

## **The Martians: Testing Curiosity's Parachute, pt. 2**

(music)

(Voice on intercom) "OK, we are on condition."

(Adam Steltzner) "I am in the position of having chosen this and pitched this.

"And so... I have nobody to blame but myself.

"All of us who, who sort of, formulated this, are like ---

"We not saving somebody else's game. We are living our own.

"So, its freaky. Scary. It's on the line."

(intense music)

(Doug Adams) We've had a lot of pressure riding on these tests.

We have been very exhaustive in our approach, so we don't expect any surprises.

Nevertheless, they wouldn't call it a test if you knew the outcome.

So we fully expect them to be successful; I daresay we're confident;

but any time you deploy parachute, you never know what's gonna to happen.

(Jarvis Gross) "It ran over it with front tire and it jumped up, whipped the thing up,

"dropped it back down and then the back tire caught it and ran right over it. Three-inch gouge in it."

(Doug Adams) "What are the odds of that happening?"

We had all our cameras ready to go, the test crew was doing a walk through of the test section,

we had one final change to do the test set up, which required maneuvering the scissor lift

and we had an incident: we lost a tire.

We've got about an hour and a half of crew time left before we lose the crew for the night,

so right now it's very much in doubt whether we will test tonight. We'll see what happens.

(Doug Adams) "There is no way we're going to get that replaced tonight

"and the only hope is to find a spare here -- and we don't have a spare.

"Do we have another scissor lift we can cannibalize?"

(Doug Adams) We can't just go pick up another tire.

These are not commonly available; they're an odd size;

so even if we wanted to, nobody is open this time of night.

"Well we're pretty much in danger of losing a test day because of this."

(Tom Rivellini) "What time are you going to make the call?"

(Doug Adams) "I'd say 25 minutes...20-25 minutes, then we gotta call it.

"Because at 11:30 everybody turns into pumpkins."

(Doug Adams) "They found something. Lets see what that looks like."

(Engineer) "Whoa."

(Doug Adams) "No, that's not going to do it."

(music)

"We're stuck. We're running the test, but we're the one's being tested.

"Biggest wind tunnel in the world, but we're in hold because of a flat tire.

"So it doesn't always go the way we want it to."

(Doug Adams) In terms of being tested, I think the hardest thing is just to maintain your focus on the problem that you're trying to address. Every aspect of this project is unforgiving.

There's a hundred daggers that could kill us when we try to make this mission succeed at Mars.

It's very difficult to stay focused long term.

You do the same thing for a number of years, or a few years, and you can just grow tired,

you know, its easy to overlook something that you might not have overlooked before, just through mental exhaustion.

Once we launch, we can't take anything back, so we have to think of everything ahead of time and make sure that you don't let anything slip through the cracks.

I think that's probably the most difficult thing. It's very taxing.

(Doug Adams) "There's no limit to the amount of hours we CAN work in a day.

"How many hours are we ALLOWED to work in a day? It's 12.

"When did we get here?"

(music)

(Doug Adams) "So you guys are happy with this, it's going to work?"

"All right then. I guess we'll stand back." (laughs)

(music)