1
00:01:00,520 --> 00:00:57,729
Columbia Houston your mission and we

2
00:01:03,009 --> 00:01:00,530
know you'll be glad to accept it is to

3
00:01:50,850 --> 00:01:03,019
extend 217 days on orbit congratulations

4
00:01:55,150 --> 00:01:53,560
we didn't respond to your previous call

5
00:02:01,180 --> 00:01:55,160
because the speaker with all the flight

6
00:02:03,910 --> 00:02:01,190
deck because applause today and I hope

7
00:02:05,710 --> 00:02:03,920
you were watching me live in the ground

8
00:02:10,600 --> 00:02:05,720
and you could see the crew response with

9
00:02:13,810 --> 00:02:10,610
your announcement and we are really able

10
00:02:15,460 --> 00:02:13,820
and eagerly anticipating all the data

11
00:02:17,590 --> 00:02:15,470
we're gonna gather with that extra day

12
00:02:21,100 --> 00:02:17,600
on orbit so thanks Lots amazing before

13
00:02:22,690 --> 00:02:21,110

giving us an extra day this television

14
00:02:24,640 --> 00:02:22,700
picture from the Space Lab module

15
00:02:28,000 --> 00:02:24,650
showing payload commander Susan Helms on

16
00:02:30,970 --> 00:02:28,010
the left with her crewmates mission

17
00:02:33,729 --> 00:02:30,980
specialists Chuck Brady who is at the

18
00:02:35,800 --> 00:02:33,739
top of the picture jean-jacques favi a

19
00:02:40,300 --> 00:02:35,810
French payload specialist on the right

20
00:04:45,480 --> 00:02:40,310
as life science research data continues

21
00:04:50,040 --> 00:04:47,890
near the center of our screen we can see

22
00:04:52,180 --> 00:04:50,050
mission specialist Chuck Brady

23
00:04:56,440 --> 00:04:52,190
participating in the canal and otolith

24
00:04:59,020 --> 00:04:56,450
integration study or Co eyes Chuck Brady

25
00:05:00,790 --> 00:04:59,030
is wearing some electronic light

26
00:05:03,010 --> 00:05:00,800
occlusion goggles part of the hardware

27
00:05:05,650 --> 00:05:03,020
for the co eyes investigation and he's

28
00:05:08,530 --> 00:05:05,660
involved in voluntary head movement

29
00:05:11,920 --> 00:05:08,540
protocols in which he follows a target

30
00:05:12,940 --> 00:05:11,930
on the luminous target display which we

31
00:05:15,850 --> 00:05:12,950
are viewing from the back near the

32
00:05:17,590 --> 00:05:15,860
foreground and this picture on the other

33
00:05:21,330 --> 00:05:17,600
side a series of light-emitting diodes

34
00:05:23,770 --> 00:05:21,340
or LEDs lighting up at various times and

35
00:05:31,350 --> 00:05:23,780
Jeff Brady must follow the movement of

36
00:05:36,970 --> 00:05:35,290
Bailey commander Susan Helms - Chuck

37
00:05:38,530 --> 00:05:36,980
Brady's immediate right is assisting

38
00:06:56,090 --> 00:05:38,540

with the operation of the Coe eyes

39
00:07:19,640 --> 00:06:58,670
I'm still for Pedro does this remind you

40
00:08:15,779 --> 00:07:22,460
this looks like an eel or maybe

41
00:08:15,789 --> 00:08:58,300
okay thank you for the Association

42
00:09:05,420 --> 00:09:03,199
this was taken this morning when dr.

43
00:09:08,749 --> 00:09:05,430
Brady was exercising and we thought this

44
00:09:11,530 --> 00:09:08,759
was setting a new standard for ham radio

45
00:09:13,670 --> 00:09:11,540
operators he's operating this rx

46
00:09:16,670 --> 00:09:13,680
simultaneously with getting his daily

47
00:09:29,270 --> 00:09:16,680
exercise and we thought this was above

48
00:09:45,550 --> 00:09:31,850
happy birthday Canada from the space

49
00:10:08,350 --> 00:09:48,980
finally the Sara Canada Dupree Lana that

50
00:11:58,790 --> 00:10:11,050
happy birthday British Columbia from the

51
00:12:22,380 --> 00:12:01,460
and specially we've got the view and we

52
00:12:22,390 --> 00:12:28,390
okay

53
00:12:33,579 --> 00:12:31,570
and Yuri was a little bit out of focus

54
00:13:03,950 --> 00:12:33,589
but we could appreciate all the details

55
00:13:08,690 --> 00:13:06,410
this is Space Lab control Huntsville

56
00:13:10,820 --> 00:13:08,700
we're currently looking at video from

57
00:13:15,640 --> 00:13:10,830
the bubble drop and particle unit

58
00:13:20,210 --> 00:13:15,650
facility multi-user facility currently

59
00:13:22,910 --> 00:13:20,220
loaded in BD PU is this Stroud

60
00:13:24,410 --> 00:13:22,920
test cartridge and this is a test

61
00:13:26,780 --> 00:13:24,420
cartridge to investigate the

62
00:13:28,550 --> 00:13:26,790
fundamentals of boiling heat transfer on

63
00:13:31,970 --> 00:13:28,560

small heating elements of different

64
00:13:33,710 --> 00:13:31,980
shapes and sizes and hopefully

65
00:13:35,510 --> 00:13:33,720
investigators will attempt to determine

66
00:13:42,410 --> 00:13:35,520
the conditions at nucleation and to

67
00:13:45,260 --> 00:13:42,420
optimize heat transfer Bob Thirsk in the

68
00:13:47,240 --> 00:13:45,270
center of our screen working the canal

69
00:13:50,180 --> 00:13:47,250
internal integration study is actually

70
00:13:52,370 --> 00:13:50,190
still performing the voluntary head

71
00:13:54,080 --> 00:13:52,380
movement portion of the experiment the

72
00:13:56,870 --> 00:13:54,090
goggles that he has done or they

73
00:14:00,680 --> 00:13:56,880
electronic light occlusion goggles and

74
00:14:04,010 --> 00:14:00,690
these have a crystal lens incorporated

75
00:14:06,560 --> 00:14:04,020
into modified ski goggles the lens are

76
00:14:08,390 --> 00:14:06,570
opaque in its natural state but will

77
00:14:13,700 --> 00:14:08,400
become translucent when an electric

78
00:14:15,710 --> 00:14:13,710
current is applied when he is completed

79
00:14:19,610 --> 00:14:15,720
with the voluntary head movement portion

80
00:14:23,120 --> 00:14:19,620
of this experiment he will continue to