



1
00:00:17,990 --> 00:00:16,390
meters we'll take steps 7 and 1 102 you

2
00:00:20,150 --> 00:00:18,000
are primed to send retreat if the

3
00:00:24,150 --> 00:00:20,160
primary range is less than 6 meters how

4
00:00:28,790 --> 00:00:26,710
asian copies were prime

5
00:00:33,750 --> 00:00:28,800
range is less than 6 meters and we're in

6
00:00:37,990 --> 00:00:35,270
we're about three and a half minutes

7
00:00:41,270 --> 00:00:38,000
away from capture point arrival

8
00:00:43,670 --> 00:00:41,280
at a distance of just 30 feet

9
00:00:44,549 --> 00:00:43,680
a final go no go for capture then will

10
00:00:46,869 --> 00:00:44,559
be

11
00:00:48,630 --> 00:00:46,879
confirmed by the flight control team

12
00:00:50,950 --> 00:00:48,640
here in houston led by flight director

13
00:00:52,869 --> 00:00:50,960

emily nelson and the cygnus flight

14

00:01:02,069 --> 00:00:52,879

control team at the orbital sciences

15

00:01:06,149 --> 00:01:03,910

the two craft are passing over the north

16

00:02:01,429 --> 00:01:06,159

atlantic this view now from a camera on

17

00:02:07,749 --> 00:02:05,749

cygnus now has reached the capture point

18

00:02:10,389 --> 00:02:07,759

a good view

19

00:02:11,350 --> 00:02:10,399

of the engine on the cargo craft that

20

00:02:13,750 --> 00:02:11,360

has

21

00:02:15,430 --> 00:02:13,760

faithfully executed all of the

22

00:02:17,910 --> 00:02:15,440

rendezvous burns

23

00:02:20,309 --> 00:02:17,920

to fine-tune its uh path over the past

24

00:02:22,150 --> 00:02:20,319

two and a half days following its launch

25

00:02:33,670 --> 00:02:22,160

from the wallops flight facility in

26
00:02:33,680 --> 00:03:21,270
canadarm2 now moving in for grapple

27
00:03:24,229 --> 00:03:22,949
once again this view from the end

28
00:03:27,509 --> 00:03:24,239
effector

29
00:03:29,830 --> 00:03:27,519
on the canadarm2 a very clear view of

30
00:03:32,229 --> 00:03:29,840
the grapple fixture just underneath the

31
00:03:33,910 --> 00:03:32,239
thruster engine on the cygnus cargo

32
00:03:35,990 --> 00:03:33,920
craft

33
00:04:14,630 --> 00:03:36,000
just a few feet separating

34
00:04:18,229 --> 00:04:16,629
the robotics officer reports a good

35
00:04:19,830 --> 00:04:18,239
alignment between the end effector and

36
00:04:22,310 --> 00:04:19,840
the grapple pin

37
00:04:45,990 --> 00:04:22,320
on the cygnus cargo craft about to be

38
00:05:00,070 --> 00:04:47,909

flight controller standing by for the

39

00:05:00,080 --> 00:05:27,270

and effector is over the pin

40

00:05:31,350 --> 00:05:29,670

grapple confirmed

41

00:05:34,790 --> 00:05:31,360

cygnus is captured

42

00:05:36,629 --> 00:05:34,800

at 5 36 a.m central time

43

00:05:53,909 --> 00:05:36,639

as the international space station flew

44

00:05:57,590 --> 00:05:56,469

houston station m2 we now have a seventh

45

00:05:59,270 --> 00:05:57,600

crew member

46

00:06:00,710 --> 00:05:59,280

janice boss is now part of expedition

47

00:06:02,469 --> 00:06:00,720

40.

48

00:06:03,990 --> 00:06:02,479

janice devoted her life to space and

49

00:06:06,950 --> 00:06:04,000

accomplished many wonderful things at

50

00:06:08,230 --> 00:06:06,960

nasa and orbital sciences including five

51

00:06:10,550 --> 00:06:08,240

shuttle missions

52

00:06:11,749 --> 00:06:10,560

and today genesis legacy and space

53

00:06:20,309 --> 00:06:11,759

continues

54

00:06:26,309 --> 00:06:21,909

well quiet here in the flight control

55

00:06:31,430 --> 00:06:28,469

this portion of the operation always

56

00:06:33,350 --> 00:06:31,440

very slow and meticulous

57

00:06:35,590 --> 00:06:33,360

delicately executed by the robotics

58

00:06:37,830 --> 00:06:35,600

officer here in mission control

59

00:06:40,070 --> 00:06:37,840

to ensure that cygnus is properly

60

00:06:42,710 --> 00:06:40,080

aligned for the initiation of the

61

00:06:44,790 --> 00:06:42,720

bolting of cygnus in place

62

00:06:46,629 --> 00:06:44,800

to this earth-facing port on the harmony

63

00:06:48,950 --> 00:06:46,639

module

64

00:06:50,230 --> 00:06:48,960

first stage capture complete that's the

65

00:06:52,550 --> 00:06:50,240

interim step

66

00:06:54,870 --> 00:06:52,560

of the bolting of cygnus in place

67

00:06:57,189 --> 00:06:54,880

standing by now for the second stage

68

00:07:00,230 --> 00:06:57,199

capture that will

69

00:08:15,189 --> 00:07:00,240

denote the hard mate of cygnus to the

70

00:08:22,150 --> 00:08:17,350

houston i am going to step six all four

71

00:08:26,390 --> 00:08:24,710

this is mission control houston the

72

00:08:29,110 --> 00:08:26,400

mechanical systems officer here in

73

00:08:30,550 --> 00:08:29,120

mission control reports a good second

74

00:08:35,350 --> 00:08:30,560

stage capture

75

00:08:37,909 --> 00:08:35,360

and so at 7 53 a.m central time

76

00:08:39,589 --> 00:08:37,919

a little over uh two hours after it was

77

00:08:42,310 --> 00:08:39,599

grappled

78

00:08:44,310 --> 00:08:42,320

in open space by steve swanson the

79

00:08:46,230 --> 00:08:44,320

expedition 40 commander

80

00:08:47,910 --> 00:08:46,240

cygnus is now hard-mated to the

81

00:08:50,870 --> 00:08:47,920

international space station's harmony

82

00:08:52,829 --> 00:08:50,880

module a fixture for the station for the

83

00:08:55,750 --> 00:08:52,839

next four weeks again

84

00:08:56,790 --> 00:08:55,760

753 a.m central time

85

00:08:59,430 --> 00:08:56,800

mark

86

00:09:02,550 --> 00:08:59,440

that as the hard mate time second stage

87

00:09:04,230 --> 00:09:02,560

capture complete cygnus is now bolted to

88

00:09:07,269 --> 00:09:04,240

the international space station that

89

00:09:09,670 --> 00:09:07,279

occurring as the international space

90

00:09:11,990 --> 00:09:09,680

station flew 260 miles