



1  
00:00:05,750 --> 00:00:25,359

[Music]

2  
00:00:30,409 --> 00:00:27,950  
payload specialist Fred Leslie is

3  
00:00:32,509 --> 00:00:30,419  
continuing to work with a variety of the

4  
00:00:35,060 --> 00:00:32,519  
payloads that are housed in that 23 foot

5  
00:00:36,619 --> 00:00:35,070  
long Space Lab module most of the

6  
00:00:38,860 --> 00:00:36,629  
experiments being conducted as part of

7  
00:00:41,389 --> 00:00:38,870  
this u.s. microgravity laboratory are

8  
00:00:42,950 --> 00:00:41,399  
contained within that Space Lab module

9  
00:00:46,009 --> 00:00:42,960  
there are some however also on the

10  
00:00:47,829 --> 00:00:46,019  
mid-deck of Columbia throughout the

11  
00:00:50,450 --> 00:00:47,839  
night the primary focus for

12  
00:00:52,160 --> 00:00:50,460  
ongoing science investigations onboard

13  
00:00:53,929 --> 00:00:52,170

Columbia will be the surface tension

14

00:00:56,090 --> 00:00:53,939  
driven convection experiment an

15

00:00:58,280 --> 00:00:56,100  
experiment that studies the basics of

16

00:01:14,750 --> 00:00:58,290  
fluid dynamics in the microgravity

17

00:01:18,540 --> 00:01:17,220  
and Spacelab pumps before Katie we would

18

00:01:44,900 --> 00:01:18,550  
like to have that there mister down to

19

00:01:44,910 --> 00:01:48,649  
[Music]

20

00:02:01,910 --> 00:01:50,880  
Space Lab Huntsville for Katie if we

21

00:02:05,750 --> 00:02:03,830  
we went through different quarantine

22

00:02:07,070 --> 00:02:05,760  
we're actually on the first flip have to

23

00:02:08,870 --> 00:02:07,080  
say the blue team even though he had to

24

00:02:48,850 --> 00:02:08,880  
walk and in the orbiter the blue team

25

00:02:48,860 --> 00:03:00,310  
4.3 coming up

26  
00:03:04,370 --> 00:03:03,140  
Space Lab for Katie just let you know

27  
00:03:06,080 --> 00:03:04,380  
we're now beginning to see some

28  
00:03:13,430 --> 00:03:06,090  
oscillation so we'd like to hold here at

29  
00:03:13,440 --> 00:03:32,800  
[Music]

30  
00:03:32,810 --> 00:03:47,440  
that's all okay

31  
00:03:52,730 --> 00:03:50,600  
and now with the live video from the

32  
00:03:55,910 --> 00:03:52,740  
Space Lab module we see Kathy Thornton

33  
00:04:01,030 --> 00:03:55,920  
going down and to adjust one of the two

34  
00:04:05,900 --> 00:04:03,310  
and we also see

35  
00:04:18,640 --> 00:04:05,910  
payload specialist al Sacco at the

36  
00:04:28,120 --> 00:04:21,350  
thought I seemed pretty pretty randomly

37  
00:04:35,270 --> 00:04:31,540  
meanwhile Kathy Thornton

38  
00:04:37,790 --> 00:04:35,280

as we can see is going about her work

39

00:04:41,620 --> 00:04:37,800

which at this time is involving the drop

40

00:04:43,270 --> 00:04:41,630

physics module she has one of the

41

00:04:47,750 --> 00:04:43,280

DPM

42

00:06:48,490 --> 00:04:47,760

bay doors open for getting the system

43

00:06:48,500 --> 00:07:03,000

and Space Lab Huntsville for Kathy and

44

00:07:08,430 --> 00:07:06,610

they've been growing now over over about

45

00:07:14,340 --> 00:07:08,440

five days

46

00:07:20,070 --> 00:07:15,830

[Music]

47

00:07:24,540 --> 00:07:23,350

in this case we're looking towards deep

48

00:07:30,240 --> 00:07:24,550

space

49

00:07:35,280 --> 00:07:32,340

mounted

50

00:07:38,410 --> 00:07:35,290

camera in the payload Bay of Columbia

51  
00:07:40,090 --> 00:07:38,420  
and now we switch camera views and when

52  
00:07:42,640 --> 00:07:40,100  
we look from the forward end of the

53  
00:07:45,970 --> 00:07:42,650  
payload Bay we get a excellent view of

54  
00:07:47,460 --> 00:07:45,980  
the clouds and the ocean surface below

55  
00:07:49,980 --> 00:07:47,470  
the spacecraft

56  
00:07:53,310 --> 00:07:49,990  
as

57  
00:07:57,180 --> 00:07:53,320  
Columbia now moves to

58  
00:08:00,250 --> 00:07:57,190  
the southeast

59  
00:08:03,280 --> 00:08:00,260  
on a diagonal track which will be

60  
00:08:05,260 --> 00:08:03,290  
bringing it to the southern regions

61  
00:08:06,780 --> 00:08:05,270  
extreme southern regions of Africa in

62  
00:08:10,360 --> 00:08:06,790  
the next few minutes and

63  
00:08:14,680 --> 00:08:10,370

that'll be occurring in the latter

64

00:08:35,709 --> 00:08:14,690

portion of this sunlit segment of orbit

65

00:08:41,810 --> 00:08:38,769

this is a Space Lab operations and

66

00:08:43,450 --> 00:08:41,820

coming down from the Space Lab module

67

00:08:45,680 --> 00:08:43,460

now we have

68

00:08:48,190 --> 00:08:45,690

we have a couple different types of

69

00:08:51,290 --> 00:08:48,200

video as

70

00:08:52,910 --> 00:08:51,300

as the onboard crew gets into some

71

00:08:59,620 --> 00:08:52,920

surface tension driven convection

72

00:09:08,090 --> 00:09:04,090

and at the moment we're seeing the

73

00:09:09,710 --> 00:09:08,100

free surface deformation video which is

74

00:09:13,040 --> 00:09:09,720

one of the special diagnostic tools