1
00:00:03,669 --> 00:00:01,750
we're standing by for the beginning of

2
00:00:06,950 --> 00:00:03,679
this rendezvous pitch maneuver is due to

3
00:00:13,270 --> 00:00:06,960
begin at 12 15 pm central time

4
00:00:18,550 --> 00:00:16,950
you can see the shadow of the spacecraft

5
00:00:30,470 --> 00:00:18,560
beginning to creep up there on

6
00:00:35,110 --> 00:00:32,630
my discovery holding right at 650 feet

7
00:00:37,069 --> 00:00:35,120
away from the station

8
00:01:19,749 --> 00:00:37,079
station discovery on the big

9
00:01:22,870 --> 00:01:21,270
so as discovery flies with the

10
00:01:24,550 --> 00:01:22,880
international space station over south

11
00:01:26,550 --> 00:01:24,560
america the station

12
00:01:28,310 --> 00:01:26,560
casting a shadow down there on the

13
00:01:29,990 --> 00:01:28,320

shuttle

14
00:01:31,510 --> 00:01:30,000
katie coleman and paulo nespoli have

15
00:01:33,190 --> 00:01:31,520
taken a position

16
00:01:37,109 --> 00:01:33,200
inside the zvezda service module they

17
00:01:42,630 --> 00:01:39,510
they will begin to take pictures of

18
00:01:44,149 --> 00:01:42,640
discovery as soon as it begins this uh

19
00:01:46,230 --> 00:01:44,159
maneuver

20
00:01:47,910 --> 00:01:46,240
to a flip over on its back and show its

21
00:01:49,270 --> 00:01:47,920
underside to the crew so they can take a

22
00:03:36,630 --> 00:01:49,280
look at all the different heat shield

23
00:03:40,070 --> 00:03:39,270
my call initiating rpm

24
00:03:46,070 --> 00:03:40,080
three

25
00:03:50,229 --> 00:03:48,390
so at 12 15 pm central time space

26
00:03:51,430 --> 00:03:50,239
shuttle discovery begins its final

27
00:03:52,949 --> 00:03:51,440
backflip maneuver known as the

28
00:03:55,509 --> 00:03:52,959
rendezvous pitch maneuver it will flip

29
00:03:57,750 --> 00:03:55,519
over on its back katie coleman and paulo

30
00:03:59,990 --> 00:03:57,760
nespoli are in the zvezda service module

31
00:04:01,830 --> 00:04:00,000
of the international space station both

32
00:04:03,589 --> 00:04:01,840
of them have cameras and hands snapping

33
00:04:05,270 --> 00:04:03,599
away hundreds of pictures of discovery

34
00:04:07,830 --> 00:04:05,280
during this maneuver

35
00:04:09,030 --> 00:04:07,840
apollo nestle has a lens that is 800

36
00:04:11,429 --> 00:04:09,040
millimeters

37
00:04:14,149 --> 00:04:11,439
coleman has a 400 millimeter lens in her

38
00:04:15,990 --> 00:04:14,159

hands

39
00:04:17,670 --> 00:04:16,000
they will take very detailed photographs

40
00:04:18,870 --> 00:04:17,680
of discovery's heat shield all the

41
00:04:20,710 --> 00:04:18,880
different tiles that are on the bottom

42
00:04:22,950 --> 00:04:20,720
of the shuttle to make sure that they

43
00:04:28,469 --> 00:04:22,960
are in good shape after discoveries ride

44
00:04:32,550 --> 00:04:30,550
this is a historic moment for discovery

45
00:04:37,430 --> 00:04:32,560
it was the first shuttle to ever do this

46
00:04:39,990 --> 00:04:37,440
maneuver back on sts-114 in 2005.

47
00:04:42,469 --> 00:04:40,000
this rpm maneuver was created in the

48
00:04:46,629 --> 00:04:42,479
wake of shuttle columbia

49
00:04:50,150 --> 00:04:48,390
it was put into every shuttle mission

50
00:04:51,430 --> 00:04:50,160
that has visited the space station since

51
00:04:52,950 --> 00:04:51,440
then

52
00:04:55,670 --> 00:04:52,960
it gives the ground teams here in

53
00:04:59,430 --> 00:04:57,590
a chance to take a look at the shuttle

54
00:05:02,390 --> 00:04:59,440
in detail to make sure that the outer

55
00:06:49,110 --> 00:05:02,400
part of the shuttle and the heat shield

56
00:06:53,189 --> 00:06:51,110
as katie coleman and paulo nespoli take

57
00:06:56,790 --> 00:06:53,199
these pictures

58
00:06:58,710 --> 00:06:56,800
of the underside of discovery it's a

59
00:07:00,469 --> 00:06:58,720
very methodical way that they do this

60
00:07:11,510 --> 00:07:00,479
they focus on certain areas of the

61
00:07:17,670 --> 00:07:13,749
both nespoli and coleman have practiced

62
00:07:21,589 --> 00:07:19,350
they've worked very closely with these

63
00:07:23,270 --> 00:07:21,599

two cameras and they've seen both

64
00:07:24,390 --> 00:07:23,280
diagrams and video

65
00:08:26,710 --> 00:07:24,400
of the parts of the shuttle that they

66
00:08:44,949 --> 00:08:29,110
discovery currently 582 feet away from

67
00:08:49,590 --> 00:08:46,710
esplee and coleman have wrapped up their

68
00:08:51,750 --> 00:08:49,600
photographs of discovery's heat shield

69
00:08:53,990 --> 00:08:51,760
they spend one minute 29 seconds taking

70
00:08:55,350 --> 00:08:54,000
those pictures as we mentioned

71
00:08:56,870 --> 00:08:55,360
they take several hundred pictures

72
00:08:58,630 --> 00:08:56,880
between the two of them

73
00:09:00,470 --> 00:08:58,640
once we get an exact count later on

74
00:09:02,310 --> 00:09:00,480
today of how many they uh took we will

75
00:09:03,590 --> 00:09:02,320
make sure we pass it on to you

76
00:09:05,110 --> 00:09:03,600
but they will begin the process of

77
00:09:06,470 --> 00:09:05,120
downlinking those photos to the ground

78
00:09:47,190 --> 00:09:06,480
teams here in houston soon after

79
00:09:51,190 --> 00:09:49,430
discovery putting on quite a show there

80
00:09:52,949 --> 00:09:51,200
as it and the

81
00:09:54,230 --> 00:09:52,959
space station fly

82
00:09:55,509 --> 00:09:54,240
over the northeastern part of south

83
00:09:58,790 --> 00:09:55,519
america about to head out over the

84
00:11:28,790 --> 00:10:00,230
we are now less than an hour away from

85
00:11:33,910 --> 00:11:30,230
discovery's crew has almost wrapped up

86
00:11:37,269 --> 00:11:35,829
you can see the shadows getting fairly

87
00:11:39,430 --> 00:11:37,279
long

88
00:11:40,790 --> 00:11:39,440

on the exterior of discovery this is why

89
00:11:42,310 --> 00:11:40,800
they talked about the window opening at

90
00:11:45,430 --> 00:11:42,320
12 15

91
00:11:46,389 --> 00:11:45,440
p.m central time and 12 23 p.m central

92
00:11:48,150 --> 00:11:46,399
time

93
00:11:49,750 --> 00:11:48,160
they have to get proper

94
00:11:53,110 --> 00:11:49,760
lighting on discovery to make sure that

95
00:11:55,110 --> 00:11:53,120
the pictures turn out as expected

96
00:11:56,870 --> 00:11:55,120
but those shadows began to appear uh