

PSK31 GETS RAVES

Getting tired of the "same ol' same ol'" on HF? From the father of AMTOR, Peter Martinez, G3PLX, comes PSK31, a "live QSO" keyboard-to-keyboard mode that occupies a sliver of bandwidth and offers terrific performance even under weak-signal conditions.

PSK31 isn't new; it's been around for a few years, but no one really took much notice until Martinez developed free software that works with a PC sound card. Suddenly, PSK31 has become the latest HF fad. Unlike 'TOR modes, PSK31 does not use a synchronized linking--or handshaking--protocol to exchange error-checked data packets. Operationally, it's much like traditional 45-baud RTTY. PSK31 has shown itself to be a real trouper in weak-signal situations. Some hams experimenting with PSK31 claim that it outperforms all other amateur modes for weak-signal work--including CW. Indeed, PSK31 signals are easy to overlook on the bands. Most PSK31 activity is concentrated on 14.070.15 and at 3.580.15 MHz. You'll also find it on 40 meters at 7.035.15 MHz. On 15 meters, look for activity around 21.070 MHz.

To run PSK31, you need a PC that runs Windows that's equipped with a sound card. PSK31 software is available via the Web). Your HF SSB transceiver should be very stable and tune in 1-Hz increments. The connections between the radio and the sound card are very straightforward.

Several versions of PSK31 software are available as zipped files. The latest PSK31 software includes a couple of tuning aids that make finding and tuning signals much simpler. The "official" [PSK31 Web site](#) is operated by Eduardo Jacob, EA2BAJ. The site also contains lots of information and links to other PSK31 and DSP-related sites, plus .wav files of PSK31 signals, so you'll know what to listen for.

W1AW Station Manager Joe Carcia, NJ1Q, has experimented with the new operating mode, PSK31, at the Maxim Memorial Station. While it took a bit of effort to get the equipment to function properly, he says initial results were quite good. Plans are in the works to add this mode to the complement of modes available for W1AW visiting operators.

Some have questioned whether the FCC permits hams to use PSK31. The answer is a definite "yes," although some confusion is understandable given the wording of Section 97.309(a) of the rules. Responding to an ARRL inquiry, the FCC amended the section in 1995 (Order DA 95-2106) "to clarify that amateur stations may use any digital code that has its technical characteristics publicly documented." PSK31 is publicly documented and widely available, but the ARRL in late January took the additional step of specifically documenting the technical characteristics of both PACTOR II and PSK31 in a letter to the FCC.