



1
00:00:00,000 --> 00:00:10,570
- 30 seconds mark 30 seconds to launch

2
00:00:16,820 --> 00:00:14,480
at t0 the two main engines will ignite

3
00:00:19,760 --> 00:00:16,830
after about one and a half seconds to

4
00:00:25,820 --> 00:00:19,770
conduct health checks and Terry's will

5
00:00:28,730 --> 00:00:25,830
lift off point of reference the space

6
00:00:31,070 --> 00:00:28,740
station is 262 miles up north of the

7
00:00:38,150 --> 00:00:31,080
Michigan Peninsula at the time of launch

8
00:00:41,660 --> 00:00:38,160
for three go enters every niche

9
00:00:44,330 --> 00:00:41,670
attention start but the affair is a

10
00:00:50,900 --> 00:00:44,340
one-man mission from the Mars and nearly

11
00:00:53,200 --> 00:00:50,910
as long a facility it is phenom attitude

12
00:00:57,520 --> 00:00:55,720
hours nominal

13
00:01:01,869 --> 00:00:57,530

engines at a hundred eight percent

14

00:01:05,940 --> 00:01:01,879

phenomenal attitude nominal pore

15

00:01:11,080 --> 00:01:05,950

pressures are nominal up to 2,000 feet

16

00:01:15,270 --> 00:01:11,090

for 30 seconds EPS P nominal engines of

17

00:01:20,620 --> 00:01:15,280

104 and nominal attitude nominal

18

00:01:25,889 --> 00:01:20,630

avionics power is nominal attitude

19

00:01:36,770 --> 00:01:32,310

ABC is not altitude 10,000 feet engines

20

00:01:42,120 --> 00:01:36,780

are nominal B plus 60 seconds

21

00:01:47,160 --> 00:01:42,130

our is nominal EB C is nominal pore

22

00:01:53,300 --> 00:01:50,310

alta to 20,000 feet velocity 900 feet

23

00:01:53,310 --> 00:01:57,160

DBC is nominal

24

00:02:02,850 --> 00:02:01,219

you know 3 encore pressures nominal

25

00:02:07,149 --> 00:02:02,860

vehicle paths

26
00:02:15,470 --> 00:02:10,900
Plus 90 seconds power is nominal engines

27
00:02:23,180 --> 00:02:18,530
altitude 50,000 feet velocity 1,600 feet

28
00:02:25,370 --> 00:02:23,190
per second ABC is nominal attitude

29
00:02:47,630 --> 00:02:25,380
nominal

30
00:02:47,640 --> 00:02:51,850
altitude 100,000 feet

31
00:02:51,860 --> 00:02:55,510
remain nominal

32
00:02:55,520 --> 00:02:57,820
on

33
00:03:03,040 --> 00:03:00,640
our is nominal

34
00:03:05,650 --> 00:03:03,050
Yumiko

35
00:03:08,400 --> 00:03:05,660
well pressure is nominal Kyle we're

36
00:03:11,170 --> 00:03:08,410
coming up on main engine cutoff yep

37
00:03:13,690 --> 00:03:11,180
attitude nominal I should come about

38
00:03:17,320 --> 00:03:13,700

three minutes 50 seconds or so into fly

39

00:03:22,440 --> 00:03:19,510

you'd wanted one out throttle down two

40

00:03:22,450 --> 00:03:28,390

of pressures nominal

41

00:03:28,400 --> 00:03:31,300

attitude nominal

42

00:03:31,310 --> 00:03:40,780

our is nominal fee pcs are nominal

43

00:03:40,790 --> 00:03:45,140

engines are nominal

44

00:03:51,470 --> 00:03:48,440

you know four five and six our encore

45

00:03:54,259 --> 00:03:51,480

pressures remain nominal

46

00:03:58,540 --> 00:03:54,269

attitude nominal give you see nominal

47

00:04:04,540 --> 00:04:01,760

to 250 thousand feet

48

00:04:07,540 --> 00:04:04,550

fresh phenomenal

49

00:04:10,990 --> 00:04:07,550

engines remained 100% a nominal t plus

50

00:04:14,860 --> 00:04:11,000

three minutes 30 seconds model down has

51
00:04:20,069 --> 00:04:14,870
begun traveling about 7,200 miles per

52
00:04:23,290 --> 00:04:22,230
BBC is skewing out in preparation for

53
00:04:26,960 --> 00:04:23,300
the Miko

54
00:04:32,110 --> 00:04:26,970
standing by for stage 1 eco and

55
00:04:43,950 --> 00:04:34,930
the assess is disabled we have Stage one

56
00:04:52,550 --> 00:04:47,490
lower ACS is enabled

57
00:05:00,030 --> 00:04:55,700
four minutes 20 seconds into the flight

58
00:05:03,090 --> 00:05:00,040
all as you hear going very smoothly 327

59
00:05:06,030 --> 00:05:03,100
second sequence done Kyle the next mark

60
00:05:08,130 --> 00:05:06,040
event will be fairing separation its

61
00:05:09,840 --> 00:05:08,140
erases now on a Coast phase until proper

62
00:05:11,880 --> 00:05:09,850
conditions for fairing separation and

63
00:05:18,210 --> 00:05:11,890

stage 2 ignition are achieved power is

64

00:05:18,220 --> 00:05:22,400

attitude nominal

65

00:05:22,410 --> 00:05:28,530

our nominal

66

00:05:32,520 --> 00:05:31,170

at the view inside the fairing right

67

00:05:36,560 --> 00:05:32,530

that's correct

68

00:05:38,760 --> 00:05:36,570

you looking forward now is nominal

69

00:05:40,350 --> 00:05:38,770

awaiting fairing separation and

70

00:05:45,360 --> 00:05:40,360

preparation or inter stage separation

71

00:05:45,370 --> 00:05:52,360

from a nominal at this time

72

00:05:52,370 --> 00:05:56,760

avionics power is nominal

73

00:06:08,530 --> 00:06:04,920

fairing separation attitude nominal

74

00:06:13,390 --> 00:06:08,540

standing by for stage 2 ignition age to

75

00:06:15,880 --> 00:06:13,400

ignition attitude nominal stage 2

76

00:06:19,000 --> 00:06:15,890

ignition comes at an altitude of 117

77

00:06:20,410 --> 00:06:19,010

miles hour is nominal traveling ninety

78

00:06:28,270 --> 00:06:20,420

four hundred miles per hour

79

00:06:30,820 --> 00:06:28,280

phenomenal attitude remains nominal so

80

00:06:33,430 --> 00:06:30,830

Kyle now we see an animated view of the

81

00:06:35,440 --> 00:06:33,440

vehicle the second stage fala nominal

82

00:06:38,290 --> 00:06:35,450

has reported burning nominally attitude

83

00:06:40,870 --> 00:06:38,300

nominal and looks like stage two burns

84

00:06:41,520 --> 00:06:40,880

for about two and a half minutes that's

85

00:06:45,329 --> 00:06:41,530

correct

86

00:06:45,339 --> 00:06:49,190

attitude nominal

87

00:06:49,200 --> 00:06:53,749

is nominal BBC remains a nominal

88

00:06:59,490 --> 00:06:57,510

attitude nominal well this is an

89

00:07:03,749 --> 00:06:59,500

animated sequence we are receiving

90

00:07:05,340 --> 00:07:03,759

direct telemetry from the vehicle our if

91

00:07:08,890 --> 00:07:05,350

now and we'll keep the corresponds to

92

00:07:08,900 --> 00:07:16,330

attitude nominal and TVC steering is not

93

00:07:21,550 --> 00:07:19,810

avionics power is nominal

94

00:07:27,830 --> 00:07:21,560

attitude nominal still

95

00:07:27,840 --> 00:07:31,590

motor pressure is a phenomenal

96

00:07:37,440 --> 00:07:33,860

one minute remaining before stage to

97

00:07:39,930 --> 00:07:37,450

tail off begins and the state to coast

98

00:07:41,370 --> 00:07:39,940

phase begins just a little bit after

99

00:07:45,050 --> 00:07:41,380

eight minutes into the flight we're

100

00:07:47,550 --> 00:07:45,060

currently at seven minutes ten seconds

101
00:07:49,950 --> 00:07:47,560
attitude is nominal Kyle there you see a

102
00:07:55,740 --> 00:07:49,960
great shot of the second stage powered

103
00:07:55,750 --> 00:08:02,020
Oh

104
00:08:11,399 --> 00:08:04,980
our is nominal

105
00:08:11,409 --> 00:08:14,219
you

106
00:08:19,719 --> 00:08:17,230
and we're standing by for states to tail

107
00:08:22,270 --> 00:08:19,729
off still burnout attitude is nominal

108
00:08:24,429 --> 00:08:22,280
motor pressures look good BBC

109
00:08:26,860 --> 00:08:24,439
performance of nominal speed is now

110
00:08:30,519 --> 00:08:26,870
sixteen thousand six hundred miles per

111
00:08:34,400 --> 00:08:30,529
hour attitude nominal

112
00:08:34,410 --> 00:08:38,500
t plus eight minutes

113
00:08:44,780 --> 00:08:40,250

all middle

114

00:08:48,139 --> 00:08:44,790

to nominal ABC is nominal

115

00:08:48,149 --> 00:08:52,380

if you burn out after

116

00:08:52,390 --> 00:08:56,860

and Terry's performance is nominal

117

00:09:02,050 --> 00:08:59,199

separation

118

00:09:04,540 --> 00:09:02,060

and Terry's is in orbit

119

00:09:07,000 --> 00:09:04,550

attitude nominal

120

00:09:08,920 --> 00:09:07,010

Terri's will Coast for roughly 100

121

00:09:10,389 --> 00:09:08,930

seconds to allow residual thrust a loss

122

00:09:13,920 --> 00:09:10,399

prior to the test mission payload

123

00:09:20,290 --> 00:09:17,710

our is not little attitude remains

124

00:09:23,740 --> 00:09:20,300

nominal so Kyle now we're in an

125

00:09:28,990 --> 00:09:23,750

unpowered Coast till we come up to the

126
00:09:31,120 --> 00:09:29,000
mp5 separation math simulator separation

127
00:09:33,220 --> 00:09:31,130
as you hear you're not being called

128
00:09:35,410 --> 00:09:33,230
we're also deploying the secondary

129
00:09:36,150 --> 00:09:35,420
payloads that we discussed earlier I'm

130
00:09:38,920 --> 00:09:36,160
in it

131
00:09:42,670 --> 00:09:38,930
everything's going very smoothly that

132
00:09:44,829 --> 00:09:42,680
Cygnus or the math simulator separation

133
00:09:47,440 --> 00:09:44,839
comes about ten minute just about one

134
00:09:52,790 --> 00:09:47,450
minute from now

135
00:09:58,610 --> 00:09:54,829
attitude remains nominal power remains

136
00:10:05,769 --> 00:09:58,620
nominal all systems brand Terry's arm a

137
00:10:11,030 --> 00:10:08,960
it was 9 minutes 30 seconds for these

138
00:10:14,150 --> 00:10:11,040

the payload separation that mass

139

00:10:16,639 --> 00:10:14,160

simulator separation is going to occur

140

00:10:21,310 --> 00:10:16,649

at an altitude of 158 statute miles

141

00:10:29,310 --> 00:10:25,710

attitude nominal about 15 seconds from

142

00:10:29,320 --> 00:10:33,509

attitude nominal

143

00:10:33,519 --> 00:10:41,929

plus n minutes

144

00:10:49,399 --> 00:10:47,119

it won't separation dial is can see on

145

00:10:51,859 --> 00:10:49,409

the animation the payload has separated

146

00:10:54,289 --> 00:10:51,869

successfully it's a beautiful beautiful

147

00:10:56,979 --> 00:10:54,299

mission and it centers got just a few

148

00:10:59,509 --> 00:10:56,989

more mission minutes to go is nominal

149

00:11:01,989 --> 00:10:59,519

delivered the a one half mission payload

150

00:11:07,519 --> 00:11:04,460

c-congratulations all around in the

151

00:11:09,499 --> 00:11:07,529

range operations center there and as you

152

00:11:12,379 --> 00:11:09,509

mentioned the mission itself has about

153

00:11:14,389 --> 00:11:12,389

eight more missions as we execute a

154

00:11:16,039 --> 00:11:14,399

collision avoidance maneuver on the