



1  
00:00:06,710 --> 00:00:04,710  
spacecraft technicians and engineers

2  
00:00:09,830 --> 00:00:06,720  
have installed the wheels and suspension

3  
00:00:11,669 --> 00:00:09,840  
system onto nasa's next mars rover a key

4  
00:00:13,749 --> 00:00:11,679  
step in assembly and testing of the

5  
00:00:15,270 --> 00:00:13,759  
flight system for the mission to launch

6  
00:00:17,670 --> 00:00:15,280  
in 2011.

7  
00:00:19,990 --> 00:00:17,680  
the rover curiosity centerpiece of

8  
00:00:21,990 --> 00:00:20,000  
nasa's mars science laboratory mission

9  
00:00:23,670 --> 00:00:22,000  
has six wheels and a rocker bogey

10  
00:00:25,830 --> 00:00:23,680  
suspension system like its smaller

11  
00:00:28,550 --> 00:00:25,840  
predecessor spirit opportunity and

12  
00:00:30,550 --> 00:00:28,560  
sojourner each wheel has its own drive

13  
00:00:32,790 --> 00:00:30,560

motor and the corner wheels also have

14

00:00:35,430 --> 00:00:32,800

independent steering motors unlike

15

00:00:37,990 --> 00:00:35,440

earlier mars rovers curiosity will also

16

00:00:39,990 --> 00:00:38,000

use its mobility system as landing gear

17

00:00:42,389 --> 00:00:40,000

when the mission's rocket power descent

18

00:00:44,950 --> 00:00:42,399

stage lowers the rover directly onto the

19

00:04:30,070 --> 00:00:44,960

martian surface on a tether in august

20

00:04:34,629 --> 00:04:32,469

we've narrowed down the landing sites to

21

00:04:36,950 --> 00:04:34,639

four

22

00:04:39,830 --> 00:04:36,960

and this is basically based primarily on

23

00:04:41,110 --> 00:04:39,840

science and the fact that they look safe

24

00:04:42,469 --> 00:04:41,120

one of the things i think is pretty

25

00:04:44,310 --> 00:04:42,479

exciting about

26

00:04:45,990 --> 00:04:44,320

the landing sites that we do have and

27

00:04:47,670 --> 00:04:46,000

even the ones that we've looked at and

28

00:04:49,030 --> 00:04:47,680

kind of fallen off the list for one

29

00:04:51,270 --> 00:04:49,040

reason or another

30

00:04:53,830 --> 00:04:51,280

is that this is the first time where we

31

00:04:56,150 --> 00:04:53,840

have wonderful spectroscopy at high

32

00:04:57,749 --> 00:04:56,160

enough resolution that we can match it

33

00:04:59,909 --> 00:04:57,759

with the terrain

34

00:05:01,909 --> 00:04:59,919

so we can point to layers and say this

35

00:05:03,909 --> 00:05:01,919

is where we want the rover to go and

36

00:05:05,909 --> 00:05:03,919

make its measurements

37

00:05:07,670 --> 00:05:05,919

and all four of them show evidence of

38

00:05:09,430 --> 00:05:07,680

having

39

00:05:11,909 --> 00:05:09,440

been associated with water

40

00:05:17,110 --> 00:05:14,870

you know if today we had to pick one

41

00:05:19,029 --> 00:05:17,120

almost randomly it would be a great site

42

00:05:21,749 --> 00:05:19,039

to go to and the amount of information

43

00:05:23,270 --> 00:05:21,759

that we get that we have available