



1
00:00:05,450 --> 00:00:03,020
Susanna sentence of the tentacle thank

2
00:00:07,340 --> 00:00:05,460
you young Thank You Santa t-minus 30

3
00:00:13,070 --> 00:00:07,350
seconds and counting domestic water

4
00:00:17,689 --> 00:00:13,080
garden starts make you go thank you

5
00:00:20,359 --> 00:00:17,699
young thank you thank you 30 th get all

6
00:00:25,370 --> 00:00:20,369
utama batteries activation here in 15

7
00:00:27,140 --> 00:00:25,380
seconds come on right head on 10 this is

8
00:00:30,950 --> 00:00:27,150
tim with jim be on yo all systems are

9
00:00:35,049 --> 00:00:30,960
ready hey ha five seconds to launch no

10
00:00:38,690 --> 00:00:35,059
Oh young man g star main engine ignition

11
00:00:41,600 --> 00:00:38,700
made it to start of the HTV and liftoff

12
00:00:43,670 --> 00:00:41,610
liftoff of the Japanese HTV cargo craft

13
00:00:45,139 --> 00:00:43,680

keep heading for a rendezvous with the

14

00:00:47,779 --> 00:00:45,149

International Space Station next

15

00:00:49,729 --> 00:00:47,789

Thursday it's to be don't get when you

16

00:00:50,990 --> 00:00:49,739

woke you up it's in you do something you

17

00:00:52,670 --> 00:00:51,000

got some new jersey pitch maneuver

18

00:00:55,040 --> 00:00:52,680

complete the HDD now heading toward the

19

00:00:58,310 --> 00:00:55,050

south east out over the Pacific Ocean we

20

00:01:00,200 --> 00:00:58,320

must stop we had a liftoff of the HTV

21

00:01:02,240 --> 00:01:00,210

launch vehicle manage it with stick on

22

00:01:05,750 --> 00:01:02,250

authority to award from the tanegashima

23

00:01:08,480 --> 00:01:05,760

space center attitude 3757 p.m. on

24

00:01:12,620 --> 00:01:08,490

january to an eight year 2011 japan

25

00:01:14,840 --> 00:01:12,630

standard file Jericho okay tomo can say

26
00:01:17,510 --> 00:01:14,850
wow yoshino Kovacic on sato khara sach

27
00:01:19,190 --> 00:01:17,520
SE hace rato nice cigar ademas i still

28
00:01:20,899 --> 00:01:19,200
left us the launch vehicle operation

29
00:01:24,740 --> 00:01:20,909
control was shifted from the clubhouse

30
00:01:26,300 --> 00:01:24,750
to the range control center look at 150

31
00:01:28,580 --> 00:01:26,310
seconds into the flight the Japanese HTV

32
00:01:31,789 --> 00:01:28,590
and as H to be booths are already going

33
00:01:34,760 --> 00:01:31,799
super side here which goes Themis the

34
00:01:37,370 --> 00:01:34,770
HTV is flat no flying over the pacific

35
00:01:42,940 --> 00:01:37,380
canton south east with its ancient i

36
00:01:56,670 --> 00:01:44,770
one minute and 10 seconds into the

37
00:01:56,680 --> 00:02:06,660
I think it

38
00:02:14,140 --> 00:02:10,779

he

39

00:02:17,289 --> 00:02:14,150

solid rocket boosters will burn out okay

40

00:02:26,620 --> 00:02:17,299

Jewish culture this the HTV is an

41

00:02:26,630 --> 00:02:32,510

how could you

42

00:02:39,260 --> 00:02:35,480

I saw to be an angel shoot Oh this'll be

43

00:02:42,410 --> 00:02:39,270

a burnout happening you Jackson

44

00:02:44,150 --> 00:02:42,420

confirming a separation of the solid

45

00:02:49,720 --> 00:02:44,160

rocket boosters these come off two at a

46

00:02:52,100 --> 00:02:49,730

time it's not to be a day I boondi

47

00:02:53,600 --> 00:02:52,110

instead of being a dyna pam indeed the

48

00:02:58,130 --> 00:02:53,610

first time stick on the prairies of the

49

00:03:08,340 --> 00:02:58,140

SLV a rejected sub both pairs of solid

50

00:03:13,060 --> 00:03:10,750

one minute and 30 seconds from now the

51
00:03:14,950 --> 00:03:13,070
fairing that protects and covers up the

52
00:03:18,160 --> 00:03:14,960
HTV at the very top of that rocket will

53
00:03:21,610 --> 00:03:18,170
jettison at that point the rocket will

54
00:03:38,370 --> 00:03:21,620
be 75 miles in altitude the server

55
00:03:44,700 --> 00:03:41,550
Jago some punk okay coach master it's

56
00:03:47,310 --> 00:03:44,710
three minutes after liftoff died in

57
00:03:49,410 --> 00:03:47,320
jannat Nashua says oh say okay chico que

58
00:03:51,480 --> 00:03:49,420
vamos edge of this look at the agent

59
00:03:54,810 --> 00:03:51,490
Tony call secretary Gaines aye na koto

60
00:03:57,990 --> 00:03:54,820
ah yeah cool shakuhachi kiram do so cool

61
00:03:59,520 --> 00:03:58,000
yoku nita nickel-metal this the first

62
00:04:02,040 --> 00:03:59,530
stage changing combustion attitude

63
00:04:05,220 --> 00:04:02,050

control and fly tragic via all normal

64

00:04:07,560 --> 00:04:05,230

current altitude is about 1 180

65

00:04:25,020 --> 00:04:07,570

kilometers the LA city is approximately

66

00:04:32,320 --> 00:04:27,820

yes a very good indeed they are the

67

00:04:41,559 --> 00:04:32,330

fairing jettison confirmation that the

68

00:04:45,519 --> 00:04:43,510

first stage will continue to burn for

69

00:04:47,529 --> 00:04:45,529

two more minutes there you see the smoke

70

00:04:53,169 --> 00:04:47,539

trail left there above the tanegashima

71

00:04:56,889 --> 00:04:53,179

space center by H done ing no Nichijou

72

00:04:58,839 --> 00:04:56,899

said ok kagetomo schedule this the first

73

00:05:14,970 --> 00:04:58,849

stage engine combustion attitude control

74

00:05:18,690 --> 00:05:16,410

here in Houston the flight director

75

00:05:20,730 --> 00:05:18,700

Jerry Jason is about to wrap up his

76

00:05:22,590 --> 00:05:20,740

shift he's updating the expedition 26

77

00:05:24,120 --> 00:05:22,600

crew onboard the space station talking

78

00:05:27,090 --> 00:05:24,130

with cady coleman they're informing her

79

00:05:30,390 --> 00:05:27,100

that tonight's launch was successful the

80

00:05:31,860 --> 00:05:30,400

HTV continuing head and orbit the next

81

00:05:35,850 --> 00:05:31,870

milestone will occur at five minutes and

82

00:05:45,930 --> 00:05:35,860

46 seconds into the flight that is when

83

00:05:48,120 --> 00:05:45,940

the first stage engine will cut off look

84

00:05:49,830 --> 00:05:48,130

at the agenda codes kotori ensign no

85

00:05:52,560 --> 00:05:49,840

koto ah yeah cool Chicago could you kill

86

00:05:54,840 --> 00:05:52,570

me to do spoken yeah cool young 10 san

87

00:05:57,960 --> 00:05:54,850

clemente oldest the flight goes very

88

00:06:01,050 --> 00:05:57,970

smoothly current altitude is about 160

89

00:06:08,970 --> 00:06:01,060

kilometers velocity is approximately 4.6

90

00:06:14,320 --> 00:06:11,170

alive you inside the control room to

91

00:06:15,760 --> 00:06:14,330

scuba Space Center a team they're

92

00:06:25,279 --> 00:06:15,770

continuing to monitor the progress of

93

00:06:28,670 --> 00:06:27,079

we're standing by for the cuff of the

94

00:06:33,290 --> 00:06:28,680

first stage engine which is coming up

95

00:06:36,200 --> 00:06:33,300

momentarily then I engine angel te first

96

00:06:41,929 --> 00:06:36,210

stage engine cutoff first agent in calif

97

00:06:44,239 --> 00:06:41,939

confirmed dead zone ok to dana dan

98

00:06:47,029 --> 00:06:44,249

locate okanagan d first and second stage

99

00:06:48,290 --> 00:06:47,039

separation five minutes and 54 seconds

100

00:06:51,950 --> 00:06:48,300

into the flight the first and second

101
00:06:54,760 --> 00:06:51,960
stages have separated canada engine

102
00:06:56,420 --> 00:06:54,770
intricacy second stage ignition

103
00:06:58,249 --> 00:06:56,430
confirmation that the second stage

104
00:07:02,420 --> 00:06:58,259
engine has fired this will fire for more

105
00:07:04,459 --> 00:07:02,430
than eight minutes the second stage

106
00:07:23,399 --> 00:07:04,469
engine will fire until the 14 minute and

107
00:07:31,409 --> 00:07:27,689
light shots there from the scuba Space

108
00:07:34,529 --> 00:07:31,419
Station mission control room the one

109
00:07:37,409 --> 00:07:34,539
station agent tracking say OK Go que los

110
00:07:39,359 --> 00:07:37,419
angeles the second stage engine

111
00:07:50,279 --> 00:07:39,369
combustion attitude control and fled

112
00:07:51,809 --> 00:07:50,289
tragically are all know more and more

113
00:07:53,699 --> 00:07:51,819

than seven minutes into the flight the

114

00:07:56,219 --> 00:07:53,709

second stage engine continues to perform

115

00:07:58,529 --> 00:07:56,229

as expected the team there and scoop of

116

00:08:00,749 --> 00:07:58,539

Japan is watching over all the systems

117

00:08:02,759 --> 00:08:00,759

onboard the expedition 26 crew onboard

118

00:08:08,549 --> 00:08:02,769

the space station is also following

119

00:08:10,350 --> 00:08:08,559

along for the next five days HTV will

120

00:08:13,439 --> 00:08:10,360

continue to perform a series of

121

00:08:17,279 --> 00:08:13,449

different orbital maneuvers as it closes

122

00:08:19,589 --> 00:08:17,289

in on the orbiting complex everything

123

00:08:21,829 --> 00:08:19,599

was will be all set for Thursday's

124

00:08:24,179 --> 00:08:21,839

activities that is when htd will arrive

125

00:08:25,859 --> 00:08:24,189

within the vicinity of the International

126

00:08:28,259 --> 00:08:25,869

Space Station it will perform a series

127

00:08:30,540 --> 00:08:28,269

of station-keeping maneuvers and then

128

00:08:32,490 --> 00:08:30,550

ultimately it will get close enough so

129

00:08:34,649 --> 00:08:32,500

that the station's robotic arm out of

130

00:08:37,199 --> 00:08:34,659

the control of cady coleman and also

131

00:08:40,290 --> 00:08:37,209

paolo nespoli and use that arm to reach

132

00:08:45,090 --> 00:08:40,300

out and grab onto HDD and to mount it to

133

00:08:47,550 --> 00:08:45,100

the bottom of the Harmony node Daniel

134

00:08:50,519 --> 00:08:47,560

ing know me show us a joe say okay

135

00:08:53,819 --> 00:08:50,529

cokato mo says ODIs genda no koto ah

136

00:08:57,360 --> 00:08:53,829

yeah cool Nyako go to tokyo me so coo

137

00:08:59,460 --> 00:08:57,370

coo Goten tokyo metro des the second

138

00:09:01,019 --> 00:08:59,470

stage engine combustion attitude control

139

00:09:03,090 --> 00:09:01,029

and fly tragically are all normal

140

00:09:05,569 --> 00:09:03,100

current altitude altitude is

141

00:09:08,490 --> 00:09:05,579

approximately 250 five kilometers

142

00:09:38,690 --> 00:09:08,500

velocity is about 5.6 kilometers per

143

00:09:50,210 --> 00:09:40,970

look at two against a antipsychotic

144

00:09:51,440 --> 00:09:50,220

ademas goes very smoothly the flight

145

00:09:53,690 --> 00:09:51,450

controllers they're in scuba Japan

146

00:09:55,640 --> 00:09:53,700

continuing to give information on the

147

00:10:02,000 --> 00:09:55,650

performance of the HTV as it continues

148

00:10:07,450 --> 00:10:02,010

to head into space it is a now more than

149

00:10:10,280 --> 00:10:07,460

160 miles high continuing to gain

150

00:10:12,530 --> 00:10:10,290

velocity under the power of that second

151
00:10:17,510 --> 00:10:12,540
stage engine which will continue to fire

152
00:10:19,550 --> 00:10:17,520
for another almost five minutes we're

153
00:10:37,740 --> 00:10:19,560
now nine minutes and 45 seconds into the

154
00:10:53,740 --> 00:10:42,819
you can go to markakis my cell it's 10

155
00:10:59,120 --> 00:10:56,300
look at origin chinese coast Amos you

156
00:11:00,860 --> 00:10:59,130
can see here oh honey that's my cookin

157
00:11:02,270 --> 00:11:00,870
of the mission of my mother in school

158
00:11:04,340 --> 00:11:02,280
japan was about a cookie right now

159
00:11:06,290 --> 00:11:04,350
ladies moved a little cut up season a

160
00:11:08,300 --> 00:11:06,300
cellar now right he was flight is

161
00:11:11,030 --> 00:11:08,310
progressing smoothly the launch vehicle

162
00:11:13,100 --> 00:11:11,040
is our tracking range of the tonic

163
00:11:15,500 --> 00:11:13,110

asthma ground station and the open

164

00:11:39,759 --> 00:11:15,510

cetera and Guam stations are tracking

165

00:11:44,470 --> 00:11:41,859

then you know in general nashua schedule

166

00:11:46,869 --> 00:11:44,480

this ground track and flight mapping

167

00:11:49,119 --> 00:11:46,879

sent to us by the japanese space agency

168

00:11:51,220 --> 00:11:49,129

jack so you can see HD be continuing to

169

00:11:53,919 --> 00:11:51,230

head to the southeast you hot over the

170

00:11:55,720 --> 00:11:53,929

parts of the Pacific Ocean yep ooh look

171

00:11:57,549 --> 00:11:55,730

at you now 11 minutes and 20 seconds

172

00:11:59,710 --> 00:11:57,559

into the flight changing combustion

173

00:12:02,019 --> 00:11:59,720

attitude control and fly tragically are

174

00:12:04,600 --> 00:12:02,029

all normal the flight goes very smoothly

175

00:12:06,819 --> 00:12:04,610

Frank ugh dude is approximately two

176

00:12:12,009 --> 00:12:06,829

hundred ninety kilometers velocity is

177

00:12:22,020 --> 00:12:12,019

about 6.4 kilometers per second HTV is

178

00:12:25,620 --> 00:12:24,120

flight director Jerry Jason continuing

179

00:12:28,860 --> 00:12:25,630

to give updates to Katie Collman a

180

00:12:31,710 --> 00:12:28,870

member of expedition 26 on the flights

181

00:12:33,480 --> 00:12:31,720

but all systems are nominal everything

182

00:12:35,670 --> 00:12:33,490

is performing as expected the next major

183

00:12:37,320 --> 00:12:35,680

milestone will occur in about two

184

00:12:42,450 --> 00:12:37,330

minutes and 15 seconds that is when the

185

00:12:43,920 --> 00:12:42,460

second stage engine will cut off and

186

00:12:46,200 --> 00:12:43,930

then a little less than a minute after

187

00:12:48,360 --> 00:12:46,210

that at fifteen minutes and five seconds

188

00:12:50,280 --> 00:12:48,370

into the flight that is when HTV two

189

00:13:13,710 --> 00:12:50,290

will be separated from its rocket and

190

00:13:19,509 --> 00:13:16,389

okusama rococo ok to tbo Cheerios

191

00:13:21,910 --> 00:13:19,519

Michelle en de gallo karachi broken

192

00:13:23,710 --> 00:13:21,920

ademas there was our station finished

193

00:13:40,510 --> 00:13:23,720

jogging and the Guam station is now

194

00:13:46,450 --> 00:13:42,640

the spacecraft currently being tracked

195

00:13:48,280 --> 00:13:46,460

by ground stations near Guam the smoke

196

00:13:51,490 --> 00:13:48,290

there above the tanegashima space center

197

00:13:52,930 --> 00:13:51,500

still very evident even though we're

198

00:13:58,810 --> 00:13:52,940

more than thirteen minutes past the

199

00:14:00,520 --> 00:13:58,820

launch time in less than one minute that

200

00:14:05,110 --> 00:14:00,530

second stage engine which has been

201
00:14:10,810 --> 00:14:05,120
firing since the six-minute mark will be

202
00:14:12,160 --> 00:14:10,820
shut down and unless a minute appt less

203
00:14:15,040 --> 00:14:12,170
than a minute after that that is when

204
00:14:17,050 --> 00:14:15,050
the HTV cargo craft itself will separate

205
00:14:49,060 --> 00:14:17,060
from the rocket and will begin its solo

206
00:14:49,070 --> 00:15:05,020
standing by for a second stage shut down

207
00:15:13,640 --> 00:15:07,580
don't need an engine name shorty she

208
00:15:15,290 --> 00:15:13,650
sick on staging cut off the shutdown of

209
00:15:20,450 --> 00:15:15,300
the second stage engine has been

210
00:15:22,250 --> 00:15:20,460
confirmed okay to again de consejo to

211
00:15:28,760 --> 00:15:22,260
the Katinas the launch vehicle is in

212
00:15:30,920 --> 00:15:28,770
close flight these are actual replays

213
00:15:36,879 --> 00:15:30,930

coming to us of when the SRBs were

214

00:15:40,869 --> 00:15:39,099

and there you see replay of the payload

215

00:15:44,340 --> 00:15:40,879

fairing separation that was the cover

216

00:15:46,479 --> 00:15:44,350

that was over the top of the HTV itself

217

00:15:48,189 --> 00:15:46,489

that took place at the three minute and

218

00:15:51,280 --> 00:15:48,199

forty second mark there's the first and

219

00:15:54,009 --> 00:15:51,290

second stage separation which took place

220

00:15:55,269 --> 00:15:54,019

at five minutes and 54 seconds and now

221

00:16:00,249 --> 00:15:55,279

back to the current view of the map

222

00:16:04,479 --> 00:16:00,259

itself HTV has separated from his rocket

223

00:16:07,119 --> 00:16:04,489

it is now flying by itself 15 minutes

224

00:16:09,759 --> 00:16:07,129

and 30 seconds after the liftoff you out

225

00:16:11,979 --> 00:16:09,769

folks I do cetacean HTV now begins a

226

00:16:14,309 --> 00:16:11,989

five-day trip up to the International

227

00:16:16,629 --> 00:16:14,319

Space Station setting up for Thursday's

228

00:16:20,619 --> 00:16:16,639

rendezvous look you can birthing

229

00:16:23,259 --> 00:16:20,629

activities sauce to dismiss this is the

230

00:16:24,970 --> 00:16:23,269

end of the line launch report of the HTV