



MEET

TEAM

CISLUNAR EXPLORERS

1
00:00:00,240 --> 00:00:04,400
We're launching two 3U CubeSats to go for that five million dollar prize

2
00:00:04,410 --> 00:00:08,840
money for the Cube Quest Challenge. This is a model of one of the two 3U

3
00:00:08,849 --> 00:00:12,870
CubeSats. So our team is a student team here at Cornell University. Our

4
00:00:12,870 --> 00:00:16,920
CubeSat will be riding alongside the Orion capsule that will be in the

5
00:00:16,920 --> 00:00:21,480
secondary payload of the SLS to go on an initial lunar swing by followed by a

6
00:00:21,480 --> 00:00:26,099
capture into lunar orbit. We're developing two new technologies mainly for

7
00:00:26,100 --> 00:00:30,330
this mission. This is where our main thruster is. One is a water electrolysis

8
00:00:30,330 --> 00:00:36,420
propulsion thruster. So we convert the water slowly into a hydrogen-oxygen mixture, then

9
00:00:36,420 --> 00:00:40,440
combust that gas mixture to generate our main thrust. The other new technology

10
00:00:40,440 --> 00:00:44,280
is inexpensive optimal navigation. So this is the Raspberry Pi camera.

11
00:00:44,280 --> 00:00:48,560

To determine where the spacecraft must be and then I'm hoping most of all that the

12

00:00:48,560 --> 00:00:52,080

mission is successful so that we can
take the technologies we were developing