
MISSION CONTROL CENTER
SIMULATING A NEW MISSION TO THE MOON

1
00:00:03,050 --> 00:00:01,610
foreign

2
00:00:05,510 --> 00:00:03,060
right now we're running an entry

3
00:00:07,249 --> 00:00:05,520
simulation for Artemis One mission

4
00:00:08,930 --> 00:00:07,259
so we're simulating the very end of that

5
00:00:10,250 --> 00:00:08,940
mission is the spacecraft is re-entering

6
00:00:11,810 --> 00:00:10,260
the Earth's atmosphere and about to

7
00:00:14,390 --> 00:00:11,820
splash down off the coast of San Diego

8
00:00:15,530 --> 00:00:14,400
and we have a team of instructors in

9
00:00:17,689 --> 00:00:15,540
this room we have a team of flight

10
00:00:20,150 --> 00:00:17,699
controllers over building 30. we have a

11
00:00:22,609 --> 00:00:20,160
simulator that is simulating the Orion

12
00:00:24,470 --> 00:00:22,619
spacecraft the instructors here are

13
00:00:26,210 --> 00:00:24,480

putting in malfunctions and various

14
00:00:28,370 --> 00:00:26,220
failures and into the model of that

15
00:00:30,589 --> 00:00:28,380
vehicle and the flight controllers over

16
00:00:31,790 --> 00:00:30,599
in building 30 are reacting to them the

17
00:00:34,010 --> 00:00:31,800
way they would if they really saw that

18
00:00:36,650 --> 00:00:34,020
failure during the re-entry

19
00:00:38,569 --> 00:00:36,660
we try the same as real as possible like

20
00:00:40,729 --> 00:00:38,579
uh you know real scenarios there's

21
00:00:43,310 --> 00:00:40,739
malfunctions where you can affect a

22
00:00:45,350 --> 00:00:43,320
specific uh like object in the vehicle

23
00:00:47,030 --> 00:00:45,360
let's say like a palm a valve or

24
00:00:49,490 --> 00:00:47,040
something like that you can also affect

25
00:00:52,190 --> 00:00:49,500
uh Telemetry coming down from the

26
00:00:53,810 --> 00:00:52,200
vehicle to MCC in total we have about

27
00:00:56,450 --> 00:00:53,820
140

28
00:00:58,069 --> 00:00:56,460
000 malfunctions this type of training

29
00:00:59,270 --> 00:00:58,079
was done in fact that was one of the

30
00:01:01,790 --> 00:00:59,280
first things that we looked at when we

31
00:01:04,009 --> 00:01:01,800
started designing this training was what

32
00:01:05,870 --> 00:01:04,019
was done with Apollo and of course

33
00:01:07,609 --> 00:01:05,880
the Iran vehicle is very different and

34
00:01:09,350 --> 00:01:07,619
our training and simulation capabilities

35
00:01:11,210 --> 00:01:09,360
are very different today

36
00:01:12,649 --> 00:01:11,220
for Artemis one we're focused

37
00:01:14,510 --> 00:01:12,659
exclusively on the flight control team

38
00:01:15,950 --> 00:01:14,520

for for crude missions training the

39
00:01:17,990 --> 00:01:15,960
flight control team and the crew as well

40
00:01:20,330 --> 00:01:18,000
how to execute the mission both

41
00:01:22,310 --> 00:01:20,340
nominally and how to respond to off

42
00:01:23,749 --> 00:01:22,320
nominal situations we're going to

43
00:01:25,010 --> 00:01:23,759
integrate the simulation that we have

44
00:01:27,050 --> 00:01:25,020
we're going to integrate it with the

45
00:01:28,730 --> 00:01:27,060
crew station that's where the astronauts

46
00:01:30,050 --> 00:01:28,740
are going to be in so everything inside

47
00:01:32,390 --> 00:01:30,060
the crew station is going to look as

48
00:01:34,789 --> 00:01:32,400
realistic as possible all the displays

49
00:01:36,770 --> 00:01:34,799
all the controls all the switches all

50
00:01:39,710 --> 00:01:36,780
the visuals out the window everything is

51
00:01:41,990 --> 00:01:39,720
going to be as as real as possible I'm

52
00:01:44,330 --> 00:01:42,000
probably most looking forward to the

53
00:01:46,969 --> 00:01:44,340
close passes by the moon and that should

54
00:01:48,410 --> 00:01:46,979
be some really remarkable imagery that's

55
00:01:52,310 --> 00:01:48,420
going to be very exciting to see Orion

56
00:01:54,230 --> 00:01:52,320
out in orbit be very proud and honored

57
00:01:56,149 --> 00:01:54,240
that just to have got to participate in

58
00:01:58,789 --> 00:01:56,159
their training and help prepare them to

59
00:02:01,010 --> 00:01:58,799
fly those missions and and hope that

60
00:02:02,030 --> 00:02:01,020
they're ready for whatever fate Mayhem

61
00:02:03,950 --> 00:02:02,040
in the mission

62
00:02:06,709 --> 00:02:03,960
just just being able to you know watch

63
00:02:08,270 --> 00:02:06,719

on TV when we actually do the flight and

64
00:02:21,790 --> 00:02:08,280
make it there I think it's going to be