



**INTERNATIONAL SPACE STATION CREW
PREVIEWS SPACE X CRS-23 SCIENCE**

1
00:00:05,430 --> 00:00:03,350
hello and welcome aboard the

2
00:00:07,510 --> 00:00:05,440
international space station i'm nasa

3
00:00:09,750 --> 00:00:07,520
astronaut megan macarthur along with my

4
00:00:12,470 --> 00:00:09,760
crewmate shane kimbrough we are getting

5
00:00:14,230 --> 00:00:12,480
ready for the spacex 23 cargo mission

6
00:00:16,230 --> 00:00:14,240
coming up soon and we're very excited

7
00:00:17,750 --> 00:00:16,240
it's going to be keeping us pretty busy

8
00:00:18,790 --> 00:00:17,760
hey megan let's go show them around the

9
00:00:20,230 --> 00:00:18,800
space station a little bit and we'll

10
00:00:21,990 --> 00:00:20,240
show you where some of these experiments

11
00:00:23,590 --> 00:00:22,000
are going to be done

12
00:00:25,029 --> 00:00:23,600
welcome to the european module called

13
00:00:27,269 --> 00:00:25,039

columbus this is where a lot of the

14

00:00:28,630 --> 00:00:27,279

spacex 23

15

00:00:31,029 --> 00:00:28,640

experiments are going to hang out one of

16

00:00:33,030 --> 00:00:31,039

those is called apex 8 which is going to

17

00:00:35,110 --> 00:00:33,040

study the response to stressors at the

18

00:00:36,950 --> 00:00:35,120

genetic level of plants now they're

19

00:00:38,470 --> 00:00:36,960

going to be really small plants in petri

20

00:00:40,069 --> 00:00:38,480

dishes that we're going to eventually

21

00:00:41,910 --> 00:00:40,079

put into this facility here that's

22

00:00:44,229 --> 00:00:41,920

called veggie it's a veggie plant growth

23

00:00:45,670 --> 00:00:44,239

facility on my last flight i got to grow

24

00:00:47,270 --> 00:00:45,680

lettuce in here and we got to actually

25

00:00:48,869 --> 00:00:47,280

harvest that and eat it so that's pretty

26

00:00:50,950 --> 00:00:48,879

cool one of the things we're trying to

27

00:00:52,869 --> 00:00:50,960

do is to learn how to engineer plants to

28

00:00:54,150 --> 00:00:52,879

grow better in microgravity and what we

29

00:00:56,069 --> 00:00:54,160

learned from that will be able to help

30

00:00:57,750 --> 00:00:56,079

us in the future in space travel but

31

00:00:58,470 --> 00:00:57,760

also help people on earth grow things

32

00:01:00,229 --> 00:00:58,480

better

33

00:01:01,670 --> 00:01:00,239

this isn't the only facility we have on

34

00:01:03,910 --> 00:01:01,680

the international space station to grow

35

00:01:05,189 --> 00:01:03,920

things we have an advanced plant habitat

36

00:01:06,469 --> 00:01:05,199

and currently we're growing chili

37

00:01:09,350 --> 00:01:06,479

peppers in there which we hope to

38

00:01:11,590 --> 00:01:09,360

harvest towards the end of our mission

39

00:01:13,830 --> 00:01:11,600

so now we're in the u.s laboratory which

40

00:01:15,830 --> 00:01:13,840

is called destiny and this is one of our

41

00:01:17,830 --> 00:01:15,840

main areas for conducting science on the

42

00:01:19,030 --> 00:01:17,840

international space station one of the

43

00:01:21,350 --> 00:01:19,040

things that makes the international

44

00:01:23,109 --> 00:01:21,360

space station such a versatile research

45

00:01:25,109 --> 00:01:23,119

lab are the express racks there's a

46

00:01:26,950 --> 00:01:25,119

couple of them right here over my head

47

00:01:28,789 --> 00:01:26,960

and the cool thing about these is that

48

00:01:30,630 --> 00:01:28,799

it allows different researchers from

49

00:01:32,950 --> 00:01:30,640

around the world to send up their own

50

00:01:34,789 --> 00:01:32,960

payload and the express rack provides

51
00:01:36,870 --> 00:01:34,799
the power and data

52
00:01:38,710 --> 00:01:36,880
cooling whatever that particular payload

53
00:01:41,109 --> 00:01:38,720
needs one of the new facilities that

54
00:01:42,950 --> 00:01:41,119
will be coming up on spacex 23 cargo

55
00:01:45,030 --> 00:01:42,960
mission is called the faraday research

56
00:01:47,109 --> 00:01:45,040
facility and it's able to house four

57
00:01:49,510 --> 00:01:47,119
different experiments at once three of

58
00:01:51,670 --> 00:01:49,520
them will house small organisms the

59
00:01:52,910 --> 00:01:51,680
fourth experiment will be a medical

60
00:01:55,510 --> 00:01:52,920
experiment to look at remote

61
00:01:56,630 --> 00:01:55,520
remote-controlled delivery of medication

62
00:01:58,310 --> 00:01:56,640
so that will be an interesting

63
00:01:59,990 --> 00:01:58,320

technology demonstration as well and

64

00:02:01,590 --> 00:02:00,000

we'll be able to install that facility