



SPACESTATION
LIVE

1
00:00:10,230 --> 00:00:08,310
this is mission control houston american

2
00:00:12,310 --> 00:00:10,240
students who are working with other

3
00:00:13,830 --> 00:00:12,320
students as far away as finland will

4
00:00:15,829 --> 00:00:13,840
soon be watching astronauts conduct

5
00:00:17,670 --> 00:00:15,839
their 17 experiments onboard the

6
00:00:19,109 --> 00:00:17,680
international space station

7
00:00:20,550 --> 00:00:19,119
these studies

8
00:00:22,710 --> 00:00:20,560
looking at everything from protein

9
00:00:25,029 --> 00:00:22,720
crystals to plant growth

10
00:00:26,630 --> 00:00:25,039
all the way to space radiation students

11
00:00:28,950 --> 00:00:26,640
devised the experiments built the

12
00:00:31,349 --> 00:00:28,960
hardware and watched as the experiment

13
00:00:33,670 --> 00:00:31,359

launched on the recent orbital atk cargo

14

00:00:35,110 --> 00:00:33,680

mission nasa commentator lori meg spoke

15

00:00:39,430 --> 00:00:35,120

with their school sponsor about the

16

00:00:41,990 --> 00:00:41,190

we have all kinds of experiments we have

17

00:00:43,590 --> 00:00:42,000

from

18

00:00:45,910 --> 00:00:43,600

protein crystallization experiments

19

00:00:49,430 --> 00:00:45,920

without refrigeration

20

00:00:51,029 --> 00:00:49,440

uh we have passed a plant pathology

21

00:00:53,430 --> 00:00:51,039

actually inject plants make sure that

22

00:00:54,630 --> 00:00:53,440

they're not they're basically immune to

23

00:00:56,310 --> 00:00:54,640

disease

24

00:00:58,310 --> 00:00:56,320

we have geiger counters that measure

25

00:01:00,310 --> 00:00:58,320

radiation

26
00:01:02,229 --> 00:01:00,320
we have plating experiments we're

27
00:01:04,789 --> 00:01:02,239
actually planting

28
00:01:07,670 --> 00:01:04,799
silver in space

29
00:01:09,030 --> 00:01:07,680
we actually have six from our school

30
00:01:10,630 --> 00:01:09,040
one from our junior high and the

31
00:01:12,469 --> 00:01:10,640
remaining from other partner schools a

32
00:01:13,990 --> 00:01:12,479
total of nine other schools

33
00:01:16,310 --> 00:01:14,000
all the way from

34
00:01:17,990 --> 00:01:16,320
san diego to finland

35
00:01:20,390 --> 00:01:18,000
so what's it like

36
00:01:22,550 --> 00:01:20,400
for high school students to be

37
00:01:24,550 --> 00:01:22,560
building something for space and and

38
00:01:26,870 --> 00:01:24,560

testing something in space

39

00:01:28,870 --> 00:01:26,880

oh it's a very unique in today's

40

00:01:31,030 --> 00:01:28,880

environment uh the students don't

41

00:01:32,789 --> 00:01:31,040

normally get an opportunity to actually

42

00:01:35,429 --> 00:01:32,799

use their hands they learn math they

43

00:01:36,789 --> 00:01:35,439

learn science of all kinds but never get

44

00:01:38,550 --> 00:01:36,799

to apply it

45

00:01:41,270 --> 00:01:38,560

here's an opportunity for the students

46

00:01:44,069 --> 00:01:41,280

to actually apply as a team

47

00:01:46,789 --> 00:01:44,079

as a goal and to do all this in a period

48

00:01:48,469 --> 00:01:46,799

in the nine months of the school year

49

00:01:50,469 --> 00:01:48,479

we actually have seventh graders who are

50

00:01:52,710 --> 00:01:50,479

able to build these experiments to let

51
00:01:55,510 --> 00:01:52,720
the experiment build the experiment test

52
00:01:58,630 --> 00:01:55,520
the sent to space and return and give a

53
00:02:00,550 --> 00:01:58,640
report on it before they go on vacation

54
00:02:01,590 --> 00:02:00,560
that's wild

55
00:02:08,389 --> 00:02:01,600
so

56
00:02:09,589 --> 00:02:08,399
17 yes

57
00:02:11,510 --> 00:02:09,599
and

58
00:02:13,750 --> 00:02:11,520
what was that like they came back they

59
00:02:16,710 --> 00:02:13,760
they found results they

60
00:02:17,589 --> 00:02:16,720
what we do is we get real-time data from

61
00:02:25,030 --> 00:02:17,599
the

62
00:02:26,949 --> 00:02:25,040
actually get what you expect or not if

63
00:02:29,110 --> 00:02:26,959

they don't get that also which is

64

00:02:30,949 --> 00:02:29,120

normally the case

65

00:02:33,110 --> 00:02:30,959

because in space obviously there's no up

66

00:02:35,430 --> 00:02:33,120

and there's no down so you constantly

67

00:02:38,070 --> 00:02:35,440

get some very very strange results

68

00:02:40,229 --> 00:02:38,080

especially the junior hires they

69

00:02:41,750 --> 00:02:40,239

come up with some phenomenal experiments

70

00:02:43,270 --> 00:02:41,760

you would never think that a junior

71

00:02:43,990 --> 00:02:43,280

would be able to do

72

00:02:45,670 --> 00:02:44,000

and

73

00:02:47,350 --> 00:02:45,680

with the results of that sometimes

74

00:02:49,670 --> 00:02:47,360

they're kind of mind-boggling

75

00:02:51,350 --> 00:02:49,680

why for you personally is this important

76
00:02:53,190 --> 00:02:51,360
it's because it's an opportunity to give

77
00:02:55,589 --> 00:02:53,200
back

78
00:02:57,030 --> 00:02:55,599
my dad before he passed away

79
00:02:58,710 --> 00:02:57,040
had all these lists for things for me to

80
00:03:00,149 --> 00:02:58,720
do and i've done them all

81
00:03:02,710 --> 00:03:00,159
except the last and most important

82
00:03:04,390 --> 00:03:02,720
things is whatever you've learned

83
00:03:06,470 --> 00:03:04,400
either naturally

84
00:03:09,670 --> 00:03:06,480
by your abilities or what you've learned

85
00:03:10,869 --> 00:03:09,680
in life give back to society

86
00:03:12,070 --> 00:03:10,879
and there's four of us that are doing

87
00:03:13,190 --> 00:03:12,080
this at valley christian high school

88
00:03:15,910 --> 00:03:13,200

right now

89

00:03:18,550 --> 00:03:15,920

we're donating our time and effort

90

00:03:20,790 --> 00:03:18,560

to get the kids into space what's the

91

00:03:23,030 --> 00:03:20,800

reaction been from the students and one

92

00:03:25,509 --> 00:03:23,040

important thing that they said to me is

93

00:03:27,589 --> 00:03:25,519

our experiments could be gone

94

00:03:28,869 --> 00:03:27,599

but our learning experience