DR. SETI'S STARSHIP

Searching For The Ultimate DX

When Will We Reach India?

hen, one well may ask, will SETI succeed? We've been at this business for about a half century now, searching for radio evidence of our cosmic companions, and so far without success. Is this an open-ended enterprise, or is success in our sights?

At the SETI Institute, our friend and colleague Seth Shostak (you may know him as radio amateur N6UDK) has been grappling with this question, and he proposed an answer. In 2004, he submitted an article to the prestigious scientific journal *Acta Astronautica* entitled "When Will We Detect the Extraterrestrials?" Not one to shrink from controversy, Seth hung it all out there by proposing a definitive answer: within 20 years.

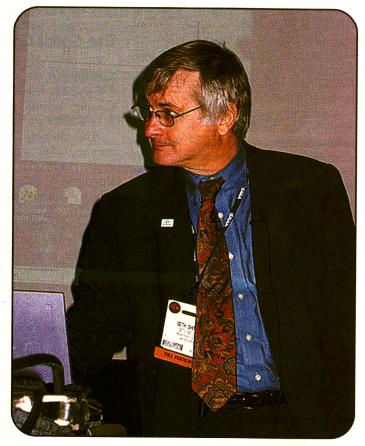
What led a respected scientist to take such a bold step, to go on record predicting SETI success within a single generation? Certainly, I'd never make such a prediction. (About a dozen years ago, I predicted 5,000 Project ARGUS stations would be online by the year 2000 ... and the actual number turned out to be just over a hundred.) No, I would have counseled caution, but Seth just had to go out there and make his numbers public. Did he pull his prediction out of a hat?

Hardly. What Dr. Shostak did, what we all do, is take the measure of the problem, state a set of assumptions, and attempt a plausible extrapolation from where we are now to where we need to arrive. Based upon his assumptions about the nature of ETI (which are just as valid as anyone else's), and his knowledge of technological trends (which is extensive, given his close involvement with the development of the Allen Telescope Array), he made a reasonable leap: At the rate our observational capacity is growing, if they're there and are like we think they are, we should have succeeded in detecting ETI by 2025.

You can quibble about the specific assumptions, but the methodology is sound. It reminds me of the prediction Christopher Columbus offered to Queen Isabella just as he was leaving port: "If our assumptions are correct, then I should reach India in sixty days."

Of course, Columbus never reached India. Instead, he bumped into a land mass the existence of which he had no reason to anticipate, no way to predict. Unwittingly, unknowingly, Columbus discovered the New World. Thus, I guess you'd have to call his quest a failure.

So too may the SETI enterprise end up a total failure. We may never pull that elusive radio beacon out of the aether. However, in trying, we are developing some incredible new technology, the very technology Seth considered in making his bold prediction. Also, no one can say what great new discoveries technology might enable, along the road to SETI success or failure.



At a recent International Astronautical Congress, Seth Shostak, N6UDK, sought to answer the question "When will we detect the extraterrestrials?" Seth chairs, and the author co-chairs, the SETI Permanent Study Group of the International Academy of Astronautics. (N6TX photo)

I find the title of Shostak's article especially interesting, because it underscores a paradigm shift that has occurred within his and my lifetime. In SETI science's formative days, the deeply held perception in scientific circles was that life on Earth is unique. Today, the overwhelming majority of experts envision a universe teeming with intelligent life, just waiting to be discovered. It is no wonder, then, that the article in question is entitled not "Will We Detect the Extraterrestrials?" but rather "When?" The existence of intelligent alien species is now accepted as a given. What remains to be determined is the when and the where. Seth Shostak has already made a guess as to the when, so I will now venture a prediction about where:

We won't find them in India, but rather in some previously unknown New World.

73, Paul, N6TX

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