes roughly an hour for the “slow but sure” amateur, I would say.) or for a small extra fee, W4RT Electronics will install it for you. To perform the mod/

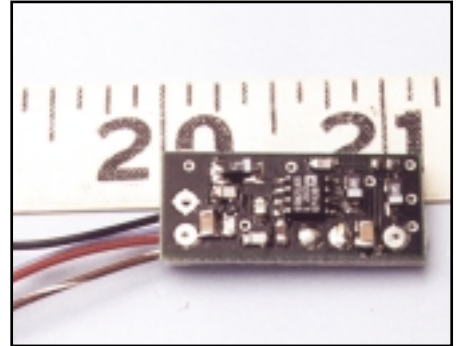


Photo B— This One Big Punch speech compressor on PC board measures 1.15 by .5 inches, fits inside an FT-817’s supplied MH-31 microphone, and adds real clout to the rig’s SSB signal. Compressor is available direct from <www.w4rt.com>, and it also has just been made available for other HF rigs without speech compressors (see text).

installation, you need a small (15 or 20 watt) soldering iron with a pencil-point tip, ultra-thin solder, and good eyesight or a magnifier. The installation involves desoldering two connections, cutting one PC board trace, soldering five

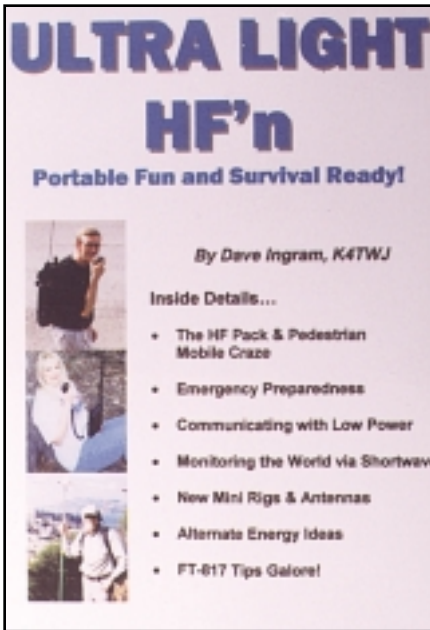


Photo A— Do you want maximum enjoyment from your Yaesu FT-817? Check out my new book, Ultralight HF’n. It is loaded with information on rig accessories and helpful tips for walk-and-talk HFing, and an autographed copy is available directly from me, Dave Ingram, K4TWJ.

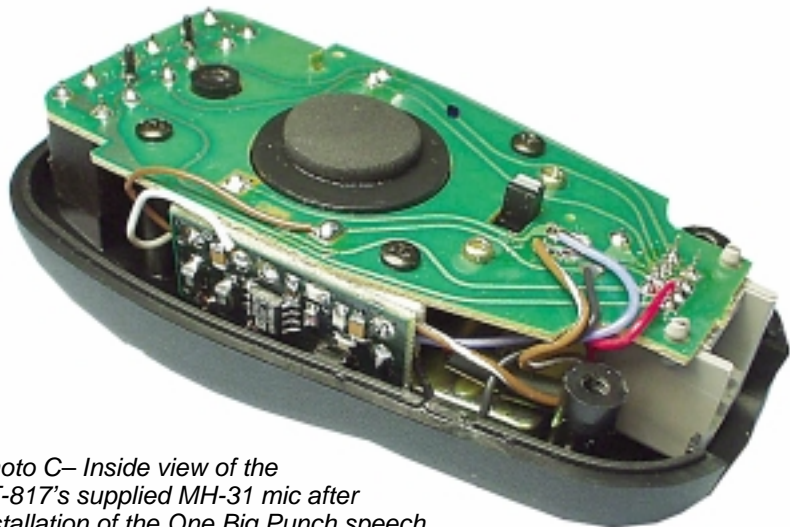


Photo C— Inside view of the FT-817’s supplied MH-31 mic after installation of the One Big Punch speech compressor. When completed, the switch on the mic’s back activates or bypasses the compressor. (Photo courtesy Barry Johnson, W4WB, and W4RT Electronics)

wires, and sticking the small PC board to the microphone case's inside edge. High-resolution and vividly detailed photos are included with the PC board/mod and make installation a no-miss, step-by-step process. I favor the in-mic rather than the in-rig arrangement, mainly because the mic's rear "position 1 and 2" switch then serves as an in-circuit/bypass or on/off switch for the compressor. The results are akin to having two microphones in one case.

If you want to make the compressor-equipped FT-817 mic a real romper, add a Heil HC-4 "DX element" to it during installation. The combination delivers a one-two punch that will make you forget the FT-817 is running QRP. You will reach out like crazy! I have heard the compressor in use with Yaesu's stock MH-31 element and with the Heil HC-4 element, incidentally, and the difference is remarkable. Heil mics and elements just sound great!

As a finishing touch to the W4RT speech compressor, consider fine-tuning the FT-817's transmit-carrier insertion point so microphone audio will be tailored to fit your voice. You do this by tuning in your SSB signal on an auxiliary receiver without an antenna connected to it and with its attenuator on so your FT-817's transmitted signal is around S9. Use earphones to monitor your audio, and watch the auxiliary receiver's S-meter while adjusting menu setting 56 for LSB carrier point or menu setting 57 for USB carrier point. Typically, you will find a carrier insertion point of +100 to +130 Hz for LSB gives the best audio response and signal punch. Also remember to reset the mic gain (menu 46 for SSB, menu 27 for FM, and menu 05 for AM), and enjoy hopped-up fun with your FT-817.

Where do you get W4RT Electronics speech compressors—plus high-current NiMH battery packs, Collins filter mods, and other items highlighted in past columns? Just check the firm's website at <www.w4rt.com> or write to Barry Johnson, W4WB, at 1527 Chandler Road S.E., Huntsville, AL 35801.

Flash! After completing this column, we learned that W4RT Electronics just made an adaptation to the "One Big Punch" circuit/board, and the compressor is now also available in a version for older, more "basic" transceivers such as the Kenwood TS-50, etc.—rigs lacking speech compressors. Wow!

Novel Keys

Half the fun of operating CW while portable is using some of the unique

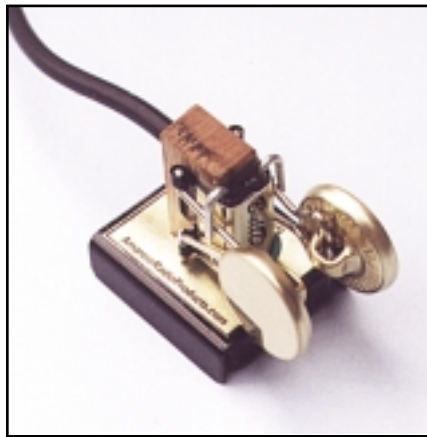


Photo D— Like grab-and-go CW? This ultra-small Bull Dog iambic paddle is only an inch square, has a magnetic base that adheres to an FT-817's steel case, and handles very well. It is available from Louis Petkus, K9LU.

new keys and paddles being introduced almost every month. Yes, and go-anywhere transceivers such as the FT-817 beg to be teamed up with miniature or novelty-type keys. (Deluxe keys are

also terrific, but they are larger and more suited to home-station use.) A quick investigation here revealed three recently announced gems with special appeal (photos D, E, and F).

The first item is a tiny, new version of the popular Bull Dog iambic paddle made by Louis Petkus, K9LU (photo D). The paddle measures 1 inch square, it is made from a highly modified bulldog paper clip fitted with brass buttons for fingerpieces, and has a super-strong magnet in its base. A steel washer approximately 1.5 inch in diameter with a strip of reusable adhesive is also supplied with the paddle so you can adhere it to your desk, belt, watch, or shack wall, as desired. If you do not remember the original, larger K9LU Bull Dog paddle, it is approximately 2 inches square and has a triangular wood base with three rubber suction cups for solid footing. Both paddles are supplied with pre-installed cables and three conductor mini-plugs, and both paddles have adjustable tension and gaps.

I have been using a mini BullDog paddle while pedestrian mobile around the neighborhood and find it handles quite well for such a small key. It's nice! You

FT-817 W4RT Accessories FT-897

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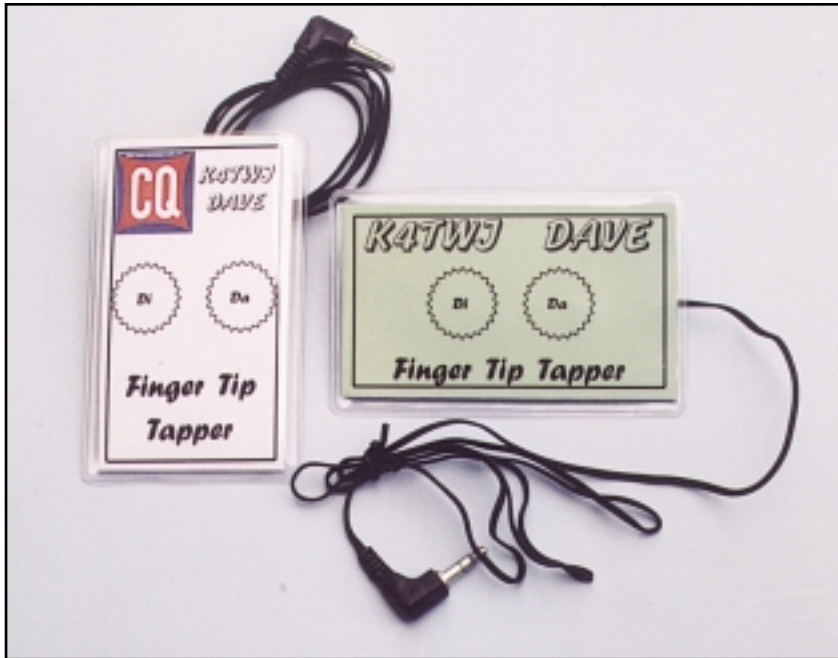


Photo E— Want to add a novel touch to your traveling HF activities? Try a flat, cricket-type Finger Tip Tapper from Jim Panzitta, N2CAU. It is easy to carry, has a magnetic backing, and can be used as an iambic paddle or a pump key.

can get one (or two—a mini and a regular) by contacting Louis Petkus, K9LU, at General Business Software, 2 South 872 Wagner Road, Batavia, IL 60510;

by telephoning (toll-free) 877-227-9139; or on the web at <www.AmateurRadioProducts.com>.

Would you like to try something really different in a portable paddle with your FT-817—something that slips in a shirt pocket, lies flat on a rig case or table, and handles like a cricket key? Try a Finger Tip Tapper from Jim Panzitta, N2CUA (photo E). This thing is thin like a charge card and has twin surface-mount tactile contacts, a magnetic base, and an attached three-conductor cable with mini plug.

You operate the Finger Tip Tapper by tapping your fingers on its dot/dash pads in a up/down rather than side-to-side motion. This “cricket” concept takes a

few minutes to master, but it can be rather entertaining and enjoyable when approached with an open mind. In other words, avoid trying to use the Tapper above 20 words per minute (finger-pad coordination gets tricky), and do not limit yourself to right-hand operation. As an example, I find the Tapper works well when turned backwards, so I press the left/dash pad with my left forefinger and the right/dot pad with my left thumb. Given half a chance, portable CW can be more fun than a romp on the beach during spring break—well, almost.

Finger Tip Tappers are available in various colors, in vertical or horizontal printed formats, and are personalized with your name and call letters. They are made and sold by Jim Panzitta, N2CAU, 602 Greenway Avenue, Trenton, NJ 08618; telephone 609-771-8182 or <www.fingertiptapper.com>. Try one just for the fun of it!

A fair number of hams tell me they prefer using a single- (rather than dual) lever CW paddle for portable operations because they do not require precise handling and finger coordination. In other words, a single lever can move in only one direction (and produce only dots or dashes) at a time, whereas dual levers can move simultaneously (and produce alternating dashes and dots).

Good news, friends: Bob Hammond, K17VY, now has an easy-to-use single-lever version Paddlette ready for sale (photo F). The paddle sports a brass mechanism with adjustable dot/dash gaps, a magnetic base, and a mating mounting plate with adhesive backing for holding the paddle to a non-metallic surface. Miniature single-lever paddles are not easy to find, so Bob’s new brain-child fills a definite void and serves a good purpose. It is available directly from Bob Hammond, K17VY, of Pad-

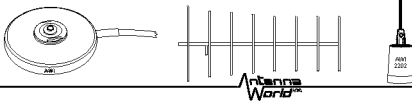
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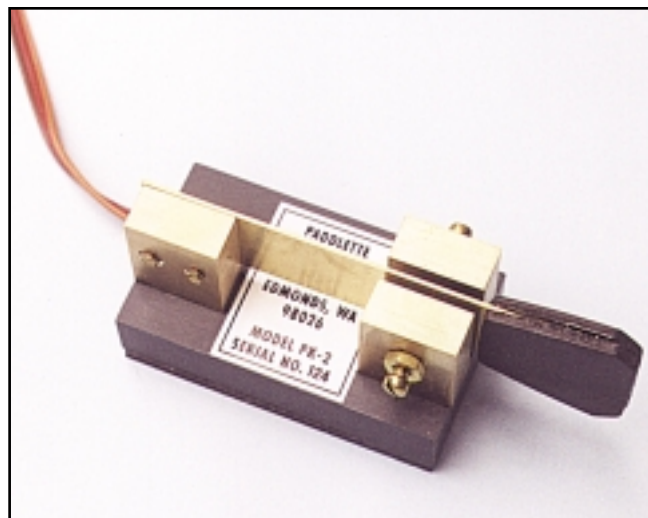


Photo F— You say dual levers and uncoordinated fingers stifle your outdoor CW fun? The new, single-lever Paddlette from Bob Hammond, K17VY, should solve the problem. It has adjustable gaps, a magnetic base, and the arm moves in only one direction at a time to minimize keying errors.

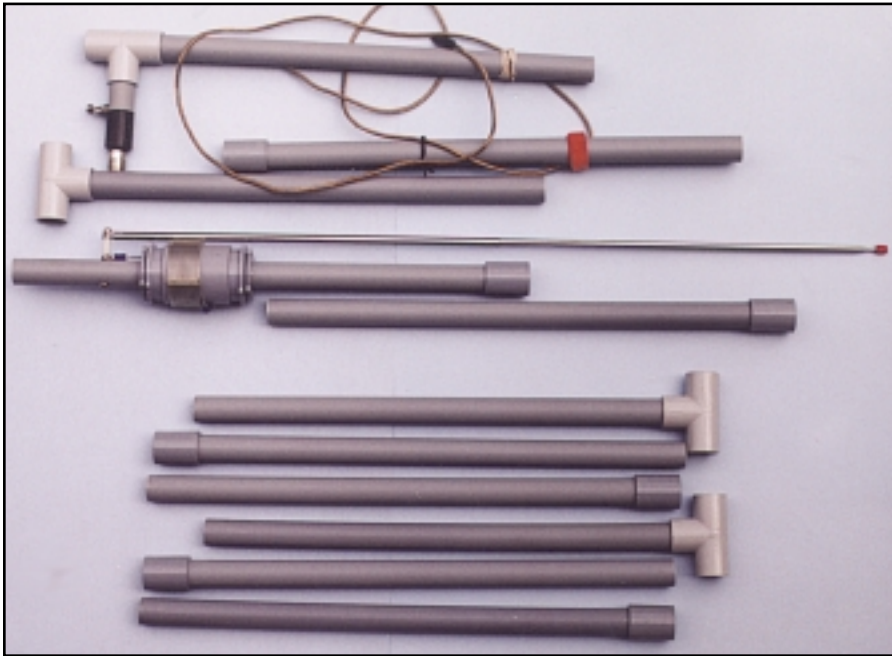


Photo G— The new MinuteMan antenna from John Bee, N1GNV, and Quicksilver Radio Products is a slip-together portable vertical antenna for 20, 17, 15, 12, and 10 meter operation. Here you see it laid out and ready for field assembly, which takes only a couple of minutes.

dlette, P.O. Box 6036, Edmonds, WA 98026; telephone 425-743-1429, or e-mail: <bham379627@aol.com>.

New MinuteMan 20 Antenna

Getting full enjoyment from an FT-817 obviously involves using it for stand-alone portable operations, and the main prerequisite is a handy snap-together travel-tenna. Enter the MinuteMan 20 shown in photos G and H.

This lightweight, multiband radiator is designed around 11 sections of 15 inch long PVC tubes you slip together to produce an approximately 11 foot tall vertical antenna with 2.5 foot square support base. The antenna works 10, 12, and 15 meters as a full quarter-wave vertical (You adjust the length of its top whip to change bands.), and a near-center loading coil is used for 17 and 20 meter operation. The antenna is supplied with two multi-conductor counterpoise cables precut for various bands, and its PL-259 socket, wire radiator, and near-middle coil sections are pre-assembled for easy setup.

Typically, the MinuteMan 20 can go from car trunk or knapsack to contact in around 4 or 5 minutes. Thanks to a tall radiating section, the antenna performs quite well—comparable to a big Bug-catcher mobile antenna, I would say.

The antenna's producer, John Bee, N1GNV, says the MinuteMan 20's main attraction is quick-setup portable operations from a fixed site, and it works well in that application. Being hopelessly engrossed in HF Pack action, however, I started out using it for "pedestrian mobile" work with a hip-strapped FT-817, carrying the whip upright and dragging the two counterpoise cables. I worked stations in both the U.S. and Europe while using the MinuteMan 20. What a gas!

The antenna makes a dandy traveling companion. Just tie its plastic sections into bundles, toss or store them in the trunk of the car, and go. At a vacation cottage or campsite, slip the sections together, set SWR, and operate!

The MinuteMan antenna (and more details) is available from John Bee, N1GNV, Quicksilver Radio Products,



Photo H— The new MinuteMan 20 antenna assembled and ready for operation on its self-supporting base. Counterpoise wires and coax cables connect to the antenna two feet up from the base.

30 Tremont Street, Meriden, CT 06450; phone 203-440-4468, e-mail: <sales@qsradio.com>, <www.qsradio.com>.

Conclusion

That's it for available space this time, gang, but stay tuned for more hot news in QRP during the months and good times straight ahead. Meanwhile, stay active and enjoy some exciting on-the-air QSOs every day.

73, Dave, K4TWJ

E-mail Notice

I appreciate hearing from each and every reader, even though there is not enough time for individual replies to everyone. Please be aware, however, that I have been having problems accessing and responding to my e-mails. Although "antiquated" (?) my postal mail still works great. Please use my street address given on the first page of this column, be brief, include an SASE if a reply is desired, and be patient for a reply. Thanks for your understanding.
—K4TWJ