1
00:00:00,000 --> 00:00:04,000
(Music)

2
00:00:04,000 --> 00:00:10,000
I'm David Oh, lead flight director for the Mars Curiosity rover and this is your Curiosity rover report.

3
00:00:10,000 --> 00:00:15,000
Over the past seven days, we've been doing checkouts of the arm instruments including the MAHLI imager,

4
00:00:15,000 --> 00:00:19,000
which is a very versatile instrument that can focus on things that are close-by and very far away.

5
00:00:19,000 --> 00:00:24,000
The imager has generated some spectacular shots of the underbelly of the rover and its wheels,

6
00:00:24,000 --> 00:00:29,000
of a 1909 Lincoln penny that we mounted on the rover for calibration purposes

7
00:00:29,000 --> 00:00:31,000
so we can check that the camera is operating properly.

8
00:00:31,000 --> 00:00:36,000
And its also been used to generate a nice self-portrait of the Mastcam on the rover, a portrait

9
00:00:36,000 --> 00:00:42,000
that's taken by the arm looking back, the same way you would take a picture of yourself using a cell phone.

10
00:00:42,000 --> 00:00:48,000
We've also been testing the APXS instrument, an instrument for doing contact mineralogy science.

11
00:00:48,000 --> 00:00:52,000
It generates spectra that allow us to identify the minerals that are present in a rock.

12
00:00:52,000 --> 00:00:57,000
When the checkout of the arm is complete, we'll be continuing our drive to the scientific target, Glenelg,

13
00:00:57,000 --> 00:01:00,000

but we'll be stopping along the way to take some video of the Martian moons,

14
00:01:00,000 --> 00:01:02,000
Phobos and Deimos, passing overhead.

15
00:01:02,000 --> 00:01:06,000
We control the rover from Earth, but we have to operate it on Mars time.

16
00:01:06,000 --> 00:01:09,000
A Martian day is 39 minutes longer than an Earth day,

17
00:01:09,000 --> 00:01:12,000
so every day the whole operations team comes in 40 minutes later,

18
00:01:12,000 --> 00:01:16,000
every single day, to send commands to the rover.

19
00:01:16,000 --> 00:01:19,000
In the month after landing, my whole family joined me on Mars time

20
00:01:19,000 --> 00:01:23,000
and we got to jump a time zone a day for 30 days going all the way around the clock.

21
00:01:23,000 --> 00:01:27,000
As we did that, we got to explore Mars here at JPL