



1

00:00:00,960 --> 00:00:05,270

"Here's some of the stories trending This Week at NASA!"

2

00:00:05,270 --> 00:00:09,550

NASA and its international partners are making changes to the International Space Station's

3

00:00:09,550 --> 00:00:13,940

schedule of arriving and departing spacecraft, following the Russian Federal Space Agency's

4

00:00:13,940 --> 00:00:19,470

preliminary findings on its recent loss of the Progress 59 cargo craft.

5

00:00:19,470 --> 00:00:24,349

Exact dates will be announced in the coming weeks, with a Roscosmos update about the Progress

6

00:00:24,349 --> 00:00:27,229

59 investigation expected May 22.

7

00:00:27,229 --> 00:00:32,079

The schedule adjustments mean NASA's Terry Virts and Expedition 43 crewmates, Samantha

8

00:00:32,079 --> 00:00:38,170

Cristoforetti of ESA and Russian cosmonaut Anton Shkaplerov – now will return to Earth

9

00:00:38,170 --> 00:00:43,710

in June instead of May – with NASA astronaut Scott Kelly and Russian cosmonauts Mikhail

10

00:00:43,710 --> 00:00:49,500

Kornienko and Gennady Padalka -- remaining on the station to begin Expedition 44.

11

00:00:49,500 --> 00:00:53,800

NASA's Kjell Lindgren, who is conducting pre-flight training in Russia with the other

12

00:00:53,800 --> 00:01:00,010

members of Expedition 44, now will launch to the station in July.

13

00:01:00,010 --> 00:01:05,210

A draft Request for Proposal issued by NASA's Launch Services Program is seeking new commercial

14

00:01:05,210 --> 00:01:11,460

Venture Class Launch Services (VCLS) to send small satellites and experiments to space

15

00:01:11,460 --> 00:01:15,280

using a smaller than currently available class of rockets.

16

00:01:15,280 --> 00:01:20,030

Launch opportunities for small satellites -- often called CubeSats or nanosatellites

17

00:01:20,030 --> 00:01:24,909

are mostly limited to ride-sharing arrangements on NASA and other launches.

18

00:01:24,909 --> 00:01:30,110

NASA anticipates a growing need for dedicated launch capability for these smaller payloads,

19

00:01:30,110 --> 00:01:34,920

which could be used on future missions for such things as improved weather prediction,

20

00:01:34,920 --> 00:01:39,719

broader Internet coverage and Earth observation.

21

00:01:39,719 --> 00:01:44,939

This closest-yet view of Ceres, captured by NASA's Dawn spacecraft on May 3 and 4 is helping

22
00:01:44,939 --> 00:01:49,649
scientists better resolve the mysterious bright spots on the dwarf planet.

23
00:01:49,649 --> 00:01:54,820
The sequence of images, taken from a distance of 8,400 miles, reveal that the brightest

24
00:01:54,820 --> 00:02:00,270
spots within a crater in the northern hemisphere are composed of many smaller spots.

25
00:02:00,270 --> 00:02:05,960
The exact nature of the spots remains unknown, but scientists estimate the spots are caused

26
00:02:05,960 --> 00:02:13,270
by the reflection of sunlight by highly reflective material on the surface, possibly ice.

27
00:02:13,270 --> 00:02:18,300
NASA laboratory experiments suggests the dark material coating some geological features

28
00:02:18,300 --> 00:02:24,470
of Jupiter's moon Europa is likely sea salt from a subsurface ocean, discolored by exposure

29
00:02:24,470 --> 00:02:26,050
to radiation.

30
00:02:26,050 --> 00:02:31,110
The presence of sea salts on Europa's surface would imply the ocean interacts with its rocky

31
00:02:31,110 --> 00:02:36,420
seafloor -- an important consideration for

establishing whether the icy moon could support

32

00:02:36,420 --> 00:02:37,720

life.

33

00:02:37,720 --> 00:02:44,610

A new NASA Jet Propulsion Laboratory led study finds the last remaining section of Antarctica's

34

00:02:44,610 --> 00:02:50,670

Larsen B Ice Shelf, which partially collapsed in 2002, is quickly weakening and likely to

35

00:02:50,670 --> 00:02:54,720

disintegrate completely before the end of the decade.

36

00:02:54,720 --> 00:02:59,890

Scientists found the shelf's remnant, which is about 625 square miles and at least 10,000

37

00:02:59,890 --> 00:03:06,490

years old, is flowing faster, becoming increasingly fragmented and developing large cracks.

38

00:03:06,490 --> 00:03:11,190

Ice shelves are the gatekeepers for glaciers flowing from Antarctica toward the ocean.

39

00:03:11,190 --> 00:03:16,340

Without them, glacial ice enters the ocean faster and accelerates the pace of global

40

00:03:16,340 --> 00:03:19,260

sea level rise.

41

00:03:19,260 --> 00:03:24,060

A major hurricane has not made landfall in the United States in a record nine years.

42
00:03:24,060 --> 00:03:31,040
That's a rarity a new NASA study says likely
only happens once every 177 years.

43
00:03:31,040 --> 00:03:36,100
The study didn't delve into the possible
meteorological causes of this hurricane drought,

44
00:03:36,100 --> 00:03:41,650
but researchers did say it could be just happenstance.

45
00:03:41,650 --> 00:03:43,630
And that's what's up this week @NASA ...