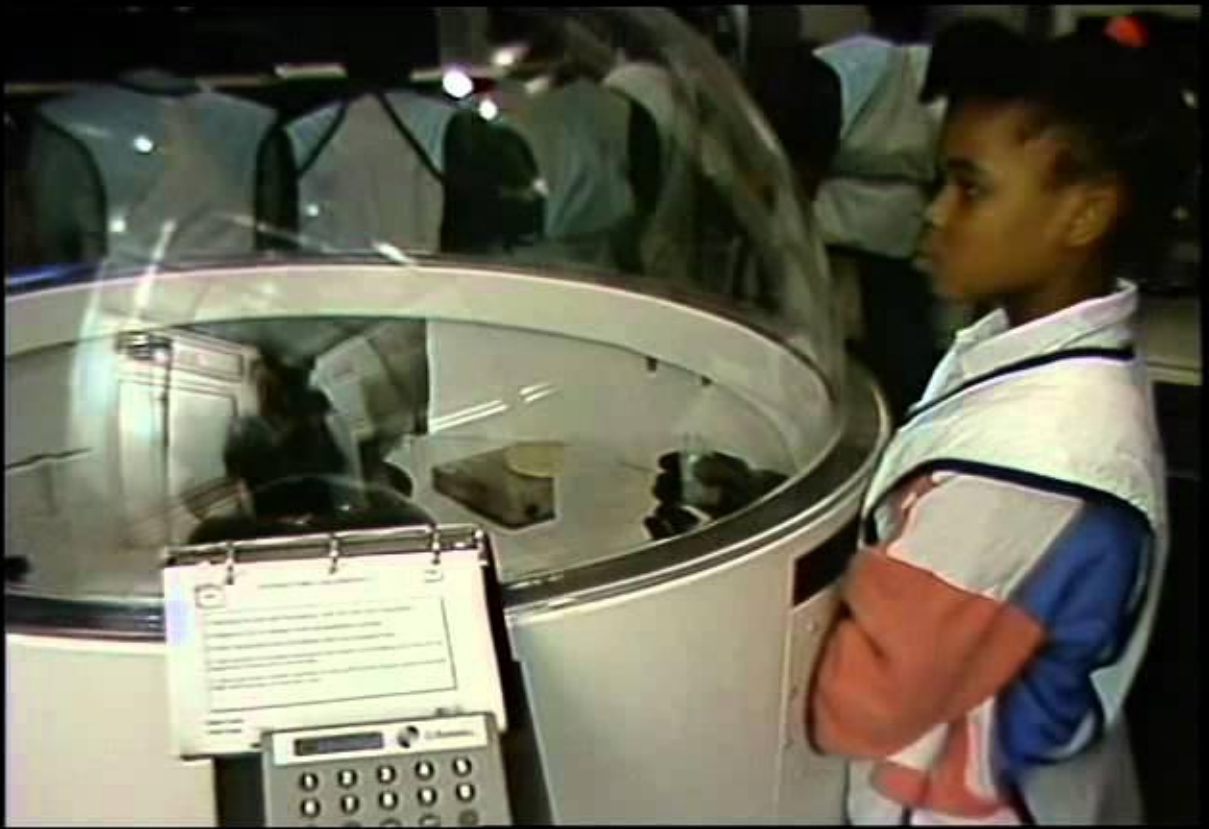

1
00:01:13,779 --> 00:01:12,279
hello I'm Lin Bondurant from the

2
00:01:16,690 --> 00:01:13,789
Challenger Center for space science

3
00:01:18,669 --> 00:01:16,700
education all of us at the Challenger

4
00:01:20,889 --> 00:01:18,679
Center are very pleased to learn that

5
00:01:24,010 --> 00:01:20,899
your class will soon be flying a mission

6
00:01:25,899 --> 00:01:24,020
to return to the moon you might ask well

7
00:01:28,539 --> 00:01:25,909
what does it like to fly a mission

8
00:01:30,719 --> 00:01:28,549
well flying a mission is not like going

9
00:01:33,099 --> 00:01:30,729
to an amusement park and writing a ride

10
00:01:35,889 --> 00:01:33,109
but it's more like being on a motion

11
00:01:39,789 --> 00:01:35,899
picture set where each one of you is a

12
00:01:41,469 --> 00:01:39,799
star in this future space mission once

13
00:01:44,319 --> 00:01:41,479

you arrive at the Challenger Learning

14
00:01:47,679 --> 00:01:44,329
Center your group will be divided in

15
00:01:50,619 --> 00:01:47,689
half half of you will begin your flight

16
00:01:53,080 --> 00:01:50,629
in the space station the other half and

17
00:01:55,630 --> 00:01:53,090
Mission Control you have a very

18
00:01:57,789 --> 00:01:55,640
important flight ahead of you you are

19
00:02:00,300 --> 00:01:57,799
going to return to the moon sometime

20
00:02:02,679 --> 00:02:00,310
near the beginning of the 21st century

21
00:02:06,010 --> 00:02:02,689
you're going to build upon what was

22
00:02:07,419 --> 00:02:06,020
learned during the Apollo program during

23
00:02:09,460 --> 00:02:07,429
this mission you're going to gather

24
00:02:12,430 --> 00:02:09,470
information which can be studied later

25
00:02:16,509 --> 00:02:12,440
in the classroom to determine where to

26
00:02:19,809 --> 00:02:16,519
establish a lunar mining base everyone

27
00:02:21,839 --> 00:02:19,819
who participates in a simulation is very

28
00:02:26,199 --> 00:02:21,849
important to the success of the mission

29
00:02:29,620 --> 00:02:26,209
as such each one of you will be assigned

30
00:02:31,659 --> 00:02:29,630
to a team your team will have certain

31
00:02:35,800 --> 00:02:31,669
things that you must do that relate to

32
00:02:37,870 --> 00:02:35,810
the mission members of each team will

33
00:02:41,379 --> 00:02:37,880
have work stations in both Mission

34
00:02:43,599 --> 00:02:41,389
Control and the space station during the

35
00:02:47,440 --> 00:02:43,609
mission you will work in both locations

36
00:02:50,979 --> 00:02:47,450
in Mission Control you will work at one

37
00:02:53,830 --> 00:02:50,989
of the various councils team members and

38
00:02:56,970 --> 00:02:53,840

Mission Control guide the space station

39
00:03:00,009 --> 00:02:56,980
through various aspects of the flight as

40
00:03:02,789 --> 00:03:00,019
mission controllers you will supply the

41
00:03:06,039 --> 00:03:02,799
flight crew and the space station with

42
00:03:09,759 --> 00:03:06,049
information and images needed to

43
00:03:12,490 --> 00:03:09,769
complete their tasks at the console you

44
00:03:15,000 --> 00:03:12,500
will also receive information to record

45
00:03:17,590 --> 00:03:15,010
from the crew and the space station

46
00:03:20,319 --> 00:03:17,600
sometimes you will be able to see live

47
00:03:23,140 --> 00:03:20,329
images from the space station the

48
00:03:25,390 --> 00:03:23,150
monitors at the front of Mission Control

49
00:03:28,410 --> 00:03:25,400
reflect what is occurring in the space

50
00:03:33,330 --> 00:03:28,420
station the status of the mission and

51
00:03:36,130 --> 00:03:33,340
also show data are video images as

52
00:03:37,949 --> 00:03:36,140
mission controllers you have a very

53
00:03:40,990 --> 00:03:37,959
important role that involves

54
00:03:44,380 --> 00:03:41,000
communications and interactions with the

55
00:03:47,500 --> 00:03:44,390
crew and the space station your job is

56
00:03:50,920 --> 00:03:47,510
to help them solve their problems it is

57
00:03:54,270 --> 00:03:50,930
your responsibility to know which tasks

58
00:03:57,789 --> 00:03:54,280
the crew and the space station is doing

59
00:04:01,149 --> 00:03:57,799
tasks cards will help you do this every

60
00:04:04,210 --> 00:04:01,159
workstation in the space station and all

61
00:04:06,580 --> 00:04:04,220
of the consoles and Mission Control have

62
00:04:09,460 --> 00:04:06,590
a set of task cards that relate to the

63
00:04:13,390 --> 00:04:09,470

jobs that 13 must do during the

64
00:04:16,500 --> 00:04:13,400
simulation each task card has the steps

65
00:04:19,689 --> 00:04:16,510
required to complete a specific task

66
00:04:23,290 --> 00:04:19,699
notice that the task card has a start in

67
00:04:26,620 --> 00:04:23,300
encode you are to enter the start code

68
00:04:30,250 --> 00:04:26,630
when you begin a task and the end code

69
00:04:33,659 --> 00:04:30,260
when it is completed to do this you will

70
00:04:38,290 --> 00:04:33,669
use the cue pad at your workstation a

71
00:04:40,510 --> 00:04:38,300
cue pad is not difficult to use as an

72
00:04:44,230 --> 00:04:40,520
example watch as the start code is

73
00:04:48,310 --> 00:04:44,240
entered from one of the task cards make

74
00:04:51,040 --> 00:04:48,320
sure you enter the correct code after

75
00:04:54,909 --> 00:04:51,050
the start code is entered press the cin

76
00:04:56,920 --> 00:04:54,919
button once the start code is sent the

77
00:04:59,260 --> 00:04:56,930
mission status board changes to let

78
00:05:02,320 --> 00:04:59,270
Mission Control know what the team is

79
00:05:07,510 --> 00:05:02,330
doing watch the mission status board

80
00:05:09,430 --> 00:05:07,520
change as the cin button is pushed the

81
00:05:12,580 --> 00:05:09,440
various tasks are carried out in the

82
00:05:15,460 --> 00:05:12,590
space station if you are a member of the

83
00:05:18,939 --> 00:05:15,470
lunar geology team you will work at this

84
00:05:22,029 --> 00:05:18,949
station from here you can tell operate

85
00:05:24,850 --> 00:05:22,039
vehicles on the moon surface tell

86
00:05:28,450 --> 00:05:24,860
operations means that you are able to

87
00:05:30,810 --> 00:05:28,460
operate something from afar you do not

88
00:05:33,940 --> 00:05:30,820

need to be right there to make it work

89
00:05:36,600 --> 00:05:33,950
the lunar geology team will also study

90
00:05:39,490 --> 00:05:36,610
moon rocks in the glovebox

91
00:05:42,580 --> 00:05:39,500
the medical team studies the effects of

92
00:05:45,189 --> 00:05:42,590
space travel on the crew is there a

93
00:05:47,499 --> 00:05:45,199
difference in the effect of zero-g

94
00:05:50,020 --> 00:05:47,509
environment of Moon orbit and the

95
00:05:53,619 --> 00:05:50,030
one-sixth G moon environment on the

96
00:05:57,460 --> 00:05:53,629
health of the crew G stands for the word

97
00:06:01,570 --> 00:05:57,470
gravity you will do tasks to evaluate

98
00:06:04,450 --> 00:06:01,580
the crews health if you are assigned to

99
00:06:07,180 --> 00:06:04,460
work at the isolation chamber you will

100
00:06:10,149 --> 00:06:07,190
use robots to handle and study various

101
00:06:13,809 --> 00:06:10,159
materials including lunar core samples

102
00:06:15,820 --> 00:06:13,819
outside of the space station those of

103
00:06:18,580 --> 00:06:15,830
you assigned to the life support team

104
00:06:20,379 --> 00:06:18,590
will be involved in checking out the

105
00:06:22,959 --> 00:06:20,389
various systems that produce the

106
00:06:26,409 --> 00:06:22,969
artificial environment that keeps the

107
00:06:29,230 --> 00:06:26,419
astronauts alive for example the life

108
00:06:32,170 --> 00:06:29,240
support station monitors the oxygen and

109
00:06:35,920 --> 00:06:32,180
water necessary for the daily needs of

110
00:06:38,529 --> 00:06:35,930
the crew during the first half of the

111
00:06:40,899 --> 00:06:38,539
mission the navigation team will be busy

112
00:06:43,959 --> 00:06:40,909
choosing the best landing site for your

113
00:06:46,629 --> 00:06:43,969

spacecraft during the second half the

114
00:06:48,909 --> 00:06:46,639
navigation team determines the correct

115
00:06:53,110 --> 00:06:48,919
orbit to launch onto from the lunar

116
00:06:55,360 --> 00:06:53,120
surface for eventual return to work the

117
00:06:57,309 --> 00:06:55,370
navigation team members will also have

118
00:07:01,659 --> 00:06:57,319
several other navigation tasks to

119
00:07:03,969 --> 00:07:01,669
complete as data team members you will

120
00:07:06,430 --> 00:07:03,979
send messages and supply data to the

121
00:07:09,360 --> 00:07:06,440
various teams you will also make

122
00:07:11,860 --> 00:07:09,370
measurements on some of the lunar images

123
00:07:13,959 --> 00:07:11,870
during the first part of the mission the

124
00:07:17,080 --> 00:07:13,969
probe team will assemble and launch a

125
00:07:19,300 --> 00:07:17,090
probe that will study the moon during

126
00:07:21,279 --> 00:07:19,310
the second half of the mission you will

127
00:07:24,480 --> 00:07:21,289
analyze probe parts and make

128
00:07:28,540 --> 00:07:24,490
measurements of the lunar environment

129
00:07:30,249 --> 00:07:28,550
Capcom in Mission Control and simcom and

130
00:07:33,339 --> 00:07:30,259
the space station will be kept busy

131
00:07:36,309 --> 00:07:33,349
asking for answers and providing input

132
00:07:40,510 --> 00:07:36,319
as necessary to make the entire mission

133
00:07:45,200 --> 00:07:40,520
operate smoothly well good luck and your

134
00:07:51,290 --> 00:07:47,510
your flight will involve such things as

135
00:07:54,110 --> 00:07:51,300
teamwork problem-solving communication

136
00:07:57,559 --> 00:07:54,120
skills skills that you will use all of

137
00:07:59,900 --> 00:07:57,569
your life may your mission to return to

138
00:08:02,089 --> 00:07:59,910

the moon be a good one and hopefully

139
00:08:04,850 --> 00:08:02,099
your flight will excite you to explore a

140
00:08:07,760 --> 00:08:04,860
future career that involves science or

141
00:08:11,749 --> 00:08:07,770
mathematics but whatever your future