



1  
00:00:00,870 --> 00:00:07,300

Music

2  
00:00:07,300 --> 00:00:11,070

As launch day approaches for space shuttle Discovery's final flight

3  
00:00:11,070 --> 00:00:13,030

to the International Space Station,

4  
00:00:13,030 --> 00:00:18,070

the STS-133 crew members prepare for liftoff by participating in the

5  
00:00:18,070 --> 00:00:21,550

Terminal Countdown Demonstration Test, or TCDT,

6  
00:00:21,550 --> 00:00:24,600

at NASA's Kennedy Space Center in Florida.

7  
00:00:24,600 --> 00:00:27,510

The six crew members flew in T-38 jets

8  
00:00:27,510 --> 00:00:31,390

to Kennedy's Shuttle Landing Facility Tuesday, Oct. 12.

9  
00:00:31,390 --> 00:00:36,190

They were greeted by Shuttle Launch Director Mike Leinbach, astronaut Jerry Ross

10  
00:00:36,190 --> 00:00:39,400

and media gathered for the crew's arrival.

11  
00:00:39,400 --> 00:00:42,760

Veteran astronaut Steve Lindsey commands Discovery's flight,

12  
00:00:42,760 --> 00:00:44,840

assisted by Pilot Eric Boe,

13  
00:00:44,840 --> 00:00:47,110

Mission Specialists Nicole Stott,

14

00:00:47,110 --> 00:00:47,930

Tim Kopra,

15

00:00:47,930 --> 00:00:48,830

Alvin Drew

16

00:00:48,830 --> 00:00:50,600

and Michael Barratt.

17

00:00:50,600 --> 00:00:55,400

During the three days of training, Lindsey and Boe made several take-offs and landings

18

00:00:55,400 --> 00:00:58,710

in the Shuttle Training Aircraft, a modified Gulfstream jet

19

00:00:58,710 --> 00:01:04,060

designed to simulate the shuttle gliding unpowered onto the 3-mile-long runway.

20

00:01:04,060 --> 00:01:07,390

As part of safety training on Launch Pad 39A,

21

00:01:07,390 --> 00:01:11,520

the astronauts were briefed on the pad's slidewire baskets and on the ground

22

00:01:11,520 --> 00:01:17,830

at the safety bunker, part of the emergency exit system located 1,200 feet west of the pad.

23

00:01:17,830 --> 00:01:20,650

STS-133 Commander Steve Lindsey: It's great to be here for TCDT

24

00:01:20,650 --> 00:01:24,580

and go through that again. The vehicle is looking great.

25

00:01:24,580 --> 00:01:28,820

All of our activities are going great. We are basically trained and ready to fly

26

00:01:28,820 --> 00:01:33,750

just a few more weeks of activities we need to go through and then we'll be hopefully

27

00:01:33,750 --> 00:01:36,260

back here for an on-time launch on November. 1

28

00:01:36,260 --> 00:01:40,540

The astronauts also were instructed on how to drive the M-113

29

00:01:40,540 --> 00:01:43,730

armored personnel carriers out in the field.

30

00:01:43,730 --> 00:01:48,500

M-113 training was developed to transport the flight and pad crew to safety

31

00:01:48,500 --> 00:01:52,260

in the unlikely event of a contingency on the pad before launch.

32

00:01:52,260 --> 00:01:56,450

On the final day at Kennedy, the astronauts suited up in their custom-fitted

33

00:01:56,450 --> 00:02:02,530

orange launch and entry suits and helmets in preparation for a full launch dress rehearsal.

34

00:02:02,530 --> 00:02:06,240

After traveling in NASA's silver Astrovan, they arrived at the pad's

35

00:02:06,240 --> 00:02:10,710

White Room on the 195-foot level and climbed aboard Discovery,

36

00:02:10,710 --> 00:02:13,220

aided by the Closeout Crew.

37

00:02:13,220 --> 00:02:17,700

As realistic as launch day itself, the flight crew took part in a simulated

38

00:02:17,700 --> 00:02:22,660

launch countdown that included operations and communication checks of a real liftoff

39

00:02:22,660 --> 00:02:25,190

right down to a mock engine start.

40

00:02:25,190 --> 00:02:30,650

The final exercise included emergency pad evacuation procedures and jumping into

41

00:02:30,650 --> 00:02:32,670

the slidewire baskets.

42

00:02:32,670 --> 00:02:37,930

After wrapping up TCDT training, the astronauts climbed back into their T-38's

43

00:02:37,930 --> 00:02:41,940

and returned home to NASA's Johnson Space Center in Houston.