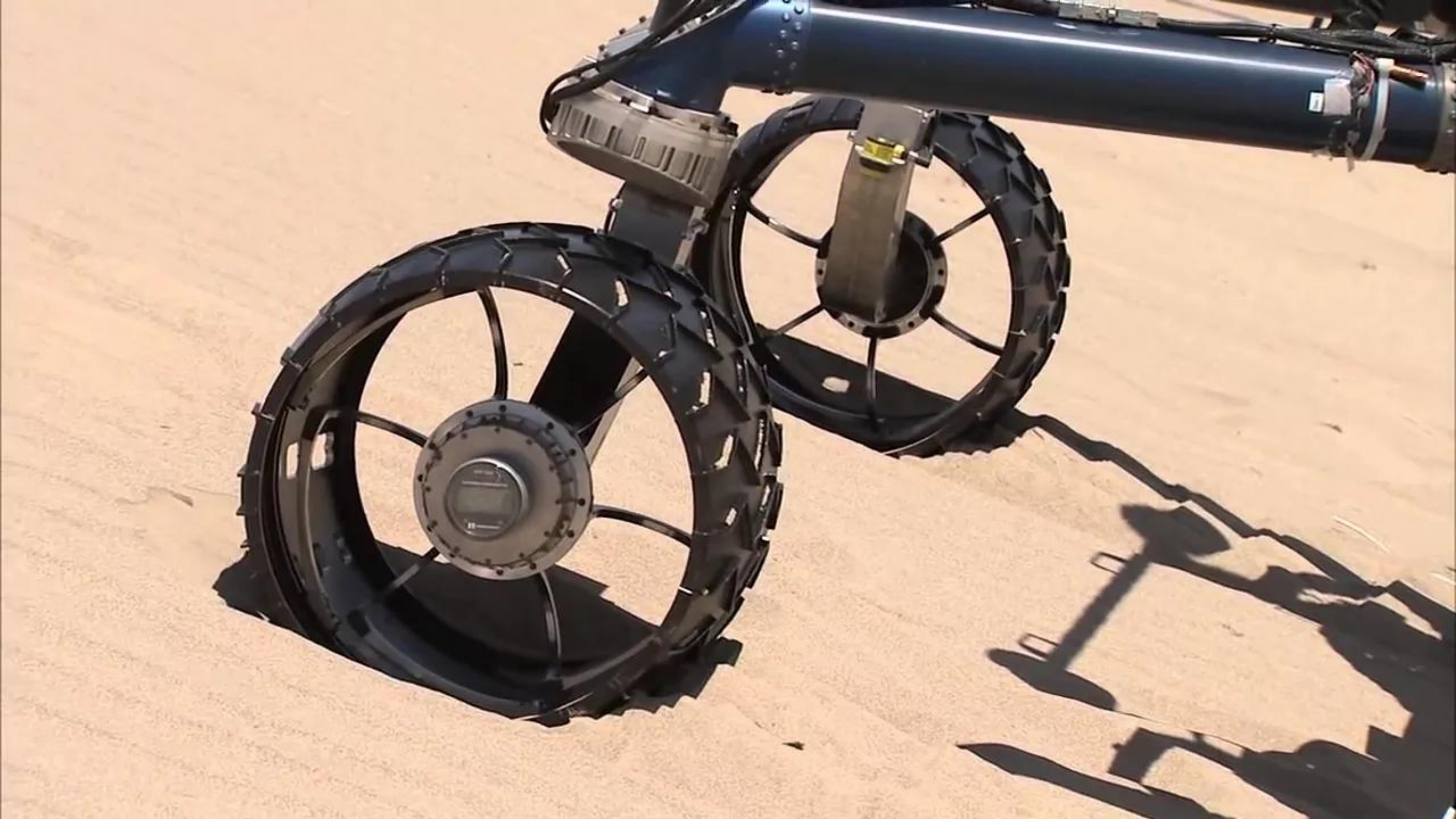

1
00:00:04,000 --> 00:00:08,000
Maxwell: I'm Scott Maxwell. I'm a Mars rover driver and this is your Curiosity Update.

2
00:00:08,000 --> 00:00:12,000
Through careful targeting, we've been able to shrink the landing ellipse for Curiosity

3
00:00:12,000 --> 00:00:15,000
and we've been able to move it closer to where we want to actually land.

4
00:00:15,000 --> 00:00:19,000
In case we land in dunes that are like this on Mars near the landing site,

5
00:00:19,000 --> 00:00:23,000
we want to be sure the real rover is able to navigate around successfully in those dunes

6
00:00:23,000 --> 00:00:26,000
and get from the point we landed, to the point where we really want to be.

7
00:00:26,000 --> 00:00:29,000
So we come out here today with the Curiosity Scarecrow rover,

8
00:00:29,000 --> 00:00:32,000
which is the same weight on Earth as the real rover is on Mars, to practice driving it

9
00:00:32,000 --> 00:00:37,000
around in the nearest thing to those dunes on Mars that we're going to find here on Earth.

10
00:00:37,000 --> 00:00:42,000
This is a similar material and similar slopes to the dunes that we're going to find on Mars.

11
00:00:42,000 --> 00:00:47,000
So being able to test this rover in these dunes gives us a good idea about what the performance

12
00:00:47,000 --> 00:00:50,000
of the real rover is going to be in the dunes that it might land in on Mars.

13
00:00:50,000 --> 00:00:53,000

Observer: 'Still making progress!'

14
00:00:53,000 --> 00:00:56,000
Maxwell: The performance on this rover is actually fairly similar to Spirit and Opportunity.

15
00:00:56,000 --> 00:01:00,000
A little bit better. We can climb in soft sand up to about 15 degrees or so,

16
00:01:00,000 --> 00:01:02,000
which is a little better than what Spirit and Opportunity will do.

17
00:01:02,000 --> 00:01:07,000
We are, in fact, right now, maneuvering it in an area of 15 degrees of tilt

18
00:01:07,000 --> 00:01:11,000
to an area of 25 degrees of tilt to try to explore where that break is in its performance.

19
00:01:11,000 --> 00:01:16,000
Our top speed is very slow, but our acceleration to that top speed is pretty much instantaneous.

20
00:01:16,000 --> 00:01:22,000
So we go from a dead stop to right about as fast as we want to go pretty quickly.

21
00:01:22,000 --> 00:01:26,000
It's really fun, like to every one and a while, kind of leave the office environment behind

22
00:01:26,000 --> 00:01:30,000
and come out to an environment like this and see what the real rovers are going to be doing on Mars.

23
00:01:30,000 --> 00:01:34,000
It kind of connects you to it and reminds you that the computer models we've been playing