KENNEDY COUNTDOWN

1
00:00:04,470 --> 00:00:02,869
hi i'm nasa kennedy's basically odin and

2
00:00:10,310 --> 00:00:04,480
this is kennedy countdown

3
00:00:13,430 --> 00:00:10,320
[Music]

4
00:00:16,710 --> 00:00:13,440
nasa's imaging x-ray polarimetry

5
00:00:19,269 --> 00:00:16,720
explorer or xp arrived last month in

6
00:00:20,870 --> 00:00:19,279
florida workers completed pre-launch

7
00:00:23,429 --> 00:00:20,880
testing and then integrated the

8
00:00:24,550 --> 00:00:23,439
spacecraft with the spacex falcon 9

9
00:00:27,750 --> 00:00:24,560
rocket

10
00:00:29,509 --> 00:00:27,760
xp is the agency's first mission

11
00:00:31,669 --> 00:00:29,519
dedicated to measuring x-ray

12
00:00:34,389 --> 00:00:31,679
polarization which will allow

13
00:00:37,030 --> 00:00:34,399

astronomers to discover hidden details

14
00:00:40,389 --> 00:00:37,040
of some of the densest and most extreme

15
00:00:43,270 --> 00:00:40,399
cosmic sources including neutron stars

16
00:00:45,430 --> 00:00:43,280
black holes and supernova remnants

17
00:00:47,510 --> 00:00:45,440
liftoff is scheduled for december 9th

18
00:00:50,869 --> 00:00:47,520
from kennedy space center's launch

19
00:00:53,270 --> 00:00:50,879
complex 39a

20
00:00:57,189 --> 00:00:53,280
nasa's laser communications relay

21
00:00:59,029 --> 00:00:57,199
demonstration or lcrd moved another step

22
00:01:01,270 --> 00:00:59,039
closer to launch when a team of

23
00:01:03,510 --> 00:01:01,280
engineers attached the payload fairing

24
00:01:06,710 --> 00:01:03,520
containing its host satellite to a

25
00:01:09,830 --> 00:01:06,720
united launch alliance atlas 5 rocket

26
00:01:12,390 --> 00:01:09,840
the lcrd payload hosted on the

27
00:01:14,789 --> 00:01:12,400
department of defense space test program

28
00:01:17,190 --> 00:01:14,799
3 mission will demonstrate optical

29
00:01:20,149 --> 00:01:17,200
technology that could provide data rates

30
00:01:23,109 --> 00:01:20,159
up to 100 times better than commonly

31
00:01:25,670 --> 00:01:23,119
used radio frequency communications

32
00:01:27,590 --> 00:01:25,680
in the future laser technology may

33
00:01:30,390 --> 00:01:27,600
greatly increase bandwidth for

34
00:01:33,830 --> 00:01:30,400
communicating in space while reducing

35
00:01:38,069 --> 00:01:33,840
size weight and power requirements for

36
00:01:40,149 --> 00:01:38,079
both government and commercial uses