# KENNEDY COUNTDOWN

1
00:00:07,370 --> 00:00:04,230
hi i'm nasa kennedy's cornelli e antonor

2
00:00:09,750 --> 00:00:07,380
and this is kennedy countdown

3
00:00:11,749 --> 00:00:09,760
[Music]

4
00:00:15,589 --> 00:00:11,759
there's a whole lot of shaking going on

5
00:00:17,990 --> 00:00:15,599
with nasa's space launch system or sls

6
00:00:20,390 --> 00:00:18,000
to measure the level of vibrations sls

7
00:00:22,870 --> 00:00:20,400
will experience during flight teams at

8
00:00:25,830 --> 00:00:22,880
kennedy are performing tests inside the

9
00:00:28,550 --> 00:00:25,840
vehicle assembly building this involves

10
00:00:31,429 --> 00:00:28,560
attaching about 300 sensors to the sls

11
00:00:33,990 --> 00:00:31,439
stack to capture data and placing

12
00:00:35,510 --> 00:00:34,000
hydraulic shakers at different locations

13
00:00:38,630 --> 00:00:35,520

on the rockets

14
00:00:40,869 --> 00:00:38,640
teams also are using a small hammer to

15
00:00:43,990 --> 00:00:40,879
deliver calibrated taps at different

16
00:00:45,430 --> 00:00:44,000
areas on the mobile launcher to simulate

17
00:00:48,229 --> 00:00:45,440
vibrations

18
00:00:51,270 --> 00:00:48,239
engineers are using an orion stage

19
00:00:53,270 --> 00:00:51,280
adapter structural test article and mass

20
00:00:56,150 --> 00:00:53,280
simulator to represent the weight of the

21
00:00:58,869 --> 00:00:56,160
stage adapter and spacecraft while teams

22
00:01:01,349 --> 00:00:58,879
continue launch processing of the real

23
00:01:03,990 --> 00:01:01,359
flight hardware slated to launch later

24
00:01:07,190 --> 00:01:04,000
this year artemis 1 will test sls and

25
00:01:10,230 --> 00:01:07,200
orion as an integrated system prior to

26
00:01:12,230 --> 00:01:10,240
crude flights to the moon

27
00:01:16,789 --> 00:01:12,240
through nasa's break the ice lunar

28
00:01:19,590 --> 00:01:16,799
challenge the agency awarded 500 000

29
00:01:22,630 --> 00:01:19,600
divided among 13 teams across the united

30
00:01:25,590 --> 00:01:22,640
states the teams submitted their ideas

31
00:01:27,990 --> 00:01:25,600
on how best to excavate resources during

32
00:01:29,910 --> 00:01:28,000
long duration missions to the moon

33
00:01:33,109 --> 00:01:29,920
the challenge involved designing a

34
00:01:36,310 --> 00:01:33,119
method to extract water by excavating

35
00:01:38,789 --> 00:01:36,320
and moving large amounts of icy regulus

36
00:01:40,870 --> 00:01:38,799
essentially moon dirt from a permanently

37
00:01:43,510 --> 00:01:40,880
shadowed area of the moon

38
00:01:46,149 --> 00:01:43,520

the challenge opened in november 2020

39
00:01:48,710 --> 00:01:46,159
and was managed by kennedy and nasa's

40
00:01:50,550 --> 00:01:48,720
marshall space flight center a future

41
00:01:54,870 --> 00:01:50,560
phase two of the challenge may focus on

42
00:01:56,870 --> 00:01:54,880
hardware development and demonstrations