

A woman with short brown hair, wearing a light blue blazer, is seated at a desk in a control room. She is looking towards the left of the frame. In the background, there are several computer monitors displaying various images, including what appears to be a space vehicle. The room has a dark, industrial aesthetic with grey panels and desks.

LUCIA MCCULLOUGH
DEPUTY CHIEF, SPACE VEHICLE MOCK UP FACILITY

1

00:00:00,380 --> 00:00:04,250

Hey everyone Amy Shira Teitel here at the space vehicle mock up facility at the Johnson

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00:00:04,250 --> 00:00:05,250

Space Center in Houston.

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00:00:05,250 --> 00:00:08,970

Today we took a tour of the International Space Station training facility with Lucia

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00:00:08,970 --> 00:00:09,970

Mccullough.

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00:00:09,970 --> 00:00:13,910

The ISS training facility is effectively the International Space Station but the modules

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00:00:13,910 --> 00:00:18,109

are separate not together like they are in space but the arrangement is exactly as they

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00:00:18,109 --> 00:00:22,449

are in orbit every module at the International Space Station is replicated in this place

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00:00:22,449 --> 00:00:26,689

in Houston and the idea is to give crews a space where they can train for emergency procedures

9

00:00:26,689 --> 00:00:29,300

and full days in the life on board the ISS.

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00:00:29,300 --> 00:00:34,710

This is the area where the instructor team sits when we do a sim with the whole space

11

00:00:34,710 --> 00:00:39,720

station crew and the instructor team can stay

out here so that the crew members that are

12
00:00:39,720 --> 00:00:45,140
in the mock ups can be viewed by these remote cameras but we don't have to be right in there

13
00:00:45,140 --> 00:00:49,820
next to them so it feels a little bit more like the space environment in which they are

14
00:00:49,820 --> 00:00:55,210
kind of on their own, like they would be on ISS and then they can practice coordinating

15
00:00:55,210 --> 00:01:00,900
with the ground and then we have real CAPCOMs that answer the questions they the crew makes

16
00:01:00,900 --> 00:01:06,850
and so we practice the coordination with the crew and the ground many times before they

17
00:01:06,850 --> 00:01:07,850
ever fly.

18
00:01:07,850 --> 00:01:11,229
Right now on the International Space Station the year in space experiment is just passed

19
00:01:11,229 --> 00:01:15,869
the halfway mark where one astronaut and one cosmonaut are spending an entire year in orbit.

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00:01:15,869 --> 00:01:20,359
This is definitely a stepping-stone to Mars in lots of different ways.

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00:01:20,359 --> 00:01:26,119
So we have crew members that live in space for six months or in this year we have two

22
00:01:26,119 --> 00:01:31,789
crew members that are living there for a whole
year and s you experience what are challenges

23
00:01:31,789 --> 00:01:39,680
of long duration being in space and then we
also get practice building types of systems,

24
00:01:39,680 --> 00:01:46,279
life support systems and computer systems
and seeing what is more robust what's going

25
00:01:46,279 --> 00:01:51,790
to last for the long haul some of the things
you can I have a really good theory and design

26
00:01:51,790 --> 00:01:57,139
and philosophy but when things are in space
and you get the experience you really learn

27
00:01:57,139 --> 00:02:02,369
what is what's going to make it for the long
haul what changes are going to needed.

28
00:02:02,369 --> 00:02:05,740
Right now the experiments on board the International
Space Station are furthering our knowledge

29
00:02:05,740 --> 00:02:10,400
of what exactly happens to the human body
blast in space for a long time and this is