



1
00:00:05,269 --> 00:00:03,510
we spend a lot of time here talking

2
00:00:06,869 --> 00:00:05,279
about the various experiments that are

3
00:00:08,549 --> 00:00:06,879
going on onboard the space station in

4
00:00:09,750 --> 00:00:08,559
particular the new ones that come up to

5
00:00:11,030 --> 00:00:09,760
the station but some of them have

6
00:00:13,270 --> 00:00:11,040
actually been around for quite a long

7
00:00:14,709 --> 00:00:13,280
time and one of those is the earth cam

8
00:00:16,870 --> 00:00:14,719
experiment which is also known as the

9
00:00:18,710 --> 00:00:16,880
sally ride earth cam experiment

10
00:00:19,670 --> 00:00:18,720
so today we have carrie goulart who is

11
00:00:20,870 --> 00:00:19,680
uh

12
00:00:23,109 --> 00:00:20,880
has actually been involved in the

13
00:00:24,870 --> 00:00:23,119

experiment for for not only um her

14

00:00:26,790 --> 00:00:24,880

career here at nasa but even before she

15

00:00:27,750 --> 00:00:26,800

arrived at nasa as a college student and

16

00:00:30,630 --> 00:00:27,760

she's going to tell us a little bit

17

00:00:32,389 --> 00:00:30,640

about that thanks for joining us Carrie

18

00:00:33,670 --> 00:00:32,399

it's a pleasure to be here all right why

19

00:00:34,790 --> 00:00:33,680

don't you start out telling us just a

20

00:00:36,870 --> 00:00:34,800

little bit more about the earth game

21

00:00:38,630 --> 00:00:36,880

experiment what what is it about

22

00:00:40,869 --> 00:00:38,640

okay earth game stands for earth

23

00:00:42,389 --> 00:00:40,879

knowledge applied to middle schools and

24

00:00:44,950 --> 00:00:42,399

essentially it's it's a very simple

25

00:00:47,110 --> 00:00:44,960

experiment there's a camera that the

26
00:00:49,270 --> 00:00:47,120
crew sets up on board the space station

27
00:00:51,270 --> 00:00:49,280
in one of the windows and it's connected

28
00:00:53,830 --> 00:00:51,280
to a laptop

29
00:00:54,869 --> 00:00:53,840
that runs the earthkam software on the

30
00:00:57,590 --> 00:00:54,879
ground

31
00:00:59,830 --> 00:00:57,600
elementary and middle school students to

32
00:01:02,310 --> 00:00:59,840
have access to a website that allows

33
00:01:05,509 --> 00:01:02,320
them to view the orbit tracks of the

34
00:01:07,109 --> 00:01:05,519
space station and based on that they

35
00:01:10,550 --> 00:01:07,119
look at where it's passing over the

36
00:01:12,710 --> 00:01:10,560
earth and they choose to select pictures

37
00:01:15,270 --> 00:01:12,720
from that orbit track and those pictures

38
00:01:17,749 --> 00:01:15,280

get put into a file which is sent up

39

00:01:20,149 --> 00:01:17,759

to the laptop and the software reads

40

00:01:21,429 --> 00:01:20,159

that file and tells the camera when to

41

00:01:22,469 --> 00:01:21,439

take pictures

42

00:01:23,590 --> 00:01:22,479

so

43

00:01:25,109 --> 00:01:23,600

then

44

00:01:27,749 --> 00:01:25,119

once the pictures are back on the ground

45

00:01:29,030 --> 00:01:27,759

the students are able to

46

00:01:31,190 --> 00:01:29,040

view

47

00:01:34,710 --> 00:01:31,200

these pictures actually anybody at this

48

00:01:38,830 --> 00:01:34,720

point can view the pictures and they use

49

00:01:41,910 --> 00:01:38,840

these photos to study anything from

50

00:01:42,789 --> 00:01:41,920

history to ecology

51
00:01:44,149 --> 00:01:42,799
to

52
00:01:47,749 --> 00:01:44,159
even

53
00:01:49,590 --> 00:01:47,759
orbital dynamics and mathematics because

54
00:01:51,429 --> 00:01:49,600
certain knowledge even though the orbit

55
00:01:53,590 --> 00:01:51,439
tracks are provided for the students a

56
00:01:55,590 --> 00:01:53,600
certain knowledge of simplified orbital

57
00:01:57,109 --> 00:01:55,600
dynamics is required to

58
00:01:59,830 --> 00:01:57,119
understand

59
00:02:02,149 --> 00:01:59,840
how the space station orbits around the

60
00:02:04,550 --> 00:02:02,159
earth so it's

61
00:02:05,830 --> 00:02:04,560
really meant to encourage

62
00:02:06,550 --> 00:02:05,840
all students

63
00:02:09,350 --> 00:02:06,560

in

64

00:02:10,710 --> 00:02:09,360
to pursue math and science and learn

65

00:02:13,110 --> 00:02:10,720
more about

66

00:02:14,470 --> 00:02:13,120
the earth we all live on in general and

67

00:02:16,390 --> 00:02:14,480
that's got to be a good way to do it

68

00:02:18,150 --> 00:02:16,400
letting them basically take photos from

69

00:02:20,229 --> 00:02:18,160
the international space station has got

70

00:02:22,150 --> 00:02:20,239
got to get them interested in space yes

71

00:02:25,990 --> 00:02:22,160
and there's definitely the cool factor

72

00:02:27,910 --> 00:02:26,000
of knowing that you told something on

73

00:02:29,110 --> 00:02:27,920
board the space station to take this

74

00:02:30,150 --> 00:02:29,120
picture

75

00:02:31,670 --> 00:02:30,160
do you ever get to hear from the

76

00:02:33,830 --> 00:02:31,680

students yourself

77

00:02:35,830 --> 00:02:33,840

yes we do the schools usually put

78

00:02:37,990 --> 00:02:35,840

together a packet

79

00:02:39,910 --> 00:02:38,000

towards the end of the mission

80

00:02:41,830 --> 00:02:39,920

describing themselves and some of the

81

00:02:44,630 --> 00:02:41,840

favorite pictures they've put together

82

00:02:46,070 --> 00:02:44,640

and also thanking the crew and we tried

83

00:02:48,309 --> 00:02:46,080

to get that up

84

00:02:50,550 --> 00:02:48,319

usually about a week after the

85

00:02:52,229 --> 00:02:50,560

completion of the mission

86

00:02:53,830 --> 00:02:52,239

and that's that's great for them and i

87

00:02:55,830 --> 00:02:53,840

guess we've got another round of earth

88

00:02:57,430 --> 00:02:55,840

cam coming up and actually have a a

89

00:02:59,670 --> 00:02:57,440

record number of participants scheduled

90

00:03:02,869 --> 00:02:59,680

this time right yes that's correct we

91

00:03:07,509 --> 00:03:02,879

set up the camera yesterday in node two

92

00:03:11,990 --> 00:03:07,519

and this time around we have 867 schools

93

00:03:13,910 --> 00:03:12,000

with 71 000 over 71 000 students

94

00:03:16,470 --> 00:03:13,920

participating from 51 different

95

00:03:17,430 --> 00:03:16,480

countries that that's that's pretty big

96

00:03:19,990 --> 00:03:17,440

number

97

00:03:21,110 --> 00:03:20,000

yes it is and it seems to grow each time

98

00:03:23,110 --> 00:03:21,120

which is

99

00:03:24,949 --> 00:03:23,120

really nice to see why do you think that

100

00:03:28,550 --> 00:03:24,959

is

101
00:03:31,030 --> 00:03:28,560
like about it do you i guess teachers

102
00:03:32,229 --> 00:03:31,040
like about it too probably well i think

103
00:03:35,509 --> 00:03:32,239
like i said you know there's definitely

104
00:03:36,470 --> 00:03:35,519
the cool factor of uh working with and

105
00:03:39,190 --> 00:03:36,480
and

106
00:03:41,270 --> 00:03:39,200
taking pictures from something that's on

107
00:03:43,750 --> 00:03:41,280
board the space station so

108
00:03:45,030 --> 00:03:43,760
it gives them a little bit of ownership

109
00:03:47,030 --> 00:03:45,040
and then when the pictures come down

110
00:03:50,149 --> 00:03:47,040
they can point to it because it does

111
00:03:52,710 --> 00:03:50,159
identify who requested that picture and

112
00:03:53,990 --> 00:03:52,720
they can point to it and say we took

113
00:03:55,589 --> 00:03:54,000

this picture

114

00:03:58,229 --> 00:03:55,599

we selected this

115

00:04:00,949 --> 00:03:58,239

and then i think the teachers like it

116

00:04:03,429 --> 00:04:00,959

because they can take that aspect of it

117

00:04:04,630 --> 00:04:03,439

and incorporate it into their classroom

118

00:04:05,750 --> 00:04:04,640

into

119

00:04:07,030 --> 00:04:05,760

the

120

00:04:09,750 --> 00:04:07,040

various

121

00:04:12,149 --> 00:04:09,760

subjects and it just really helps make

122

00:04:13,429 --> 00:04:12,159

learning interesting and fun for the

123

00:04:15,270 --> 00:04:13,439

students

124

00:04:16,710 --> 00:04:15,280

okay well how many how many photographs

125

00:04:18,550 --> 00:04:16,720

would you estimate that they'll take

126
00:04:21,349 --> 00:04:18,560
this time around

127
00:04:23,350 --> 00:04:21,359
probably on the order of a couple

128
00:04:26,070 --> 00:04:23,360
thousand at least

129
00:04:28,310 --> 00:04:26,080
wow and how long does it last

130
00:04:31,350 --> 00:04:28,320
usually we go about a week so we set up

131
00:04:33,030 --> 00:04:31,360
yesterday and the camera will come down

132
00:04:35,350 --> 00:04:33,040
saturday morning a couple thousand

133
00:04:38,310 --> 00:04:35,360
photos in just a week

134
00:04:41,430 --> 00:04:38,320
well the camera can take photos during

135
00:04:43,670 --> 00:04:41,440
only during the day pass but usually the

136
00:04:46,310 --> 00:04:43,680
schools since there are so many schools

137
00:04:48,469 --> 00:04:46,320
the camera clicks pretty much

138
00:04:50,070 --> 00:04:48,479

the whole time yeah

139

00:04:51,990 --> 00:04:50,080

well that's great and so now we

140

00:04:53,510 --> 00:04:52,000

mentioned earlier that you basically got

141

00:04:55,990 --> 00:04:53,520

started with this project in college

142

00:04:57,189 --> 00:04:56,000

tell us a little bit about that

143

00:04:58,310 --> 00:04:57,199

well my whole

144

00:05:00,469 --> 00:04:58,320

career

145

00:05:01,830 --> 00:05:00,479

to even how i ended up at nasa

146

00:05:03,270 --> 00:05:01,840

i'm sorry if i'm going a little bit off

147

00:05:05,270 --> 00:05:03,280

subject but

148

00:05:08,469 --> 00:05:05,280

it's really kind of just been

149

00:05:11,029 --> 00:05:08,479

one giant accident in some respects

150

00:05:12,950 --> 00:05:11,039

i sort of fell into the project by

151
00:05:15,909 --> 00:05:12,960
accident when i was

152
00:05:18,390 --> 00:05:15,919
a freshman in college and

153
00:05:21,189 --> 00:05:18,400
uh earthkam or kid set as it was called

154
00:05:23,189 --> 00:05:21,199
at the time was just getting started and

155
00:05:24,629 --> 00:05:23,199
i joined up

156
00:05:26,710 --> 00:05:24,639
and then

157
00:05:28,629 --> 00:05:26,720
from and so i was part of the group and

158
00:05:29,510 --> 00:05:28,639
then from that

159
00:06:32,550 --> 00:05:29,520
i

160
00:06:35,189 --> 00:06:32,560
students and teachers would use to

161
00:06:36,309 --> 00:06:35,199
supplement the pictures and kind of

162
00:06:39,590 --> 00:06:36,319
explain

163
00:06:41,510 --> 00:06:39,600

how the camera and how the space shuttle

164

00:06:43,510 --> 00:06:41,520

orbited the earth and

165

00:06:45,909 --> 00:06:43,520

things like that all right now you get

166

00:06:48,309 --> 00:06:45,919

to see the the program going on and and

167

00:06:50,309 --> 00:06:48,319

reaching even more students that is

168

00:06:51,670 --> 00:06:50,319

correct all right well thank you so much

169

00:06:52,790 --> 00:06:51,680

for uh coming and talking with us and

170

00:06:55,350 --> 00:06:52,800

we're looking forward to see some of

171

00:06:57,350 --> 00:06:55,360

those uh photos um coming up over the

172

00:06:59,189 --> 00:06:57,360

next week i guess thanks again

173

00:07:01,430 --> 00:06:59,199

you're very welcome this is carrie