



FREE
SPIRIT

1
00:00:10,600 --> 00:00:07,700
this is Jon Callas at the Jet Propulsion

2
00:00:13,310 --> 00:00:10,610
Laboratory with your free spirit update

3
00:00:15,320 --> 00:00:13,320
since we last updated you we've begun

4
00:00:17,870 --> 00:00:15,330
the extraction testing here in our

5
00:00:20,000 --> 00:00:17,880
sandbox at JPL of our engineering Rover

6
00:00:23,660 --> 00:00:20,010
in preparation for doing the actual

7
00:00:25,660 --> 00:00:23,670
driving on Mars with spirit okay what if

8
00:00:28,339 --> 00:00:25,670
the team is preparing to do right now is

9
00:00:30,410 --> 00:00:28,349
situate the rover for the next set of

10
00:00:33,020 --> 00:00:30,420
testing what we want to do is embed the

11
00:00:34,910 --> 00:00:33,030
rover so to do that we're spinning each

12
00:00:37,280 --> 00:00:34,920
of the wheels individually you can see

13
00:00:39,080 --> 00:00:37,290

the left middle wheel spinning now that

14

00:00:41,420 --> 00:00:39,090

allows that wheel to sink in without

15

00:00:44,000 --> 00:00:41,430

moving the whole Rover until they'll do

16

00:00:46,190 --> 00:00:44,010

the five driving wheels to sync the

17

00:00:49,250 --> 00:00:46,200

rover down in just that spirit is

18

00:00:51,229 --> 00:00:49,260

positioned on Mars where all five of

19

00:00:54,229 --> 00:00:51,239

these driving wheels are embedded deeply

20

00:00:56,510 --> 00:00:54,239

in the soft loose material we previously

21

00:00:58,369 --> 00:00:56,520

tested driving the rover forward which

22

00:01:00,439 --> 00:00:58,379

we think is probably our most likely way

23

00:01:01,910 --> 00:01:00,449

of getting spirit out but we want to

24

00:01:03,500 --> 00:01:01,920

look at all the options so the next

25

00:01:05,060 --> 00:01:03,510

thing they'll do is driving the rover

26

00:01:08,179 --> 00:01:05,070

backwards to see if we can actually

27

00:01:10,910 --> 00:01:08,189

drive through this bad section on Mars

28

00:01:12,440 --> 00:01:10,920

so it'll set it up here and then proceed

29

00:01:14,240 --> 00:01:12,450

to drive this r over backwards to see

30

00:01:16,100 --> 00:01:14,250

what kind of progress the rover makes

31

00:01:18,140 --> 00:01:16,110

and whether the rover has any problems

32

00:01:19,940 --> 00:01:18,150

like with sinkage because that's one of

33

00:01:23,990 --> 00:01:19,950

the things that could spell real trouble

34

00:01:25,999 --> 00:01:24,000

for spirit on Mars although we've been

35

00:01:28,760 --> 00:01:26,009

busy moving this Rover down here on

36

00:01:30,380 --> 00:01:28,770

earth spirit up on Mars hasn't moved in

37

00:01:32,600 --> 00:01:30,390

over two months but that doesn't mean

38

00:01:34,069 --> 00:01:32,610

the rover hasn't been busy when spirit

39

00:01:36,050 --> 00:01:34,079

drove and got stuck in this particular

40

00:01:38,330 --> 00:01:36,060

location it churned up the soil and the

41

00:01:39,530 --> 00:01:38,340

science team are very interested in this

42

00:01:41,390 --> 00:01:39,540

particular soil and they've been using

43

00:01:43,999 --> 00:01:41,400

all the instruments on the rover to

44

00:01:45,649 --> 00:01:44,009

investigate it this is Jon Callas at the