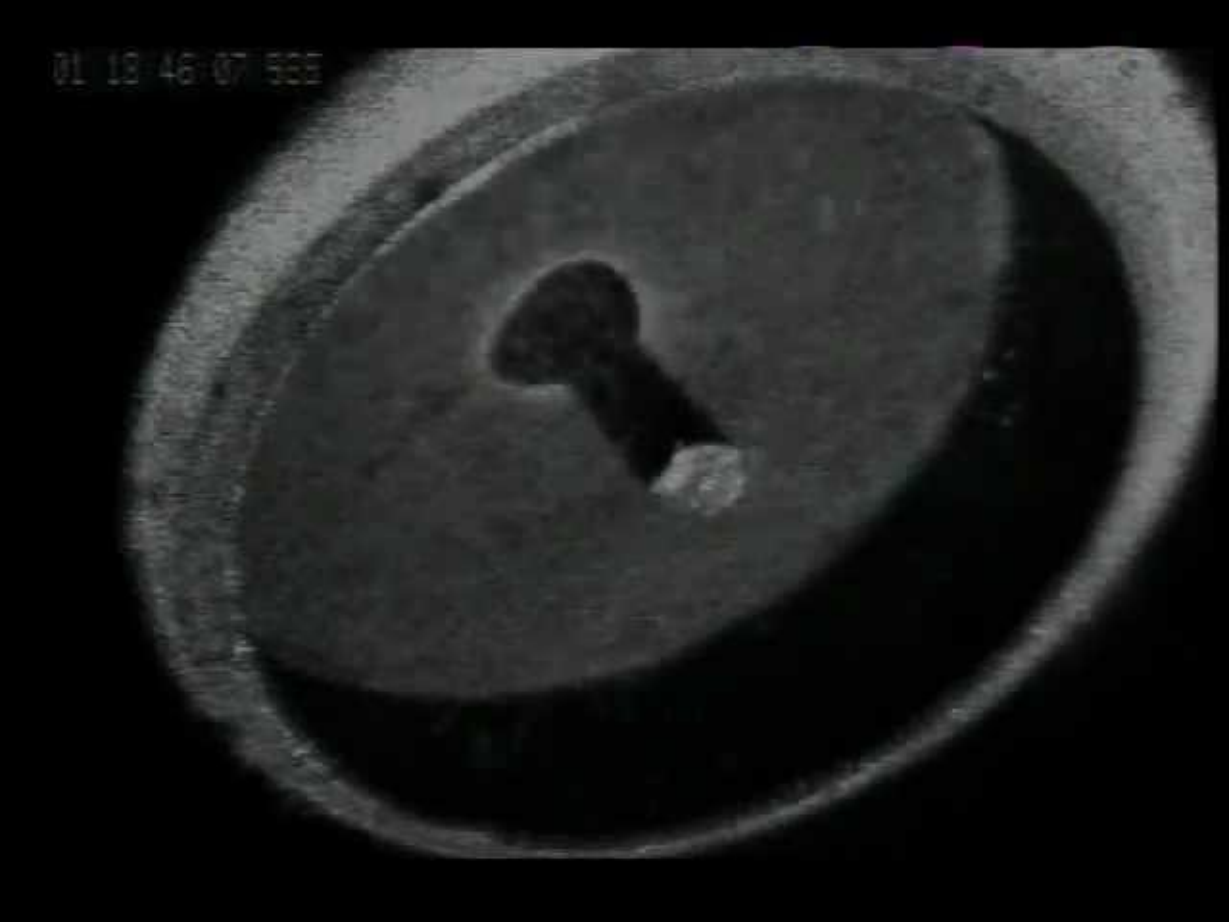
01 13 46 07 565

1
00:02:29,670 --> 00:02:26,220
meanwhile as Thornton was being given

2
00:02:32,369 --> 00:02:29,680
those specific detailed instructions for

3
00:02:36,170 --> 00:02:32,379
an upcoming run of the surface tension

4
00:02:41,630 --> 00:02:36,180
experiment at NASA Lewis research center

5
00:02:45,750 --> 00:02:41,640
facility al Sacco is so we can see

6
00:02:49,289 --> 00:02:45,760
continuing at his duties which at this

7
00:02:55,020 --> 00:02:49,299
point are to continue with protein

8
00:02:59,460 --> 00:02:55,030
crystal growth work initializing samples

9
00:03:02,069 --> 00:02:59,470
of proteins substances getting the

10
00:03:10,460 --> 00:03:02,079
various solutions mixed together at just

11
00:03:14,880 --> 00:03:10,470
the right combination of quantities and

12
00:03:18,720 --> 00:03:14,890
now we can take a look at a split image

13
00:03:20,699 --> 00:03:18,730

here to see that at the moment we do

14
00:03:35,849 --> 00:03:20,709
have multiple images of video coming to

15
00:03:46,530 --> 00:03:35,859
the ground and beautiful Cathy very

16
00:03:54,460 --> 00:03:50,530
and again in this split screen view or

17
00:03:55,840 --> 00:03:54,470
quad image we're seeing four of the

18
00:03:58,330 --> 00:03:55,850
images that are coming to the ground

19
00:04:03,130 --> 00:03:58,340
simultaneously by means of the high pack

20
00:04:06,850 --> 00:04:03,140
digital TV system that's debuting on

21
00:04:12,960 --> 00:04:06,860
this STS 73 flight the digital video

22
00:04:16,420 --> 00:04:12,970
allowing multiplexing several images

23
00:04:19,300 --> 00:04:16,430
simultaneously rather than our previous

24
00:04:21,520 --> 00:04:19,310
mode of operation which was only capable

25
00:04:28,840 --> 00:04:21,530
of bringing one image TV image to the

26
00:04:31,360 --> 00:04:28,850
ground at any given time this is space

27
00:04:34,140 --> 00:04:31,370
live operations control Huntsville in

28
00:04:38,500 --> 00:04:34,150
our live down like video from Columbia

29
00:04:41,830 --> 00:04:38,510
showing us the space lab module looking

30
00:04:43,810 --> 00:04:41,840
towards the aft where Baylor commander

31
00:04:45,670 --> 00:04:43,820
kathy thornton and payload specialist al

32
00:04:51,310 --> 00:04:45,680
Sacco have been getting things ready to

33
00:04:54,400 --> 00:04:51,320
go into a sample exchange procedure at

34
00:04:57,730 --> 00:04:54,410
the crystal growth furnace that'll be

35
00:05:01,510 --> 00:04:57,740
again a fairly lengthy operation with

36
00:05:04,120 --> 00:05:01,520
both crew members involved it was

37
00:05:11,820 --> 00:05:04,130
preceded a few minutes ago by a

38
00:05:15,220 --> 00:05:11,830

preliminary step in which al Sacco did a

39
00:05:21,130 --> 00:05:15,230
pulling pull the pin out of one of the

40
00:05:25,210 --> 00:05:21,140
sample mechanisms so that when they do

41
00:05:30,030 --> 00:05:25,220
the sample exchange the sample that

42
00:05:33,010 --> 00:05:30,040
they'll be inserting into one chamber

43
00:05:34,840 --> 00:05:33,020
into one holder rather one position of

44
00:05:37,960 --> 00:05:34,850
the crystal growth furnace carousel

45
00:05:40,060 --> 00:05:37,970
assembly that sample will fit in there

46
00:06:14,620 --> 00:05:40,070
there's a unique keying system to these

47
00:06:21,260 --> 00:06:19,010
spacelab huntsville cgf says it's okay

48
00:06:57,100 --> 00:06:21,270
if that sack is in your way to remove

49
00:06:57,110 --> 00:08:12,810
but

50
00:08:12,820 --> 00:08:18,270
that's okay

51
00:08:41,469 --> 00:08:27,310
go ahead and put tape number 43 in this

52
00:08:49,500 --> 00:08:41,479
year for Roger can t we copy tape for

53
00:08:56,970 --> 00:08:54,330
some video of the surface tension driven

54
00:09:00,490 --> 00:08:56,980
convection experiment test chamber as

55
00:09:03,480 --> 00:09:00,500
kathy thornton is getting it filled up

56
00:09:09,880 --> 00:09:03,490
to the proper level for another test run

57
00:09:12,940 --> 00:09:09,890
with the in this case one of the test

58
00:09:16,840 --> 00:09:12,950
cells that has a submerged heater

59
00:09:31,990 --> 00:09:16,850
element which we see there in the center

60
00:09:36,019 --> 00:09:34,430
spacelab Huntsville for Ramallah we're

61
00:09:40,850 --> 00:09:36,029
ready for that after culture video

62
00:10:04,280 --> 00:09:40,860
playback whenever you are okay coming

63
00:10:12,079 --> 00:10:08,689

coming down of the potato plants the

64
00:10:14,689 --> 00:10:12,089
potato tubers that are being grown in

65
00:10:18,019 --> 00:10:14,699
the Astro culture facility on board in

66
00:10:21,740 --> 00:10:18,029
the mid deck of Columbia pilot can't

67
00:10:26,569 --> 00:10:21,750
roaming ER obtained this video little

68
00:10:29,889 --> 00:10:26,579
earlier and now has the opportunity to

69
00:10:41,449 --> 00:10:29,899
replay it and we take it to the ground I

70
00:10:46,449 --> 00:10:41,459
downlink video and as we look down on

71
00:10:50,629 --> 00:10:46,459
the ocean below Columbia we see

72
00:10:54,680 --> 00:10:50,639
pronounced the cloudiness covering the

73
00:10:57,079 --> 00:10:54,690
broad ocean area of the Pacific Columbia

74
00:10:59,569 --> 00:10:57,089
currently about 39 degrees north

75
00:11:04,129 --> 00:10:59,579
latitude the northernmost point of this

76
00:11:09,189 --> 00:11:04,139
orbit and that orbital inclination

77
00:11:14,900 --> 00:11:09,199
putting it at an equivalent point north

78
00:11:20,620 --> 00:11:14,910
about equivalent to the mid portion of

79
00:12:10,130 --> 00:11:20,630
California or the states of Utah

80
00:12:18,170 --> 00:12:13,910
this is an infrared diagnostic tool for