

August 17, 2011



Morning Edition

August 17, 2011

Google's Goal: Inspire First Privately Funded Moon Landing

Copyright ©2011 National Public Radio®. For personal, noncommercial use only. See Terms of Use. For other uses, prior permission required.

Heard on Tell Me More

August 11, 2011 - ALLISON KEYES, host: I'm Allison Keyes and this is TELL ME MORE from NPR News. Michel Martin is away.

Coming up, a new website showcases African-American perspectives on news, opinion and culture. More on HuffPost BlackVoices in a moment.

But, first, with NASA's shuttle Atlantis retired and bound for a museum, it might seem like space exploration is on the verge of being grounded. But much of it is just moving out of the hands of the government. Dozens of private companies around the world are plotting a new course to pick up for where NASA left off an unmanned space flight.

The X Prize Foundation is running a competition right now to see which of 29 firms can accomplish the first privately funded robotic landing on the moon. And there's \$30 million in prize money from Google at stake. To talk more about this new space race, we're joined by Peter Diamandis. He's the founder and CEO of the X Prize Foundation. Thanks for joining us.

PETER DIAMANDIS: My pleasure, Allison.

KEYES: So tell us a bit about what these 29 teams have to do. They've got to build a spacecraft, get to the moon, land on it and then what?

DIAMANDIS: Yeah. That's all they have to do. And, you know, I would say that the era of space exploration is really just beginning because we're putting into the hands of individual small companies, universities, the ability to literally go and do something that only two countries have ever done before. You know, the United States and the Soviet Union are the only two that have landed on the surface of the moon.

And so for \$30 million, what's up at stake is building a private lunar lander landing, sending back photos and basically YouTube videos. And then going exploring a half a kilometer, 500 meters and then sending back more photos and videos. It's really enabling a new generation of personal exploration in space.

KEYES: And there's some bonuses for people that - whose lander can survive the lunar night and the extreme conditions there. What are some of the others?

DIAMANDIS: So, we've said, listen, if you land and send back the photos, fantastic. If you are able to survive through lunar night where you really have the temperatures plummeting as the sunlight disappears and the moon goes into permanent shadows for 14 days. Or my favorite, if you're able to actually image, send back photographs of Apollo hardware. So if you're able to get close enough to take photos and, you know, dispel all those myths about not having gone to the moon, then you win more prize money.

KEYES: Ever since I saw the movie, you know, "2001," I've been wanting to go into space and ride on that lovely little rocket with the cute women and the, you know, walking around in the circles.

(SOUNDBITE OF LAUGHTER)

KEYES: How close are we to that kind of scenario?

DIAMANDIS: So, one of my company's space adventures, we have three seats available over the next three years for someone who wants to go to the International Space Station for 10 days. And that's an incredible ride. But even better than that, we've signed an agreement with the Russian space agency for a circumlunar flight. For - on the order of \$110 million or so, you can go to the space station for 10 days and then we'll boost you around the backside of the moon and come back. You've got a Russian cosmonaut as your pilot. You and one of your friends, it's the ride of a lifetime.

KEYES: See, we'll take some champagne, I'll go get my credit card, but in the meantime, if you're just joining us, you're listening to TELL ME MORE from NPR News. We're speaking with Peter Diamantis about the Google Lunar X Prize, a modern day race to the moon that hopes to bring about the first privately backed moon landing.

And tell me, why is Google willing to put out such big money for this? And what kind of role is NASA playing?

DIAMANDIS: Google's mission here is to really inspire a new generation of scientists and engineers. Larry Page, who's now the CEO of Google is on my board at X Prize. Sergey Brin, who's been, you know, the co-founder, huge advocate of space. I had presented the idea to them of a lunar X Prize, you know. That it's now possible. And they on the spot said, yes, let's do it. We ended up launching that now, about three-and-a-half years ago.

KEYES: So, once we get to the future and we've got Robert Heinlein's Luna City and billboards on the moon and everything, what kind of rules are there governing what companies can and can't do? I mean, who owns the property rights? Who owns the mining rights? Can you just land there and start building an apartment building?

DIAMANDIS: So that's interesting. You know, there have been two sets of laws - the Moon Treaty and the Outer Space Treaty that have governed a lot of activities. But first of all, the U.S. isn't a signatory to the Moon Treaty. And the Outer Space Treaty's really governments' actions and not private individuals or corporations.

KEYES: OK, wait. If the U.S. isn't a signatory to the Moon Treaty, what does that mean for the rights?

DIAMANDIS: Well, it means a lot of this is up for grabs. A lot of this undefined. So, for example, we believe that the law of the sea type of thinking is going to apply to space, which means that you don't own the sea, but if you take fish out of the ocean, you own those fish. Same way you may not own the moon, but if you extract precious materials or oxygen or helium three, whatever it might be, you then own that.

So a lot of this is going to be defined by these early companies that get there and the case they can make in the world courts and the governments that govern them.

KEYES: So the deadline's set for the end of 2015. How many of the teams do you think will actually make it to the moon by then?

DIAMANDIS: Well, our hope is at least one. You know, all of our X Prizes typically have a third of the teams that are able to raise the capital, have the technology and the people. A third that have the potential and the third we didn't want to turn away. You know, we're fond of saying we don't want to turn away those pesky bicycle mechanics from Dayton, Ohio.

(SOUNDBITE OF LAUGHTER)

DIAMANDIS: You never know who's going to have the breakthrough.

KEYES: You've got teams from all over the world in this competition. Are there any rivalries developing yet?

DIAMANDIS: So, I'm excited about that. You know, we have - we do have teams from a dozen plus countries. From Israel and from South America and from Canada, the U.S., U.K., you know, China. It's incredibly diverse. And I am really trying to stoke the fire of the international competition because of course that's what got us to the moon in the first place.

KEYES: So, what's next for the X Prize Foundation? Are we talking maybe a man trip to the moon or better yet, the Star Trek Enterprise at some point in the future down the line?

(SOUNDBITE OF LAUGHTER)

DIAMANDIS: So it's really - it's exciting. We're focused on X Prizes in energy and environment and in life sciences. But we have in development an X Prize for

autonomous cars. Qualcomm has underwritten us to design a tri-quarter X Prize, going back to the Star Trek universe, you know. A device that you can talk to, you can cough on, you can do a blood finger prick and it can diagnose you better than a group of 10 board certified doctors

So it's no question, Rod Roddenberry, son of Gene Roddenberry, the legendary creator of "Star Trek" is a very close friend and adviser. And we do think of "Star Trek" as inspiration for where we should be doing our following X Prizes.

KEYES: You're a CEO of this company, are you planning on setting foot on the moon?

DIAMANDIS: It is my personal dream. So my mission - I want to be the first private citizen to set foot on the moon. That would be my dream. Fulfilling Heinlein's "The Man Who Sold the Moon" and getting there myself.

KEYES: All right. Peter Diamandis is the founder and CEO of X Prize Foundation. He joined us from our studios at NPR West. Thank you so much for the future conversation.

DIAMANDIS: My pleasure.

Copyright © 2011 National Public Radio®. All rights reserved. No quotes from the materials contained herein may be used in any media without attribution to National Public Radio. This transcript is provided for personal, noncommercial use only, pursuant to our Terms of Use. Any other use requires NPR's prior permission. Visit our permissions page for further information.

NPR transcripts are created on a rush deadline by a contractor for NPR, and accuracy and availability may vary. This text may not be in its final form and may be updated or revised in the future. Please be aware that the authoritative record of NPR's programming is the audio.