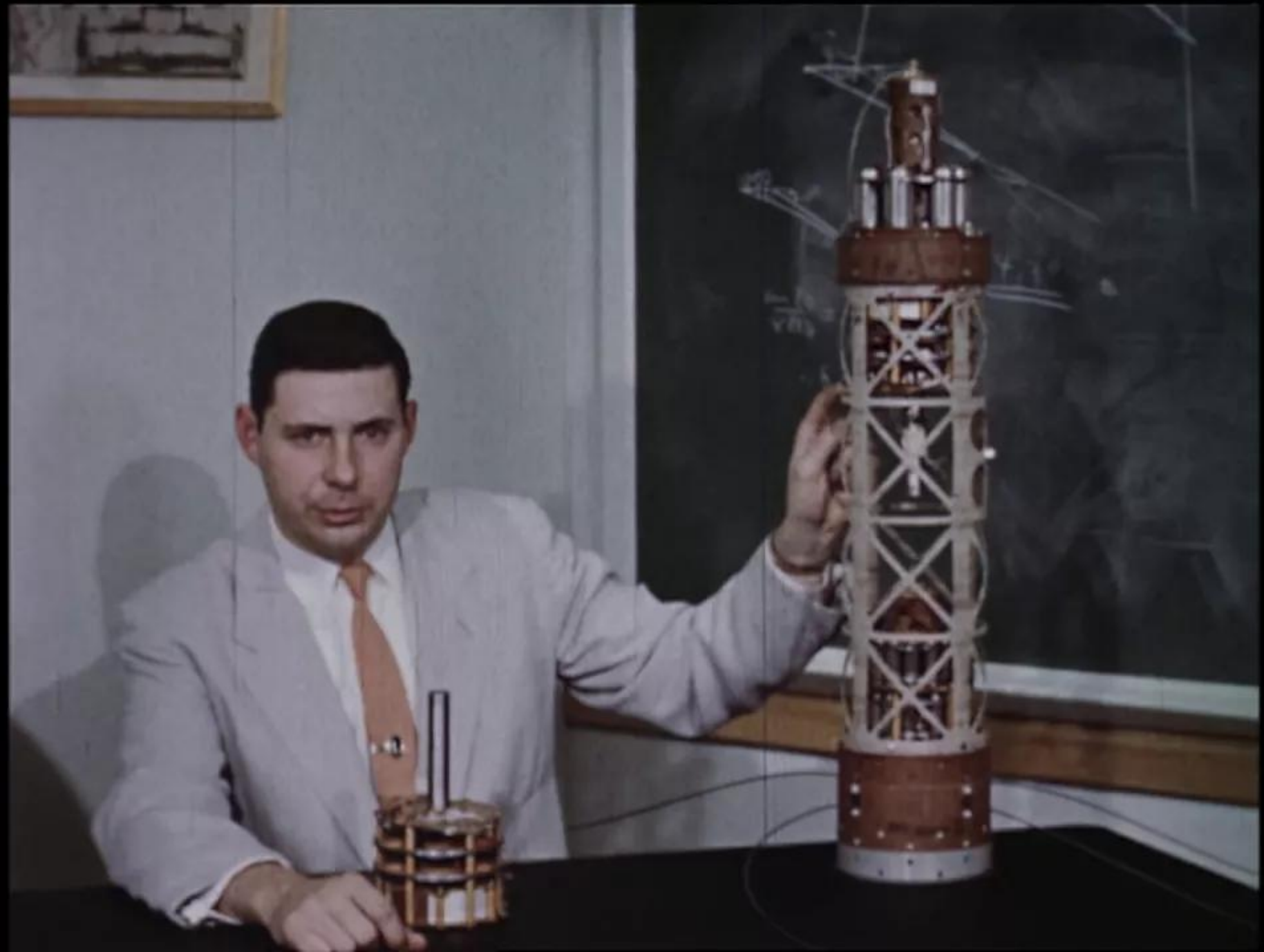

1
00:00:00,533 --> 00:00:01,735
(fanfare music)

2
00:00:01,835 --> 00:00:03,870
[TEXT: 60th Anniversary
Explorer 1]

3
00:00:03,903 --> 00:00:07,107
[TEXT:The beginning of
the US space program

4
00:00:08,941 --> 00:00:10,743
- [Narrator] Today, a
new moon is in the sky,

5
00:00:10,776 --> 00:00:14,381
a 23-inch metal sphere placed
in orbit by a Russian rocket.

6
00:00:17,349 --> 00:00:19,118
- [Narrator] The reaction
was one of astonishment

7
00:00:19,151 --> 00:00:21,421
and concern, for
it was now known

8
00:00:21,454 --> 00:00:24,457
that a potential enemy was
at least temporarily ahead

9
00:00:24,490 --> 00:00:26,526
in developing means
for space travel.

10
00:00:27,827 --> 00:00:29,896
- [Narrator] President
Eisenhower reassures the nation

11

00:00:29,929 --> 00:00:32,598
that Russia's success
with the first satellite

12
00:00:32,631 --> 00:00:37,003
does not indicate a serious lag
in American rocket research.

13
00:00:37,036 --> 00:00:39,539
- [Narrator] The morning
of November 8th, 1957,

14
00:00:39,572 --> 00:00:42,675
at Huntsville, Alabama, a
sudden meeting has been called

15
00:00:42,708 --> 00:00:45,144
by General John B.
Medaris, commanding general

16
00:00:45,177 --> 00:00:47,147
of the Army Ballistic
Missile Agency.

17
00:00:48,280 --> 00:00:49,816
- I promised the
secretary of the Army

18
00:00:49,849 --> 00:00:52,952
that we would be ready
in 90 days or less.

19
00:00:52,985 --> 00:00:54,520
- [Narrator] All at once,
Americans were interested

20
00:00:54,553 --> 00:00:56,656
in the oncoming age of space.

21
00:00:56,689 --> 00:01:00,293

And with the curiosity came
a mounting swelling demand

22
00:01:00,326 --> 00:01:04,097
to get a satellite into
the air on the double.

23
00:01:04,130 --> 00:01:06,466
But there were disappointments.

24
00:01:06,499 --> 00:01:08,701
- [Narrator] Another setback
for the United States,

25
00:01:08,734 --> 00:01:12,472
a loss of thrust and fall
back to Earth in split second.

26
00:01:12,505 --> 00:01:15,175
(loud rumbling)

27
00:01:23,682 --> 00:01:25,618
- [Narrator] But meanwhile,
far across the country

28
00:01:25,651 --> 00:01:27,720
at the Jet Propulsion
Laboratory,

29
00:01:27,753 --> 00:01:30,790
a sprawling 80-acre research
and development complex

30
00:01:30,823 --> 00:01:33,926
in Pasadena, California,
scientists and engineers

31
00:01:33,959 --> 00:01:36,095
were racing toward
the same deadline,

32
00:01:36,128 --> 00:01:39,298
90 days to put a
satellite into orbit.

33
00:01:39,331 --> 00:01:42,068
- The Army is requesting the
Jet Propulsion Laboratory

34
00:01:42,101 --> 00:01:45,872
to provide the following
programs: first, the additional

35
00:01:45,905 --> 00:01:49,108
high-speed propulsion
systems required;

36
00:01:49,141 --> 00:01:52,345
second, the orbiting
missile or satellite;

37
00:01:52,378 --> 00:01:55,414
and third, the necessary
instrumentation

38
00:01:55,447 --> 00:01:59,118
to record and transmit
the scientific data

39
00:01:59,151 --> 00:02:01,187
assigned to this experiment.

40
00:02:01,220 --> 00:02:03,556
- This assembly, which
is the actual payload

41
00:02:03,589 --> 00:02:07,026
for the satellite,
contains both transmitters,

42
00:02:07,059 --> 00:02:10,196
the necessary circuits
for the impact microphone

43
00:02:10,229 --> 00:02:13,599
which will detect the collisions
with meteorite particles,

44
00:02:13,632 --> 00:02:17,170
and a Geiger counter to
measure cosmic ray intensity.

45
00:02:17,203 --> 00:02:19,105
(dramatic music)

46
00:02:19,138 --> 00:02:20,573
- [Narrator] At Cape
Canaveral, Florida,

47
00:02:20,606 --> 00:02:22,842
the Army's Jupiter-C
rocket is readied

48
00:02:22,875 --> 00:02:25,711
for America's second attempt
to launch a space satellite.

49
00:02:25,744 --> 00:02:28,014
The hours-long countdown
approaches zero,

50
00:02:28,047 --> 00:02:29,615
a moment of enormous tension,

51
00:02:29,648 --> 00:02:32,084
for every missile launching
is still an experiment.

52
00:02:32,117 --> 00:02:34,654

Any one of tens of thousands
of things can go wrong,

53
00:02:34,687 --> 00:02:36,422
with catastrophic results.

54
00:02:36,455 --> 00:02:38,758
But all that can be done to
ensure perfection has been done.

55
00:02:38,791 --> 00:02:41,494
The moment is at hand, the
countdown reaches zero.

56
00:02:42,328 --> 00:02:44,998
(loud rumbling)

57
00:02:54,173 --> 00:02:57,076
Some three minutes later,
Explorer is in orbit,

58
00:02:57,109 --> 00:03:00,112
broadcasting to the world
its coded scientific data.

59
00:03:00,145 --> 00:03:02,582
This close-up of the United
State's edition of Sputnik

60
00:03:02,615 --> 00:03:03,983
was made at a press conference

61
00:03:04,016 --> 00:03:06,118
with leaders of the
scientific teams:

62
00:03:06,151 --> 00:03:08,454
Dr. Werner von Braun,
Dr. James Van Allen,

63
00:03:08,487 --> 00:03:11,457
and Dr. William Pickering,
a three-way collaboration

64
00:03:11,490 --> 00:03:12,825
between private industry,

65
00:03:12,858 --> 00:03:16,362
academic science
and the military.

66
00:03:16,395 --> 00:03:19,699
Cosmic ray intensity, meteor
impact, solar radiation,

67
00:03:19,732 --> 00:03:22,101
these are the dry facts
that will help carry man