



1
00:00:43,640 --> 00:00:41,150
we were in Cold War there was darn close

2
00:00:46,130 --> 00:00:43,650
to hot war with the Russians they had

3
00:00:47,780 --> 00:00:46,140
been launching some rockets and ours too

4
00:00:50,450 --> 00:00:47,790
often had been blowing up on the launch

5
00:00:54,170 --> 00:00:50,460
pad and that was sort of the background

6
00:00:56,330 --> 00:00:54,180
of what happened in in 57 when they sent

7
00:00:58,970 --> 00:00:56,340
ups Putney right there i think we all

8
00:01:02,960 --> 00:00:58,980
inwardly resolved that that one go left

9
00:01:06,590 --> 00:01:02,970
you go do something about it it was just

10
00:01:10,600 --> 00:01:06,600
a faint beep radio beacon coming from a

11
00:01:14,060 --> 00:01:10,610
shiny little orb circling the earth in

12
00:01:17,030 --> 00:01:14,070
1957 Sputnik signaled the beginning of

13
00:01:20,570 --> 00:01:17,040

the Space Age and the United States was

14

00:01:22,820 --> 00:01:20,580

behind our first successful answer to

15

00:01:25,910 --> 00:01:22,830

Sputnik came with the launch of the

16

00:01:28,370 --> 00:01:25,920

Explorer 1 satellite and within the year

17

00:01:31,539 --> 00:01:28,380

the formation of the National

18

00:01:34,100 --> 00:01:31,549

Aeronautics and Space Administration

19

00:01:37,580 --> 00:01:34,110

explore one had science instruments on

20

00:01:42,020 --> 00:01:37,590

and so is really marks the first use of

21

00:01:44,000 --> 00:01:42,030

space for scientific exploration

22

00:01:46,680 --> 00:01:44,010

we have one of the most challenging

23

00:01:50,490 --> 00:01:46,690

assignments that has ever been given to

24

00:01:56,840 --> 00:01:50,500

modern man we will be preparing for the

25

00:02:02,910 --> 00:02:00,600

Alan Shepard's flight was a fantastic

26

00:02:05,520 --> 00:02:02,920

moment in the history of the NASA I

27

00:02:08,310 --> 00:02:05,530

think back on that and I watch him come

28

00:02:11,820 --> 00:02:08,320

out of that van on the Redstone pad and

29

00:02:15,030 --> 00:02:11,830

look up at that rocket in that silver

30

00:02:22,440 --> 00:02:15,040

suit he had on wondering himself what

31

00:02:24,900 --> 00:02:22,450

the hell he was doing there this nation

32

00:02:27,510 --> 00:02:24,910

should commit itself to achieving the

33

00:02:30,270 --> 00:02:27,520

goal before this decade is out of

34

00:02:32,520 --> 00:02:30,280

landing a man on the moon and returning

35

00:02:34,890 --> 00:02:32,530

him safely to the earth that was all

36

00:02:37,320 --> 00:02:34,900

heady stuff and we were all you know go

37

00:02:39,270 --> 00:02:37,330

go man go some of the doctors were

38

00:02:41,220 --> 00:02:39,280

concerned for instance that when you're

39

00:02:43,410 --> 00:02:41,230

in zero-g for a while for several hours

40

00:02:54,060 --> 00:02:43,420

you're afraid your eyes might change

41

00:02:58,259 --> 00:02:54,070

shape it truly was the age of aquarius

42

00:03:01,860 --> 00:02:58,269

in that 60s the mood around us was

43

00:03:04,650 --> 00:03:01,870

always electric the press revered the

44

00:03:07,500 --> 00:03:04,660

astronauts and it revered those of us in

45

00:03:09,479 --> 00:03:07,510

the front of the program communications

46

00:03:13,199 --> 00:03:09,489

are lots of course cable to be in and a

47

00:03:15,330 --> 00:03:13,209

lot of other neat things have happened

48

00:03:18,240 --> 00:03:15,340

as a result of that technology push

49

00:03:21,000 --> 00:03:18,250

there's the drop before it returns to

50

00:03:23,490 --> 00:03:21,010

earth again the x-15 may apply some 60

51
00:03:25,350 --> 00:03:23,500
miles straight up at nearly 4,000 miles

52
00:03:27,420 --> 00:03:25,360
per hour the country was trying to build

53
00:03:29,100 --> 00:03:27,430
a supersonic transport at least to do

54
00:03:32,220 --> 00:03:29,110
some research and builds and prototypes

55
00:03:34,110 --> 00:03:32,230
so by trying to study the flow fields

56
00:03:35,940 --> 00:03:34,120
about these vehicles trying to compute

57
00:03:37,979 --> 00:03:35,950
the sonic booms and their propagation to

58
00:03:40,460 --> 00:03:37,989
the ground was a very interesting man

59
00:03:48,800 --> 00:03:40,470
challenging problem

60
00:03:52,310 --> 00:03:48,810
two one liftoff Gemini was the program

61
00:03:55,220 --> 00:03:52,320
between mercury of the single seater and

62
00:03:57,770 --> 00:03:55,230
Earth orbit and Apollo the three seater

63
00:04:02,470 --> 00:03:57,780

all the way to the moon Kevin e12

64

00:04:06,230 --> 00:04:02,480

Houston Capcom alleviate beautiful job

65

00:04:10,550 --> 00:04:06,240

the fire on the pad was a traumatic

66

00:04:13,190 --> 00:04:10,560

event he ripped us apart be perfectly

67

00:04:15,740 --> 00:04:13,200

honest with you it was a terrible day

68

00:04:17,270 --> 00:04:15,750

five weeks later as the backup crew we

69

00:04:20,030 --> 00:04:17,280

inherited the first manned apollo

70

00:04:21,349 --> 00:04:20,040

mission which turned out the Apollo 7 so

71

00:04:23,530 --> 00:04:21,359

we were quite proud of the fact that

72

00:04:25,820 --> 00:04:23,540

we've had a triumph out of a disaster

73

00:04:27,800 --> 00:04:25,830

Apollo way when we wrote into the

74

00:04:30,020 --> 00:04:27,810

spacecraft it's often the very first

75

00:04:32,930 --> 00:04:30,030

time the far side of the Moon only 60

76
00:04:37,300 --> 00:04:32,940
miles below we were like free school

77
00:04:42,680 --> 00:04:39,950
hello car I just thought there were so

78
00:04:45,320 --> 00:04:42,690
many unknowns that I would have given us

79
00:04:48,880 --> 00:04:45,330
about a 50-50 chance of being the first

80
00:04:53,050 --> 00:04:48,890
flight to land and return someone safely

81
00:04:57,320 --> 00:04:53,060
okay engine stop we copy you down eagle

82
00:05:00,890 --> 00:04:57,330
and body babe here an eagle has landed I

83
00:05:03,050 --> 00:05:00,900
think it was the biggest event from an

84
00:05:04,940 --> 00:05:03,060
aviation point of view and probably from

85
00:05:08,210 --> 00:05:04,950
scientific point of view that happened

86
00:05:14,270 --> 00:05:08,220
in 20th century at one false step for

87
00:05:16,100 --> 00:05:14,280
man one giant leap for our first steps

88
00:05:18,650 --> 00:05:16,110

on the moon were the culmination of

89

00:05:20,930 --> 00:05:18,660

efforts put forth by a host of people

90

00:05:23,540 --> 00:05:20,940

who simply refuse to believe it could

91

00:05:27,200 --> 00:05:23,550

not be done was an accomplishment of

92

00:05:29,890 --> 00:05:27,210

human ingenuity and tenacity paulo 11

93

00:05:32,840 --> 00:05:29,900

was the end of the race to the moon an

94

00:05:36,450 --> 00:05:32,850

important milestone in our exploration

95

00:05:41,850 --> 00:05:38,670

okay yeah we've had a problem here

96

00:05:43,950 --> 00:05:41,860

supposed to be looking out the back so

97

00:05:47,760 --> 00:05:43,960

we are betting trumpet that series of

98

00:05:49,740 --> 00:05:47,770

events started the saga of Apollo 13 the

99

00:05:52,020 --> 00:05:49,750

trust that existed between crew and

100

00:05:55,740 --> 00:05:52,030

ground was absolute because it takes

101
00:05:57,300 --> 00:05:55,750
trust to make split-second decisions the

102
00:06:00,450 --> 00:05:57,310
whole family's bought out almost

103
00:06:13,200 --> 00:06:00,460
probably a face to the agent power

104
00:06:21,330 --> 00:06:17,520
ah ah Charlie's best for home season

105
00:06:23,100 --> 00:06:21,340
come on out here give me a phone we not

106
00:06:26,100 --> 00:06:23,110
only did a lot of work on him we had a

107
00:06:28,589 --> 00:06:26,110
good time hippity-hop hippity-hop tovar

108
00:06:30,719 --> 00:06:28,599
you'll read do you know you're only

109
00:06:32,249 --> 00:06:30,729
gonna come that way once in your life

110
00:06:45,300 --> 00:06:32,259
it's gotta be one of most proud moments

111
00:06:52,400 --> 00:06:48,140
give us the real

112
00:06:52,410 --> 00:06:56,300
sunny

113
00:07:02,939 --> 00:06:59,820

we saw the fragments around Skylab go

114

00:07:05,339 --> 00:07:02,949

over us and I thought oh brother there's

115

00:07:09,869 --> 00:07:05,349

been an accident in the Skylab launch

116

00:07:12,149 --> 00:07:09,879

and jack'll asthma was the best EV a guy

117

00:07:14,369 --> 00:07:12,159

that I've ever met lo and behold he goes

118

00:07:15,959 --> 00:07:14,379

out there and fools around with it a

119

00:07:18,320 --> 00:07:15,969

while puts it all together and it worked

120

00:07:21,059 --> 00:07:18,330

great and he went on to a Brent

121

00:07:23,640 --> 00:07:21,069

scientific discovery and it gave us some

122

00:07:31,649 --> 00:07:23,650

forward momentum in the science that

123

00:07:34,890 --> 00:07:31,659

continues right now till today let me

124

00:07:38,279 --> 00:07:34,900

call to express my very great admiration

125

00:07:42,589 --> 00:07:38,289

for your hard work your total dedication

126

00:07:46,080 --> 00:07:42,599

in preparing for this first joint flight

127

00:07:49,110 --> 00:07:46,090

Mars showed seasonal variations that

128

00:07:50,580 --> 00:07:49,120

suggests that something was alive and I

129

00:07:53,730 --> 00:07:50,590

think that was the basis for creating

130

00:07:57,570 --> 00:07:53,740

Viking when we got down and found out

131

00:07:59,519 --> 00:07:57,580

how dry and arid and barren the place

132

00:08:01,980 --> 00:07:59,529

really was came as a bit of a surprise

133

00:08:03,659 --> 00:08:01,990

when we flew by Neptune people were

134

00:08:06,240 --> 00:08:03,669

standing in line at night at

135

00:08:08,040 --> 00:08:06,250

planetariums in order to be able to see