



1  
00:00:02,480 --> 00:00:06,789  
t minus 20.

2  
00:00:06,799 --> 00:00:11,830  
falcon 9 is configured for flight

3  
00:00:14,549 --> 00:00:13,669  
t minus 10

4  
00:00:15,430 --> 00:00:14,559  
9

5  
00:00:16,390 --> 00:00:15,440  
8

6  
00:00:17,430 --> 00:00:16,400  
seven

7  
00:00:18,470 --> 00:00:17,440  
six

8  
00:00:19,429 --> 00:00:18,480  
five

9  
00:00:20,390 --> 00:00:19,439  
four

10  
00:00:21,429 --> 00:00:20,400  
three

11  
00:00:25,269 --> 00:00:21,439  
two

12  
00:00:29,509 --> 00:00:27,429  
the lift off the falcon 9 takes flight

13  
00:00:31,109 --> 00:00:29,519

with the dragon spacecraft destined for

14

00:00:33,030 --> 00:00:31,119

the one-of-a-kind laboratory in

15

00:00:34,389 --> 00:00:33,040

microgravity the international space

16

00:00:40,229 --> 00:00:34,399

station

17

00:00:40,239 --> 00:00:57,189

launchpad post launch operations

18

00:01:01,990 --> 00:00:59,910

six seconds after liftoff

19

00:01:04,070 --> 00:01:02,000

two seconds later after by

20

00:01:18,070 --> 00:01:04,080

two seconds later we'll go through max q

21

00:01:18,080 --> 00:01:29,740

standing by for falcon 9 to go transonic

22

00:01:33,590 --> 00:01:31,910

[Music]

23

00:01:35,030 --> 00:01:33,600

and we've just heard the key the queue

24

00:01:41,670 --> 00:01:35,040

for that the vehicle has gone through

25

00:01:49,030 --> 00:01:43,990

next major milestone will be the

26

00:01:57,429 --> 00:01:51,190

scheduled for two minutes 27 seconds

27

00:02:23,110 --> 00:01:59,670

less than a minute away from main engine

28

00:02:27,030 --> 00:02:25,270

after a main engine cutoff

29

00:02:28,869 --> 00:02:27,040

the first stage will perform a boost

30

00:02:30,869 --> 00:02:28,879

back burn about 15 seconds later and

31

00:02:33,350 --> 00:02:30,879

head back to nearby cape canaveral air

32

00:02:35,589 --> 00:02:33,360

force station landing zone one and on

33

00:02:37,350 --> 00:02:35,599

nasa television we'll be showing you

34

00:02:40,470 --> 00:02:37,360

the first stage landing as well as the

35

00:02:44,390 --> 00:02:40,480

continuation of the second stage taking

36

00:02:50,869 --> 00:02:46,229

station one jettison will begin at two

37

00:02:54,630 --> 00:02:52,309

vehicle flying down the nominal we have

38

00:02:56,309 --> 00:02:54,640

miko

39

00:02:57,830 --> 00:02:56,319

and we have mikko stage separation

40

00:03:01,509 --> 00:02:57,840

confirmed

41

00:03:05,270 --> 00:03:03,110

stage one on the right drifting back

42

00:03:09,830 --> 00:03:05,280

away from stage two continuing to power

43

00:03:14,149 --> 00:03:12,550

this view from the stage ignition

44

00:03:24,869 --> 00:03:14,159

this view from the second stage of the

45

00:03:28,470 --> 00:03:26,630

and that's the first stage

46

00:03:39,589 --> 00:03:28,480

heading back toward the ground just

47

00:03:45,430 --> 00:03:42,949

for stages conducting a boost burn

48

00:03:49,910 --> 00:03:45,440

about 10 seconds remaining in that burn

49

00:03:53,190 --> 00:03:51,990

meanwhile the dragon nose cone has

50

00:03:55,509 --> 00:03:53,200

deployed

51  
00:03:59,270 --> 00:03:55,519  
exposing the trajectory spacecraft to

52  
00:04:08,630 --> 00:04:01,350  
who's back shut down

53  
00:04:12,630 --> 00:04:11,110  
this view again from the second stage

54  
00:04:14,630 --> 00:04:12,640  
everything proceeding normally with both

55  
00:04:20,550 --> 00:04:14,640  
first and second stage operations of the

56  
00:04:24,950 --> 00:04:22,790  
first stage continues to fly upward

57  
00:04:27,189 --> 00:04:24,960  
bermuda

58  
00:04:48,950 --> 00:04:27,199  
reaching its apogee in about 10 seconds

59  
00:04:54,469 --> 00:04:50,390  
about four and a half minutes after

60  
00:05:11,189 --> 00:04:56,790  
the second stage engine will continue

61  
00:05:15,510 --> 00:05:13,670  
falcon 9 first stage counting down

62  
00:05:18,950 --> 00:05:15,520  
toward its entry burn in about a minute

63  
00:05:23,430 --> 00:05:20,870

you can see thrusters

64

00:05:25,830 --> 00:05:23,440

firing to control the first stage

65

00:05:28,070 --> 00:05:25,840

as it makes its way back toward earth

66

00:05:30,070 --> 00:05:28,080

once again to land at cape canaveral air

67

00:05:31,990 --> 00:05:30,080

force station landing zone one

68

00:05:51,830 --> 00:05:32,000

accompanied by a sonic boom for those

69

00:05:55,749 --> 00:05:53,749

five and a half minutes after launch

70

00:05:57,990 --> 00:05:55,759

everything continues to go normally for

71

00:06:08,950 --> 00:05:58,000

the falcon 9 first stage and for the

72

00:06:14,150 --> 00:06:11,990

of acquisition at new hampshire

73

00:06:16,469 --> 00:06:14,160

new hampshire tracking station now

74

00:06:18,309 --> 00:06:16,479

tracking the vehicle

75

00:06:22,870 --> 00:06:18,319

less than 30 seconds away from the first

76

00:06:33,990 --> 00:06:24,950

landing of the first stage

77

00:06:34,000 --> 00:06:47,110

we have the entry burn underway

78

00:06:47,120 --> 00:06:53,830

and the entry burn hazard shut down

79

00:06:57,749 --> 00:06:56,390

stage two still a nominal trajectory

80

00:07:00,469 --> 00:06:57,759

stage two

81

00:07:08,710 --> 00:07:00,479

still on course for its rendezvous with

82

00:07:20,230 --> 00:07:10,390

stage two engine cut off about two and a

83

00:07:27,189 --> 00:07:23,110

stage one about to come back

84

00:07:31,990 --> 00:07:29,749

about 45 seconds away from landing

85

00:07:39,189 --> 00:07:32,000

transonic

86

00:07:46,469 --> 00:07:41,350

landing burn about to begin

87

00:07:55,430 --> 00:07:48,070

landing legs will be deployed in about

88

00:07:58,710 --> 00:07:57,189

and a sonic boom

89

00:08:01,029 --> 00:07:58,720

fell throughout the kennedy space center

90

00:08:03,589 --> 00:08:01,039

in cape canaveral air force station area

91

00:08:05,990 --> 00:08:03,599

as falcon 9 first stage

92

00:08:07,830 --> 00:08:06,000

landing legs deploy returns

93

00:08:15,589 --> 00:08:07,840

to cape canaveral air force station

94

00:08:19,749 --> 00:08:17,350

It1 the falcon has landed landing

95

00:08:23,189 --> 00:08:19,759

operators move into procedure 11.100

96

00:08:26,469 --> 00:08:24,390

meanwhile

97

00:08:28,550 --> 00:08:26,479

dragon spacecraft powered by the

98

00:08:31,110 --> 00:08:28,560

falcon 9 second stage

99

00:08:32,389 --> 00:08:31,120

continues on its way to orbit

100

00:08:34,550 --> 00:08:32,399

with a

101  
00:08:49,670 --> 00:08:34,560  
second stage engine cutoff expected in

102  
00:08:55,030 --> 00:08:50,949  
everything is proceeding per the

103  
00:09:00,550 --> 00:08:57,430  
40 seconds away from second stage engine

104  
00:09:00,560 --> 00:09:09,110  
stage 2 is under terminal guidance

105  
00:09:09,120 --> 00:09:22,150  
stage 2 aftfs is saved

106  
00:09:29,590 --> 00:09:24,070  
nine minutes after launch everything

107  
00:09:33,670 --> 00:09:31,509  
is about to end

108  
00:09:37,910 --> 00:09:33,680  
and spacecraft separation about one

109  
00:09:44,870 --> 00:09:40,070  
yes

110  
00:09:44,880 --> 00:09:49,590  
gnc confirms good orbit insertion

111  
00:09:53,910 --> 00:09:51,990  
guidance navigation and control officer

112  
00:09:55,509 --> 00:09:53,920  
confirms good orbit insertion dragon

113  
00:09:57,670 --> 00:09:55,519

separation confirmed dragon is on its

114

00:09:59,750 --> 00:09:57,680

way to the international space station

115

00:10:02,069 --> 00:09:59,760

and dragon is on its way to the

116

00:10:03,509 --> 00:10:02,079

international space station

117

00:10:05,670 --> 00:10:03,519

looking inside the mission control

118

00:10:08,389 --> 00:10:05,680

center in hawthorne california

119

00:10:10,550 --> 00:10:08,399

where spacex is headquartered

120

00:10:12,470 --> 00:10:10,560

great

121

00:10:14,069 --> 00:10:12,480

mission so far

122

00:10:15,110 --> 00:10:14,079

the dragon is on its way to the space

123

00:10:17,750 --> 00:10:15,120

station

124

00:10:19,509 --> 00:10:17,760

controlled by the international control

125

00:10:25,750 --> 00:10:19,519

international space station control

126  
00:10:35,590 --> 00:10:27,990  
standing away standing by for solar

127  
00:10:42,710 --> 00:10:37,509  
dragon separation confirmed and there's

128  
00:10:55,509 --> 00:10:44,949  
that will be followed by the solar array

129  
00:11:00,710 --> 00:10:58,310  
ten and a half minutes after launch

130  
00:11:02,630 --> 00:11:00,720  
stage one back on the ground stage two

131  
00:11:18,069 --> 00:11:02,640  
just deploying the dragon spacecraft

132  
00:11:22,150 --> 00:11:19,590  
flight controllers in mission control

133  
00:11:24,710 --> 00:11:22,160  
houston monitoring today's launch and

134  
00:11:26,630 --> 00:11:24,720  
the flight of dragon as it makes its way

135  
00:11:28,550 --> 00:11:26,640  
toward a wednesday rendezvous with the

136  
00:11:30,870 --> 00:11:28,560  
international space station with a

137  
00:11:47,190 --> 00:11:30,880  
grapple plan for approximately 7 am

138  
00:11:51,509 --> 00:11:49,110

six crew members

139

00:11:56,949 --> 00:11:51,519

aboard the international space station

140

00:12:02,470 --> 00:11:58,710

and for the contents of the dragon

141

00:12:03,910 --> 00:12:02,480

spacecraft that will uh help them pursue

142

00:12:22,870 --> 00:12:03,920

science

143

00:12:25,509 --> 00:12:24,069

dragon's propulsion system has

144

00:13:05,190 --> 00:12:25,519

successfully primed and thrusters are

145

00:13:11,509 --> 00:13:07,750

is in solar array deploy

146

00:13:14,150 --> 00:13:11,519

and solar array deploy is is underway um

147

00:13:17,509 --> 00:13:14,160

for the dragon spacecraft so everything

148

00:13:18,389 --> 00:13:17,519

is uh going normally today uh good

149

00:13:20,949 --> 00:13:18,399

launch

150

00:13:23,190 --> 00:13:20,959

good spacecraft separation and now

151  
00:13:25,269 --> 00:13:23,200  
solar array deployed josh and as dragon

152  
00:13:26,389 --> 00:13:25,279  
unfurls its solar wings the spacecraft

153  
00:13:28,310 --> 00:13:26,399  
continues its journey to the

154  
00:13:30,389 --> 00:13:28,320  
international space station dragon will

155  
00:13:32,230 --> 00:13:30,399  
arrive at the station on wednesday nasa

156  
00:13:36,069 --> 00:13:32,240  
television coverage will begin at 5 30

157  
00:13:37,829 --> 00:13:36,079  
a.m for the expected capture at 7 a.m

158  
00:13:39,990 --> 00:13:37,839  
and so with the successful launch and

159  
00:13:42,389 --> 00:13:40,000  
deploy of the dragon and its journey to

160  
00:13:44,230 --> 00:13:42,399  
the international space station underway