
FIU
Medina Aquarius
Program

1
00:00:00,740 --> 00:00:04,210
“Here’s some of the stories trending This
Week at NASA!”

2
00:00:04,210 --> 00:00:09,690
NASA’s Spitzer Space Telescope has helped
astronomers confirm the discovery of the nearest

3
00:00:09,690 --> 00:00:12,580
rocky planet outside our solar system.

4
00:00:12,580 --> 00:00:19,390
The planet, called HD 219134b, is a bit larger
than Earth and located a mere 21 light-years

5
00:00:19,390 --> 00:00:23,680
away in the Cassiopeia constellation, near
the North Star.

6
00:00:23,680 --> 00:00:30,859
While HD 219134b orbits too close to its star
to sustain life, it is the closest exoplanet

7
00:00:30,859 --> 00:00:36,320
to Earth to be detected transiting, or crossing
in front of, its star – which makes it perfect

8
00:00:36,320 --> 00:00:38,730
for extensive scientific research.

9
00:00:38,730 --> 00:00:43,750
The results of this discovery are the subject
of a study accepted for publication in the

10
00:00:43,750 --> 00:00:46,250
journal Astronomy & Astrophysics.

11
00:00:46,250 --> 00:00:49,750
NASA’s Hubble Space Telescope and the W.M.

12
00:00:49,750 --> 00:00:55,030
Keck Observatory in Hawaii have made independent
confirmations of an exoplanet orbiting far

13
00:00:55,030 --> 00:00:57,000
from its central star.

14
00:00:57,000 --> 00:01:01,960
The finding, made through a technique called
gravitational microlensing, opens a new piece

15
00:01:01,960 --> 00:01:07,450
of discovery space in the hunt for extrasolar
planets: to uncover planets as far from their

16
00:01:07,450 --> 00:01:11,850
central stars as Jupiter and Saturn are from
our sun.

17
00:01:11,850 --> 00:01:17,869
The Hubble and Keck Observatory results will
appear in the July 30 edition of The Astrophysical

18
00:01:17,869 --> 00:01:19,100
Journal.

19
00:01:19,100 --> 00:01:24,550
NASA’s prime contractor for the Orion spacecraft
– Lockheed Martin – conducted its second

20
00:01:24,550 --> 00:01:29,560
successful ground-based test recently, to
evaluate how the fairing panels on Orion will

21
00:01:29,560 --> 00:01:31,749
separate on its way to space.

22
00:01:31,749 --> 00:01:36,130

The massive panels help the spacecraft endure
the aerodynamic forces encountered during

23
00:01:36,130 --> 00:01:39,760
launch – then are jettisoned several minutes
into flight.

24
00:01:39,760 --> 00:01:45,259
The testing incorporated several design changes
to reduce spacecraft mass and better prepare

25
00:01:45,259 --> 00:01:50,149
Orion for its first test mission on NASA’s
Space Launch System (SLS) rocket to a distant

26
00:01:50,149 --> 00:01:52,539
lunar orbit.

27
00:01:52,539 --> 00:01:57,920
The 20th NASA Extreme Environment Mission
Operations or NEEMO mission got underway July

28
00:01:57,920 --> 00:02:02,159
20 in the Florida Keys – about 60 feet below
the surface of the Atlantic Ocean.

29
00:02:02,159 --> 00:02:07,490
NASA astronaut Serena Aunon and ESA astronaut
Luca Parmitano are among the NEEMO crew of

30
00:02:07,490 --> 00:02:11,560
the Aquarius habitat, the world's only undersea
science station.

31
00:02:11,560 --> 00:02:16,580
The 14-day mission is designed to test tools
and techniques for use during possible future

32
00:02:16,580 --> 00:02:22,790
spacewalks on asteroids and the surfaces of

Mars and its moons.

33
00:02:22,790 --> 00:02:28,320
According to a NASA study published in the
July 30 Journal of Geophysical Research: Atmospheres,

34
00:02:28,320 --> 00:02:34,530
California accumulated a “rainfall debt”
of about 20 inches between 2012 and 2015 – that’s

35
00:02:34,530 --> 00:02:38,070
equivalent to the state’s average amount
of rainfall in a year.

36
00:02:38,070 --> 00:02:42,310
The majority of the precipitation loss is
the result of a high-pressure system in the

37
00:02:42,310 --> 00:02:47,650
eastern Pacific Ocean that has hindered water
vapor-rich air currents, called atmospheric

38
00:02:47,650 --> 00:02:52,630
rivers, from reaching the California coast
since 2011.

39
00:02:52,630 --> 00:02:57,690
The Unmanned Aircraft Systems Traffic Management
Convention kicked off July 28 at NASA’s

40
00:02:57,690 --> 00:03:00,870
Ames Research Center in Moffett Field, California.

41
00:03:00,870 --> 00:03:05,240
The three-day event featured a keynote speech
from Jaiwon Shin, the agency’s associate

42
00:03:05,240 --> 00:03:07,290
administrator for aeronautics.

43
00:03:07,290 --> 00:03:11,730
It also included demonstrations of the latest
developments in unmanned aircraft systems

44
00:03:11,730 --> 00:03:17,330
technology, safety and security; solutions
for privacy concerns and issues; and discussion

45
00:03:17,330 --> 00:03:23,400
about the future impact of low-altitude flight
on the emerging business sector.

46
00:03:23,400 --> 00:03:25,540
And that’s what’s up this week @NASA …