



esa
European Space Agency



esa



ASTRONAUT
TIM PEAKE

1
00:00:14,470 --> 00:00:12,230
hi everyone i'm tim peake and welcome

2
00:00:16,550 --> 00:00:14,480
aboard the international space station

3
00:00:18,070 --> 00:00:16,560
where we're orbiting earth 16 times

4
00:00:19,910 --> 00:00:18,080
every day

5
00:00:22,070 --> 00:00:19,920
one of the most rewarding activities

6
00:00:23,990 --> 00:00:22,080
that some astronauts undertake on orbit

7
00:00:26,390 --> 00:00:24,000
is to talk to schools using the space

8
00:00:28,310 --> 00:00:26,400
station's ham radio

9
00:00:30,790 --> 00:00:28,320
now these are events that are planned by

10
00:00:32,870 --> 00:00:30,800
aris which is a worldwide group of

11
00:00:35,510 --> 00:00:32,880
amateur radio volunteers who are

12
00:00:38,069 --> 00:00:35,520
dedicated to introducing young people

13
00:00:41,030 --> 00:00:38,079

and students to science technology

14

00:00:42,630 --> 00:00:41,040

engineering and mathematics

15

00:00:45,510 --> 00:00:42,640

now this is the equipment here in the

16

00:00:47,510 --> 00:00:45,520

columbus laboratory which consists of a

17

00:00:49,270 --> 00:00:47,520

handheld radio

18

00:00:52,549 --> 00:00:49,280

a headset

19

00:00:54,229 --> 00:00:52,559

and we also have a ham video unit

20

00:00:57,029 --> 00:00:54,239

now as the international space station

21

00:00:59,110 --> 00:00:57,039

orbits above your location a radio link

22

00:01:00,150 --> 00:00:59,120

is established between the iss and your

23

00:01:02,470 --> 00:01:00,160

school

24

00:01:04,310 --> 00:01:02,480

now because we're traveling at nearly 18

25

00:01:07,350 --> 00:01:04,320

000 miles per hour which is an

26
00:01:09,510 --> 00:01:07,360
incredible 25 times the speed of sound

27
00:01:11,670 --> 00:01:09,520
we usually get about 9 or 10 minutes of

28
00:01:13,270 --> 00:01:11,680
good radio contact before losing the

29
00:01:14,789 --> 00:01:13,280
signal

30
00:01:16,950 --> 00:01:14,799
so about five minutes before the

31
00:01:18,870 --> 00:01:16,960
scheduled start time of the contact i

32
00:01:20,789 --> 00:01:18,880
come into the columbus laboratory and

33
00:01:22,870 --> 00:01:20,799
configure the radio so that i'm on the

34
00:01:25,109 --> 00:01:22,880
correct channel and sometimes i'll set

35
00:01:27,190 --> 00:01:25,119
up the ham video too

36
00:01:29,270 --> 00:01:27,200
just before the predicted time i'll

37
00:01:31,030 --> 00:01:29,280
begin to start calling the school using

38
00:01:32,149 --> 00:01:31,040

the standard amateur radio calling

39

00:01:34,069 --> 00:01:32,159

techniques

40

00:01:37,510 --> 00:01:34,079

for example if the call sign of your

41

00:01:40,310 --> 00:01:37,520

school was gb4 fun i would say golf

42

00:01:43,190 --> 00:01:40,320

bravo 4 foxtrot uniform november this is

43

00:01:45,030 --> 00:01:43,200

golf bravo 1 sierra sierra listening and

44

00:01:46,870 --> 00:01:45,040

standing by

45

00:01:48,950 --> 00:01:46,880

now at your school the radio operator

46

00:01:52,149 --> 00:01:48,960

will be listening for my call but may

47

00:01:53,350 --> 00:01:52,159

also transmit and try to call me as well

48

00:01:55,510 --> 00:01:53,360

you'll probably have a much more

49

00:01:58,069 --> 00:01:55,520

powerful transmitter on the ground than

50

00:02:01,429 --> 00:01:58,079

we have up here on board so i'm likely

51
00:02:04,069 --> 00:02:01,439
to hear you before you hear me

52
00:02:05,510 --> 00:02:04,079
then once we can hear each other

53
00:02:07,190 --> 00:02:05,520
then comes the best bit which is

54
00:02:09,190 --> 00:02:07,200
actually talking to the students and

55
00:02:11,110 --> 00:02:09,200
answering the questions

56
00:02:12,790 --> 00:02:11,120
once i've answered all the questions we

57
00:02:15,910 --> 00:02:12,800
use the remaining time to say goodbye to

58
00:02:17,750 --> 00:02:15,920
each other and in the connection

59
00:02:19,750 --> 00:02:17,760
i'll then spend a few minutes

60
00:02:22,390 --> 00:02:19,760
configuring the radio back into a

61
00:02:24,790 --> 00:02:22,400
re-broadcast mode and then i'll go back

62
00:02:26,710 --> 00:02:24,800
to my day job which is of course doing

63
00:02:28,070 --> 00:02:26,720

science on board the international space

64

00:02:30,309 --> 00:02:28,080

station

65

00:02:33,030 --> 00:02:30,319

iris is a brilliant opportunity for

66

00:02:35,350 --> 00:02:33,040

astronauts to talk to school pupils it's

67

00:02:37,110 --> 00:02:35,360

really rewarding to hear how excited the

68

00:02:39,430 --> 00:02:37,120

students are when they're talking to

69

00:02:41,830 --> 00:02:39,440

somebody up here in space and it's a

70

00:02:43,589 --> 00:02:41,840

true privilege to be able to inspire our