



1
00:00:06,710 --> 00:00:04,550
at nasa's kennedy space center in

2
00:00:08,549 --> 00:00:06,720
florida technicians in the vehicle

3
00:00:10,150 --> 00:00:08,559
assembly building make additional

4
00:00:13,350 --> 00:00:10,160
imaging scans of space shuttle

5
00:00:15,990 --> 00:00:13,360
discovery's external fuel tank

6
00:00:17,910 --> 00:00:16,000
on december 29th technicians scanned

7
00:00:20,550 --> 00:00:17,920
below the external tank's foam

8
00:00:23,189 --> 00:00:20,560
insulation around the entire entertain

9
00:00:24,550 --> 00:00:23,199
section to look for any issues like

10
00:00:26,790 --> 00:00:24,560
cracks

11
00:00:29,349 --> 00:00:26,800
workers using computed radiography

12
00:00:31,429 --> 00:00:29,359
scanners that work like an x-ray machine

13
00:00:33,750 --> 00:00:31,439

by transmitting radiation through the

14

00:00:35,990 --> 00:00:33,760

tank's foam and metal skin

15

00:00:39,030 --> 00:00:36,000

the scans will help verify repairs

16

00:00:41,910 --> 00:00:39,040

associated with cracks on tops of two 21

17

00:00:43,830 --> 00:00:41,920

foot long u-shaped aluminum brackets

18

00:00:46,869 --> 00:00:43,840

called stringers which line the

19

00:00:48,310 --> 00:00:46,879

intertank and help engineers determine

20

00:00:50,630 --> 00:00:48,320

what caused the cracks during

21

00:00:53,350 --> 00:00:50,640

discovery's launch attempt on november

22

00:00:55,510 --> 00:00:53,360

5th managers and engineers will review

23

00:00:58,229 --> 00:00:55,520

the test data to determine the next

24

00:01:01,270 --> 00:00:58,239

course of action discovery's next launch

25

00:01:03,670 --> 00:01:01,280

opportunity for its sts-133 mission to

26

00:01:07,270 --> 00:01:03,680

the international space station is no

27

00:01:08,710 --> 00:01:07,280

earlier than february 3rd

28

00:01:12,550 --> 00:01:08,720

voltage cable

29

00:01:16,070 --> 00:01:12,560

ground cable and coolant lines

30

00:01:17,350 --> 00:01:16,080

so the control unit upstairs

31

00:01:20,070 --> 00:01:17,360

sends whatever

32

00:01:21,990 --> 00:01:20,080

kill voltage we need in amperage

33

00:01:24,230 --> 00:01:22,000

and there's a filament here that heats

34

00:01:29,510 --> 00:01:27,190

emits electrons

35

00:02:46,390 --> 00:01:29,520

those electrons are streamed to a target

36

00:02:51,350 --> 00:02:48,869

this is the image plate

37

00:02:52,949 --> 00:02:51,360

uh it takes place of the old film

38

00:02:55,030 --> 00:02:52,959

techniques

39

00:02:57,430 --> 00:02:55,040

and this sheet right here is the lead

40

00:03:00,149 --> 00:02:57,440

backing for a backscatter

41

00:03:02,229 --> 00:03:00,159

to prevent backscatter x-rays from

42

00:03:04,309 --> 00:03:02,239

changing any of the image patterns but

43

00:03:07,990 --> 00:03:04,319

all this is enclosed up there in a dark

44

00:03:14,550 --> 00:03:09,509

and then we seal it and it's ready for

45

00:03:26,630 --> 00:03:15,990

gonna go in

46

00:03:29,910 --> 00:03:28,630

and this is the film holder

47

00:04:08,789 --> 00:03:29,920

that will

48

00:04:12,070 --> 00:04:10,550

i position on on these stringer

49

00:04:15,270 --> 00:04:12,080

locations

50

00:04:17,670 --> 00:04:15,280

and correspond that with the x-ray

51

00:04:19,030 --> 00:04:17,680

equipment outside and that way we shoot

52

00:04:25,749 --> 00:04:19,040

the same stringer

53

00:04:47,590 --> 00:04:27,990

then to remove it just the opposite

54

00:04:47,600 --> 00:05:01,110

so