



WINDS WINDS **MISSION**

The Atmospheric Molecular Mission (WINDS)

WINDS is a NASA-led mission to study the atmosphere of Mars. The mission will consist of a Mars Reconnaissance Orbiter (MRO) and a Mars Science Laboratory (MSL) rover. WINDS will use a variety of instruments to study the atmosphere, including a laser interferometer to measure the refractive index of the atmosphere, a microwave radiometer to measure the temperature profile, and a laser Doppler velocimeter to measure the wind speed and direction. WINDS will also study the interaction between the atmosphere and the surface of Mars.

The Mars Spectral

The Mars Spectral instrument will study the atmosphere of Mars by measuring the absorption of solar radiation by the atmosphere. The instrument will consist of an entrance slit, a dispersive element, a detector array, and a readout system. The instrument will be mounted on the MRO and will observe the atmosphere of Mars from an altitude of approximately 300 km. The instrument will have a field of view of approximately 10 degrees and a resolution of approximately 1 km.

WINDS

1
00:00:07,749 --> 00:00:05,110
thank you thank you great okay thank you

2
00:00:10,230 --> 00:00:07,759
very much for changing your schedule so

3
00:00:13,589 --> 00:00:10,240
we could be together this is great right

4
00:00:14,709 --> 00:00:13,599
okay let's go and see your satellite yes

5
00:00:17,590 --> 00:00:14,719
okay

6
00:00:23,109 --> 00:00:17,600
some of this data that we get here is uh

7
00:00:23,119 --> 00:00:36,229
it's getting ready to be tested

8
00:00:40,069 --> 00:00:38,389
sometimes as close as 10 kilometers

9
00:00:41,750 --> 00:00:40,079
sometimes you spread it out to a couple

10
00:00:43,670 --> 00:00:41,760
hundred depends on the scientists who

11
00:00:45,590 --> 00:00:43,680
are watching all the time

12
00:00:47,270 --> 00:00:45,600
as they look for this phenomenon these

13
00:00:49,029 --> 00:00:47,280

are spinning spacecrafts each one of

14

00:00:51,270 --> 00:00:49,039

these spins at 3rp the aerospace

15

00:00:53,270 --> 00:00:51,280

corporation even even partners in

16

00:00:54,709 --> 00:00:53,280

austria

17

00:00:56,069 --> 00:00:54,719

we're storing them up on the mezzanine

18

00:00:58,470 --> 00:00:56,079

you can see all the

19

00:01:05,189 --> 00:00:58,480

containers up there so

20

00:01:09,590 --> 00:01:07,030

we have a number of projects going on

21

00:01:12,630 --> 00:01:09,600

about 20 in development roughly

22

00:01:14,789 --> 00:01:12,640

and most of them are impacted uh all of

23

00:01:16,070 --> 00:01:14,799

them were impacted the only one we were

24

00:01:18,789 --> 00:01:16,080

able to

25

00:01:20,550 --> 00:01:18,799

maintain pretty much on schedule was

26

00:01:22,630 --> 00:01:20,560

maven that's the one that's going to

27

00:01:25,350 --> 00:01:22,640

mars it's going to launch in

28

00:01:27,510 --> 00:01:25,360

in on november 18th is the current

29

00:01:30,310 --> 00:01:27,520

launch date

30

00:01:32,069 --> 00:01:30,320

first of all how do you spell belief

31

00:01:34,950 --> 00:01:32,079

it's called work

32

00:01:38,149 --> 00:01:34,960

it is a tremendous relief to see the men

33

00:01:41,030 --> 00:01:38,159

and women who work at goddard

34

00:01:43,590 --> 00:01:41,040

back on the job and getting paid for the

35

00:01:46,310 --> 00:01:43,600

work they do

36

00:01:48,710 --> 00:01:46,320

whether you are a facilities manager or

37

00:01:51,030 --> 00:01:48,720

whether you're an astrophysicist we want

38

00:01:52,389 --> 00:01:51,040

to say thank you for what you do because

39

00:01:55,030 --> 00:01:52,399

nasa's work

40

00:01:56,469 --> 00:01:55,040

really belongs to not only the united

41

00:01:59,030 --> 00:01:56,479

states of america

42

00:02:07,270 --> 00:01:59,040

but it gives the information it works

43

00:02:13,030 --> 00:02:10,229

thank you thank you great okay

44

00:02:15,030 --> 00:02:13,040

long time no see glad to see you back at

45

00:02:16,470 --> 00:02:15,040

work

46

00:02:18,150 --> 00:02:16,480

you had to be back

47

00:02:20,830 --> 00:02:18,160

how are you doing

48

00:02:22,470 --> 00:02:20,840

thank you very much for changing your

49

00:02:23,830 --> 00:02:22,480

schedule so we could be together this

50

00:02:27,350 --> 00:02:23,840

was great great

51
00:02:29,510 --> 00:02:27,360
okay let's go and see your satellite yes

52
00:02:32,150 --> 00:02:29,520
incarnation this is basically kind of

53
00:02:33,589 --> 00:02:32,160
going in parallel with the coastline of

54
00:02:36,550 --> 00:02:33,599
the us so

55
00:02:39,589 --> 00:02:36,560
some of this data that we get here is uh

56
00:02:41,430 --> 00:02:39,599
is very useful to uh to noaa because uh

57
00:02:44,630 --> 00:02:41,440
requires so low we have very high

58
00:02:45,830 --> 00:02:44,640
specific precision the more accurate you

59
00:02:47,990 --> 00:02:45,840
can hear

60
00:02:49,650 --> 00:02:48,000
in terms of when they try to tell

61
00:02:58,070 --> 00:02:49,660
everybody to start

62
00:02:58,080 --> 00:03:11,270
hi everybody

63
00:03:15,110 --> 00:03:13,350

sometimes as close as 10 kilometers

64

00:03:16,790 --> 00:03:15,120

sometimes you spread it out to a couple

65

00:03:18,710 --> 00:03:16,800

hundred depends on the scientists who

66

00:03:20,790 --> 00:03:18,720

are watching all the time

67

00:03:22,390 --> 00:03:20,800

as they look for this phenomenon so

68

00:03:24,309 --> 00:03:22,400

spinning spacecraft so each one of these

69

00:03:27,030 --> 00:03:24,319

spins with three rpms but while these

70

00:03:29,270 --> 00:03:27,040

look large when they're out we deploy 60

71

00:03:31,150 --> 00:03:29,280

meters booms for you

72

00:03:38,229 --> 00:03:31,160

essentially managing that protecting

73

00:03:42,390 --> 00:03:39,750

we're storing them up on the mezzanine

74

00:03:43,509 --> 00:03:42,400

you can see all the containers up there