## DR. SETI'S STARSHIP

Searching For The Ultimate DX

## The Politics of Protocols or How I Spent My (Southern Hemisphere) Spring Vacation

ack in the 1980s, the key players in the SETI enterprise were primarily large, government-sponsored agencies such as NASA in the United States and the Russian Academy of Science in the Soviet Union. Not only was there little room for small, independent research organizations, there was little need for them. SETI was more or less a closed community, which made its own rules.

Acting under the auspices of the International Academy of Astronautics (IAA), that small community convened a series of meetings to forge a set of protocols intended to bring order to the chaos which was expected to follow an actual SETI detection. The result of that effort was a document published in 1989, adopted by the IAA, and submitted to and accepted by the United Nations Committee for the Peaceful Uses of Outer Space (UN-COPUOS) with the suitably bureaucratic title "Declaration of Principles Concerning Activities Following the Detection of Extraterrestrial Intelligence" (but universally referred to simply as the "SETI Protocols").

With the subsequent end of the Cold War came a significant curtailing of funding, on both sides of the once Iron Curtain, for large-scale scientific endeavors. I suppose that's one of the costs of deciding to wage peace. Soon the NASA SETI program was terminated, and with it equivalent projects in the former Soviet states. Thus began a gradual shift toward privatization, and democratization, of global SETI. The very existence of The SETI League is beholden to this shift. As we and similar organizations (not to mention quite a few unaffiliated individuals) stepped in to fill the void left by the demise of government-sponsored SETI, the SETI Protocols began to appear irrelevant.

As Dr. Seth Shostak, N6UDK, Chairman of the IAA SETI Permanent Study Group, recently wrote to the IAA leadership team, "in recent years, the IAA SETI PSG has elected to revisit these protocols with the intention of (1) streamlining both the wording and the intention, and (2) removing ambiguities and obvious impediments to utility."

So what exactly was wrong with the original SETI Protocols, which were themselves several years and many debates in the making? Very little, in the context of the political, economic, and scientific realities which served as their backdrop. It's just that they haven't kept up with the times.

For one thing, the Protocols were only binding upon their signatories (which, at the time, constituted just about everyone in the world involved in SETI science). Certainly, the several hundred SETI League members who became involved in this research over the past 17 years were not bound by the terms of the Protocols (except, perhaps, by implication, as The SETI League itself is signa-

tory to them). Nor were several dozen unaffiliated ham radio operators worldwide who continue to pursue SETI science on the cheap. Nor were the 7-million worldwide individual contributors to the popular SETI@Home distributed computing experiment, any one of which could well have been the person to achieve contact. Written by and for professional SETI scientists, the Protocols never contemplated regulating the activities of the masses.

Consider some of the specific language in the original Protocols:

Prior to making a public announcement that evidence of extraterrestrial intelligence has been detected, the discoverer should promptly inform all other observers or research organizations that are parties to this declaration, so that those other parties may seek to confirm the discovery by independent observations at other sites and so that a network can be established to enable continuous monitoring of the signal or phenomenon.

All other observers or research organizations were, of course, readily reachable



Members of the international SETI community (many of them hams) met over dinner and wine in Cape Town, South Africa in October 2011 to revisit the SETI Detection Protocols.

\*Executive Director Emeritus, The SETI League, Inc., <www.setileague.org> e-mail: <n6tx@setileague.org> for consultation and collaboration when the Protocols were first penned. Putting aside for just a moment the question of who constitutes a "party to this declaration," a very different reality exists today.

In addition, by implication the Protocols dictate that the researcher may not inform other observers who are not a party to this declaration (such as asking another radio astronomer to take a look at an interesting candidate signal), lest the "SETI Police" appear and lock up that researcher in a "Faraday Cage":

Parties to this declaration should not make any public announcement of this information until it is determined whether this information is or is not credible evidence of the existence of extraterrestrial intelligence.

This constraint might have been feasible before the advent of the internet; it no longer is. If anything in recent experience seems to defy Einsteinian physics, it is the fact that the spread of information in cyberspace appears to exceed the speed of light.

"The discoverer should inform his/her or its relevant national authorities": Which national authorities, when observations are now being made by global organizations with members residing in well over a hundred different countries? And who determines which authorities are "relevant"?

After concluding that the discovery appears to be credible evidence of extraterrestrial intelligence, and after informing other parties to this declaration, the discoverer should inform observers throughout the world through the Central Bureau for Astronomical Telegrams of the International Astronomical Union, and should inform the Secretary General of the United Nations in accordance with Article XI of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Bodies.

After who concludes that the evidence is credible? Central Bureau for Astronomical Telegrams? How quaint! (Does anyone even send telegrams anymore?) And how many of today's SETI participants ever heard of that particular treaty article, let alone understand its implications?

Because of their demonstrated interest in and expertise concerning the question of the existence of extraterrestrial intelligence, the discoverer should simultaneously inform the following international institutions of the discovery and should provide them with all pertinent data and recorded information concerning the evidence: the International Telecommunication Union, the Committee on Space Research, of the International Council of Scientific Unions, the International Astronautical Federation, the International Academy of Astronautics, the International Institute of Space Law, Commission 51 of the International Astronomical Union and Commission J of the International Radio Science Union.

Frankly, I wouldn't know how to begin to get in touch with all of those bodies, and I've been involved in SETI science and technology for decades!

No response to a signal or other evidence of extraterrestrial intelligence should be sent until appropriate international consultations have taken place.

Imagine trying to tell a radio amateur licensed by his or her country to emit electromagnetic radiation and to refrain from

transmitting until appropriate international consultations have taken place.

The International Academy of Astronautics will act as the Depository for this declaration and will annually provide a current list of parties to all the parties to this declaration.

If you happen to be a SETI League member, you already know how difficult it is to maintain a current membership list of just our small organization, not to mention the challenges of providing same to all of our members. Besides, do you even want to receive an annual e-mail with the names and addresses of all 7-million SETI@Home participants?

The Protocols go on, as does the list of objections. Clearly, this is a document that has failed to keep up with the times. Revision is not just due, it is long *overdue*.

Five years ago the IAA SETI Committee began revisiting the Protocols. It was an arduous process, requiring not only technical expertise, but also legal and political input, and it dragged on. Finally, after drafting numerous versions and incorporating revisions suggested by the International Institute of Space Law (IISL), simplified and revised protocols were unanimously adopted by the SETI Permanent Study Group of the International Academy of Astronautics at its annual meeting in Prague, Czech Republic, on 30 September 2010. The significantly shorter, more succinct document, now entitled "Declaration of Principles Concerning the Conduct of the Search for Extraterrestrial Intelligence," was submitted straightaway to the IAA Board for adoption.

Then the fun began. At its Paris office in March 2011, the Academy reorganized its committee structure, terminating the SETI Permanent Study Group and replacing it with a SETI Permanent Committee. It was a change in name only, as the membership roster remained the same. However, the very people who had drafted and unanimously adopted what is now being called the "revised Protocols" was tasked with revisiting it, and considering it for either revision or resubmission to the Academy.

As this is being written, it is October 2011, and I am enjoying a balmy spring day in Cape Town, South Africa, chairing a meeting of the SETI Permanent Study Group (pardon me, I meant the SETI Permanent Committee). The Committee has once again recommended adoption of revised Protocols. Unfortunately, the new president of the IAA has already stipulated that this recommendation should be acted upon by the newly elected, incoming Academy Board (which has yet to be brought up to speed on the issues), rather than the outgoing board (which has already accepted these revisions). Thus, it will be some time before we can expect the board to act. I wouldn't be surprised if, following any such action, the document will then be resubmitted to the IISL before it ever sees light in UN chambers. Let us hope that SETI success doesn't come too quickly, lest we be bound by an obsolete document and find ourselves hog-tied.

On the other hand, we've yet to achieve SETI success after a half-century of observation. What's another decade or two to the bureaucrats?

For those who are interested, the revised Protocols can be found on The SETI League website at <a href="http://www.setileague.org/iaaseti/protocols\_rev2010.pdf">http://www.setileague.org/iaaseti/protocols\_rev2010.pdf</a>. Be sure to clear your browser cache when you take a look, as they've probably changed while I was typing this.

73, Paul, NN6TX