Nearly half a century of SETI science, and still not a single confirmed transmission from "Beyond." What kind of DXpedition is this?

When Frank Drake conducted the world's first SETI experiment in 1960, he was just days into the project when he heard a loud, periodic signal from Up There. "My God," he thought, "Could it really be this easy?" The signal was, of course, RIP, a phenomenon with which every subsequent effort to detect evidence of extraterrestrial intelligence has been plagued. No, it wasn't that easy, then or now. The bands, they seem, are dead.

After a while, when the bands scars dead, any sensible ham will want to stir the pot. So why aren't we calling CQ?

The whole question of transmitting from Earth is fraught with controversy. Every ham knows that if everyone is listening and no one is transmitting, no one is going to know when a band opens up. That's one of the reasons why we put propagation beacons on the air from exotic locations. Early on, SETIians thought that advanced extraterrestrial civilizations would accommodate us immature Earthlings by providing just such beacons, to draw us into membership in the Galactic Club. Thus, the early SETI experiments, beginning with Drake's, concentrated on searching nearby sun-like stars for just such strong and steady beacons. If they are abundant, you'd think we would have heard one by now.

We haven't, though, and not necessarily because the bands are dead. Maxwell's laws quantitatively propagate, and they suggest that even a modest beacon, properly aimed, will easily be detectable by Earth's receive technology, across the interstellar gulf. Maybe, then, it's time to rethink our assumptions. Advanced civilizations, if indeed they exist, apparently don't announce their presence using radio waves. Do they perhaps know something we don't?"
doesn't represent much of a hazard), the signal's duration (for centuries key-down certainly has been more detectable than random dots), and information content (the more we say, the more they learn about us). Plug all these factors into an equation, and the San Marino number emerges. The higher the number, the more hazardous a given transmission should be considered.

I won't labor the math here. The whole scale is explained in great detail on the website of the International Academy of Astronautics' SETI Permanent Study Group, which I am privileged to co-chair. You can see it, and try it on for size, by browsing to <http://iapsi.org>. On the left-hand main menu, click on Protocols, and then on San Marino Scale, to find full disclosure. There's also a JavaScript calculator there to find out just how detectable (and, by some reasoning, just how hazardous) your EME station or OSCAR uplink might be.

No, I'm not proposing that any of us stop transmitting. However, before we reply to ET's CQ or broadcast our own, it would be nice to know the level of risk to which we are committing our defenseless planet. The San Marino Scale will tell us that. It will also provide the would-be regulators with a quantitative tool.

For years, the SETI community has been engaged in ongoing policy and protocol discussions dealing with the possibility or advisability of issuing either binding or voluntary restrictions or prohibitions against deliberate transmissions from Earth. The proponents of the San Marino Scale recognize that not all such transmissions imply the same level of risk or hazard. We hope that the international SETI community will consider using this tool for helping to define a threshold below which no prior consultation may be required in the event of a transmission from Earth, but above which discussions should take place, and a consensus be sought, prior to engaging in active SETI or replying to received signals.

Where do I stand? As a ham, I am committed to communicating. I'm loath to hide in my hilltop fortress, fending off invading Romans. Then again, though, I'm not the sole inhabitant of this planet. If my actions have the potential to affect others, it behooves me to analyze the consequences before I commit my whole planet to a course of communications and contact. The San Marino Scale will help me do that.

73, Paul, N6TX