



MARY KALAYJIAN

RS-25 PROJECT & COMPONENT ENGINEER



1
00:00:00,000 --> 00:00:03,620
Hi, I'm Mary Kaylajian. I'm an engineer at Aerojet Rocketdyne,

2
00:00:03,720 --> 00:00:04,860
working with structured light

3
00:00:04,940 --> 00:00:06,720
on the RS-25 engine program...

4
00:00:06,800 --> 00:00:08,640
for NASA's Space Launch System Rocket.

5
00:00:08,720 --> 00:00:10,560
This is Rocket Science in 60 Seconds.

6
00:00:14,000 --> 00:00:16,140
Structured light is a process in which light...

7
00:00:16,220 --> 00:00:18,900
structured in grids is projected onto an object...

8
00:00:19,000 --> 00:00:21,560
so that the resulting geometries can be digitally scanned...

9
00:00:21,660 --> 00:00:22,260
and analyzed.

10
00:00:26,040 --> 00:00:28,280
The RS-25 engine is the size of a car.

11
00:00:28,360 --> 00:00:30,280
and is made up of hundreds of components.

12
00:00:30,400 --> 00:00:31,640
Structured light allows us...

13
00:00:31,740 --> 00:00:34,000

to measure and evaluate each part ten times faster...

14

00:00:34,100 --> 00:00:35,640

with greater accuracy...

15

00:00:35,700 --> 00:00:37,640

and at lower costs than we could in the past.

16

00:00:41,240 --> 00:00:43,160

We are continuously discovering new applications...

17

00:00:43,240 --> 00:00:44,400

for this amazing technology...

18

00:00:44,500 --> 00:00:47,080

Imagine being an astronaut onboard a spacecraft...

19

00:00:47,160 --> 00:00:47,940

with a damaged part.

20

00:00:48,020 --> 00:00:50,700

The damaged part can be scanned and digitally repaired.

21

00:00:50,700 --> 00:00:52,700

It can then be downloaded onboard...