



MIKE CURIE

NASA Launch Commentator

JOSH FINCH

NASA Launch Commentator

1

00:00:01,360 --> 00:00:06,520

From NASA's Kennedy Space Center in Florida,
You're watching live coverage of the Transiting

2

00:00:06,529 --> 00:00:12,780

Exoplanet Survey Satellite, or TESS, a mission
to find new planets outside of our solar system

3

00:00:12,780 --> 00:00:14,420

that could support life.

4

00:00:14,420 --> 00:00:16,080

Hi, I'm Marie Lewis.

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00:00:16,080 --> 00:00:17,580

Thanks for joining us.

6

00:00:17,580 --> 00:00:22,339

TESS will help us with an age old question,
"Are we alone in the universe?"

7

00:00:22,339 --> 00:00:26,579

The images TESS will capture could be the
key to solving that mystery.

8

00:00:26,579 --> 00:00:31,760

TESS is a planet hunter about to embark on
a two-year mission to scan almost our entire

9

00:00:31,760 --> 00:00:35,840

sky by breaking it up into 26 different sections.

10

00:00:35,840 --> 00:00:41,320

Powerful cameras will stare at each zone for
about a month monitoring more than 20,000

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00:00:41,320 --> 00:00:46,950

stars and looking for changes in their brightness
that signal that a planet is passing over.

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00:00:46,950 --> 00:00:51,920
Our goal is to find other planets like Earth
and to decide which ones deserve a closer

13
00:00:51,920 --> 00:00:52,990
look.

14
00:00:52,990 --> 00:00:59,350
TESS is scheduled to launch on top a SpaceX
Falcon 9 rocket at 6:52 p.m. tonight form

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00:00:59,350 --> 00:01:02,900
Space Launch Complex 40 at Cape Canaveral
Air Force Station.

16
00:01:02,900 --> 00:01:08,030
TESS has a window of 30 seconds o launch and
will take about two months to reach orbit.

17
00:01:08,030 --> 00:01:11,690
Coming up we'll hear for the SpaceX Mission
Control Center in California.

18
00:01:11,690 --> 00:01:15,740
We'll also share more about the thrilling
discoveries cold uncover.

19
00:01:15,740 --> 00:01:20,470
But first, we are now about 20 minutes form
launch, so let's Cheick in with NASA's Josh

20
00:01:20,470 --> 00:01:24,409
Finch and Mike Curie in Kennedy's Mission
Directors Center for a weather update.

21
00:01:24,409 --> 00:01:25,409
Guys.

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00:01:25,409 --> 00:01:26,409

Launch Control Commentators Mike Curie and
Josh Finch:

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00:01:26,409 --> 00:01:27,409

Josh Finch

Thanks you Marie, I'm Josh Finch

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00:01:27,409 --> 00:01:29,000

Mike Curie

And I'm Mike Curie and we are in the Mission

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00:01:29,000 --> 00:01:34,479

Directors Center in Hangar AE at Cape Canaveral
Air Force Station, very close to Space Launch

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00:01:34,479 --> 00:01:38,660

Complex 40 where the Falcon 9 rocket is poised
for launch today.

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00:01:38,660 --> 00:01:44,840

We have teams from SpaceX, NASA and the U.S.
Air Force working on the East Coast of Florida

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00:01:44,840 --> 00:01:46,600

to the West Coast of California.

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00:01:46,600 --> 00:01:49,890

To launch NASA's planet hunting spacecraft.

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00:01:49,890 --> 00:01:54,690

Our first launch attempt on April 16 was scrubbed
to allow launch teams to further review data

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00:01:54,690 --> 00:01:59,460

from the SpaceX Falcon 9's guidance navigation
and control system.

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00:01:59,460 --> 00:02:05,670

And that analysis is now complete and we are

go for today's launch at 6:51 and 31 seconds

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00:02:05,670 --> 00:02:06,870

p.m. Eastern Time.

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00:02:06,870 --> 00:02:09,860

Josh Finch

Marie, you asked about the weather forecast

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00:02:09,860 --> 00:02:12,650

and it is even better than the first launch

tempt.

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00:02:12,650 --> 00:02:15,150

Today the skies are clear as you can see on

you screen.

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00:02:15,150 --> 00:02:20,190

The temperature is about 72 degrees with light

winds from the southeast at about 10 to 15

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00:02:20,190 --> 00:02:21,319

miles per hour.

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00:02:21,319 --> 00:02:24,490

We have no primary concerns for launch today.

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00:02:24,490 --> 00:02:29,920

The probably of violating launch constraints

is less than 90 percent go today s launch

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00:02:29,920 --> 00:02:30,920

due to weather.

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00:02:30,920 --> 00:02:33,280

Mike Curie

The U.S. Air Force is also monitoring the

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00:02:33,280 --> 00:02:37,670

Eastern Range to make sure professional and personal aircraft stay out of the restricted

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00:02:37,670 --> 00:02:42,160
area and the waters within the launch safety zone are clear of any boats.

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00:02:42,160 --> 00:02:48,470
We also received a collision avoidance update which is tracking any potential objects in

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00:02:48,470 --> 00:02:50,690
space that is all clear for today.

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00:02:50,690 --> 00:02:56,209
We have on COLAs so we're on time for the opening of the launch window.

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00:02:56,209 --> 00:03:00,160
Teams continue to work the necessary procedures to prepare the Falcon 9 rocket and the TESS

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00:03:00,160 --> 00:03:04,099
spacecraft for launch including loading fuel into both are checking out rocket stages and

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00:03:04,099 --> 00:03:06,510
making sure all systems are properly checking.

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00:03:06,510 --> 00:03:08,580
Josh Finch
As Mike mentioned, we have done a collision

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00:03:08,580 --> 00:03:12,940
avoidance of the Eastern Range and checked out the autonomous flight termination system,

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00:03:12,940 --> 00:03:18,379
and the loading of RP-1 fuel, rocket grade kerosene beginning at the one-hour 10-minutes.

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00:03:18,379 --> 00:03:23,010

The Eastern Range has given a go for the Falcon 9 and the landing of the first stage.

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00:03:23,010 --> 00:03:26,879

And liquid oxygen began being fueled at T-minus 35 minutes