



**#AskNASA**

**HOW WILL ASTRONAUTS  
LIVE AT THE MOON?**

1  
00:00:01,334 --> 00:00:05,138  
[MUSIC]  
Ho, Ho, Ho

2  
00:00:05,205 --> 00:00:08,608  
Hi. Im Mark Wiese  
and I'm the Logistics Element Manager for

3  
00:00:08,675 --> 00:00:12,379  
NASA's Gateway Program  
and this is #AskNASA. We're here to answer

4  
00:00:12,445 --> 00:00:14,347  
your questions about Gateway.

5  
00:00:14,414 --> 00:00:19,519  
[Music]

6  
00:00:19,586 --> 00:00:21,621  
Alright lets get to the questions. First one

7  
00:00:21,688 --> 00:00:26,526  
we got in the mailbag.  
Why can't we just land on the Moon?

8  
00:00:26,593 --> 00:00:28,528  
We can.  
We did that already.

9  
00:00:28,595 --> 00:00:32,732  
Gateway is not about just landing on the Moon.  
Gateway is about giving us access to the entire

10  
00:00:32,799 --> 00:00:36,669  
Moon and doing it  
in a reusable sustainable manner.

11  
00:00:36,736 --> 00:00:41,007  
Gateway is our command and service module

that will enable us to explore the Moon.

12

00:00:41,074 --> 00:00:45,779

It's a small spaceship and it enables us to dock Orion, get down to the surface of the

13

00:00:45,845 --> 00:00:47,747

Moon  
and practice at a place that's really close

14

00:00:47,814 --> 00:00:53,019

so we can eventually explore beyond to Mars.  
Alright next question.

15

00:00:53,086 --> 00:00:59,125

When will the first module be ready?  
So Gateway's first module is the Power Propulsion

16

00:00:59,192 --> 00:01:01,194

Element.  
right now it's scheduled to launch by the end

17

00:01:01,261 --> 00:01:04,898

of calendar year 2022.  
That's what allows us to have all the power

18

00:01:04,964 --> 00:01:09,002

to start to assemble Gateway  
and be ready for 2024 boots on the Moon.

19

00:01:12,238 --> 00:01:15,175

YEAH!

20

00:01:15,241 --> 00:01:19,846

Will the Gateway have cameras so people can watch live action?

21

00:01:19,913 --> 00:01:24,784

Scientists love pictures but so do you right.  
We want to share this with the American people

22  
00:01:24,851 --> 00:01:29,923  
In this world of #What'sgoingonwithGateway  
We want to share that with everybody.

23  
00:01:29,989 --> 00:01:32,759  
We will definitely be sharing what were doing,  
going down to the surface of the moon

24  
00:01:32,826 --> 00:01:39,432  
and living aboard Gateway.  
[Laughing]

25  
00:01:39,499 --> 00:01:42,735  
What's your favorite sci-fi character?  
Darth Vader.

26  
00:01:42,802 --> 00:01:45,839  
If the Moon was made of cheese, could you  
smell it from Gateway?

27  
00:01:45,905 --> 00:01:50,777  
No cause the smell wont travel in space.  
How far is Gateway from Earth?

28  
00:01:50,844 --> 00:01:52,812  
It's far.  
Gateways in deep space.

29  
00:01:52,879 --> 00:01:57,784  
So we all can see space station fly above  
earth, its a couple hours drive equivalent

30  
00:01:57,851 --> 00:02:01,120  
above us so when the sun reflects, those solar  
arrays are huge.

31  
00:02:01,187 --> 00:02:03,923  
Gateways no where near that size and its a  
quarter of a million miles away

32

00:02:03,990 --> 00:02:07,193

at the Moon so it will be much harder for us to spot it out there.

33

00:02:07,260 --> 00:02:10,196

Are we taking science research to Gateway like we do with Space Station

34

00:02:10,263 --> 00:02:13,333

Absolutely.

So we want to definitely take advantage of

35

00:02:13,399 --> 00:02:17,303

the environment out by the moon where theres less interference of whats going

36

00:02:17,370 --> 00:02:19,606

on here at Earth so we can study the planets beyond.

37

00:02:19,672 --> 00:02:23,476

Whats your favorite part of your job?

The people. Always the people.

38

00:02:23,543 --> 00:02:26,613

We work with amazing people.

NASA's an amazing place to work.

39

00:02:26,679 --> 00:02:29,315

How many astronauts does it take to change a light bulb on Gateway?

40

00:02:29,382 --> 00:02:31,484

None.

They don't live up there all the time like

41

00:02:31,551 --> 00:02:35,388

we do on space station so we have to develop the right inter-vehicle robotics to make sure

42  
00:02:35,455 --> 00:02:38,291  
we can do this without them even being there.

43  
00:02:38,358 --> 00:02:44,097  
How will air and water be supplied?

44  
00:02:44,163 --> 00:02:48,301  
So water is not coming in bottles like this. That's the challenge we have to set up a commercial

45  
00:02:48,368 --> 00:02:51,204  
supply chain in deep space.  
We don't have a rocket launching every single

46  
00:02:51,271 --> 00:02:54,574  
day so we have to figure this out  
and make sure we have everything our crew

47  
00:02:54,641 --> 00:02:58,378  
needs, supplies, science equipment  
and all the equipment they need to go down

48  
00:02:58,444 --> 00:03:00,046  
to the surface of the moon.  
[INHALES]

49  
00:03:00,980 --> 00:03:02,982  
And the air they need to breathe.

50  
00:03:04,984 --> 00:03:06,085  
Where's my eggnog?

51  
00:03:06,152 --> 00:03:07,153  
Did someone take my eggnog?

52  
00:03:09,155 --> 00:03:10,557  
Got EVA mittens.

