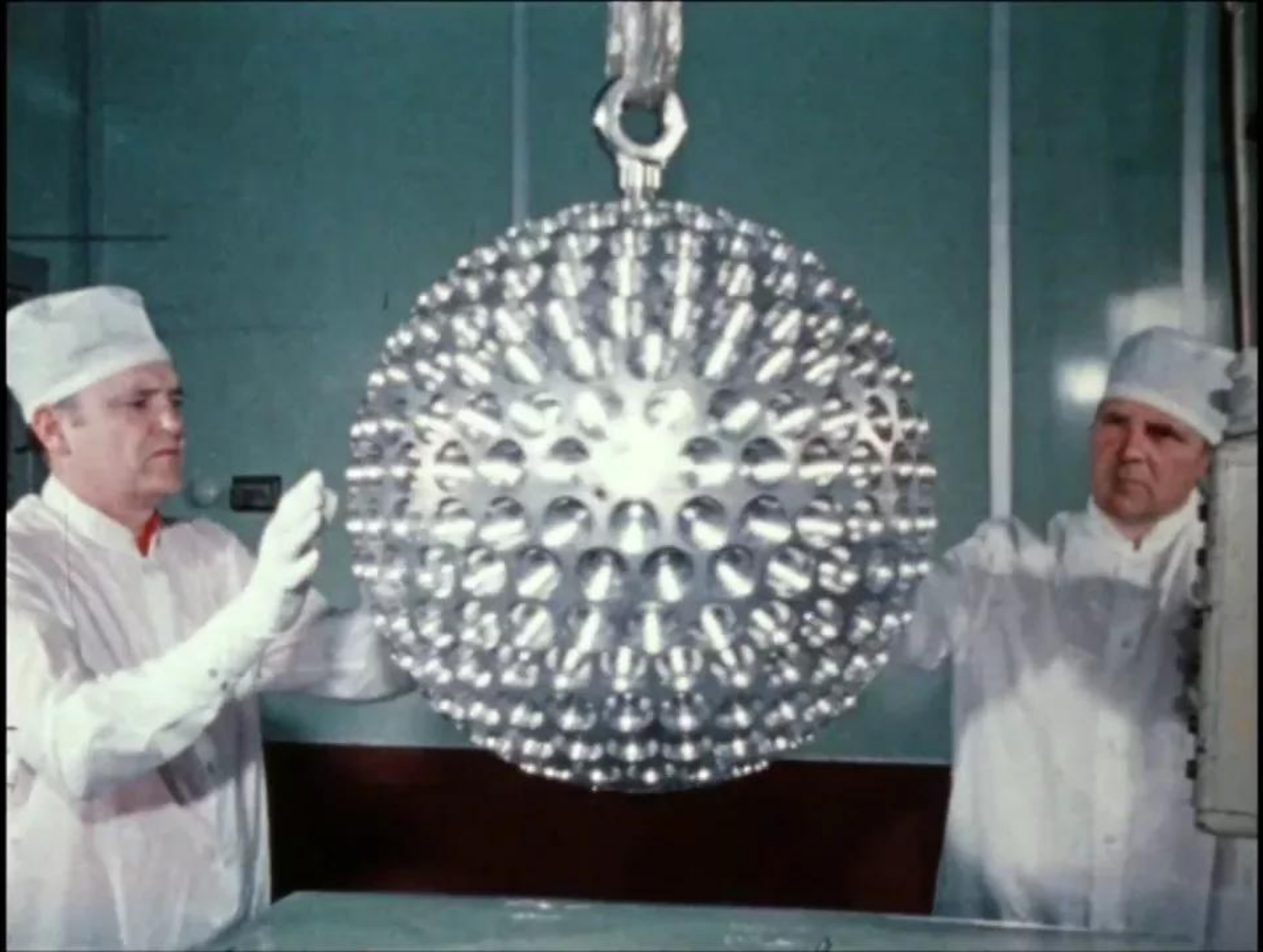

1
00:00:00,750 --> 00:00:04,100
A small group of highly skilled
people at the Marshall Space

2
00:00:04,100 --> 00:00:06,070
Flight Center have
just completed

3
00:00:06,070 --> 00:00:07,560
building a small
satellite, which

4
00:00:07,560 --> 00:00:10,920
will be launched early next year
for taking precise measurements

5
00:00:10,920 --> 00:00:11,920
of the earth.

6
00:00:11,920 --> 00:00:17,540
It is known as LAGEOS, short for
a Laser Geodynamic Satellite.

7
00:00:17,540 --> 00:00:21,460
LAGEOS is basically a solid
ball of aluminum and brass

8
00:00:21,460 --> 00:00:24,490
about twice the size
of a basketball.

9
00:00:24,490 --> 00:00:27,700
And is covered with
precision reflectors.

10
00:00:27,700 --> 00:00:31,620
It will be a passive satellite,
not originating signals itself,

11

00:00:31,620 --> 00:00:34,930
but bouncing back the laser
beams from ground stations.

12
00:00:34,930 --> 00:00:38,130
Placed in a circular
orbit, LAGEOS

13
00:00:38,130 --> 00:00:40,360
will be so stable
that its reflected

14
00:00:40,360 --> 00:00:43,750
signals can be used to detect
an analyze the earth's crust

15
00:00:43,750 --> 00:00:47,070
and rotational motions and
how fast the continents are

16
00:00:47,070 --> 00:00:48,750
drifting apart.

17
00:00:48,750 --> 00:00:52,190
The LAGEOS satellite is a part
of NASA's Earth and Oceans

18
00:00:52,190 --> 00:00:54,020
Physics Application Program.