



1  
00:00:04,870 --> 00:00:03,110  
my name is nijud moranci and i'm the

2  
00:00:06,230 --> 00:00:04,880  
mission planning and analysis lead for

3  
00:00:10,070 --> 00:00:06,240  
orion

4  
00:00:11,990 --> 00:00:10,080  
exploration architecture by being the

5  
00:00:14,150 --> 00:00:12,000  
vehicle that really gets the crew safely

6  
00:00:16,390 --> 00:00:14,160  
to and from earth and can provide for

7  
00:00:17,269 --> 00:00:16,400  
them for 21 days worth for up to four

8  
00:00:19,189 --> 00:00:17,279  
crew

9  
00:00:20,790 --> 00:00:19,199  
of supplies and breathable air and

10  
00:00:22,310 --> 00:00:20,800  
things like that

11  
00:00:24,470 --> 00:00:22,320  
we're really designed to be the first

12  
00:00:26,470 --> 00:00:24,480  
stepping stone to a wide variety of

13  
00:00:28,870 --> 00:00:26,480

missions we can go to asteroids with the

14

00:00:30,710 --> 00:00:28,880

crew and we can go to mars and

15

00:00:33,030 --> 00:00:30,720

those things all need more equipment but

16

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

orion will be that first piece and we'll

17

00:00:37,750 --> 00:00:35,120

be able to support a lot of missions in

18

00:00:39,430 --> 00:00:37,760

whatever the plans for exploration are

19

00:00:42,150 --> 00:00:39,440

in the future so in order to be

20

00:00:44,310 --> 00:00:42,160

versatile orion is treating it like

21

00:00:46,470 --> 00:00:44,320

upgrade kits it's almost a plug-and-play

22

00:00:48,150 --> 00:00:46,480

system where right now we're building

23

00:00:50,470 --> 00:00:48,160

the base vehicle and that's what

24

00:00:52,790 --> 00:00:50,480

essentially we're flying on eft-1 and

25

00:00:54,549 --> 00:00:52,800

then for follow-on missions we can keep

26

00:00:57,270 --> 00:00:54,559

adding to it we can add the docking

27

00:00:59,270 --> 00:00:57,280

system we can add a water kit

28

00:01:01,189 --> 00:00:59,280

to extend emission we can add thermal

29

00:01:03,590 --> 00:01:01,199

protection we could change the heat

30

00:01:05,990 --> 00:01:03,600

shield to make it thicker which would

31

00:01:07,670 --> 00:01:06,000

handle a higher speed entry and and

32

00:01:10,390 --> 00:01:07,680

really what you need when you go beyond

33

00:01:12,310 --> 00:01:10,400

is to add a habitat module to orion to

34

00:01:14,789 --> 00:01:12,320

give the crew enough space so all of

35

00:01:17,510 --> 00:01:14,799

these things we can modify over time and

36

00:01:19,990 --> 00:01:17,520

build up and take away as needed as uh

37

00:01:21,429 --> 00:01:20,000

as technology improves as well

38

00:01:23,830 --> 00:01:21,439

so what i like best about working on

39

00:01:25,830 --> 00:01:23,840

orion is we're building the exploration

40

00:01:27,429 --> 00:01:25,840

vehicle so i mean i grew up watching the

41

00:01:29,270 --> 00:01:27,439

shuttle and i worked on the space

42

00:01:31,429 --> 00:01:29,280

station and all of those are in low

43

00:01:33,429 --> 00:01:31,439

earth orbit but for me it's the we're

44

00:01:35,510 --> 00:01:33,439

really gonna go beyond

45

00:01:37,590 --> 00:01:35,520

no one's been higher than a few hundred

46

00:01:39,510 --> 00:01:37,600

kilometers from earth in my lifetime so