



1
00:00:04,789 --> 00:00:03,030
the mission itself for goes is

2
00:00:06,309 --> 00:00:04,799
incredibly exciting the interesting

3
00:00:07,349 --> 00:00:06,319
thing is that we get to operate

4
00:00:08,790 --> 00:00:07,359
satellites

5
00:00:10,870 --> 00:00:08,800
it's really satisfying to actually get

6
00:00:12,470 --> 00:00:10,880
to make it work and see it operate to

7
00:00:15,350 --> 00:00:12,480
see the fruits of my labor

8
00:00:17,029 --> 00:00:15,360
it's a very warm feeling once we get to

9
00:00:18,710 --> 00:00:17,039
the end of it seeing that the satellite

10
00:00:29,029 --> 00:00:18,720
is providing data that actually saves

11
00:00:33,030 --> 00:00:30,870
the biggest form of contamination for

12
00:00:34,389 --> 00:00:33,040
the satellite is the human body so what

13
00:00:35,590 --> 00:00:34,399

you have to do is you have to dress in a

14

00:00:38,869 --> 00:00:35,600

special suit

15

00:00:40,470 --> 00:00:38,879

this jumpsuit protects you from

16

00:00:41,670 --> 00:00:40,480

producing contamination that can

17

00:00:43,990 --> 00:00:41,680

actually be very harmful to the

18

00:00:46,069 --> 00:00:44,000

satellite because if it gets on optics

19

00:00:48,229 --> 00:00:46,079

and you get on space those optics can't

20

00:00:51,110 --> 00:00:48,239

be cleaned

21

00:00:55,430 --> 00:00:51,120

here we go all ready to go into the air

22

00:00:55,440 --> 00:01:04,950

and head into the clean room

23

00:01:07,990 --> 00:01:06,310

we're in titusville florida which is

24

00:01:12,390 --> 00:01:08,000

where this test facility is and this is

25

00:01:15,350 --> 00:01:13,910

we're getting it ready to be put onto

26
00:01:16,469 --> 00:01:15,360
the launch pad at cape canaveral in a

27
00:01:26,149 --> 00:01:16,479
few weeks

28
00:01:29,350 --> 00:01:27,590
the satellite is built in el segundo

29
00:01:31,590 --> 00:01:29,360
california in our satellite

30
00:01:33,350 --> 00:01:31,600
manufacturing facility and then we ship

31
00:01:35,350 --> 00:01:33,360
it out here on a plane we have a special

32
00:01:39,270 --> 00:01:35,360
container we put on a c17 plane and we

33
00:01:42,230 --> 00:01:40,710
we need to make sure that everything

34
00:01:43,510 --> 00:01:42,240
operates on the satellite properly we

35
00:01:45,590 --> 00:01:43,520
have to thoroughly test it make sure

36
00:01:47,590 --> 00:01:45,600
it'll survive so probably the biggest

37
00:01:48,870 --> 00:01:47,600
tests are our environmental tests so

38
00:01:50,310 --> 00:01:48,880

vibration we actually shake the

39

00:01:52,389 --> 00:01:50,320

satellite just like it's going to

40

00:01:55,109 --> 00:01:52,399

experience when it's launching and the

41

00:01:57,590 --> 00:01:55,119

biggest test is sctv which is where we

42

00:01:59,590 --> 00:01:57,600

put the spacecraft in a thermal vacuum

43

00:02:01,510 --> 00:01:59,600

chamber so we pump it down to zero

44

00:02:04,630 --> 00:02:01,520

vacuum and simulate the space

45

00:02:08,550 --> 00:02:06,469

as we approach the launch date we run

46

00:02:10,229 --> 00:02:08,560

through a series of tests to make sure

47

00:02:11,990 --> 00:02:10,239

that the satellite is healthy and to

48

00:02:14,390 --> 00:02:12,000

verify that all the personnel in the

49

00:02:21,990 --> 00:02:14,400

control center know exactly what they're

50

00:02:25,990 --> 00:02:23,830

this is the goes launch control center

51
00:02:27,990 --> 00:02:26,000
this is the area the center of activity

52
00:02:30,710 --> 00:02:28,000
for everything that happens once the go

53
00:02:32,550 --> 00:02:30,720
satellite is released from the rocket

54
00:02:34,070 --> 00:02:32,560
until it gets on orbit and through its

55
00:02:35,110 --> 00:02:34,080
own orbit activity for the first six

56
00:02:37,110 --> 00:02:35,120
months

57
00:02:38,390 --> 00:02:37,120
during which we check out the spacecraft

58
00:02:40,309 --> 00:02:38,400
and make sure it's certified for

59
00:02:42,070 --> 00:02:40,319
operations once the spacecraft is

60
00:02:44,630 --> 00:02:42,080
launched and it's going into its

61
00:02:47,430 --> 00:02:44,640
geostationary orbit we use

62
00:02:50,390 --> 00:02:47,440
nasa ground antennas to communicate to

63
00:02:52,070 --> 00:02:50,400

space from this control center these are

64

00:02:54,150 --> 00:02:52,080

the workstations that we use to operate

65

00:02:55,589 --> 00:02:54,160

the gozo satellite what these guys do

66

00:02:57,270 --> 00:02:55,599

they're the first line of defense

67

00:02:58,630 --> 00:02:57,280

performing all the commanding necessary

68

00:03:00,070 --> 00:02:58,640

to keep it safe

69

00:03:01,509 --> 00:03:00,080

okay so what he's doing here is he's

70

00:03:03,589 --> 00:03:01,519

monitoring the

71

00:03:05,270 --> 00:03:03,599

daily command schedule

72

00:03:07,190 --> 00:03:05,280

which consists of all of the commands

73

00:03:08,070 --> 00:03:07,200

necessary to take the images of the

74

00:03:10,790 --> 00:03:08,080

earth

75

00:03:12,869 --> 00:03:10,800

it is really the journey of going from

76

00:03:14,390 --> 00:03:12,879

the initial development of the satellite

77

00:03:15,910 --> 00:03:14,400

through the ability to be able to see

78

00:03:17,750 --> 00:03:15,920

the weather pictures on television that

79

00:03:19,910 --> 00:03:17,760

are taken from that satellite and see

80

00:03:26,789 --> 00:03:19,920

how well it's performing it's a great