



1  
00:00:24,440 --> 00:00:10,010

[Music]

2  
00:00:26,510 --> 00:00:24,450

vicente I'll come back to you

3  
00:00:28,340 --> 00:00:26,520

I know you're working or have worked

4  
00:00:30,470 --> 00:00:28,350

on one of the technologies that is one of

5  
00:00:33,950 --> 00:00:30,480

my favorites right now it's

6  
00:00:36,440 --> 00:00:33,960

shape memory alloy could you

7  
00:00:38,500 --> 00:00:36,450

tell me how we're using that technology

8  
00:00:41,900 --> 00:00:38,510

and what we can do with it This technology,

9  
00:00:45,350 --> 00:00:41,910

of course, currently here at the

10  
00:00:45,350 --> 00:00:47,550

research center is a NASA blend. We

11  
00:00:52,470 --> 00:00:49,530

are using this type of technology

12  
00:00:54,530 --> 00:00:52,480

to develop and design new

13  
00:00:57,540 --> 00:00:54,540

tires,

14

00:00:59,340 --> 00:00:57,550

especially nickel and titanium.

15

00:01:01,650 --> 00:00:59,350

These new high-

16

00:01:04,509 --> 00:01:01,660

performance tires are going to be used in

17

00:01:07,880 --> 00:01:04,519

future missions, missions underway in the luna

18

00:01:11,480 --> 00:01:07,890

the advantages of this new technology

19

00:01:14,330 --> 00:01:11,490

is that these tires mold to the

20

00:01:16,910 --> 00:01:14,340

ground where they are going to be treading, in addition

21

00:01:20,540 --> 00:01:16,920

to that it does not sink in as much as the

22

00:01:22,760 --> 00:01:20,550

rigid wheels that exist now that

23

00:01:25,070 --> 00:01:22,770

allows the robots to have

24

00:01:27,200 --> 00:01:25,080

much more additional loads and I

25

00:01:31,010 --> 00:01:27,210

believe that It is very important that this

26

00:01:34,890 --> 00:01:31,020

new technology one of the advantages is

27

00:01:38,430 --> 00:01:34,900

that it absorbs a lot of

28

00:01:40,470 --> 00:01:38,440

energy from impacts at

29

00:01:43,380 --> 00:01:40,480

different speeds, especially at

30

00:01:45,540 --> 00:01:43,390

moderate or high speeds. This is

31

00:01:47,970 --> 00:01:45,550

very beneficial because now

32

00:01:50,160 --> 00:01:47,980

the transportation

33

00:01:52,860 --> 00:01:50,170

for astronauts that

34

00:01:54,000 --> 00:01:52,870

is currently available can be designed and developed. calculated that it will be much faster

35

00:01:58,590 --> 00:01:55,800

than the speeds of the robots on

36

00:02:00,690 --> 00:01:58,600

mars i know that we have a

37

00:02:03,500 --> 00:02:00,700

facility that we have here in mass

38

00:02:08,010 --> 00:02:03,510

clémenti summer may that we can simulate

39

00:02:10,020 --> 00:02:08,020

as the movement of the wheels or

40

00:02:12,180 --> 00:02:10,030

tires on different

41

00:02:14,310 --> 00:02:12,190

surfaces and obviously what we do

42

00:02:17,490 --> 00:02:14,320

is that we simulate the surface of the

43

00:02:22,020 --> 00:02:17,500

moon or the surface of mars and how the

44

00:02:25,740 --> 00:02:22,030

performance of this technology is that

45

00:02:27,350 --> 00:02:25,750

material as we do the tests

46

00:02:31,920 --> 00:02:27,360

there

47

00:02:37,199 --> 00:02:35,580

rafael and we speak in general terms

48

00:02:42,590 --> 00:02:37,209

that when we finish the tests

49

00:02:45,220 --> 00:02:42,600

here the ship Orion to return to

50

00:02:48,440 --> 00:02:45,230

the Kennedy Space Center in Florida

51  
00:02:49,850 --> 00:02:48,450  
and there we will integrate it into the

52  
00:02:52,220 --> 00:02:49,860  
space launch system, which is the most

53  
00:02:54,560 --> 00:02:52,230  
powerful in the world. Could you tell me

54  
00:02:57,320 --> 00:02:54,570  
what the steps are and what will

55  
00:02:58,980 --> 00:02:57,330  
happen before integrating it into the

56  
00:03:02,480 --> 00:02:58,990  
rocket

57  
00:03:05,850 --> 00:03:02,490  
? Immediately after the ship returns to

58  
00:03:07,760 --> 00:03:05,860  
have and we are going to do a test to

59  
00:03:11,100 --> 00:03:07,770  
show that everything is still working

60  
00:03:14,340 --> 00:03:11,110  
we are going to finish the installation of the

61  
00:03:16,770 --> 00:03:14,350  
solar panels that are not in the ones

62  
00:03:18,900 --> 00:03:16,780  
we brought the man because we

63  
00:03:25,500 --> 00:03:18,910

could not use them here it is going to be integrated

64

00:03:28,590 --> 00:03:25,510

so we are going to hand over to the team

65

00:03:32,730 --> 00:03:28,600

that is in charge of integrating the ship to the

66

00:03:35,000 --> 00:03:32,740

rocket we have 10 3 10 tests after

67

00:03:38,760 --> 00:03:35,010

the integration that we are going to continue

68

00:03:41,790 --> 00:03:38,770

30 process that takes approximately

69

00:03:45,450 --> 00:03:41,800

a year and then we will be ready

70

00:03:48,720 --> 00:03:45,460

for the launch before with it the

71

00:03:51,540 --> 00:03:48,730

first flight without people around

72

00:03:57,360 --> 00:03:51,550

the moon to demonstrate how the ship

73

00:04:00,680 --> 00:03:57,370

works on that mission that will ensure that

74

00:04:03,830 --> 00:04:00,690

the mission of we do 2

75

00:04:07,530 --> 00:04:03,840

with the cross to the person the athletes

