
GOES-T LAUNCH
L-00:35:11
NASA
NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE
TANKING
T-4 HOLD
WX BRIEFING
POLLING
GO FOR LAUNCH
LIFTOFF

1
00:00:04,630 --> 00:00:02,470
in just about 40 minutes this united

2
00:00:07,749 --> 00:00:04,640
launch alliance atlas v rocket will

3
00:00:09,910 --> 00:00:07,759
launch goes-t into space the satellite

4
00:00:12,070 --> 00:00:09,920
will continue nearly 50 years of

5
00:00:15,749 --> 00:00:12,080
protecting people and property from

6
00:00:17,109 --> 00:00:15,759
severe and potentially deadly

7
00:00:19,109 --> 00:00:17,119
welcome and thank you for joining us

8
00:00:21,349 --> 00:00:19,119
here at kennedy space center in florida

9
00:00:23,429 --> 00:00:21,359
i'm nasa's megan cruz the rocket's right

10
00:00:25,830 --> 00:00:23,439
there on the pad behind me and this is

11
00:00:28,230 --> 00:00:25,840
kevin fryer he's with noah the national

12
00:00:29,910 --> 00:00:28,240
oceanic and atmospheric administration

13
00:00:31,189 --> 00:00:29,920

great to have you here kevin great to be

14
00:00:32,870 --> 00:00:31,199
here and thank you for having me it's

15
00:00:34,950 --> 00:00:32,880
kind of cold though a little windy a

16
00:00:36,310 --> 00:00:34,960
little windy absolutely i think that's

17
00:00:38,389 --> 00:00:36,320
going to be the biggest concern for the

18
00:00:40,549 --> 00:00:38,399
launch today but so far we are 80

19
00:00:41,990 --> 00:00:40,559
percent go so i hope that we can see

20
00:00:44,229 --> 00:00:42,000
this thing launched yeah that's great

21
00:00:46,150 --> 00:00:44,239
news kevin is here because ghost t is a

22
00:00:48,549 --> 00:00:46,160
noaa mission nasa and noaa have been

23
00:00:50,470 --> 00:00:48,559
launching those satellites since 1975

24
00:00:52,869 --> 00:00:50,480
right yeah it's an amazing relationship

25
00:00:54,950 --> 00:00:52,879
that we've been able to have with nasa

26
00:00:56,470 --> 00:00:54,960
um over the past 50 years the one thing

27
00:00:58,790 --> 00:00:56,480
we can say is that we've actually saved

28
00:01:01,110 --> 00:00:58,800
lives as a result of that we've also

29
00:01:03,029 --> 00:01:01,120
obviously moved the science forward with

30
00:01:04,469 --> 00:01:03,039
with advanced satellites but for the

31
00:01:06,870 --> 00:01:04,479
most part what we like to hang our hat

32
00:01:09,830 --> 00:01:06,880
on is that we save lives yeah ghosty is

33
00:01:11,270 --> 00:01:09,840
the third in a series called goes-r you

34
00:01:12,550 --> 00:01:11,280
know you're the chief of staff of that

35
00:01:14,310 --> 00:01:12,560
program can you tell us a little bit

36
00:01:15,990 --> 00:01:14,320
about that series sure within the

37
00:01:17,429 --> 00:01:16,000
program we like to say that not only can

38
00:01:19,830 --> 00:01:17,439

we provide you with a big picture but we

39
00:01:21,510 --> 00:01:19,840
can also read the fine print again being

40
00:01:23,350 --> 00:01:21,520
one of the most sophisticated satellites

41
00:01:25,350 --> 00:01:23,360
in the geostationary orbit our

42
00:01:27,670 --> 00:01:25,360
capabilities are basically to provide

43
00:01:29,030 --> 00:01:27,680
you with a constant view of the earth in

44
00:01:30,149 --> 00:01:29,040
our case we're able to look at half of

45
00:01:32,149 --> 00:01:30,159
the globe

46
00:01:33,749 --> 00:01:32,159
and in doing so we're also able to

47
00:01:35,910 --> 00:01:33,759
inform you on the environmental changes

48
00:01:37,670 --> 00:01:35,920
over time so we're so ghosty is going to

49
00:01:39,270 --> 00:01:37,680
be looking at what happens here on earth

50
00:01:40,870 --> 00:01:39,280
in terms of terrestrial weather but also

51
00:01:42,310 --> 00:01:40,880
space weather right that's another

52
00:01:43,910 --> 00:01:42,320
reason why we're incredibly excited

53
00:01:46,310 --> 00:01:43,920
about this package that we'll be able to

54
00:01:48,389 --> 00:01:46,320
launch today not only are we improving

55
00:01:50,469 --> 00:01:48,399
what we can see on earth but also what

56
00:01:51,830 --> 00:01:50,479
affects us from space and space weather

57
00:01:53,749 --> 00:01:51,840
does really affect us i learned that

58
00:01:55,190 --> 00:01:53,759
while i was researching this mission so

59
00:01:57,030 --> 00:01:55,200
i'm interested to hear more about that

60
00:01:59,310 --> 00:01:57,040
and we will learn more about it later in

61
00:02:02,149 --> 00:01:59,320
this broadcast now goes stands for

62
00:02:04,789 --> 00:02:02,159
geostationary operational environmental

63
00:02:06,789 --> 00:02:04,799

satellites geostationary refers to where

64
00:02:08,070 --> 00:02:06,799
and how the satellite will orbit the

65
00:02:10,070 --> 00:02:08,080
earth so this might be a little

66
00:02:11,430 --> 00:02:10,080
difficult to understand unless you see

67
00:02:13,270 --> 00:02:11,440
it right so this is why we brought some

68
00:02:15,430 --> 00:02:13,280
props here today kevin let's start off

69
00:02:17,510 --> 00:02:15,440
by just talking about how you determine

70
00:02:19,350 --> 00:02:17,520
a satellite orbit so it's really

71
00:02:20,790 --> 00:02:19,360
determined by its overall role right

72
00:02:23,589 --> 00:02:20,800
what is the job of that particular

73
00:02:25,830 --> 00:02:23,599
satellite so in case of polar orbiters

74
00:02:28,070 --> 00:02:25,840
they typically will rotate

75
00:02:30,550 --> 00:02:28,080
along the poles and their job is

76
00:02:32,229 --> 00:02:30,560
basically to image the entire planet as

77
00:02:34,229 --> 00:02:32,239
it planet rotates underneath it so there

78
00:02:36,070 --> 00:02:34,239
is a there is a time frame for which

79
00:02:38,390 --> 00:02:36,080
they can provide you a global image and

80
00:02:40,070 --> 00:02:38,400
so again in a low earth orbit that is

81
00:02:42,309 --> 00:02:40,080
why you'll see those particular

82
00:02:45,350 --> 00:02:42,319
satellites used but the geostationary

83
00:02:47,990 --> 00:02:45,360
orbit it has to be in a fixed place

84
00:02:49,670 --> 00:02:48,000
so in the sky at all times right correct

85
00:02:51,509 --> 00:02:49,680
and actually to achieve that you have to

86
00:02:53,750 --> 00:02:51,519
be 22 000

87
00:02:56,470 --> 00:02:53,760
miles above the planet and as a result

88
00:02:58,869 --> 00:02:56,480

so it can actually spin with the earth

89
00:03:00,949 --> 00:02:58,879
as it continues to rotate so relative to

90
00:03:02,790 --> 00:03:00,959
your position on earth you will always

91
00:03:04,630 --> 00:03:02,800
see this particular satellite in its

92
00:03:06,710 --> 00:03:04,640
place so that's why we say it will keep

93
00:03:08,630 --> 00:03:06,720
continuous watch over the western

94
00:03:10,229 --> 00:03:08,640
hemisphere with a second ghost satellite

95
00:03:11,670 --> 00:03:10,239
right absolutely so between the two of

96
00:03:13,430 --> 00:03:11,680
them they'll be able to cover this

97
00:03:14,630 --> 00:03:13,440
portion of the hemisphere we're talking

98
00:03:15,990 --> 00:03:14,640
about from

99
00:03:17,509 --> 00:03:16,000
western africa all the way to new

100
00:03:20,309 --> 00:03:17,519
zealand all right and ghost goes-t will

101
00:03:22,390 --> 00:03:20,319
reach that geostationary orbit on march

102
00:03:24,710 --> 00:03:22,400
12th and now let's take a closer look at

103
00:03:28,630 --> 00:03:24,720
the satellite goes-t is the size of a

104
00:03:31,509 --> 00:03:28,640
small school bus and weighs over 6 000

105
00:03:32,710 --> 00:03:31,519
pounds it has a five-panel solar array

106
00:03:34,309 --> 00:03:32,720
which you see there it's the one that's

107
00:03:36,390 --> 00:03:34,319
kind of swinging out

108
00:03:38,470 --> 00:03:36,400
they'll produce more than five thousand

109
00:03:41,430 --> 00:03:38,480
watts of energy which is the same amount

110
00:03:42,630 --> 00:03:41,440
needed to power your home's central ac

111
00:03:45,350 --> 00:03:42,640
system

112
00:03:47,270 --> 00:03:45,360
goes-t has six advanced instruments that

113
00:03:49,990 --> 00:03:47,280

can analyze weather hazards and

114
00:03:52,070 --> 00:03:50,000
environmental conditions

115
00:03:54,229 --> 00:03:52,080
the plan is for goes-t to replace one of

116
00:03:56,789 --> 00:03:54,239
two goes satellites already in orbit