Too risky to phone ET? Too late -- NASA's tried it

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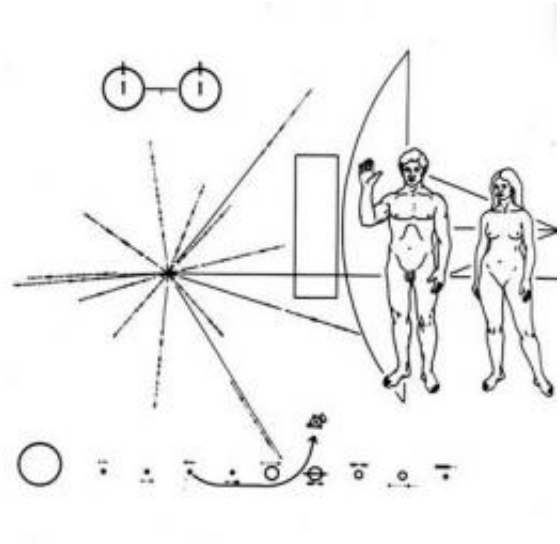

This undated handout photo shows the design of a plaque that was carried on the Pioneer 10 spacecraft. Stephen Hawking says it is too risky to try to talk to space aliens. Oops. Too late. NASA and others have already beamed several messages into deep space, trying to phone ET. NASA -- which two years ago, broadcast the Beatles song "Across the Universe" across the galaxy -- on Wednesday discussed its latest search strategy for life outside of Earth. It is more aimed at looking for simple life like bacteria in our solar system than fretting about potential alien overlords coming here. (AP-Photo/HO)

(AP) -- Stephen Hawking says it is too risky to try to talk to space aliens. Oops. Too late. NASA and others have already beamed several messages into deep space, trying to phone E.T.

The U.S. space agency, which two years ago broadcast the Beatles song "Across the Universe" into the cosmos, on Wednesday discussed its latest search strategy for life beyond Earth.

"The search for life is really central to what we should be doing next in the exploration of the solar system," said Cornell University planetary scientist Steve Squyres, chairman of a special National Academy of Sciences panel advising NASA on future missions.

The academy panel is looking at 28 possible missions - from Mars to the moons of Jupiter and Saturn. And NASA is focused mostly on looking for simple life like bacteria in our solar system rather than fretting about potential alien overlords coming here.

Just days ago, Hawking said on his new TV show that a visit by extraterrestrials to Earth would be like Christopher Columbus arriving in the Americas, "which didn't turn out very well for the Native Americans."

The famous British physicist speculated that while most extraterrestrial life will be similar to microbes, advanced life forms would likely be "nomads, looking to conquer and colonize."

The comment reinvigorated a three-year debate roiling behind the scenes in the small community of astronomers who look for extraterrestrial life, said Seth Shostak, a senior astronomer at the SETI Institute, which looks for aliens. Should astronomers ban purposeful messages into the universe for fear of attracting dangerous aliens?

Shostak maintains it doesn't really matter, saying that approach is unnecessarily fearful.

While some people think broadcasting into the universe is "like shouting

in a jungle, not necessarily a good idea," Shostak asked, "Are we to forever hide under a rock? That to me seems like no way to live."

There's a big difference of opinion in astronomy about the issue, said Mary Voytek, a senior astrobiology scientist at NASA headquarters.

"We're prepared to make discoveries of any type of life, of any form," Voytek said in a NASA teleconference. But much of the search for intelligent life is privately funded, by groups like SETI, she said.

About 20 years ago, NASA held a conference on this issue. Back then, most of the experts were worried about attracting the wrong type of aliens, said Christopher Kraft, the former NASA Johnson Space Center director who created Mission Control.

But Kraft, a NASA legend who received a lifetime achievement award Wednesday from the Smithsonian Institution, said he would welcome aliens. "I might just learn something," he said.

The SETI Institute in Mountain View, Calif., takes a passive approach, listening for any signals from aliens.

But for more than a quarter of a century, various groups have been purposely sending out signals to other worlds. The most famous was a three-minute broadcast from the Arecibo Observatory in Puerto Rico in 1974, Shostak said.

The Canadians made a series of broadcasts using a Ukrainian antenna in the 1990s. The now-defunct Team Encounter of Houston and a prominent Russian astronomer make public and distinct "cosmic calls" out to the universe, including one just from teenagers.

NASA beamed "Across the Universe" to the star Polaris in 2008 to

promote the space agency's 50th anniversary, the 45th anniversary of the Deep Space Network and the 40th anniversary of the Beatles song. And the same year, as part of the publicity for the remake of "The Day the Earth Stood Still," the movie was broadcast to the stars, Shostak said.

Four NASA deep space probes - Pioneer 10 and 11 and Voyager 1 and 2 - carry plaques and recordings that say hello from Earth and give directions on how to get here. Those probes launched in the 1970s are at the edges of the solar system.

And that's on top of the broadcasts Earth inadvertently sends into the cosmos as part of daily life: radio and TV signals, airport and other radar communications.

"That horse left the barn a long time ago," Squyres said, speaking from an astrobiology conference in Houston. "Whether you do it intentionally or not, the signals are out there."

MIT planetary scientist Sara Seager doesn't think much of the broadcasts to space because so far they are pointed at random, not toward potential Earth-like planets.

"We wouldn't even know where to send our message, it's so vast out there," Seager said. That will change in a few years when new telescopes will be able to find terrestrial planets that could support life.

Even then, Seager said any aliens coming to Earth likely would be so advanced they wouldn't need to hear our message to find us. It wouldn't be like Columbus stumbling upon on the New World, she said.

"If they have the capability to come here, they're probably to us as we are to ants on Manhattan," said former NASA sciences chief Alan Stern.

The closest any aliens could be is a few tens of light years away. With one light year equaling about 5.9 trillion miles, that means it would take them generations to get here traveling at the speed of light, Shostak said. And even that would be unlikely, he added.

Frank Drake, who did the first modern experiment looking for extraterrestrial intelligence, estimated there are about 10,000 intelligent civilizations in the universe, while the late Carl Sagan figured it was closer to a million, Shostak said.

Given how big the universe is, our nearest intelligent neighbor is more likely about 5,900 trillion miles away, he said.

"God has nicely buffered us," he said.

More information: SETI: http://www.seti.org

Astrobiology 2010 Science Conference: http://www.lpi.usra.edu/meetings/abscicon2010/