

1
00:00:08,870 --> 00:00:06,789
space shuttle discovery the venerable

2
00:00:11,270 --> 00:00:08,880
veteran of america's human space flight

3
00:00:13,589 --> 00:00:11,280
fleet proudly resting atop launch pad

4
00:00:15,350 --> 00:00:13,599
39a here at nasa's kennedy space center

5
00:00:18,150 --> 00:00:15,360
in florida

6
00:00:22,550 --> 00:00:18,160
her wings outstretched and ready to soar

7
00:00:24,950 --> 00:00:22,560
into space for the 39th and final time

8
00:00:28,070 --> 00:00:24,960
and here we have the crew

9
00:00:30,070 --> 00:00:28,080
walking out of crew corners

10
00:00:31,990 --> 00:00:30,080
this is a very historical walkway it's

11
00:00:34,310 --> 00:00:32,000
the same path that uh the apollo

12
00:00:36,470 --> 00:00:34,320
astronauts took to go to the moon

13
00:00:39,590 --> 00:00:36,480

and over the last 30 years there's been

14

00:00:40,389 --> 00:00:39,600

a 133 odd shuttle crews that walked out

15

00:00:42,950 --> 00:00:40,399

here

16

00:00:45,510 --> 00:00:42,960

to catch this bus for the exciting ride

17

00:00:47,910 --> 00:00:45,520

out to the launch pad

18

00:00:49,510 --> 00:00:47,920

the crew will step out of the astro van

19

00:00:54,950 --> 00:00:49,520

and

20

00:00:57,430 --> 00:00:54,960

look up which is a little hard to do in

21

00:00:59,349 --> 00:00:57,440

the uh

22

00:01:00,470 --> 00:00:59,359

heavy suits that they have

23

00:01:02,950 --> 00:01:00,480

but uh

24

00:01:04,630 --> 00:01:02,960

you get an opportunity to stand there

25

00:01:07,270 --> 00:01:04,640

and see the shuttle from a very unique

26

00:01:09,030 --> 00:01:07,280

perspective uh

27

00:01:10,710 --> 00:01:09,040

the view itself is spectacular but your

28

00:01:12,390 --> 00:01:10,720

perspective is particularly unique

29

00:01:15,190 --> 00:01:12,400

because you know that it is the ride

30

00:01:18,149 --> 00:01:15,200

that's going to take you

31

00:01:21,830 --> 00:01:20,390

there you can see the crew having a

32

00:01:25,830 --> 00:01:21,840

group hug and

33

00:01:31,910 --> 00:01:25,840

a little quiet moment for themselves to

34

00:01:38,310 --> 00:01:34,149

wish each other well

35

00:01:43,270 --> 00:01:41,590

20 seconds the sound suppression water

36

00:01:45,510 --> 00:01:43,280

system

37

00:01:47,429 --> 00:01:45,520

has been activated protecting discovery

38

00:01:50,069 --> 00:01:47,439

and the launch pad from acoustical

39

00:01:52,710 --> 00:01:50,079

energy waves

40

00:01:55,749 --> 00:01:52,720

go for main engine start

41

00:01:56,709 --> 00:01:55,759

we have main engine start

42

00:01:57,990 --> 00:01:56,719

two

43

00:02:00,630 --> 00:01:58,000

one

44

00:02:03,590 --> 00:02:00,640

booster ignition and the final liftoff

45

00:02:05,670 --> 00:02:03,600

of discovery a tribute to the dedication

46

00:02:07,670 --> 00:02:05,680

hard work and pride of america's space

47

00:02:13,030 --> 00:02:07,680

shuttle team the shuttle has cleared the

48

00:02:16,550 --> 00:02:14,790

mission control houston space shuttle

49

00:02:18,390 --> 00:02:16,560

now rolling over onto its back for a

50

00:02:20,309 --> 00:02:18,400

10-minute ride

51
00:02:43,430 --> 00:02:20,319
discovery now making one last reach for

52
00:02:46,229 --> 00:02:44,790
engines are now throttling down as the

53
00:02:47,990 --> 00:02:46,239
orbiter passes through the area of

54
00:03:01,190 --> 00:02:48,000
maximum pressure reducing the stress on

55
00:03:10,949 --> 00:03:03,350
discovery houston you are go at throttle

56
00:03:13,350 --> 00:03:11,990
well commander steve lindsay

57
00:03:15,110 --> 00:03:13,360
acknowledging the call from capcom

58
00:03:20,550 --> 00:03:15,120
charlie hoba as discovery's three main

59
00:03:23,750 --> 00:03:21,990
lindsay is joined on the flight deck by

60
00:03:31,350 --> 00:03:23,760
pilot eric bowen mission specialist al

61
00:03:35,270 --> 00:03:32,949
mission specialist mike barrett and

62
00:03:36,470 --> 00:03:35,280
steve bowen

63
00:03:37,670 --> 00:03:36,480

discovery's three main engines are

64

00:03:39,509 --> 00:03:37,680

burning fuel at a rate that would drain

65

00:03:41,430 --> 00:03:39,519

an average swimming pool in about 25

66

00:03:42,789 --> 00:03:41,440

seconds

67

00:03:44,470 --> 00:03:42,799

the engines combined with the solid

68

00:03:47,509 --> 00:03:44,480

rocket boosters produce more than seven

69

00:03:49,190 --> 00:03:47,519

million pounds of thrust

70

00:03:50,550 --> 00:03:49,200

one minute 50 seconds into the flight

71

00:03:52,550 --> 00:03:50,560

we're standing by for separation of the

72

00:03:55,509 --> 00:03:52,560

twin solid rocket boosters discovery now

73

00:03:57,750 --> 00:03:55,519

traveling 2695 miles an hour its

74

00:04:12,869 --> 00:03:57,760

altitude 24 miles downrange from the

75

00:04:16,310 --> 00:04:14,789

booster separation confirmed discovery's

76

00:04:18,150 --> 00:04:16,320

guidance is now converging as the

77

00:04:23,670 --> 00:04:18,160

shuttle's onboard computers fine-tune

78

00:04:27,670 --> 00:04:25,430

two minutes 25 seconds into the flight

79

00:04:30,150 --> 00:04:27,680

discovery traveling

80

00:04:31,510 --> 00:04:30,160

miles an hour this altitude 37 miles