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
00:00:08,710 --> 00:00:07,359
satellites

5
00:00:10,790 --> 00:00:08,720
it's really satisfying to actually get

6
00:00:12,470 --> 00:00:10,800
to make it work and see it operate to

7
00:00:15,270 --> 00:00:12,480
see the fruits of my labor

8
00:00:16,630 --> 00:00:15,280
it's a very warm feeling once we get to

9
00:00:18,310 --> 00:00:16,640
the end of it seeing that the

10
00:00:28,950 --> 00:00:18,320
satellite's providing data that actually

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
00:00:35,510 --> 00:00:34,399

you have to do is you have to dress in a

14
00:00:38,869 --> 00:00:35,520
special suit

15
00:00:40,389 --> 00:00:38,879
this jumpsuit protects you from

16
00:00:41,590 --> 00:00:40,399
producing contamination that can

17
00:00:43,990 --> 00:00:41,600
actually be very harmful to the

18
00:00:46,069 --> 00:00:44,000
satellite because if it gets on optics

19
00:00:48,150 --> 00:00:46,079
and you get on space those optics can't

20
00:00:51,110 --> 00:00:48,160
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
00:01:12,310 --> 00:01:08,000
where this test facility is and this is

25
00:01:15,270 --> 00:01:13,830
we're getting it ready to be put onto

26
00:01:16,390 --> 00:01:15,280
the launch pad at cape canaveral in a

27
00:01:26,149 --> 00:01:16,400
few weeks

28
00:01:29,270 --> 00:01:27,510
the satellite is built in el segundo

29
00:01:31,510 --> 00:01:29,280
california in our satellite

30
00:01:33,270 --> 00:01:31,520
manufacturing facility and then we ship

31
00:01:35,270 --> 00:01:33,280
it out here on a plane we have a special

32
00:01:39,270 --> 00:01:35,280
container we put on a c-17 plane and we

33
00:01:42,149 --> 00:01:40,630
we need to make sure that everything

34
00:01:43,510 --> 00:01:42,159
operates on the satellite properly we

35
00:01:45,510 --> 00:01:43,520
have to thoroughly test it make sure

36
00:01:47,590 --> 00:01:45,520
it'll survive so probably the biggest

37
00:01:48,789 --> 00:01:47,600
tests are our environmental tests so

38
00:01:50,310 --> 00:01:48,799

vibration we actually shake the

39
00:01:52,310 --> 00:01:50,320
satellite just like it's going to

40
00:01:54,389 --> 00:01:52,320
experience when it's launching and the

41
00:01:56,310 --> 00:01:54,399
biggest test is sctv

42
00:01:58,789 --> 00:01:56,320
which is where we put the spacecraft in

43
00:02:01,190 --> 00:01:58,799
a thermal vacuum chamber so we pump it

44
00:02:04,630 --> 00:02:01,200
down to zero vacuum and simulate the

45
00:02:08,469 --> 00:02:06,469
as we approach the launch date we run

46
00:02:10,150 --> 00:02:08,479
through a series of tests to make sure

47
00:02:11,990 --> 00:02:10,160
that the satellite is healthy and to

48
00:02:14,390 --> 00:02:12,000
verify that all the personnel in the

49
00:02:20,830 --> 00:02:14,400
control center know exactly what they're

50
00:02:25,350 --> 00:02:23,350
orbit this is the goes launch control

51
00:02:27,030 --> 00:02:25,360
center this is the area the center of

52
00:02:29,350 --> 00:02:27,040
activity for everything that happens

53
00:02:30,630 --> 00:02:29,360
once the go satellite is released from

54
00:02:32,470 --> 00:02:30,640
the rocket

55
00:02:33,990 --> 00:02:32,480
until it gets on orbit and through its

56
00:02:35,110 --> 00:02:34,000
own orbit activity for the first six

57
00:02:37,030 --> 00:02:35,120
months

58
00:02:38,309 --> 00:02:37,040
during which we check out the spacecraft

59
00:02:40,229 --> 00:02:38,319
and make sure it's certified for

60
00:02:41,990 --> 00:02:40,239
operations once the spacecraft is

61
00:02:45,190 --> 00:02:42,000
launched and it's going into its

62
00:02:47,910 --> 00:02:45,200
geostationary orbit we use nasa ground

63
00:02:50,470 --> 00:02:47,920

antennas to communicate to space from

64
00:02:52,150 --> 00:02:50,480
this control center these are the

65
00:02:54,070 --> 00:02:52,160
workstations that we use to operate the

66
00:02:55,509 --> 00:02:54,080
gozo satellite what these guys do

67
00:02:57,270 --> 00:02:55,519
they're the first line of defense

68
00:02:58,550 --> 00:02:57,280
performing all the commanding necessary

69
00:02:59,990 --> 00:02:58,560
to keep it safe

70
00:03:01,509 --> 00:03:00,000
okay so what he's doing here is he's

71
00:03:03,509 --> 00:03:01,519
monitoring the

72
00:03:05,190 --> 00:03:03,519
daily command schedule

73
00:03:07,190 --> 00:03:05,200
which consists of all of the commands

74
00:03:08,070 --> 00:03:07,200
necessary to take the images of the

75
00:03:10,710 --> 00:03:08,080
earth

76
00:03:12,790 --> 00:03:10,720
it is really the journey of going from

77
00:03:14,309 --> 00:03:12,800
the initial development of the satellite

78
00:03:15,910 --> 00:03:14,319
through the ability to be able to see

79
00:03:17,670 --> 00:03:15,920
the weather pictures on television that

80
00:03:19,830 --> 00:03:17,680
are taken from that satellite and see

81
00:03:26,710 --> 00:03:19,840
how well it's performing it's a great