

JAXA

LIVE

種子島宇宙センターより生中継



1
00:00:06,240 --> 00:00:27,269
away from liftoff

2
00:00:29,349 --> 00:00:28,310
three

3
00:00:30,390 --> 00:00:29,359
two

4
00:00:32,630 --> 00:00:30,400
one

5
00:00:35,510 --> 00:00:32,640
the engines igniting the solid rocket

6
00:00:38,310 --> 00:00:35,520
boosters and liftoff the white stork is

7
00:00:47,910 --> 00:00:38,320
in the air htv5 heading towards the

8
00:00:51,830 --> 00:00:49,910
again the first stage firing those solid

9
00:00:55,590 --> 00:00:51,840
rocket boosters will continue to burn

10
00:00:59,750 --> 00:00:57,029
along with the

11
00:01:01,590 --> 00:00:59,760
central portion the first stage

12
00:01:18,310 --> 00:01:01,600
providing the initial thrust for the

13
00:01:23,429 --> 00:01:20,149

operation control was shifted from the

14

00:01:24,630 --> 00:01:23,439

block house to the range control center

15

00:01:28,789 --> 00:01:24,640

located

16

00:01:32,630 --> 00:01:30,710

just about one minute

17

00:01:34,469 --> 00:01:32,640

into liftoff

18

00:01:36,310 --> 00:01:34,479

solid rocket boosters about halfway

19

00:01:38,630 --> 00:01:36,320

through their life again they'll

20

00:01:40,630 --> 00:01:38,640

separate in two stages uh the first pair

21

00:01:42,550 --> 00:01:40,640

of jettison jettisoning and then a few

22

00:01:45,109 --> 00:01:42,560

seconds later the second pair will pop

23

00:01:46,230 --> 00:01:45,119

off the first stage will continue to

24

00:02:01,830 --> 00:01:46,240

fire

25

00:02:06,469 --> 00:02:04,069

the hdb is flying normally and the

26
00:02:09,190 --> 00:02:06,479
tanaka space stations are tracking the

27
00:02:11,029 --> 00:02:09,200
launch vehicle very well

28
00:02:16,229 --> 00:02:11,039
getting reports of good first stage

29
00:02:29,750 --> 00:02:17,830
the solid rocket boosters should be

30
00:02:29,760 --> 00:02:43,030
yes

31
00:02:47,190 --> 00:02:45,110
and there you see the first and second

32
00:02:49,589 --> 00:02:47,200
pairs of the solid rocket boosters being

33
00:02:50,390 --> 00:02:49,599
jettisoned the first stage continuing to

34
00:02:52,309 --> 00:02:50,400
burn

35
00:02:54,390 --> 00:02:52,319
uh the next major milestone will be the

36
00:02:57,030 --> 00:02:54,400
fairing jettison at about three minutes

37
00:02:59,270 --> 00:02:57,040
40 seconds into flight so just a little

38
00:03:01,190 --> 00:02:59,280

over a minute and 10 seconds from now

39

00:03:04,630 --> 00:03:01,200

that fairing of course protecting the

40

00:03:29,110 --> 00:03:04,640

htv vehicle during the dynamic stages of

41

00:03:34,869 --> 00:03:31,350

and just about three minutes since

42

00:03:34,879 --> 00:04:00,949

it's three minutes after left off

43

00:04:05,350 --> 00:04:03,110

again in just about 10 seconds or so we

44

00:04:07,589 --> 00:04:05,360

will be standing by to hear that fairing

45

00:04:09,429 --> 00:04:07,599

jettison control and flight tragically

46

00:04:12,309 --> 00:04:09,439

are all normal the flight goes very

47

00:04:14,869 --> 00:04:12,319

smoothly current altitude is about 100

48

00:04:20,870 --> 00:04:14,879

kilometers velocity is approximately two

49

00:04:20,880 --> 00:04:25,350

bundy fellow the fairing jettison

50

00:04:29,749 --> 00:04:27,670

and confirmation that payload fairing

51
00:04:32,710 --> 00:04:29,759
has been jettisoned

52
00:04:35,830 --> 00:04:32,720
the first stage is going to burn for

53
00:04:38,230 --> 00:04:35,840
about a minute and 45 seconds longer

54
00:04:41,350 --> 00:04:38,240
that cut off coming at five minutes 47

55
00:04:43,189 --> 00:04:41,360
seconds into flight

56
00:04:44,790 --> 00:04:43,199
once the first stage has done its job a

57
00:04:46,070 --> 00:04:44,800
few seconds later

58
00:04:49,189 --> 00:04:46,080
on the

59
00:04:51,350 --> 00:04:49,199
it will separate then the second stage

60
00:04:53,830 --> 00:04:51,360
will ignite just a few seconds after

61
00:04:56,710 --> 00:04:53,840
that continue the climb into orbit

62
00:04:57,990 --> 00:04:56,720
putting htv5 into its uh initial orbit

63
00:04:59,670 --> 00:04:58,000

and

64

00:05:01,510 --> 00:04:59,680

on its way to the international space

65

00:05:03,909 --> 00:05:01,520

station but for now everything

66

00:05:06,710 --> 00:05:03,919

continuing to go well the on time launch

67

00:05:10,310 --> 00:05:06,720

the first stage continuing to function

68

00:05:11,909 --> 00:05:10,320

as planned just about one more minute in

69

00:05:36,710 --> 00:05:11,919

its lifetime

70

00:05:36,720 --> 00:05:42,550

it's five minutes after liftoff

71

00:05:47,350 --> 00:05:44,629

so passing that five minute mark just

72

00:05:52,230 --> 00:05:47,360

about 40 seconds longer in the

73

00:05:57,189 --> 00:05:54,469

the flight goes very smoothly current

74

00:05:59,990 --> 00:05:57,199

altitude is about 160 kilometers

75

00:06:04,830 --> 00:06:00,000

velocity is approximately 4.2 kilometers

76

00:06:10,469 --> 00:06:08,070

second 160 kilometers roughly in

77

00:06:20,790 --> 00:06:10,479

altitude that translates to about 99

78

00:06:20,800 --> 00:06:26,550

so expecting first stage shutdown

79

00:06:31,830 --> 00:06:28,550

first stage engine cut off

80

00:06:36,230 --> 00:06:33,830

next up will be that separation of the

81

00:06:42,870 --> 00:06:36,240

first and second stages first and second

82

00:06:47,029 --> 00:06:44,390

just about 10 seconds after that

83

00:07:12,070 --> 00:06:47,039

separation the second stage igniting

84

00:07:17,430 --> 00:07:13,990

so again at this point the second stage

85

00:07:20,469 --> 00:07:17,440

going to fire for roughly eight minutes

86

00:07:23,110 --> 00:07:20,479

that second stage cut off coming

87

00:07:24,150 --> 00:07:23,120

at about 14 minutes and 20 seconds post

88

00:07:34,710 --> 00:07:24,160

lift off

89

00:07:38,790 --> 00:07:37,589

then once the uh the second stage cuts

90

00:07:40,230 --> 00:07:38,800

off it'll

91

00:07:45,990 --> 00:07:40,240

be

92

00:07:47,909 --> 00:07:46,000

separates from the second stage and then

93

00:07:49,430 --> 00:07:47,919

the vehicle will be in its preliminary

94

00:08:27,670 --> 00:07:49,440

orbit and on its way to the

95

00:08:27,680 --> 00:08:37,990

coming up on eight minutes since launch

96

00:08:38,000 --> 00:08:53,190

it's eight minutes after liftoff

97

00:08:56,470 --> 00:08:54,389

stations in says

98

00:08:58,630 --> 00:08:56,480

attitude control and fire trajectory are

99

00:09:01,990 --> 00:08:58,640

all normal current altitude is

100

00:09:07,829 --> 00:09:02,000

approximately 250 kilometers velocity is

101
00:09:18,230 --> 00:09:12,070
htv already about 160 statute miles in

102
00:09:23,190 --> 00:09:20,790
the second stage continuing to perform

103
00:09:25,750 --> 00:09:23,200
well just about nine minutes since

104
00:09:28,550 --> 00:09:25,760
liftoff should have about five minutes

105
00:09:30,470 --> 00:09:28,560
more of this second stage performance

106
00:09:32,150 --> 00:09:30,480
second stage burning liquid oxygen and

107
00:09:35,030 --> 00:09:32,160
liquid hydrogen just like the first

108
00:09:38,310 --> 00:09:35,040
stage to continue sending htv into its

109
00:09:38,320 --> 00:10:25,190
the flight goes very smoothly

110
00:10:29,030 --> 00:10:27,829
and we're just about 10 minutes since

111
00:10:31,430 --> 00:10:29,040
liftoff

112
00:10:33,509 --> 00:10:31,440
on the first stage already done its job

113
00:10:35,829 --> 00:10:33,519

the second stage continuing to fire has

114

00:10:38,949 --> 00:10:35,839

about four minutes and 20 seconds left

115

00:10:41,190 --> 00:10:38,959

of powered flight after which it'll be

116

00:10:44,550 --> 00:10:41,200

time for the hdv to separate from the

117

00:10:50,310 --> 00:10:44,560

h2b rocket and continue on its way

118

00:10:54,389 --> 00:10:52,550

the flight is progressing smoothly the

119

00:10:56,470 --> 00:10:54,399

launch vehicle is out of the trucking

120

00:10:59,110 --> 00:10:56,480

range of the tanegashima and uchinora

121

00:11:34,310 --> 00:10:59,120

stations and the gossara and guam

122

00:11:37,829 --> 00:11:36,310

station finished dropping and the guam

123

00:13:03,350 --> 00:11:37,839

station is now charging the launch

124

00:13:08,150 --> 00:13:05,269

so it's been over 12 and a half minutes

125

00:13:11,590 --> 00:13:08,160

since the successful liftoff from the

126

00:13:14,150 --> 00:13:11,600

yoshinobu launch complex in tanagashima

127

00:13:16,069 --> 00:13:14,160

the htv continuing to fly straight and

128

00:13:17,190 --> 00:13:16,079

true

129

00:13:19,670 --> 00:13:17,200

just uh

130

00:13:22,550 --> 00:13:19,680

under two minutes now of powered flight

131

00:13:23,829 --> 00:13:22,560

left for this second stage

132

00:13:25,590 --> 00:13:23,839

once that

133

00:13:27,990 --> 00:13:25,600

engine cutoff occurs we'll be standing

134

00:13:30,710 --> 00:13:28,000

by to get confirmation

135

00:13:33,190 --> 00:13:30,720

that htv5 has separated from the second

136

00:13:35,910 --> 00:13:33,200

stage successfully then of course we'll

137

00:13:37,750 --> 00:13:35,920

be able to bring you some quick replays

138

00:13:40,069 --> 00:13:37,760

of that launch

139

00:13:43,189 --> 00:13:40,079

and all the other uh dynamic events in

140

00:13:45,110 --> 00:13:43,199

the initial climb to orbit

141

00:13:47,030 --> 00:13:45,120

but for now everything continuing to go

142

00:13:48,790 --> 00:13:47,040

well for this vehicle

143

00:14:00,310 --> 00:13:48,800

currently slated to arrive at the

144

00:14:00,320 --> 00:14:41,670

light goes very smoothly

145

00:14:41,680 --> 00:14:46,949

second station cutoff

146

00:14:46,959 --> 00:14:54,629

and the second stage engine has cut off

147

00:14:59,509 --> 00:14:57,269

and it takes just under a minute now for

148

00:15:01,990 --> 00:14:59,519

that separation to occur and be

149

00:15:03,590 --> 00:15:02,000

confirmed so that'll be the next major

150

00:15:06,150 --> 00:15:03,600

milestone we're standing by for

151

00:15:30,629 --> 00:15:06,160

everything ticking off per the plan so

152

00:15:30,639 --> 00:15:37,990

hdb fiber bundy hdv5 separation

153

00:15:43,189 --> 00:15:40,710

and htv5 separation confirmed this will