



1
00:00:39,190 --> 00:00:37,270
welcome back to 90's daybreak high above

2
00:00:40,709 --> 00:00:39,200
us in space this morning the astronauts

3
00:00:42,549 --> 00:00:40,719
aboard the shuttle columbia are taking a

4
00:00:44,790 --> 00:00:42,559
break from their nonstop scientific

5
00:00:47,110 --> 00:00:44,800
research they're scheduled to end the 16

6
00:00:48,630 --> 00:00:47,120
day mission on sunday as colombia orbits

7
00:00:50,549 --> 00:00:48,640
the earth the crew and ground

8
00:00:52,630 --> 00:00:50,559
controllers have been conducting fluid

9
00:00:54,709 --> 00:00:52,640
crystal and other experiments almost

10
00:00:56,549 --> 00:00:54,719
around the clock but this morning while

11
00:00:57,830 --> 00:00:56,559
there is a short break in the action up

12
00:01:00,470 --> 00:00:57,840
there we have the good fortune to be

13
00:01:02,470 --> 00:01:00,480

joined in a live hookup through nasa by

14

00:01:04,549 --> 00:01:02,480

shuttle astronaut kent romiger who is

15

00:01:07,350 --> 00:01:04,559

from del norte colorado a small town in

16

00:01:08,950 --> 00:01:07,360

the san luis valley good morning to you

17

00:01:10,469 --> 00:01:08,960

before we get started i want to good

18

00:01:12,469 --> 00:01:10,479

morning to you all

19

00:01:15,429 --> 00:01:12,479

do you have any messages for friends or

20

00:01:17,030 --> 00:01:15,439

family here in colorado

21

00:01:18,630 --> 00:01:17,040

hey i'd just like to thank everybody in

22

00:01:19,990 --> 00:01:18,640

my hometown del oro colorado and

23

00:01:22,469 --> 00:01:20,000

actually the whole valley for all the

24

00:01:24,469 --> 00:01:22,479

support i understand when we went over

25

00:01:25,990 --> 00:01:24,479

three hours after launch the

26

00:01:28,550 --> 00:01:26,000

kids from my high school were on the

27

00:01:29,990 --> 00:01:28,560

field with a sign that said hi kent

28

00:01:31,510 --> 00:01:30,000

i wasn't able to see it but i've got

29

00:01:33,270 --> 00:01:31,520

photos of it maybe in the photos i'll be

30

00:01:35,030 --> 00:01:33,280

able to it'll show up

31

00:01:36,710 --> 00:01:35,040

great yeah they were i guess it was

32

00:01:39,350 --> 00:01:36,720

pretty neat well yesterday on one of our

33

00:01:41,109 --> 00:01:39,360

newscasts we asked viewers to call in

34

00:01:42,710 --> 00:01:41,119

and give us their questions whatever

35

00:01:44,310 --> 00:01:42,720

they would like to ask you so we'd like

36

00:01:46,389 --> 00:01:44,320

to pose a couple of them to you this

37

00:01:48,870 --> 00:01:46,399

morning one viewer wanted to know what's

38

00:01:50,630 --> 00:01:48,880

it like in outer space is it cold hot

39

00:01:54,069 --> 00:01:50,640

and how does it feel to float around up

40

00:01:56,870 --> 00:01:55,910

uh the floating around is tremendous

41

00:01:58,550 --> 00:01:56,880

i'll try to show you a little bit of

42

00:02:00,469 --> 00:01:58,560

that now you can see i'm floating right

43

00:02:02,069 --> 00:02:00,479

here and it really is one of the neatest

44

00:02:03,990 --> 00:02:02,079

feelings i've ever had

45

00:02:05,590 --> 00:02:04,000

as far as colder hot inside the space

46

00:02:07,510 --> 00:02:05,600

shuttle we keep the temperature very

47

00:02:10,229 --> 00:02:07,520

reasonable similar to what you have

48

00:02:12,390 --> 00:02:10,239

there on earth if i were outside if i

49

00:02:14,949 --> 00:02:12,400

were not in the sun it would be close to

50

00:02:16,390 --> 00:02:14,959

100 degrees negative fahrenheit and if i

51
00:02:18,229 --> 00:02:16,400
were in the sun it could be several

52
00:02:20,710 --> 00:02:18,239
hundred degrees warmer than that but

53
00:02:22,229 --> 00:02:20,720
inside here it's very comfortable

54
00:02:24,150 --> 00:02:22,239
can't another viewer wants to know what

55
00:02:25,750 --> 00:02:24,160
does it feel like when you lift off or

56
00:02:29,910 --> 00:02:25,760
re-enter what does it feel like when you

57
00:02:33,910 --> 00:02:31,750
it's a pretty amazing sensation because

58
00:02:35,030 --> 00:02:33,920
when we lift off the there's a lot of

59
00:02:37,509 --> 00:02:35,040
rumbling

60
00:02:38,470 --> 00:02:37,519
a lot of vibrations and acceleration and

61
00:02:40,309 --> 00:02:38,480
as a matter of fact the most

62
00:02:42,470 --> 00:02:40,319
acceleration we have is right before we

63
00:02:44,390 --> 00:02:42,480

were in orbit so we're accelerating it

64

00:02:47,830 --> 00:02:44,400

three times meaning that if i weighed

65

00:02:49,750 --> 00:02:47,840

200 pounds on earth i weigh 600 pounds

66

00:02:51,509 --> 00:02:49,760

just before the engines cut off and when

67

00:02:53,830 --> 00:02:51,519

they cut off i go from weighing 600

68

00:02:55,670 --> 00:02:53,840

pounds to zero pounds and free floating

69

00:02:57,190 --> 00:02:55,680

it's quite a sensation

70

00:02:59,430 --> 00:02:57,200

i can't imagine it's better than the

71

00:03:01,030 --> 00:02:59,440

best roller coaster i would guess well

72

00:03:02,630 --> 00:03:01,040

let's ask you one of the viewers wanted

73

00:03:04,790 --> 00:03:02,640

to know what kind of experiments you're

74

00:03:08,790 --> 00:03:04,800

involved with and how that might affect

75

00:03:12,229 --> 00:03:10,949

the several experiments on the mid deck

76

00:03:13,910 --> 00:03:12,239

i'm involved with and one of them is

77

00:03:15,670 --> 00:03:13,920

called astral culture which

78

00:03:17,990 --> 00:03:15,680

interestingly enough is growing five

79

00:03:19,830 --> 00:03:18,000

tuber potatoes and the sandless valley

80

00:03:21,990 --> 00:03:19,840

is potato country but the reason we're

81

00:03:24,710 --> 00:03:22,000

doing this is on this space station

82

00:03:26,390 --> 00:03:24,720

coming up and extended space travel

83

00:03:27,830 --> 00:03:26,400

it's a great idea to have plants and be

84

00:03:29,830 --> 00:03:27,840

able to grow our own food because the

85

00:03:31,990 --> 00:03:29,840

food takes advantage and cleans up the

86

00:03:33,830 --> 00:03:32,000

air takes the co2 out of it so we're

87

00:03:35,670 --> 00:03:33,840

using one of those experiments

88

00:03:37,589 --> 00:03:35,680

to see how the potatoes form in space

89

00:03:39,830 --> 00:03:37,599

see if their starch content is correct

90

00:03:41,509 --> 00:03:39,840

as well as the technology using it as a

91

00:03:44,070 --> 00:03:41,519

technology demonstrator to see the most

92

00:03:45,589 --> 00:03:44,080

efficient way to grow stuff in space

93

00:03:46,949 --> 00:03:45,599

kent one more question another viewer

94

00:03:48,789 --> 00:03:46,959

wants to know what kinds of things do

95

00:03:50,149 --> 00:03:48,799

you see up there as far as i i know

96

00:03:54,149 --> 00:03:50,159

you're surrounded by stars but have you

97

00:03:57,910 --> 00:03:56,390

i haven't seen comets but what is really

98

00:03:59,429 --> 00:03:57,920

interesting from up here are falling

99

00:04:01,509 --> 00:03:59,439

stars in

100

00:04:03,509 --> 00:04:01,519

the falling stars are below us so when

101
00:04:06,149 --> 00:04:03,519
we look at the earth at night we'll see

102
00:04:08,550 --> 00:04:06,159
these huge bright green and blue stars

103
00:04:09,830 --> 00:04:08,560
that burn it seems like for close to 10

104
00:04:11,750 --> 00:04:09,840
seconds as they're entering the

105
00:04:13,270 --> 00:04:11,760
atmosphere and blowing up

106
00:04:14,949 --> 00:04:13,280
well that's just terrific we want to

107
00:04:16,710 --> 00:04:14,959
thank you for joining us this morning i

108
00:04:17,590 --> 00:04:16,720
know your options are limited up there

109
00:04:19,270 --> 00:04:17,600
but you're going to do any

110
00:04:21,909 --> 00:04:19,280
trick-or-treating at all today i mean it

111
00:04:25,189 --> 00:04:21,919
is halloween

112
00:04:26,870 --> 00:04:25,199
costumes hopefully later on tonight

113
00:04:29,350 --> 00:04:26,880

we'll send down some video of

114

00:04:30,870 --> 00:04:29,360

our halloween party on board

115

00:04:32,870 --> 00:04:30,880

okay

116

00:04:34,710 --> 00:04:32,880

thank you for joining us we have lots of

117

00:04:36,629 --> 00:04:34,720

fans in colorado that are pulling for

118

00:04:38,950 --> 00:04:36,639

you have a safe return to earth next

119

00:04:40,230 --> 00:04:38,960

sunday i guess have a good one thanks

120

00:04:41,670 --> 00:04:40,240

kent

121

00:04:42,870 --> 00:04:41,680

happy halloween and thanks for all the

122

00:08:59,509 --> 00:04:42,880

support

123

00:11:22,870 --> 00:09:01,350

give me a minute

124

00:11:22,880 --> 00:11:58,870

redeploy the drop

125

00:11:58,880 --> 00:12:03,670

copy that two and three

126

00:12:06,870 --> 00:12:05,110

that's affirmative allen you'll probably

127

00:12:11,190 --> 00:12:06,880

still need to look at the z-axis and