1
00:00:20,630 --> 00:00:06,309
30 seconds now left until discovery is

2
00:00:24,550 --> 00:00:23,269
houston and station discovery physical

3
00:00:27,589 --> 00:00:24,560
separation

4
00:00:33,670 --> 00:00:27,599
houston copies

5
00:00:36,389 --> 00:00:35,030
lunch is connecting space shuttle

6
00:00:37,990 --> 00:00:36,399
discovery to the international space

7
00:00:39,350 --> 00:00:38,000
station of let go

8
00:00:40,470 --> 00:00:39,360
and springs in that mechanism are

9
00:00:42,150 --> 00:00:40,480
pushing the shuttle away from the

10
00:00:44,389 --> 00:00:42,160
station marking the end of the docked

11
00:00:47,510 --> 00:00:44,399
portion of the sts-130

12
00:00:48,869 --> 00:00:47,520
mission at 7 52 a.m central time

13
00:00:50,950 --> 00:00:48,879

12 days

14
00:00:52,869 --> 00:00:50,960
2 hours and 31 minutes into discovery's

15
00:01:00,630 --> 00:00:52,879
mission

16
00:01:04,789 --> 00:01:02,150
built a link to mark discovery's

17
00:01:07,109 --> 00:01:04,799
departure shuttle and station are 217

18
00:01:08,950 --> 00:01:07,119
miles above new guinea the shuttle spent

19
00:01:10,630 --> 00:01:08,960
a total of 10 days

20
00:01:16,550 --> 00:01:10,640
five hours and eight minutes docked to

21
00:01:19,830 --> 00:01:18,550
this again is sequential still video

22
00:01:21,590 --> 00:01:19,840
being sent down through the shuttle's

23
00:01:23,670 --> 00:01:21,600
s-band antenna

24
00:01:24,950 --> 00:01:23,680
as a video downlink isn't currently

25
00:01:27,830 --> 00:01:24,960
available

26
00:01:29,910 --> 00:01:27,840
discoveries leaving behind 7.6 tons of

27
00:01:32,230 --> 00:01:29,920
cargo and equipment brought in up in the

28
00:01:34,069 --> 00:01:32,240
shuttle's mid deck and cargo bay

29
00:01:35,990 --> 00:01:34,079
including four new science racks that'll

30
00:01:37,910 --> 00:01:36,000
improve the station's earth observation

31
00:01:38,830 --> 00:01:37,920
capabilities and help astronauts fight

32
00:01:41,190 --> 00:01:38,840
muscle

33
00:01:42,389 --> 00:01:41,200
astrophy and also a new ammonia take

34
00:01:44,789 --> 00:01:42,399
assembly that will help keep the

35
00:01:47,749 --> 00:01:44,799
station's systems cool

36
00:01:50,310 --> 00:01:47,759
taking home with it another 3.3 tons of

37
00:01:51,910 --> 00:01:50,320
used equipment and scientific samples

38
00:01:53,350 --> 00:01:51,920

clearing out some space on the station

39
00:01:59,190 --> 00:01:53,360
which has been filling up steadily over

40
00:02:03,910 --> 00:02:00,870
discovery is scheduled to return to the

41
00:02:05,510 --> 00:02:03,920
station one more time for the sts-133

42
00:02:06,870 --> 00:02:05,520
mission the final shuttle mission

43
00:02:08,389 --> 00:02:06,880
actually currently scheduled for

44
00:02:10,309 --> 00:02:08,399
september

45
00:02:12,070 --> 00:02:10,319
control thanks you and your crew were

46
00:02:13,750 --> 00:02:12,080
excellent guests we loved having you

47
00:02:16,710 --> 00:02:13,760
here you helped us leave the station in

48
00:02:18,630 --> 00:02:16,720
a better place than when you got here

49
00:02:20,630 --> 00:02:18,640
come back soon

50
00:02:22,470 --> 00:02:20,640
thanks tj we enjoyed every minute of it

51
00:02:23,990 --> 00:02:22,480
thanks for the great hospitality

52
00:02:29,270 --> 00:02:24,000
we'll talk to you soon

53
00:02:33,030 --> 00:02:31,190
flight engineer tj creamer giving one

54
00:02:35,670 --> 00:02:33,040
more goodbye on behalf of the station's

55
00:02:37,589 --> 00:02:35,680
crew to space shuttle of the discovery

56
00:02:39,589 --> 00:02:37,599
in particular commander alan poindexter

57
00:02:41,350 --> 00:02:39,599
talking there

58
00:02:42,949 --> 00:02:41,360
and as he mentioned that not too much

59
00:02:45,190 --> 00:02:42,959
longer before discovery will be back

60
00:02:47,030 --> 00:02:45,200
it'll be bringing the leonardo module

61
00:02:49,190 --> 00:02:47,040
again that's currently inside the

62
00:02:51,750 --> 00:02:49,200
shuttle's cargo bay coming back with it

63
00:02:53,670 --> 00:02:51,760

uh but by then it will have been

64
00:02:56,150 --> 00:02:53,680
converted from its moving band form of a

65
00:02:58,390 --> 00:02:56,160
multi-purpose logistics module into a

66
00:02:59,670 --> 00:02:58,400
permanent multi-purpose module and we'll

67
00:03:01,270 --> 00:02:59,680
be staying at the station after that

68
00:03:29,430 --> 00:03:01,280
mission to provide the station crew with

69
00:03:34,229 --> 00:03:32,070
space shuttle discovery now 25 feet away

70
00:03:36,070 --> 00:03:34,239
from the international space station

71
00:03:38,149 --> 00:03:36,080
this view through the

72
00:03:39,589 --> 00:03:38,159
hatch

73
00:03:41,030 --> 00:03:39,599
the window in the

74
00:03:42,630 --> 00:03:41,040
the shuttle's

75
00:03:44,550 --> 00:03:42,640
orbiter docking system

76
00:03:45,750 --> 00:03:44,560
looking into the pressurized mating

77
00:03:47,589 --> 00:03:45,760
adapter

78
00:04:32,550 --> 00:03:47,599
on the harmony node where it has spent

79
00:04:36,390 --> 00:04:34,629
discovery houston i have your r-pop

80
00:04:44,550 --> 00:04:36,400
numbers if you're ready to copy for

81
00:04:48,390 --> 00:04:45,670
minus

82
00:04:49,270 --> 00:04:48,400
zero decimal eight

83
00:04:51,670 --> 00:04:49,280
yaw

84
00:04:52,629 --> 00:04:51,680
one decimal one

85
00:04:56,550 --> 00:04:52,639
row

86
00:05:25,029 --> 00:04:56,560
minus zero decimal eight

87
00:05:28,870 --> 00:05:26,790
let's go right now 50 feet away from the

88
00:05:30,950 --> 00:05:28,880

international space station continuing

89
00:05:33,029 --> 00:05:30,960
to move away aiming for a point

90
00:05:34,629 --> 00:05:33,039
400 feet away from in front of the

91
00:05:37,430 --> 00:05:34,639
station

92
00:07:37,029 --> 00:05:37,440
where it will begin the fly around at 8

93
00:07:41,830 --> 00:07:39,830
continuing to get this look through the

94
00:07:45,830 --> 00:07:41,840
space shuttle's orbiter docking system

95
00:07:52,790 --> 00:07:50,309
in block 8 alpha step 2 is not required

96
00:08:26,550 --> 00:07:52,800
we will not be performing 10 alpha today

97
00:08:31,909 --> 00:08:29,830
graphical depiction of the shuttles

98
00:08:33,110 --> 00:08:31,919
move away from the station

99
00:08:35,029 --> 00:08:33,120
the

100
00:08:36,630 --> 00:08:35,039
bottom number under range tells you how

101
00:08:40,230 --> 00:08:36,640
far away the shuttle has moved from the

102
00:08:42,709 --> 00:08:40,240
station according to

103
00:08:45,590 --> 00:08:42,719
one of the sensors it uses to dodge that

104
00:08:49,750 --> 00:08:45,600
the trajectory control sensor now just

105
00:08:54,870 --> 00:08:52,310
shuttle and station are 216

106
00:09:19,350 --> 00:08:54,880
miles above the pacific ocean heading

107
00:09:19,360 --> 00:09:24,070
on two starting step five

108
00:09:24,080 --> 00:09:28,070
2.813

109
00:09:28,080 --> 00:11:24,470
copy we're ready

110
00:11:28,790 --> 00:11:26,870
discoveries now

111
00:11:30,630 --> 00:11:28,800
150 feet away from the international

112
00:11:32,949 --> 00:11:30,640
space station moving

113
00:11:36,150 --> 00:11:32,959

uh less than two tenths of a mile faster

114
00:11:37,509 --> 00:11:36,160
than the space station so

115
00:11:39,590 --> 00:11:37,519
gaining distance between the two

116
00:11:40,790 --> 00:11:39,600
vehicles moving to a point

117
00:11:42,230 --> 00:11:40,800
400

118
00:11:43,750 --> 00:11:42,240
feet away from the international space

119
00:11:45,430 --> 00:11:43,760
station when

120
00:14:22,389 --> 00:11:45,440
pilot jim dunton will then take controls

121
00:14:26,150 --> 00:14:24,470
discovery now 200 feet in front of the

122
00:14:28,230 --> 00:14:26,160
international space station continuing

123
00:14:30,710 --> 00:14:28,240
to move away

124
00:14:32,790 --> 00:14:30,720
at a rate of about two tenths of a mile

125
00:14:35,269 --> 00:14:32,800
per hour