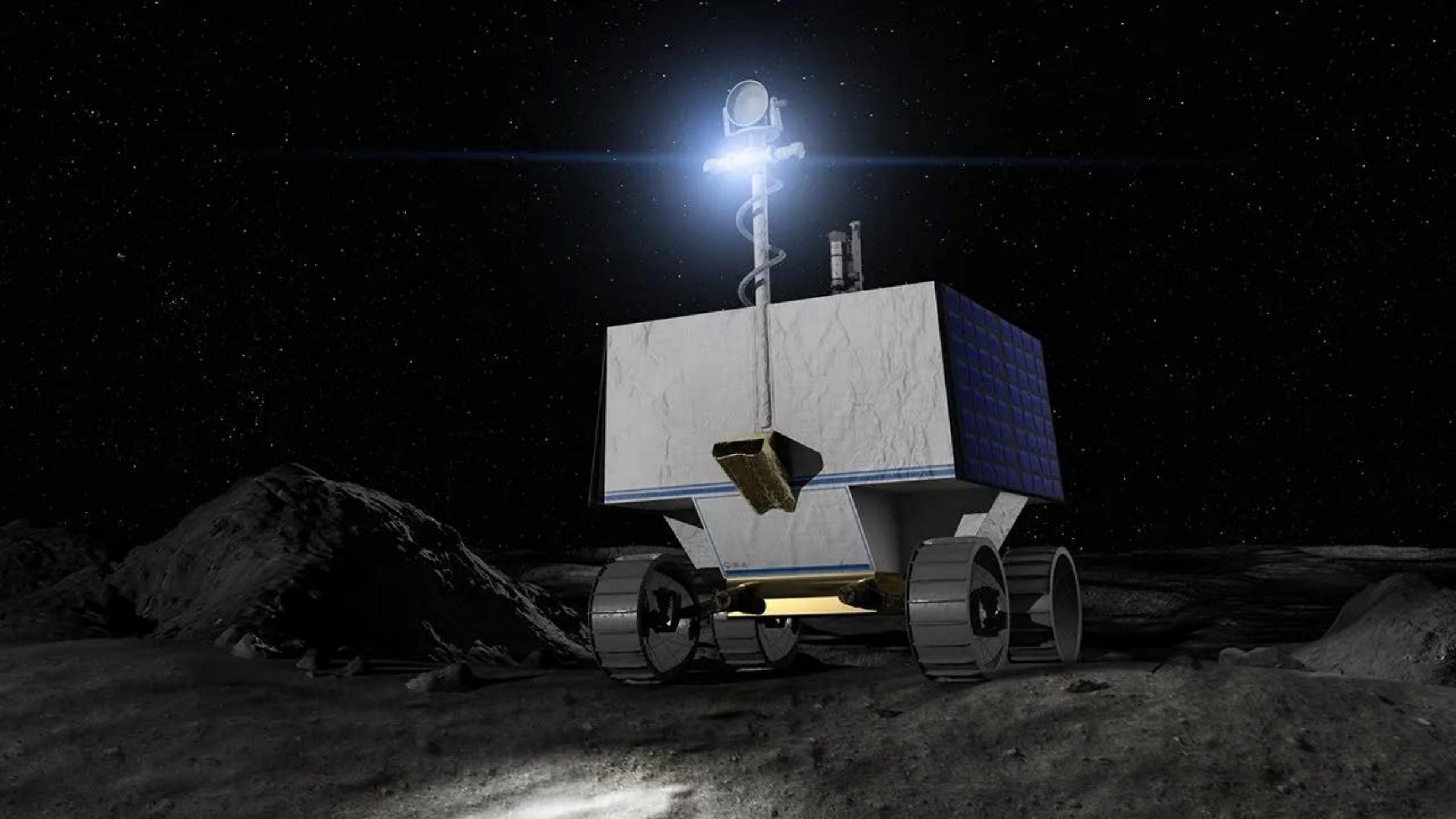




1
00:00:00,000 --> 00:00:01,930
Narrator: We know from decades of study

2
00:00:01,930 --> 00:00:03,590
that the Moon has water.

3
00:00:03,590 --> 00:00:05,520
But where? And how much?

4
00:00:05,520 --> 00:00:08,230
In 2023, a robotic rover will explore

5
00:00:08,230 --> 00:00:11,400
the Moon's surface in search of water ice.

6
00:00:11,400 --> 00:00:13,850
NASA's VIPER Moon rover will perform the first

7
00:00:13,850 --> 00:00:16,680
resource mapping mission on another world,

8
00:00:16,680 --> 00:00:19,040
using advanced instruments and tools to determine

9
00:00:19,040 --> 00:00:22,750
the location and concentration of water on the Moon.

10
00:00:22,750 --> 00:00:24,700
Thomas Zurbuchen: To send VIPER to the Moon,

11
00:00:24,700 --> 00:00:26,830
we're leveraging industry as part of our

12
00:00:26,830 --> 00:00:30,010
Commerical Lunar Payload Services program.

13
00:00:30,010 --> 00:00:32,710

A program designed to send science instruments

14

00:00:32,710 --> 00:00:35,750

and technology payloads to the surface of the Moon.

15

00:00:35,750 --> 00:00:37,590

VIPER represents a very different

16

00:00:37,590 --> 00:00:39,190

development paradigm.

17

00:00:39,190 --> 00:00:42,030

We are developing each instrument for launch on

18

00:00:42,030 --> 00:00:45,390

a CLPS ahead of VIPER, totally flipping on its head

19

00:00:45,390 --> 00:00:46,910

how we normally do this.

20

00:00:46,910 --> 00:00:48,870

This is truly creative.

21

00:00:48,870 --> 00:00:50,970

An industry partner will launch VIPER

22

00:00:50,970 --> 00:00:52,670

to the Moon's South Pole.

23

00:00:52,670 --> 00:00:55,580

This is a place where no human or rover

24

00:00:55,580 --> 00:00:57,740

has ever been before.

25

00:00:57,740 --> 00:00:59,210

Narrator: The rover's survey will provide

26
00:00:59,210 --> 00:01:01,310
scientists with the most detailed view of

27
00:01:01,310 --> 00:01:04,430
the Moon's water to date and point to spots where

28
00:01:04,430 --> 00:01:08,820
water could be harvested by future astronauts.

29
00:01:08,820 --> 00:01:10,090
Lori Glaze: VIPER will be the first

30
00:01:10,090 --> 00:01:11,940
resource-mapping mission on the surface

31
00:01:11,940 --> 00:01:14,030
of another celestial body.

32
00:01:14,030 --> 00:01:16,940
It represents a new kind of mission for NASA

33
00:01:16,940 --> 00:01:19,480
in which the objectives of advancing science

34
00:01:19,480 --> 00:01:23,110
and human exploration are closer than ever.

35
00:01:23,110 --> 00:01:25,080
The measurements that VIPER's instruments will

36
00:01:25,080 --> 00:01:28,070
make can help us understand the source and

37
00:01:28,070 --> 00:01:30,690
distribution of the water and other volatiles

38
00:01:30,690 --> 00:01:33,460

on the Moon, giving us insight into the evolution

39

00:01:33,460 --> 00:01:36,200

of the Moon and the Earth-Moon system.

40

00:01:36,200 --> 00:01:38,870

The Moon's water is also a precious resource that

41

00:01:38,870 --> 00:01:41,490

could be extracted to support human exploration

42

00:01:41,490 --> 00:01:43,540

of the Moon and beyond.

43

00:01:43,540 --> 00:01:46,670

What we learn from VIPER will bring us a step closer

44

00:01:46,670 --> 00:01:49,490

to developing a sustainable, long-term