



1
00:00:01,250 --> 00:00:05,250
NASA's new spacecraft heat shield design

2
00:00:05,250 --> 00:00:09,390
opens like an umbrella.

3
00:00:09,390 --> 00:00:13,390
It's called Adaptable, Deployable Entry

4
00:00:13,390 --> 00:00:17,420
Placement Technology or ADEPT.

5
00:00:17,420 --> 00:00:21,400
During its first suborbital flight, ADPET will

6
00:00:21,400 --> 00:00:24,680
deploy above Earth's atmosphere

7
00:00:24,680 --> 00:00:29,190
and test how the new technology performs

8
00:00:29,190 --> 00:00:31,620
throughout re-entry, descent, and landing.

9
00:00:31,620 --> 00:00:35,500
ADEPT was developed at NASA's Ames Research Center

10
00:00:35,500 --> 00:00:38,880
in Silicon Valley as a game-changing technology.

11
00:00:38,880 --> 00:00:46,160
It uses a flexible, multi-layer woven carbon fabric

12
00:00:46,160 --> 00:00:53,350
that opens into a rigid heat shield when deployed.

13
00:00:53,350 --> 00:00:57,300

Like an umbrella, larger versions of ADEPT

14
00:00:57,300 --> 00:01:01,160
could be stored compactly in today's rockets.

15
00:01:01,160 --> 00:01:05,100
ADEPT could make it possible to send

16
00:01:05,100 --> 00:01:08,420
larger missions to Venus, Mars or Titan,