



1
00:00:01,368 --> 00:00:04,537

THE SPACE RACE WAS
A COMPETITION OF ECONOMICS,

2
00:00:04,604 --> 00:00:09,175

TECHNOLOGY, AND POLITICS.
IN THE 1960s, THE UNITED STATES

3
00:00:09,242 --> 00:00:12,879

AND THE SOVIET UNION WERE BOTH
SEEKING HIGHER GROUND.

4
00:00:12,946 --> 00:00:16,349

EACH COUNTRY WAS STOCKPILING
NUCLEAR ARMS AND ADVANCING

5
00:00:16,416 --> 00:00:19,519

MISSILE TECHNOLOGY.
THE SOVIETS HAD BEEN THE FIRST

6
00:00:19,586 --> 00:00:22,689

TO ORBIT BOTH A SATELLITE
AND A HUMAN.

7
00:00:22,756 --> 00:00:25,492

THEY WERE CLEARLY AHEAD.
I'M NASA ADMINISTRATOR

8
00:00:25,558 --> 00:00:28,094

JIM BRIDENSTINE.
FOR FIVE YEARS, I SERVED

9
00:00:28,161 --> 00:00:30,330

IN THE U.S. CONGRESS
ON THE SCIENCE COMMITTEE,

10
00:00:30,397 --> 00:00:32,899

WHICH OVERSEES NASA.
WRITTEN ON THE WALL IS

11
00:00:32,966 --> 00:00:35,702
A SCRIPTURE:
"WHERE THERE IS NO VISION,

12
00:00:35,769 --> 00:00:39,939
"THE PEOPLE PERISH."
ON MAY 25, 1961,

13
00:00:40,006 --> 00:00:43,343
PRESIDENT JOHN F. KENNEDY
PRESENTED CONGRESS WITH

14
00:00:43,410 --> 00:00:47,347
THE MOST INSPIRATIONAL VISION
IN HISTORY--

15
00:00:47,414 --> 00:00:50,417
AND HE GAVE IT A DEADLINE.
I BELIEVE THAT THIS NATION

16
00:00:50,483 --> 00:00:53,887
SHOULD COMMIT ITSELF
TO ACHIEVING THE GOAL

17
00:00:53,953 --> 00:00:57,624
BEFORE THIS DECADE IS OUT
OF LANDING A MAN ON THE MOON

18
00:00:57,690 --> 00:01:01,428
AND RETURNING HIM SAFELY
TO THE EARTH.

19
00:01:01,494 --> 00:01:05,899
THIS VISION WAS PLACED
IN JEOPARDY WHEN, IN 1967,

20
00:01:05,965 --> 00:01:10,036
THE APOLLO 1 FIRE KILLED
GUS GRISSOM, ED WHITE,

21

00:01:10,103 --> 00:01:13,072

AND ROGER CHAFFEE.

AND THEN IN 1968,

22

00:01:13,139 --> 00:01:17,377

THE UNCREWED APOLLO 6 MISSION

ALSO FAILED.

23

00:01:17,444 --> 00:01:20,280

STILL, THE SOVIETS PLANNED

TO FLY AROUND THE MOON

24

00:01:20,346 --> 00:01:25,418

AS EARLY AS THE END OF 1968.

SO NASA MADE AGGRESSIVE

25

00:01:25,485 --> 00:01:28,688

AND EVEN DANGEROUS PLANS.

THE PLAN WAS TO SKIP

26

00:01:28,755 --> 00:01:32,826

TWO APOLLO TEST FLIGHTS,

DROP THE MOON LANDER,

27

00:01:32,892 --> 00:01:36,396

AND GO DIRECTLY TO LUNAR ORBIT

WITH HUMANS.

28

00:01:36,596 --> 00:01:39,365

AT A TIME WHEN NOBODY HAD

EVER FLOWN MORE THAN

29

00:01:39,432 --> 00:01:43,536

850 MILES ABOVE THE EARTH,

NASA PLANNED TO FLY

30

00:01:43,603 --> 00:01:49,008

240,000 MILES TO THE MOON.

31

00:01:49,075 --> 00:01:52,579
NASA CONSIDERED THE RISKS.
THE SATURN V ROCKET HAD NEVER

32
00:01:52,645 --> 00:01:56,049
FLOWN A CREW BEFORE.
ITS PREVIOUS MISSION WAS

33
00:01:56,115 --> 00:01:58,852
A FAILURE.
CRITICAL COMPONENTS WERE NOT

34
00:01:58,918 --> 00:02:03,356
READY, SUCH AS MISSION CONTROL,
COMMUNICATION NETWORKS,

35
00:02:03,423 --> 00:02:08,127
SOFTWARE AND INSTRUMENTATION.
TRAJECTORIES AND NAVIGATION

36
00:02:08,194 --> 00:02:11,631
WERE NOT EVEN UNDERSTOOD
LET ALONE CALCULATED.

37
00:02:11,698 --> 00:02:14,200
AN ASTRONAUT CREW
AND A FLIGHT CONTROL TEAM

38
00:02:14,267 --> 00:02:18,738
WERE NOT TRAINED, AND THERE WAS
NO ABILITY TO RECOVER THE CREW

39
00:02:18,805 --> 00:02:23,309
IF THEY RETURNED AT ALL.
FINALLY, WITHOUT A MOON LANDER,

40
00:02:23,376 --> 00:02:27,180
APOLLO 8 WOULD HAVE
ONLY A SINGLE ENGINE.

41

00:02:27,247 --> 00:02:31,885
IT WOULD NEED TO BE REIGNITED
MANY TIMES TO GET TO THE MOON,

42
00:02:31,951 --> 00:02:35,088
TO ENTER LUNAR ORBIT,
TO CHANGE ORBITS WHILE AT

43
00:02:35,154 --> 00:02:40,293
THE MOON, TO EXIT LUNAR ORBIT,
AND TO FLY BACK TO EARTH.

44
00:02:40,360 --> 00:02:43,396
IN THE PREVIOUS MISSION,
THAT SINGLE ENGINE

45
00:02:43,463 --> 00:02:47,867
FAILED TO REIGNITE EVEN ONCE.
IF IT FAILED NOW,

46
00:02:47,934 --> 00:02:51,704
OUR ASTRONAUTS WOULD BE
LOST FOREVER.

47
00:02:51,771 --> 00:02:57,143
THE OPTIMUM EARTH MOON ALIGNMENT
WOULD PLACE APOLLO 8 IN ORBIT

48
00:02:57,210 --> 00:03:01,481
AROUND THE MOON IN JUST
FOUR SHORT MONTHS.

49
00:03:01,548 --> 00:03:05,151
A DANGEROUSLY AGGRESSIVE
SCHEDULE GIVEN ALL THAT WAS

50
00:03:05,218 --> 00:03:09,122
NEEDED TO BE ACCOMPLISHED.
EVEN MORE WORRISOME,

51

00:03:09,188 --> 00:03:13,560
OUR ASTRONAUTS WOULD BE
IN LUNAR ORBIT ON CHRISTMAS DAY.

52
00:03:13,626 --> 00:03:17,864
ANY FAILURE WOULD WRECK
CHRISTMAS FOR THE ENTIRE NATION.

53
00:03:17,931 --> 00:03:22,802
NASA WORKED OVERTIME.
AND NASA WAS DEDICATED.

54
00:03:42,822 --> 00:03:47,126
ON CHRISTMAS EVE, FRANK BORMAN,
JIM LOVELL, AND BILL ANDERS

55
00:03:47,193 --> 00:03:50,396
WERE THE FIRST HUMANS
TO ORBIT THE MOON,

56
00:03:50,463 --> 00:03:52,098
AND THE FIRST HUMANS
TO SEE AN EARTHRISE

57
00:03:52,165 --> 00:03:57,670
ABOVE THE MOON'S SURFACE.
AS THEY ORBITED THE MOON,

58
00:03:57,737 --> 00:04:01,641
THEY MADE THEIR LAST BROADCAST
BEFORE ATTEMPTING TO REIGNITE

59
00:04:01,708 --> 00:04:05,778
THEIR SINGLE ENGINE
TO RETURN HOME.

60
00:04:05,845 --> 00:04:10,683
THIS BROADCAST WAS SEEN OR HEARD
BY ONE OUT OF EVERY FOUR

61

00:04:10,750 --> 00:04:14,487
PEOPLE ON THE EARTH,
INCLUDING THE PEOPLE BEHIND

62
00:04:14,554 --> 00:04:18,858
THE SOVIET UNION'S IRON CURTAIN,
WHERE CHRISTMAS WAS

63
00:04:18,925 --> 00:04:23,963
STILL ILLEGAL.
THIS WAS THEIR MESSAGE.

64
00:04:24,030 --> 00:04:27,433
FOR ALL THE PEOPLE
BACK ON EARTH, THE CREW OF

65
00:04:27,500 --> 00:04:33,206
APOLLO 8 HAS A MESSAGE THAT
WE WOULD LIKE TO SEND TO YOU.

66
00:04:33,272 --> 00:04:35,875
"IN THE BEGINNING,
"GOD CREATED THE HEAVEN

67
00:04:35,942 --> 00:04:38,378
"AND THE EARTH.
"AND THE EARTH WAS

68
00:04:38,444 --> 00:04:42,115
"WITHOUT FORM AND VOID,
"AND DARKNESS WAS UPON

69
00:04:42,181 --> 00:04:46,319
"THE FACE OF THE DEEP.
"AND THE SPIRIT OF GOD MOVED

70
00:04:46,386 --> 00:04:51,090
"UPON THE FACE OF THE WATERS.
"AND GOD SAID, 'LET THERE BE

71

00:04:51,157 --> 00:04:56,362
"LIGHT,' AND THERE WAS LIGHT.
"AND GOD SAW THE LIGHT.

72
00:04:56,429 --> 00:04:59,132
"AND IT WAS GOOD.
"AND GOD DIVIDED THE LIGHT

73
00:04:59,198 --> 00:05:04,904
"FROM THE DARKNESS."
"AND GOD CALLED THE LIGHT

74
00:05:04,971 --> 00:05:08,441
"DAY,' AND THE DARKNESS
"HE CALLED 'NIGHT.'

75
00:05:08,508 --> 00:05:12,278
"AND THE EVENING AND THE MORNING
"WERE THE FIRST DAY.

76
00:05:12,345 --> 00:05:14,147
"AND GOD SAID,
"LET THERE BE A FIRMAMENT

77
00:05:14,213 --> 00:05:16,816
"IN THE MIDST OF THE WATERS,
"AND LET IT DIVIDE THE WATERS

78
00:05:16,883 --> 00:05:22,989
"FROM THE WATERS.
"AND GOD MADE THE FIRMAMENT,

79
00:05:23,056 --> 00:05:25,758
"AND DIVIDED THE WATERS
"WHICH WERE UNDER THE FIRMAMENT

80
00:05:25,825 --> 00:05:28,594
"FROM THE WATERS WHICH WERE
"ABOVE THE FIRMAMENT.

81

00:05:28,661 --> 00:05:31,130

"AND IT WAS SO.

"AND GOD CALLED

82

00:05:31,197 --> 00:05:33,966

"THE FIRMAMENT 'HEAVEN.'

"AND THE EVENING

83

00:05:34,033 --> 00:05:37,737

"AND THE MORNING WERE

"THE SECOND DAY."

84

00:05:37,804 --> 00:05:39,672

>> "AND GOD SAID, "LET

"THE WATERS UNDER THE HEAVEN

85

00:05:39,739 --> 00:05:42,775

"BE GATHERED TOGETHER

"INTO ONE PLACE.

86

00:05:42,842 --> 00:05:46,579

"AND LET THE DRY LAND APPEAR.'

"AND IT WAS SO.

87

00:05:46,646 --> 00:05:49,649

"AND GOD CALLED

"THE DRY LAND 'EARTH.'

88

00:05:49,716 --> 00:05:53,853

"AND THE GATHERING TOGETHER

"OF THE WATERS CALLED HE 'SEAS.'

89

00:05:53,920 --> 00:05:59,659

"AND GOD SAW THAT IT WAS GOOD."

AND FROM THE CREW OF APOLLO 8,

90

00:05:59,726 --> 00:06:04,897

WE CLOSE WITH GOODNIGHT,

GOOD LUCK, A MERRY CHRISTMAS,

91

00:06:04,964 --> 00:06:14,674
AND GOD BLESS ALL OF YOU,
ALL OF YOU ON THE GOOD EARTH.

92
00:06:14,741 --> 00:06:18,544
TODAY, WE ARE STILL
STRIVING FOR HIGHER GROUND.

93
00:06:18,611 --> 00:06:21,948
THIS TIME, WE'RE DOING IT
WITH OUR INTERNATIONAL PARTNERS,

94
00:06:22,014 --> 00:06:25,918
INCLUDING RUSSIA.
THIS HOLIDAY SEASON, REMEMBER

95
00:06:25,985 --> 00:06:30,490
NASA'S DARING FEAT OF 1968.
THINK ABOUT THE PEOPLE WHO

96
00:06:30,556 --> 00:06:32,925
RISKED THEIR LIVES,
AND THE PEOPLE WHO

97
00:06:32,992 --> 00:06:37,697
GAVE THEIR LIVES TO PRESERVE
OUR FREEDOMS, INCLUDING

98
00:06:37,764 --> 00:06:40,399
THE FREEDOM TO CELEBRATE
CHRISTMAS.