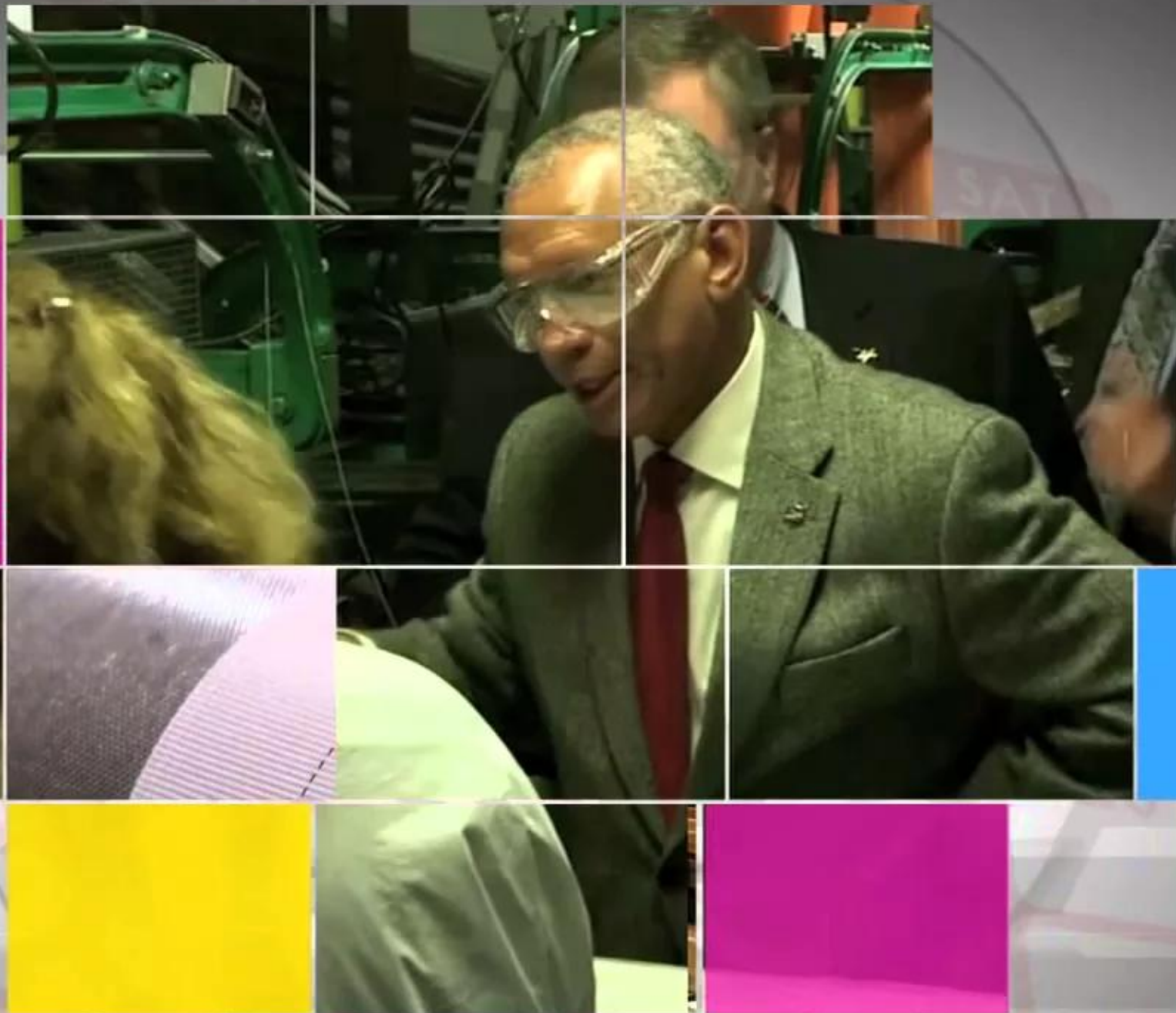


Weaving the way to Mars



1
00:00:05,599 --> 00:00:02,300
here's some of the stories trending this

2
00:00:07,639 --> 00:00:05,609
week at NASA the SpaceX Dragon

3
00:00:10,070 --> 00:00:07,649
spacecraft is loaded with more than

4
00:00:12,080 --> 00:00:10,080
5,000 pounds of supplies and experiments

5
00:00:15,410 --> 00:00:12,090
for delivery to the International Space

6
00:00:18,290 --> 00:00:15,420
Station on crs 5 the company's fifth

7
00:00:21,050 --> 00:00:18,300
resupply mission to the ISS one of the

8
00:00:24,019 --> 00:00:21,060
experiments the cloud aerosol transport

9
00:00:25,790 --> 00:00:24,029
system or cats is designed to study the

10
00:00:28,519 --> 00:00:25,800
global distribution of clouds and

11
00:00:30,470 --> 00:00:28,529
aerosols in our atmosphere launched from

12
00:00:35,000 --> 00:00:30,480
cape canaveral air force station is no

13
00:00:37,069 --> 00:00:35,010

earlier than january 10 new astrophysics

14

00:00:38,810 --> 00:00:37,079

findings presented by nasa researchers

15

00:00:40,790 --> 00:00:38,820

january fourth through eighth and the

16

00:00:43,610 --> 00:00:40,800

225th meeting of the american

17

00:00:45,560 --> 00:00:43,620

astronomical society in seattle included

18

00:00:48,020 --> 00:00:45,570

the largest Hubble Space Telescope image

19

00:00:50,869 --> 00:00:48,030

ever assembled a sweeping bird's-eye

20

00:00:54,350 --> 00:00:50,879

view of a portion of m31 the Andromeda

21

00:00:56,510 --> 00:00:54,360

galaxy even though m31 is over two

22

00:00:58,939 --> 00:00:56,520

million light years away Hubble was

23

00:01:02,029 --> 00:00:58,949

powerful enough to resolve individual

24

00:01:04,609 --> 00:01:02,039

stars in a 61,000 Lightyear long stretch

25

00:01:06,980 --> 00:01:04,619

of the galaxy's pancake shaped disk

26
00:01:09,140 --> 00:01:06,990
never before had astronomers been able

27
00:01:12,109 --> 00:01:09,150
to see individual stars inside an

28
00:01:15,560 --> 00:01:12,119
external spiral galaxy over such a large

29
00:01:17,840 --> 00:01:15,570
contiguous area meanwhile the total

30
00:01:20,390 --> 00:01:17,850
number of verified exoplanet finds by

31
00:01:23,420 --> 00:01:20,400
NASA's Kepler space telescope has been

32
00:01:26,030 --> 00:01:23,430
up to 1,000 after researchers using

33
00:01:28,160 --> 00:01:26,040
Kepler data validated that eighth planet

34
00:01:30,920 --> 00:01:28,170
candidates spotted by the telescope are

35
00:01:32,780 --> 00:01:30,930
in fact planets three of the planets are

36
00:01:35,090 --> 00:01:32,790
located in their sun's habitable zone

37
00:01:37,880 --> 00:01:35,100
the range of distances from the host

38
00:01:40,039 --> 00:01:37,890

star where liquid water might exist on

39

00:01:42,469 --> 00:01:40,049

the surface of an orbiting planet of

40

00:01:46,370 --> 00:01:42,479

those three two are likely made of rock

41

00:01:47,960 --> 00:01:46,380

like Earth a January eighth media

42

00:01:50,090 --> 00:01:47,970

briefing at NASA headquarters in

43

00:01:51,980 --> 00:01:50,100

Washington preview the upcoming soil

44

00:01:54,289 --> 00:01:51,990

moisture active passive mission

45

00:01:56,179 --> 00:01:54,299

scheduled to launch January 20 nights

46

00:01:58,280 --> 00:01:56,189

from Vandenberg Air Force Base in

47

00:02:00,649 --> 00:01:58,290

California the mission will provide the

48

00:02:02,719 --> 00:02:00,659

most accurate highest resolution global

49

00:02:05,179 --> 00:02:02,729

measurements of soil moisture ever

50

00:02:07,880 --> 00:02:05,189

obtained from space and will enhance our

51
00:02:11,740 --> 00:02:07,890
understanding of the processes that link

52
00:02:14,690 --> 00:02:11,750
Earth's water energy and carbon cycles

53
00:02:16,850 --> 00:02:14,700
nasa administrator charlie bolden got a

54
00:02:19,610 --> 00:02:16,860
first-hand look at work being done on

55
00:02:21,740 --> 00:02:19,620
advanced woven material used on the

56
00:02:24,470 --> 00:02:21,750
agency's Orion spacecraft during the

57
00:02:27,050 --> 00:02:24,480
January 9th visit to bally ribbon mills

58
00:02:28,690 --> 00:02:27,060
in Valley Pennsylvania the company a

59
00:02:30,890 --> 00:02:28,700
leader in high-performance

60
00:02:33,199 --> 00:02:30,900
multidimensional woven materials is

61
00:02:35,660 --> 00:02:33,209
leading the multifunctional thermal

62
00:02:37,490 --> 00:02:35,670
protection system padding used to

63
00:02:40,670 --> 00:02:37,500

insulate and protect NASA's Orion

64

00:02:42,680 --> 00:02:40,680

spacecraft Orion will take astronauts on

65

00:02:44,750 --> 00:02:42,690

the journey to Mars and return them

66

00:02:48,410 --> 00:02:44,760

safely to earth with the help of this

67

00:02:51,199 --> 00:02:48,420

technology NASA associate administrator

68

00:02:53,839 --> 00:02:51,209

for science and astronaut John Grunsfeld

69

00:02:55,339 --> 00:02:53,849

was on hand at a preview event for the

70

00:02:58,130 --> 00:02:55,349

smithsonian national air and space

71

00:03:00,349 --> 00:02:58,140

museum's new exhibit outside the

72

00:03:03,800 --> 00:03:00,359

spacecraft 50 years of extra vehicular

73

00:03:06,470 --> 00:03:03,810

activity the exhibit opened January aid

74

00:03:09,110 --> 00:03:06,480

to commemorate the 50th anniversary of

75

00:03:12,830 --> 00:03:09,120

the first two spacewalks in history both

76

00:03:15,830 --> 00:03:12,840

in 1965 on March 18th of that year

77

00:03:17,440 --> 00:03:15,840

soviet cosmonaut Alexey Leonov became

78

00:03:20,240 --> 00:03:17,450

the first person to walk in space

79

00:03:23,030 --> 00:03:20,250

followed by u.s. astronaut edward white

80

00:03:25,759 --> 00:03:23,040

on jun 3rd during the Jimmy for mission

81

00:03:27,979 --> 00:03:25,769

Grunsfeld has performed eight spacewalks

82

00:03:31,369 --> 00:03:27,989

to service and upgrade NASA's Hubble

83

00:03:33,319 --> 00:03:31,379

Space Telescope and that's what's up

84

00:03:35,300 --> 00:03:33,329

this week @nasa for more on these and