



1

00:00:00,930 --> 00:00:02,610

"Final Inspection team and Closeout Crew have entered the pad."

2

00:00:02,610 --> 00:00:03,610

"Copy that."

3

00:00:03,610 --> 00:00:07,410

It's shuttle launch day.

4

00:00:07,410 --> 00:00:12,340

Dressed in bright-orange protective suits, an elite group heads to the launch pad where

5

00:00:12,340 --> 00:00:15,230

a space shuttle awaits liftoff.

6

00:00:15,230 --> 00:00:18,850

But this crew isn't made up of astronauts heading for space

7

00:00:18,850 --> 00:00:20,500

it's the Final Inspection Team.

8

00:00:20,500 --> 00:00:24,160

"The Final Inspection Team has seven members on it.

9

00:00:24,160 --> 00:00:28,080

We have two photographers, we have an

10

00:00:28,080 --> 00:00:31,660

infrared camera operator, we have a member from

11

00:00:31,660 --> 00:00:32,689

safety,

12

00:00:32,689 --> 00:00:37,079

we have two people looking with binoculars  
at the exterior of the whole tank

13

00:00:37,079 --> 00:00:39,480

and taking notes on what we find,

14

00:00:39,480 --> 00:00:44,960

and we have a person sending photos, images  
back to the firing room

15

00:00:44,960 --> 00:00:46,820

on a laptop computer."

16

00:00:46,820 --> 00:00:51,250

During a time when most workers are cleared  
from the launch pad, this group spends

17

00:00:51,250 --> 00:00:54,250

more than two hours inspecting the fully fueled  
vehicle.

18

00:00:54,250 --> 00:00:57,190

"It's a beautiful sight up close.

19

00:00:57,190 --> 00:01:01,460

When you're there at that moment you know  
just a very few people are allow allowed the

20

00:01:01,460 --> 00:01:02,739

privilege of being out here.

21

00:01:02,739 --> 00:01:04,000

The crew,

22

00:01:04,000 --> 00:01:05,869

the people that support the crew to get them  
on board,

23

00:01:05,869 --> 00:01:08,720  
and ourselves, that's all. So it's special."

24

00:01:08,720 --> 00:01:12,190  
"It's personal. It's very real."

25

00:01:12,190 --> 00:01:17,189  
The Final Inspection Team has the crucial  
and potentially dangerous job of inspecting

26

00:01:36,420 --> 00:01:18,189  
the

27

00:01:36,420 --> 00:01:38,640  
and astronauts after liftoff.

28

00:01:38,640 --> 00:01:43,130  
Using their cameras, binoculars, infrared  
sensors and other equipment,

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00:01:43,130 --> 00:01:48,350  
team members begin their inspection at the  
launch pad's 255-foot level.

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00:01:48,350 --> 00:01:51,939  
They methodically work their way down the  
launch pad's service structure,

31

00:01:51,939 --> 00:01:55,950  
checking in with launch control at each level.

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00:01:55,950 --> 00:01:59,670  
"Right now we're at the 215 level, and this  
is a pretty extensive level for us because

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00:01:59,670 --> 00:02:00,670  
we

34

00:02:00,670 --> 00:02:05,820

head out on the haunch to do a close-up inspection of the tank and the SRBs,

35  
00:02:05,820 --> 00:02:11,159  
and we can go around on the RSS platform to look at the front side of the orbiter."

36  
00:02:11,159 --> 00:02:15,261  
Along the way, they electronically send images back to the launch control center

37  
00:02:15,261 --> 00:02:17,510  
for analysis.

38  
00:02:17,510 --> 00:02:22,569  
"Imagery is really what we're all about. We're responsible for giving the launch team,

39  
00:02:22,569 --> 00:02:29,040  
the launch director and the crew assessments via imagery of how the space vehicle is

40  
00:02:29,040 --> 00:02:30,370  
ready to go for flight.

41  
00:02:30,370 --> 00:02:33,349  
And post flight, how did it perform on post flight."

42  
00:02:33,349 --> 00:02:37,590  
The team finishes its inspection at the base of the shuttle stack on the surface

43  
00:02:37,590 --> 00:02:39,980  
of the mobile launch platform.

44  
00:02:39,980 --> 00:02:45,169  
There they check solid rocket booster aft skirts as well as under the external tank

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00:02:45,169 --> 00:02:47,129

and main engines.

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00:02:47,129 --> 00:02:51,819

After departing the pad, they head back to launch control where the team leader reports

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00:02:51,819 --> 00:02:54,230

their findings to the launch director.

48

00:02:54,230 --> 00:02:59,709

Final Inspection Team is complete and we will be rolling back to AB11."

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00:02:59,709 --> 00:03:00,709

"Copy that."

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00:03:00,709 --> 00:03:04,639

From consoles in the launch control center, they continue monitoring through the rest

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00:03:04,639 --> 00:03:05,639

of

52

00:03:05,639 --> 00:03:10,269

the countdown using the remote cameras, as the shuttle's final checks are completed.

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00:03:10,269 --> 00:03:13,230

Then comes the pivotal moment when the main engines ignite,

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00:03:13,230 --> 00:03:18,069

the solid rocket boosters thunder, and the spacecraft roars off the pad

55

00:03:18,069 --> 00:03:21,459

amid billows of smoke and steam.

56  
00:03:21,459 --> 00:03:25,400  
Ground and on-board cameras capture the shuttle's ascent and separation

57  
00:03:25,400 --> 00:03:30,299  
from the boosters and tank, allowing the team to begin analyzing the results before

58  
00:03:30,299 --> 00:03:33,309  
ending a 12-hour day.