



1
00:00:04,150 --> 00:00:02,389
at nasa's goddard space flight center

2
00:00:06,470 --> 00:00:04,160
we're leveraging our scientific and

3
00:00:09,270 --> 00:00:06,480
technical expertise to support nasa's

4
00:00:12,150 --> 00:00:09,280
bold artemis initiative for a new era of

5
00:00:14,470 --> 00:00:12,160
crude lunar exploration

6
00:00:17,189 --> 00:00:14,480
we build and operate spacecraft and

7
00:00:19,510 --> 00:00:17,199
science instruments and analyze data and

8
00:00:22,790 --> 00:00:19,520
lunar samples to help us understand the

9
00:00:25,910 --> 00:00:22,800
moon identify resources and locate safe

10
00:00:31,349 --> 00:00:28,390
we test science instruments in moon-like

11
00:00:33,350 --> 00:00:31,359
environments on earth

12
00:00:35,750 --> 00:00:33,360
providing valuable input to the design

13
00:00:37,910 --> 00:00:35,760

of hardware and strategies to be used by

14

00:00:40,869 --> 00:00:37,920

astronauts

15

00:00:42,790 --> 00:00:40,879

our researchers and partners study and

16

00:00:44,790 --> 00:00:42,800

model the sun's flow of energy and

17

00:00:46,709 --> 00:00:44,800

particles throughout the solar system

18

00:00:48,990 --> 00:00:46,719

which helps protect astronauts and

19

00:00:50,229 --> 00:00:49,000

spacecraft from harsh radiation

20

00:00:51,910 --> 00:00:50,239

[Music]

21

00:00:53,670 --> 00:00:51,920

the science payloads we develop for

22

00:00:57,029 --> 00:00:53,680

nasa's gateway will monitor space

23

00:00:59,430 --> 00:00:57,039

weather conditions from lunar orbit

24

00:01:01,910 --> 00:00:59,440

we also oversee communications networks

25

00:01:04,310 --> 00:01:01,920

for nasa providing two-way support and

26
00:01:05,910 --> 00:01:04,320
transmitting critical data

27
00:01:08,390 --> 00:01:05,920
optical communications will be

28
00:01:11,990 --> 00:01:08,400
demonstrated on orion for potential use

29
00:01:14,230 --> 00:01:12,000
on future human space flight missions

30
00:01:16,149 --> 00:01:14,240
reliable navigation on and around the

31
00:01:19,030 --> 00:01:16,159
moon will be enabled by proven

32
00:01:22,789 --> 00:01:19,040
technology onboard processing capability

33
00:01:27,429 --> 00:01:25,270
back on earth astronaut location and

34
00:01:29,670 --> 00:01:27,439
safety during orion splashdowns will be

35
00:01:33,190 --> 00:01:29,680
enhanced by the development of emergency

36
00:01:37,190 --> 00:01:35,190
our wallops flight facility assists with

37
00:01:39,510 --> 00:01:37,200
tracking and communication support for

38
00:01:41,910 --> 00:01:39,520

orion as well as launching uncrewed

39

00:01:44,630 --> 00:01:41,920

missions and payloads into low earth and

40

00:01:46,230 --> 00:01:44,640

lunar orbits

41

00:01:48,550 --> 00:01:46,240

future missions will demonstrate

42

00:01:51,030 --> 00:01:48,560

sustainable and resilient space flight

43

00:01:52,830 --> 00:01:51,040

enabled by in-space robotic servicing

44

00:01:54,950 --> 00:01:52,840

assembly and

45

00:01:56,870 --> 00:01:54,960

manufacturing the technologies we're

46

00:01:59,590 --> 00:01:56,880

developing will allow spacecraft to live

47

00:02:01,510 --> 00:01:59,600

longer and journey farther

48

00:02:03,350 --> 00:02:01,520

so that when future explorers step foot

49

00:02:06,149 --> 00:02:03,360

on the moon with artemis and take the

50

00:02:08,309 --> 00:02:06,159

next giant leap to mars goddard with our

