



NASA

ORION
MRS-L

S

2L

1

00:00:07,370 --> 00:00:11,790

NASA is preparing to expand the already legendary capabilities of its

2

00:00:11,790 --> 00:00:18,020

critical Earth-to-space communications network -- the Tracking and Data Relay Satellite System.

3

00:00:18,020 --> 00:00:23,120

The TDRS-L satellite is at Cape Canaveral Air Force Station in Florida undergoing final

4

00:00:23,120 --> 00:00:24,120

preparations

5

00:00:24,120 --> 00:00:29,720

for its upcoming ride to space aboard a United Launch Alliance Atlas V rocket.

6

00:00:29,720 --> 00:00:34,870

The Atlas V first-stage booster and Centaur upper stage were shipped together aboard

7

00:00:34,870 --> 00:00:37,579

ULA's massive Delta Mariner Barge.

8

00:00:37,579 --> 00:00:43,910

The pair reached Port Canaveral on Nov. 1, 2013, and were trucked north to begin checkouts

9

00:00:43,910 --> 00:00:44,910

inside the

10

00:00:44,910 --> 00:00:48,730

Atlas Spaceflight Operations Center at Cape Canaveral Air Force Station.

11

00:00:48,730 --> 00:00:55,339

A U.S. Air Force C-17 cargo plane delivered

the TDRS-L satellite to Kennedy Space Center

12

00:00:55,339 --> 00:00:56,820
on December 6

13

00:00:56,820 --> 00:01:01,629
with an early morning touchdown at the Shuttle
Landing Facility.

14

00:01:01,629 --> 00:01:05,780
The 7,600-pound spacecraft was carefully removed
from the aircraft and transported

15

00:01:05,780 --> 00:01:09,650
to the Astrotech payload processing facility
in Titusville.

16

00:01:09,650 --> 00:01:17,210
Once inside, it was uncrated and raised to
vertical, kicking off several weeks of examinations,

17

00:01:17,210 --> 00:01:20,280
tests and other prelaunch activities.

18

00:01:20,280 --> 00:01:24,720
In mid-December the rocket's first-stage booster
rolled from the Atlas Spaceflight Operations

19

00:01:24,720 --> 00:01:25,720
Center

20

00:01:25,720 --> 00:01:31,070
to the Vertical Integration Facility at Space
Launch Complex 41, and was raised into flight

21

00:01:31,070 --> 00:01:32,410
position.

22

00:01:32,410 --> 00:01:38,890

Next, the Centaur moved to the launch complex and was attached atop the first stage.

23

00:01:38,890 --> 00:01:43,280

Members of the news media got one last, up-close look at the TDRS-L spacecraft

24

00:01:43,280 --> 00:01:49,380

just after the new year -- and on Jan. 8, 2014, the satellite was enclosed within the

25

00:01:49,380 --> 00:01:50,580

aerodynamic payload

26

00:01:50,580 --> 00:01:55,000

fairing that will protect it through the early minutes of flight.

27

00:01:55,000 --> 00:01:58,980

At last, the spacecraft was ready to move to the launch pad.

28

00:01:58,980 --> 00:02:04,290

In the early morning darkness Jan. 20, the payload fairing carrying TDRS-L rolled

29

00:02:04,290 --> 00:02:09,920

from Astrotech to Space Launch Complex 41, where it was placed atop the Atlas V rocket

30

00:02:09,920 --> 00:02:10,920

to await

31

00:02:10,920 --> 00:02:12,230

launch day.

32

00:02:12,230 --> 00:02:16,530

When countdown clocks reach zero, the Atlas V booster will ignite,

