1
00:00:15,589 --> 00:00:12,870
if i was to go from the space station

2
00:00:19,109 --> 00:00:15,599
then i would want to go out in the space

3
00:00:22,150 --> 00:00:19,119
and suit and want to work on it

4
00:00:26,310 --> 00:00:22,160
i'd like to move around a lot and do

5
00:00:30,870 --> 00:00:28,470
i would first have fun and then i would

6
00:00:32,870 --> 00:00:30,880
go start research on like different like

7
00:00:34,470 --> 00:00:32,880
plants that see how space affects the

8
00:00:36,229 --> 00:00:34,480
plants

9
00:00:37,990 --> 00:00:36,239
i would like to actually go out there

10
00:00:38,869 --> 00:00:38,000
and help hook up and

11
00:00:39,990 --> 00:00:38,879
like

12
00:00:42,310 --> 00:00:40,000
build it

13
00:00:44,389 --> 00:00:42,320

technically this mission is going to add

14
00:00:46,470 --> 00:00:44,399
the capability to provide more power to

15
00:00:47,990 --> 00:00:46,480
the space station to be able to have

16
00:00:49,430 --> 00:00:48,000
more power we have to have more solar

17
00:00:52,150 --> 00:00:49,440
arrays we have to have a place to put

18
00:00:54,229 --> 00:00:52,160
them so extending that central truss

19
00:00:55,670 --> 00:00:54,239
segment out and attaching those solar

20
00:00:57,189 --> 00:00:55,680
arrays will be critical for the future

21
00:00:59,110 --> 00:00:57,199
of the space station

22
00:01:00,869 --> 00:00:59,120
well the s5 truss actually we call it

23
00:01:03,910 --> 00:01:00,879
stubby it's it's a it's a little

24
00:01:06,310 --> 00:01:03,920
structural piece and it uh

25
00:01:08,710 --> 00:01:06,320
it goes on the end of the truss that's

26
00:01:12,070 --> 00:01:08,720
already up there and provides the next

27
00:01:13,590 --> 00:01:12,080
uh structure for attaching the very last

28
00:01:22,230 --> 00:01:13,600
piece on the end of the truss which

29
00:01:27,670 --> 00:01:24,550
it's going to be a really exciting space

30
00:01:29,270 --> 00:01:27,680
walk for us we're both highly trained

31
00:01:30,870 --> 00:01:29,280
space walkers and we've both been to

32
00:01:32,950 --> 00:01:30,880
space but neither one of us has actually

33
00:01:35,590 --> 00:01:32,960
done a space walk before so you can

34
00:01:37,830 --> 00:01:35,600
imagine opening the hatch of the airlock

35
00:01:40,469 --> 00:01:37,840
sticking your head out looking down at

36
00:01:42,950 --> 00:01:40,479
the earth below you traveling 25 times

37
00:01:45,910 --> 00:01:42,960
the speed of sound reaching out and

38
00:01:48,230 --> 00:01:45,920

handrail by handrail moving out to the

39
00:01:50,469 --> 00:01:48,240
extreme limit on the starboard side of

40
00:01:53,270 --> 00:01:50,479
the space station i would say i am the

41
00:01:56,469 --> 00:01:53,280
coordinator i will be the person inside

42
00:01:58,469 --> 00:01:56,479
the iv the intravehicular crew member

43
00:02:00,389 --> 00:01:58,479
i'm kind of the quarterback in a way i'm

44
00:02:02,149 --> 00:02:00,399
keeping the big picture i'm keeping

45
00:02:17,670 --> 00:02:02,159
track of two different crew members

46
00:02:21,589 --> 00:02:19,270
we're going to be doing a remove and

47
00:02:23,990 --> 00:02:21,599
replacement of an old cmg a control

48
00:02:25,190 --> 00:02:24,000
moment gyro and we're bringing up a new

49
00:02:30,309 --> 00:02:25,200
cmg

50
00:02:31,990 --> 00:02:30,319
attitude control it saves the space

51
00:02:34,790 --> 00:02:32,000
station from having to use fuel they use

52
00:02:36,550 --> 00:02:34,800
the cmgs instead for attitude control

53
00:02:39,270 --> 00:02:36,560
and right now i believe they have three

54
00:02:40,790 --> 00:02:39,280
functioning cmgs which is well capable

55
00:02:42,309 --> 00:02:40,800
of operating on those but obviously we

56
00:02:44,229 --> 00:02:42,319
want the fourth one in case another one

57
00:02:45,910 --> 00:02:44,239
fails or has problems

58
00:02:48,390 --> 00:02:45,920
but i think what's really exciting about

59
00:02:51,270 --> 00:02:48,400
the space station program is the station

60
00:02:53,830 --> 00:02:51,280
itself is not only a research platform

61
00:02:55,270 --> 00:02:53,840
it's a technology development platform

62
00:02:57,270 --> 00:02:55,280
all these issues that we face for the

63
00:02:58,869 --> 00:02:57,280

space station are similar issues that

64
00:03:01,030 --> 00:02:58,879
we're going to face on the moon and we

65
00:03:03,030 --> 00:03:01,040
can develop new technologies for

66
00:03:04,869 --> 00:03:03,040
habitability living and working in space

67
00:03:06,949 --> 00:03:04,879
test them out on the space station and