



ARTEMIS I MISSION HIGHLIGHTS

1
00:00:03,120 --> 00:00:06,830
foreign

2
00:00:32,770 --> 00:00:17,270
[Music]

3
00:00:40,790 --> 00:00:36,290
hydrogen burnoff igniters initiate seven

4
00:00:45,110 --> 00:00:40,800
six five four stage engine start

5
00:00:48,110 --> 00:00:45,120
three two one booster's indignation

6
00:00:54,950 --> 00:00:48,120
and liftoff of Artemis one we rise

7
00:01:02,990 --> 00:00:57,889
and here we go ten hydrogen burnoff

8
00:01:04,670 --> 00:01:03,000
igniters initiate seven six five four

9
00:01:08,990 --> 00:01:04,680
stage engine start

10
00:01:11,929 --> 00:01:09,000
three two one booster's indignation

11
00:01:22,969 --> 00:01:11,939
and liftoff of Artemis one we rise

12
00:01:27,109 --> 00:01:25,550
all four rs25 engines on the core stage

13
00:01:29,570 --> 00:01:27,119

and two solid rocket boosters now

14

00:02:19,850 --> 00:01:29,580

propelling the vehicle at 128 miles per

15

00:02:19,860 --> 00:02:36,729

foreign

16

00:02:43,670 --> 00:02:41,750

traveling at 1 420 miles per hour

17

00:02:47,809 --> 00:02:43,680

the four core stage engines are back at

18

00:02:52,070 --> 00:02:50,150

the next major Milestone will be for the

19

00:02:53,869 --> 00:02:52,080

solid rocket boosters to cut off and

20

00:02:55,610 --> 00:02:53,879

jettison in about two minutes and 11

21

00:02:57,830 --> 00:02:55,620

seconds into the flight so about 30

22

00:02:59,630 --> 00:02:57,840

seconds from now

23

00:03:01,850 --> 00:02:59,640

again quiet here in Mission Control

24

00:03:04,309 --> 00:03:01,860

Houston as teams continue monitoring the

25

00:03:06,350 --> 00:03:04,319

flight of Artemis won

26
00:03:07,670 --> 00:03:06,360
we're now 16 miles downrange from the

27
00:03:15,530 --> 00:03:07,680
launch pad at Kennedy Space Center

28
00:03:28,869 --> 00:03:17,270
standing by for solid rocket booster

29
00:03:33,830 --> 00:03:30,949
confirmation that the solid rocket

30
00:03:36,110 --> 00:03:33,840
boosters have separated these 177-foot

31
00:03:37,970 --> 00:03:36,120
boosters

32
00:03:40,850 --> 00:03:37,980
now the core stage continues to power

33
00:03:44,030 --> 00:03:40,860
the flight of Orion all Force rs-25

34
00:06:04,150 --> 00:03:44,040
engines firing traveling over 3 400

35
00:06:09,710 --> 00:06:06,770
and you're seeing there on your screen

36
00:06:12,770 --> 00:06:09,720
our first Earth views

37
00:06:17,090 --> 00:06:12,780
this view of Earth captured from a human

38
00:06:20,270 --> 00:06:17,100

rated spacecraft not seen since 1972

39

00:06:24,170 --> 00:06:20,280

during the final Apollo Mission some 50

40

00:06:26,990 --> 00:06:24,180

years ago the views of our Blue Marble

41

00:06:29,990 --> 00:06:27,000

in the Blackness of space now capturing

42

00:06:45,070 --> 00:06:30,000

the imagination of a new generation the

43

00:06:51,830 --> 00:06:49,249

at 6 44 a.m Central just about 9 minutes

44

00:06:54,290 --> 00:06:51,840

and 30 seconds ago commands were sent

45

00:06:56,029 --> 00:06:54,300

for the outbound powered flyby burn to

46

00:06:57,950 --> 00:06:56,039

occur with the orbital maneuvering

47

00:07:00,590 --> 00:06:57,960

system engine or ohms engine on-board

48

00:07:02,809 --> 00:07:00,600

Orion which sends Orion close enough to

49

00:07:05,090 --> 00:07:02,819

the lunar surface to leverage the moon's

50

00:07:07,550 --> 00:07:05,100

gravitational force and swing the

51
00:07:11,110 --> 00:07:07,560
spacecraft once around the Moon toward

52
00:07:13,850 --> 00:07:11,120
entry into distant retrograde orbit

53
00:07:16,010 --> 00:07:13,860
following this Orion will remain in the

54
00:07:18,290 --> 00:07:16,020
distant retrograde orbit for one half

55
00:07:39,589 --> 00:07:18,300
elliptical orbit around the Moon which

56
00:07:45,770 --> 00:07:43,010
now to distant retrograde orbit or Dro

57
00:07:48,409 --> 00:07:45,780
we're going to be about 38 000 miles

58
00:07:49,850 --> 00:07:48,419
away from the lunar surface as we orbit

59
00:07:52,010 --> 00:07:49,860
around that's part of why we're calling

60
00:07:54,770 --> 00:07:52,020
it distant and we call it retrograde

61
00:07:56,870 --> 00:07:54,780
because the moon orbiting the Earth in

62
00:07:58,510 --> 00:07:56,880
this direction and then we're entering

63
00:08:01,969 --> 00:07:58,520

into our orbit in this direction

64

00:08:04,189 --> 00:08:01,979

opposites retrograde now we're choosing

65

00:08:06,469 --> 00:08:04,199

this orbit because it's extremely stable

66

00:08:08,689 --> 00:08:06,479

it doesn't cost a lot of fuel to

67

00:08:10,550 --> 00:08:08,699

maintain your position there and that

68

00:08:12,890 --> 00:08:10,560

gives all of our Engineers our flight

69

00:08:15,830 --> 00:08:12,900

controllers the chance to really learn

70

00:08:18,350 --> 00:08:15,840

about Orion systems in deep space learn

71

00:08:20,749 --> 00:08:18,360

about flying a spacecraft farther than

72

00:08:23,210 --> 00:08:20,759

we've ever sent one intended for humans

73

00:08:26,089 --> 00:08:23,220

we're going Beyond anywhere we ever went

74

00:08:28,730 --> 00:08:26,099

for Apollo and so we're in that orbit

75

00:08:30,650 --> 00:08:28,740

test out all of those systems eventually

76
00:10:58,269 --> 00:08:30,660
we'll do a maneuver to break out of that

77
00:11:04,970 --> 00:11:01,190
we're continuing to get some spectacular

78
00:11:08,050 --> 00:11:04,980
views from the Orion spacecraft

79
00:11:10,850 --> 00:11:08,060
from this view Orion is

80
00:11:13,610 --> 00:11:10,860
1277 miles above the lunar surface

81
00:11:15,829 --> 00:11:13,620
following its return powered flyby burn

82
00:11:17,769 --> 00:11:15,839
which sent it around the back side of

83
00:11:24,769 --> 00:11:17,779
the moon

84
00:11:30,710 --> 00:11:26,870
this view is from one of the solar array

85
00:11:34,670 --> 00:11:30,720
Wing or saw cameras on board the vehicle

86
00:11:38,870 --> 00:11:34,680
the vehicle now over 1 680 miles away

87
00:11:44,630 --> 00:11:42,050
and that small sliver towards the bottom

88
00:11:47,269 --> 00:11:44,640

of your screen that's here that's home

89

00:13:46,389 --> 00:11:47,279

that's us

90

00:13:52,430 --> 00:13:50,150

50 years ago today Apollo 17 Commander

91

00:13:54,949 --> 00:13:52,440

Gene cernan and lunar module pilot Jack

92

00:13:57,050 --> 00:13:54,959

Schmidt guided Challenger to a Pinpoint

93

00:13:59,870 --> 00:13:57,060

Landing on a Barren Rock strewn area of

94

00:14:02,090 --> 00:13:59,880

the Moon called Taurus litro a half

95

00:14:05,030 --> 00:14:02,100

century later NASA's newest moon

96

00:14:07,069 --> 00:14:05,040

Explorer the Orion spacecraft is

97

00:14:09,410 --> 00:14:07,079

barreling its way back home after

98

00:14:11,629 --> 00:14:09,420

circumnavigating the moon and Beyond in

99

00:14:14,150 --> 00:14:11,639

an elliptical distant retrograde orbit

100

00:14:16,910 --> 00:14:14,160

now less than two hours away from

101
00:14:19,430 --> 00:14:16,920
splashing down in the Pacific Ocean West

102
00:14:21,949 --> 00:14:19,440
of Baja California to completed

103
00:14:25,490 --> 00:14:21,959
Shakedown mission that has opened a new

104
00:14:28,370 --> 00:14:25,500
era of deep space exploration

105
00:14:32,210 --> 00:14:28,380
Thank You Phillip but again a live view

106
00:14:35,930 --> 00:14:32,220
of Orion closing in on planet Earth now

107
00:14:39,170 --> 00:14:35,940
about 11 000 miles away from Earth

108
00:14:41,810 --> 00:14:39,180
as it continues a very very precise

109
00:14:44,569 --> 00:14:41,820
trajectory for a Splashdown that is

110
00:15:02,990 --> 00:14:44,579
scheduled at 11 39 and 42 seconds am

111
00:15:07,370 --> 00:15:05,030
now just one minute away from crew

112
00:15:09,410 --> 00:15:07,380
module service module separation

113
00:15:11,689 --> 00:15:09,420

we'll be standing by for confirmation of

114

00:15:24,250 --> 00:15:11,699

that from the

115

00:15:30,710 --> 00:15:27,949

we have confirmation of separation

116

00:15:33,170 --> 00:15:30,720

Orion flying on its own

117

00:15:36,769 --> 00:15:33,180

again the separation occurred right on

118

00:15:38,689 --> 00:15:36,779

time at 11 A.M and 11 seconds Central

119

00:15:41,810 --> 00:15:38,699

Time

120

00:15:43,790 --> 00:15:41,820

with Orion 3200 statute miles away from

121

00:15:48,050 --> 00:15:43,800

Earth the European service module has

122

00:15:58,610 --> 00:15:49,790

just one minute away from entry

123

00:16:04,250 --> 00:16:01,269

and this view from the cabin camera

124

00:16:07,069 --> 00:16:04,260

looking out of the upper hatch of Orion

125

00:16:09,710 --> 00:16:07,079

you can see the limb of the Earth

126
00:16:13,430 --> 00:16:09,720
we're going to be losing all of the data

127
00:16:14,990 --> 00:16:13,440
here shortly once we enter into the

128
00:16:21,410 --> 00:16:15,000
Earth's atmosphere and begin the first

129
00:16:25,970 --> 00:16:23,769
again this is a

130
00:16:27,949 --> 00:16:25,980
visualization of what should be

131
00:16:30,009 --> 00:16:27,959
happening with Orion at the moment

132
00:16:32,629 --> 00:16:30,019
although we are in a blackout period

133
00:16:36,350 --> 00:16:32,639
that should end about three minutes and

134
00:16:44,329 --> 00:16:39,230
and we have data from Orion Orion out of

135
00:16:49,550 --> 00:16:47,150
flight Dynamics reports

136
00:16:51,710 --> 00:16:49,560
that Orion is right on the money coming

137
00:16:52,970 --> 00:16:51,720
right down the pike a good view out of

138
00:16:55,790 --> 00:16:52,980

the uh

139

00:17:06,850 --> 00:16:55,800

cabin camera looking out of the upper

140

00:17:14,569 --> 00:17:09,770

we should be performing the skip entry

141

00:17:22,549 --> 00:17:16,429

good Communications established with

142

00:17:41,350 --> 00:17:24,949

this view on the deck of the USS

143

00:17:45,650 --> 00:17:44,150

and there is a view out of the uh

144

00:17:48,049 --> 00:17:45,660

cabin camera

145

00:17:49,970 --> 00:17:48,059

of Orion as it continues a series of

146

00:17:52,909 --> 00:17:49,980

role reversals we have data back from

147

00:17:58,850 --> 00:17:56,690

flight Dynamics reports Orion straight

148

00:18:00,650 --> 00:17:58,860

and narrow on a true course toward its

149

00:18:02,810 --> 00:18:00,660

Splashdown site

150

00:18:09,669 --> 00:18:02,820

forward Bay covered jettisoning less

151
00:18:09,679 --> 00:18:24,710
150 000 feet off the ocean

152
00:18:24,720 --> 00:18:30,710
Orion now traveling at Mach 10.

153
00:18:30,720 --> 00:18:45,770
Orion now at 50 000 feet

154
00:19:15,650 --> 00:18:48,230
forward big covered jettisoning pyros

155
00:19:15,660 --> 00:19:24,850
25 000 feet

156
00:19:24,860 --> 00:19:54,350
troques have been deployed

157
00:20:01,430 --> 00:19:57,350
two good drug shoots reported by the

158
00:20:08,870 --> 00:20:04,789
the decent rate is right on the money

159
00:20:11,690 --> 00:20:08,880
Orion's velocity now down to 282 miles

160
00:20:15,049 --> 00:20:11,700
an hour range to splash down one and a

161
00:20:15,059 --> 00:20:35,950
ten thousand feet now

162
00:20:46,070 --> 00:20:39,770
and we're on mains

163
00:20:46,080 --> 00:21:01,430

reefing in progress

164

00:21:01,440 --> 00:21:12,289

three good main shoots for Orion

165

00:21:22,490 --> 00:21:16,490

we have three fully inflated main shoots

166

00:21:22,500 --> 00:22:01,669

perfect descent rate reported

167

00:22:06,890 --> 00:22:04,549

and there it is high over the Pacific

168

00:22:10,190 --> 00:22:06,900

America's new Ticket to Ride To the Moon

169

00:22:29,029 --> 00:22:12,649

Orion under its shoots descending

170

00:22:43,130 --> 00:22:31,190

Orion in the perfect orientation for

171

00:22:43,140 --> 00:22:56,690

one thousand feet

172

00:22:56,700 --> 00:23:11,770

good decent rate

173

00:23:11,780 --> 00:23:29,029

500 feet

174

00:23:35,149 --> 00:23:31,630

splash down

175

00:23:37,190 --> 00:23:35,159

from Tranquility base to Taurus litro to

176

00:23:39,110 --> 00:23:37,200

the Tranquil Waters of the Pacific the

177

00:23:43,070 --> 00:23:39,120

latest chapter of NASA's Journey to the

178

00:23:48,890 --> 00:23:43,080

moon comes to a close Orion back on

179

00:23:54,409 --> 00:23:51,950

Orion is in great shape

180

00:24:00,970 --> 00:23:54,419

stable one just in the orientation that