

10 questions

FOR ANDY WEIR

The author of "The Martian" spoke to us by email about his fear of flying, the role of commercial space and the Oscar-nominated film based on his novel.



Andy Weir says he's happy that "The Martian" film is "very true to the book."

Did you ever think your self-published book would become a bestseller and a Hollywood movie?

By the time I wrote "The Martian," I'd given up on ever being published, so it was purely a labor of love.

I self-published just so more people could get access to it (many of my regular readers didn't know how to manually download an e-reader file and put it on their e-reader). Once it started to sell well online, an agent and publisher approached me. And then Fox approached me for the film rights.

You fantasize about this sort of thing, but you never really think it'll happen.

What role did you have in making the movie?

Mostly my job was just

to cash the check. Though they did send me the screenplay to get my opinion. They weren't required to listen to anything I had to say. They kept me updated on the production because they're cool. And in the end, the film is very true to the book, so I'm happy.

How much did you lean on your background as a software engineer?

I've been a space dork my whole life, so I started with more than a layman's knowledge of this stuff. But I'm an enthusiast, not an expert. I did tons of research for the novel. I didn't know anyone in aerospace while working on the book, so all my research was good old-fashioned Google searches. Fortunately, the space industry is very open

with their technology and advances. It's all out there online.

My software engineering skills helped a little. I wrote software to calculate the orbital paths taken by Hermes to and from Mars, etc.

What do you and the main character, Mark Watney, have in common?

[He's] pretty much how I talk and act. I'm a terrible smart-ass. I got beat up a lot in high school, and I earned every beating I got. When I come up with something witty to say I just have to say it. Not always the best policy.

Given your fear of flying, is it fair to say you wouldn't go to Mars?

I'm very afraid of flying, though I'm getting bet-

ter at it. I do regular therapy sessions to work on it and I take anti-anxiety meds when flying. I can do short commuter flights (one to two hours) now without fear.

I would definitely not go to Mars. I wouldn't even go into Earth orbit. I write about brave people; I'm not one of them.

What sparked your interest in space travel?

My father is a space enthusiast, so I grew up with it. I honestly don't remember any point in my past when I wasn't interested in it.

What impact do you think the book and movie will have on exploration?

I think it's part of an overall virtuous cycle of public interest in space

MARTIAN



20th Century Fox

A self-professed “space dork,” Weir did most of his research for “The Martian” on Google. Here, astronaut Mark Watney, played by Matt Damon, is extracting hydrogen from the hydrazine in rocket fuel to make water.

travel. People are taking a renewed interest in space. That drives a market for popular entertainment to make books, TV shows and films with realistic depictions of space. That, in turn, increases public interest even more. It’s great!

“The Martian” is just one of several major films that are part of this cycle. I’m thrilled to be part of it, but I don’t think “The Martian” by itself renewed public interest. I think it’s just part of a really cool resurgence.

If you were to write “The Martian” today, would Mark Watney travel via SpaceX or Virgin Galactic?

No, though I certainly would have had SpaceX be a part of the mission. Maybe the people who made the presupply

probes. I’m pretty sure the first manned mission to Mars will be done by governments, not private spaceflight. And, unlike the depiction in my novel, I think the real first manned mission to Mars will be a large, multinational effort like the International Space Station. It will cost a lot, so the more governments that get involved the cheaper it is for everyone.

Commercial space companies will be critical [to] the process, because they’ll provide freight service to low Earth orbit. So when the time comes to build something huge like Hermes, they’ll need to put like 900,000 kilograms into orbit or something, and they’ll need to do it in chunks. That’s where SpaceX and other commercial space-

flight comes into place.

Imagine you run a toothpaste factory. Do you build your own trucks from scratch to deliver the toothpaste to supermarkets around the country? No. You pay a trucking company to do that for you. The same will be true of the space industry. NASA will make cool [bleep]; SpaceX will put it into orbit.

What would you like to see a new U.S. administration tackle?

I believe the commercial space industry is the only way forward. There has to be an economic motive. If technology can drive the price point of a trip to low Earth orbit down enough that middle-class Westerners can afford it, we will have a new trillion-dollar industry

in the world. Just like the airline industry boom of the mid-20th century.

So I think our space policy should focus on commercial projects. NASA should stop working on delivery systems entirely. They should work on making space stations, probes and spacecraft. But they should contract out the boosters. It might be enough to kick-start a genuine commercial space industry.

What’s next for you?

I’m working on a different project. It’s another hard sci-fi novel with accurate science. It’s about a city on the moon. It should be out in early to mid-2017.

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