1
00:00:05,180 --> 00:00:03,860
on the upcoming SpaceX crs 10 resupply

2
00:00:08,120 --> 00:00:05,190
mission to the International Space

3
00:00:10,280 --> 00:00:08,130
Station a dragon spacecraft will deliver

4
00:00:13,370 --> 00:00:10,290
the stratospheric aerosol and gas

5
00:00:16,430 --> 00:00:13,380
experiment or sage three instrument to

6
00:00:19,220 --> 00:00:16,440
study ozone in the atmosphere once

7
00:00:21,560 --> 00:00:19,230
mounted on the space station sage 3 will

8
00:00:24,590 --> 00:00:21,570
measure the your sunscreen or ozone

9
00:00:27,679 --> 00:00:24,600
along with other gases aerosols and tiny

10
00:00:29,900 --> 00:00:27,689
particles in the atmosphere following

11
00:00:31,820 --> 00:00:29,910
years of global efforts to significantly

12
00:00:34,700 --> 00:00:31,830
reduce the number of ozone-depleting

13
00:00:38,389 --> 00:00:34,710

substances experts now we're optimistic

14
00:00:40,340 --> 00:00:38,399
that the ozone layer will recover while

15
00:00:43,639 --> 00:00:40,350
watchin saves three is scheduled for

16
00:00:46,160 --> 00:00:43,649
early 2017 preparations have been and

17
00:00:49,010 --> 00:00:46,170
worked for several years sage 3 team

18
00:00:51,709 --> 00:00:49,020
actually began back in September of 2011

19
00:00:53,630 --> 00:00:51,719
we sent a delegation of engineers out to

20
00:00:55,340 --> 00:00:53,640
Langley to meet with the sage team and

21
00:00:58,549 --> 00:00:55,350
to learn a little bit about their

22
00:01:00,500 --> 00:00:58,559
payload and to offer our expertise here

23
00:01:04,130 --> 00:01:00,510
at KSC and how we could help make their

24
00:01:06,380 --> 00:01:04,140
payload successful sage 3 now is being

25
00:01:09,190 --> 00:01:06,390
tested in the high bay F Kennedy Space

26
00:01:12,859 --> 00:01:09,200
Station processing facility or s SPF

27
00:01:14,390 --> 00:01:12,869
world-class processing laboratory every

28
00:01:17,390 --> 00:01:14,400
American launched element for

29
00:01:19,640 --> 00:01:17,400
construction of the ISS of cargo and

30
00:01:22,520 --> 00:01:19,650
each experiment is prepared and checked

31
00:01:25,310 --> 00:01:22,530
out in the s SPF a crucial part of a

32
00:01:27,590 --> 00:01:25,320
premier multi-user spaceport KSC offers

33
00:01:30,109 --> 00:01:27,600
ho stroll support to the stage 3 team

34
00:01:31,819 --> 00:01:30,119
when they arrive at KSC basically we

35
00:01:34,219 --> 00:01:31,829
offer them anything they need to make

36
00:01:36,590 --> 00:01:34,229
their work here and an SSP of high base

37
00:01:39,380 --> 00:01:36,600
successful one unique requirement that

38
00:01:41,929 --> 00:01:39,390

the sage 3 team had was the need for a

39
00:01:45,800 --> 00:01:41,939
super clean room we spent about a year

40
00:01:48,920 --> 00:01:45,810
to develop design and build a super

41
00:01:51,230 --> 00:01:48,930
clean clean room clean tent in the SS PF

42
00:01:54,139 --> 00:01:51,240
high bay and this is considered a class

43
00:01:56,359 --> 00:01:54,149
10k clean room which basically means

44
00:01:58,670 --> 00:01:56,369
that within any given cubic foot of air

45
00:02:01,840 --> 00:01:58,680
inside the tent there are less than

46
00:02:04,660 --> 00:02:01,850
10,000 particles greater than half

47
00:02:07,050 --> 00:02:04,670
micron in size so and this is due to the

48
00:02:10,330 --> 00:02:07,060
sensitivity in the optics of the payload

49
00:02:12,280 --> 00:02:10,340
this 10k clean tent is actually about

50
00:02:14,979 --> 00:02:12,290
ten times cleaner than the air and the

51
00:02:16,330 --> 00:02:14,989
SPF high bay it's about 150 times

52
00:02:19,930 --> 00:02:16,340
cleaner than the air in the average

53
00:02:22,030 --> 00:02:19,940
living room to ensure sage 3 will be

54
00:02:24,610 --> 00:02:22,040
ready to go to work once it arrives at

55
00:02:26,140 --> 00:02:24,620
the space station Kennedy experts have

56
00:02:28,540 --> 00:02:26,150
been assisting Langley Research Center

57
00:02:31,240 --> 00:02:28,550
engineers and conducting extensive

58
00:02:34,809 --> 00:02:31,250
checkouts in the special processing area

59
00:02:37,420 --> 00:02:34,819
of the SSP F I've been more involved in

60
00:02:40,330 --> 00:02:37,430
helping them coordinate their testing

61
00:02:41,559 --> 00:02:40,340
with our ISS simulators so that they can

62
00:02:43,690 --> 00:02:41,569
do their command and data handling

63
00:02:46,540 --> 00:02:43,700

checkouts and make sure that everything

64
00:02:48,070 --> 00:02:46,550
is going to flow the data correctly once

65
00:02:50,949 --> 00:02:48,080
they're on orbit and gathering science

66
00:02:53,199 --> 00:02:50,959
once age 3 is installed on the space

67
00:02:55,449 --> 00:02:53,209
station get what again sending back data

68
00:02:59,289 --> 00:02:55,459
so what's great about this science is

69
00:03:01,750 --> 00:02:59,299
they're going to try to see or verify

70
00:03:04,210 --> 00:03:01,760
whether those efforts that have been

71
00:03:06,910 --> 00:03:04,220
made here on earth have actually helped

72
00:03:08,680 --> 00:03:06,920
improve the ozone layer back I just wish

73
00:03:11,290 --> 00:03:08,690
all the payload teams

74
00:03:13,570 --> 00:03:11,300
and the science teams great success I