1
00:00:00,789 --> 00:00:03,670
“Here’s some of the stories trending This
Week at NASA!”

2
00:00:03,670 --> 00:00:10,200
On Aug. 2, NASA’s Associate Administrator
for Aeronautics Jaiwon Shin, representatives

3
00:00:10,200 --> 00:00:14,920
from the Federal Aviation Administration (FAA),
aviation industry leaders and the academic

4
00:00:14,920 --> 00:00:19,880
research community participated in a workshop
hosted by the White House Office of Science

5
00:00:19,880 --> 00:00:25,170
and Technology Policy (OSTP) to discuss Drones
and the Future of Aviation.

6
00:00:25,170 --> 00:00:29,430
The event was designed to explore airspace
integration issues; public and commercial

7
00:00:29,430 --> 00:00:35,590
uses; and safety, security, and privacy concerns
related to this emerging technology.

8
00:00:35,590 --> 00:00:40,180
NASA is working with the FAA on a traffic
management system that will enable pilots

9
00:00:40,180 --> 00:00:45,330
of these aircraft to fly safely in the national
airspace.

10
00:00:45,330 --> 00:00:50,560
After analyzing data from space, NASA has
created images and animations of the slow-moving

11
00:00:50,560 --> 00:00:56,320
storms that dumped as much as 6 to 7 inches
of rain over central Maryland in about two

12
00:00:56,320 --> 00:01:02,080
hours' time, on July 30 – causing devastating
flooding in historic Ellicott City.

13
00:01:02,080 --> 00:01:06,830
The imagery was created from data captured
by sensors on the Global Precipitation Measurement

14
00:01:06,830 --> 00:01:09,000
(GPM) mission satellite, and others.

15
00:01:09,000 --> 00:01:15,790
GPM is a joint mission between NASA and the
Japan Aerospace Exploration Agency.

16
00:01:15,790 --> 00:01:21,000
According to a new study by NASA-funded researchers,
Jupiter’s shadow has a freezing effect on

17
00:01:21,000 --> 00:01:25,130
the atmosphere surrounding Io, the planet’s
volcanic moon.

18
00:01:25,130 --> 00:01:31,100
Observations during the study confirmed that
Io’s thin atmosphere, which consists primarily

19
00:01:31,100 --> 00:01:37,420
of sulfur dioxide (SO2) gas emitted from volcanoes,
collapses as the gas freezes onto the moon’s

20
00:01:37,420 --> 00:01:42,590
surface, due to the drop in temperature when
Jupiter shades Io during daily eclipses.

21

00:01:42,590 --> 00:01:48,619
Then the atmosphere is restored when the ice warms and transforms from solid back to gas

22
00:01:48,619 --> 00:01:51,970
as the moon moves out of eclipse back into sunlight.

23
00:01:51,970 --> 00:01:56,760
The observations, which occurred over two nights in November 2013, are the first time

24
00:01:56,760 --> 00:02:01,740
scientists have witnessed this phenomenon directly, improving our understanding of this

25
00:02:01,740 --> 00:02:05,150
geologically active moon.

26
00:02:05,150 --> 00:02:10,129
At NASA’s Kennedy Space Center, in Florida, time-lapse footage was captured as the Orion

27
00:02:10,129 --> 00:02:15,670
crew module was moved from the birdcage test stand to an enclosed clean room inside the

28
00:02:15,670 --> 00:02:19,459
Neil Armstrong Operations and Checkout Building high bay.

29
00:02:19,459 --> 00:02:24,391
Work will continue to prepare Orion for the first un-crewed flight on the agency’s Space

30
00:02:24,391 --> 00:02:28,480
Launch System rocket, targeted for November 2018.

31
00:02:28,480 --> 00:02:34,189

Orion is the spacecraft that will carry astronauts
on missions to deep space destinations, including

32
00:02:34,189 --> 00:02:37,510
on NASA's Journey to Mars.

33
00:02:37,510 --> 00:02:42,689
With the 2016 summer Olympic games underway,
NASA's Chandra X-ray observatory program

34
00:02:42,689 --> 00:02:45,790
has posted the AstrOlympics project.

35
00:02:45,790 --> 00:02:50,819
This online resource compares the physics
involved in the impressive feats performed

36
00:02:50,819 --> 00:02:56,079
by Olympic athletes to similar movement that
takes place in cosmic events throughout the

37
00:02:56,079 --> 00:02:57,450
universe.

38
00:02:57,450 --> 00:03:03,340
The project shows how athletic and cosmic
activities involve speed, mass, time, pressure,

39
00:03:03,340 --> 00:03:08,809
rotation, distance, and more – and how studying
these forces of nature can help us learn more

40
00:03:08,809 --> 00:03:13,870
about the world around us, and the universe
we live in.

41
00:03:13,870 --> 00:03:18,010
NASA celebrates two significant anniversaries
on Aug. 5.

42
00:03:18,010 --> 00:03:22,559
That date is the four-year anniversary of
the Curiosity rover’s landing on Mars.

43
00:03:22,559 --> 00:03:27,620
Curiosity touched down in 2012 at 10:32 p.m.
PDT on that date.

44
00:03:27,620 --> 00:03:32,609
In its first year, the mission achieved its
goal by finding the Gale Crater region of

45
00:03:32,609 --> 00:03:37,579
the planet offered conditions suitable for
microbial life in the past.

46
00:03:37,579 --> 00:03:41,650
NASA recently approved an additional two-year
extension for Curiosity’s mission.

47
00:03:41,650 --> 00:03:47,249
Aug. 5 also is the five-year anniversary of
the launch of NASA’s Juno spacecraft, which

48
00:03:47,249 --> 00:03:53,400
arrived at Jupiter on July 4 of this year
for its 20-month mission to study our solar

49
00:03:53,400 --> 00:03:56,159
system’s largest planet.

50
00:03:56,159 --> 00:03:58,189
And that’s what’s up this week @NASA …