



1
00:00:11,480 --> 00:00:08,960
we're here in our test facility at JPL

2
00:00:14,419 --> 00:00:11,490
trying to help spirit on the surface of

3
00:00:17,000 --> 00:00:14,429
Mars spirit had become embedded in loose

4
00:00:19,340 --> 00:00:17,010
soft material in the rover is having

5
00:00:21,410 --> 00:00:19,350
difficulty extracting herself so what

6
00:00:23,150 --> 00:00:21,420
we've done since we can't send people to

7
00:00:25,400 --> 00:00:23,160
Mars to help the rover's we're bringing

8
00:00:27,679 --> 00:00:25,410
Mars down here to earth so we're in the

9
00:00:29,710 --> 00:00:27,689
process of recreating the conditions

10
00:00:32,810 --> 00:00:29,720
where spirit is stuck in this facility

11
00:00:35,930 --> 00:00:32,820
the soil where spirit has trouble moving

12
00:00:38,479 --> 00:00:35,940
is a very light fluffy material so what

13
00:00:40,580 --> 00:00:38,489

we've done is developed a simulant here

14

00:00:43,400 --> 00:00:40,590

at JPL from a constituent of different

15

00:00:44,900 --> 00:00:43,410

materials and we're creating that

16

00:00:47,690 --> 00:00:44,910

material producing mixing it and

17

00:00:50,090 --> 00:00:47,700

spreading it in our test box here and

18

00:00:51,950 --> 00:00:50,100

then conditioning the soil landscaping

19

00:00:54,229 --> 00:00:51,960

it if you will to be just like the

20

00:00:56,119 --> 00:00:54,239

terrain on Mars and then we'll take our

21

00:00:58,430 --> 00:00:56,129

engineering Rover which is just like

22

00:01:00,580 --> 00:00:58,440

spirit the exact same size it will put

23

00:01:03,200 --> 00:01:00,590

our engineering Rover into this facility

24

00:01:05,050 --> 00:01:03,210

deliberately embed it in the facility

25

00:01:07,399 --> 00:01:05,060

the same way spirit is stock and then

26

00:01:09,440 --> 00:01:07,409

experiment with extracting trying to get

27

00:01:11,840 --> 00:01:09,450

the rover out try to figure out what

28

00:01:13,850 --> 00:01:11,850

works here before we do it for real on

29

00:01:16,190 --> 00:01:13,860

Mars because there's always the risk

30

00:01:18,020 --> 00:01:16,200

that something we may try actually might

31

00:01:20,030 --> 00:01:18,030

make things worse and we want to avoid

32

00:01:22,160 --> 00:01:20,040

that so we want to find out what things

33

00:01:23,780 --> 00:01:22,170

work what doesn't avoid the things that

34

00:01:26,990 --> 00:01:23,790

don't work and then focus on the things

35

00:01:29,210 --> 00:01:27,000

that do work we expect that it will take

36

00:01:32,569 --> 00:01:29,220

some time for us to complete the testing

37

00:01:35,030 --> 00:01:32,579

here at JPL and then to actually extract

38

00:01:36,890 --> 00:01:35,040

spirit on the surface of Mars so we will

39

00:01:38,569 --> 00:01:36,900

be regularly updating you on the

40

00:01:41,090 --> 00:01:38,579

progress both here on the ground and on

41

00:01:42,710 --> 00:01:41,100

the surface of Mars I'm Jon Callas

42

00:01:44,030 --> 00:01:42,720

project manager for the Mars exploration