



1
00:00:15,560 --> 00:00:13,520
NASA is developing a lunar lander

2
00:00:18,220 --> 00:00:15,570
capability because it is the next step

3
00:00:21,109 --> 00:00:18,230
to understanding the lunar environment

4
00:00:23,390 --> 00:00:21,119
currently we have orbiters in space and

5
00:00:27,190 --> 00:00:23,400
we also have two more orbiters plan for

6
00:00:30,560 --> 00:00:27,200
2011 so it is NASA's next big milestone

7
00:00:32,510 --> 00:00:30,570
if you can imagine trying to control the

8
00:00:34,970 --> 00:00:32,520
decent speed so that we make a soft

9
00:00:36,319 --> 00:00:34,980
landing without damaging the science

10
00:00:38,389 --> 00:00:36,329
payload which is the important thing

11
00:00:40,430 --> 00:00:38,399
it's it's not easy going you have to

12
00:00:42,410 --> 00:00:40,440
account for surface terrain which

13
00:00:45,470 --> 00:00:42,420

includes a potentially very large moon

14

00:00:46,850 --> 00:00:45,480

rocks so it's a there's a lot of unique

15

00:00:49,430 --> 00:00:46,860

challenges to be taken into account

16

00:00:51,590 --> 00:00:49,440

these tests are important because they

17

00:00:53,299 --> 00:00:51,600

demonstrate our capability to do

18

00:00:55,280 --> 00:00:53,309

something that we haven't done in a very

19

00:00:58,430 --> 00:00:55,290

long time which is land on the moon we

20

00:01:01,069 --> 00:00:58,440

can do simulations and we can do math

21

00:01:04,759 --> 00:01:01,079

models but there's no real substitute

22

00:01:06,830 --> 00:01:04,769

for actually physically demonstrating a

23

00:01:10,219 --> 00:01:06,840

capability and making it an jable to

24

00:01:14,859 --> 00:01:10,229

build confidence the test article

25

00:01:18,230 --> 00:01:14,869

consists of a series of high pressure

26

00:01:20,959 --> 00:01:18,240

air tanks that we use as our fuel and

27

00:01:25,249 --> 00:01:20,969

control algorithms and carbon fiber

28

00:01:28,190 --> 00:01:25,259

composite structure our time all

29

00:01:30,840 --> 00:01:28,200

personnel are clear of the area you have

30

00:01:34,469 --> 00:01:30,850

the test

31

00:01:38,429 --> 00:01:34,479

okay we got your arm stand by this

32

00:01:41,700 --> 00:01:38,439

series of tests actually is free flying

33

00:01:45,120 --> 00:01:41,710

of the test bed which means that it's

34

00:01:47,930 --> 00:01:45,130

autonomously flying around under its own

35

00:01:50,960 --> 00:01:47,940

power and we're monitoring telemetry

36

00:01:54,300 --> 00:01:50,970

this demonstrates its capability to