

СОЮЗ

К ЗВЕЗДАМ
ТКРЬТА



1
00:00:00,450 --> 00:00:03,750

“Here’s some of the stories trending This Week at NASA!”

2
00:00:03,750 --> 00:00:08,490

NASA this month is scheduled to launch the first of six next-generation, Earth-observing

3
00:00:08,490 --> 00:00:10,170
small satellites.

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00:00:10,170 --> 00:00:15,269

They’ll demonstrate innovative new approaches for measuring hurricanes, Earth’s energy budget

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00:00:15,269 --> 00:00:20,930

– which is essential to understanding greenhouse gas effects on climate, aerosols, and other

6
00:00:20,930 --> 00:00:24,850

atmospheric factors affecting our changing planet.

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00:00:24,850 --> 00:00:30,200

These small satellites range in size from a loaf of bread to a small washing machine,

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00:00:30,200 --> 00:00:34,250

and weigh as little as a few pounds to about 400 pounds.

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00:00:34,250 --> 00:00:39,000

Their size helps keeps development and launch costs down -- because they often hitchhike

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00:00:39,000 --> 00:00:43,590

to space as a “secondary payload” on another mission’s rocket.

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00:00:43,590 --> 00:00:49,079

Small spacecraft and satellites are helping NASA advance scientific and human exploration,

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00:00:49,079 --> 00:00:55,350

test technologies, reduce the cost of new space missions, and expand access to space.

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00:00:55,350 --> 00:01:00,239

On Nov. 10, NASA previewed one of those six new small satellite missions – the Cyclone,

14

00:01:00,239 --> 00:01:05,289

Global Navigation Satellite System, or (CYGNSS) – during a news briefing at the agency's

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00:01:05,289 --> 00:01:07,420

headquarters in Washington.

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00:01:07,420 --> 00:01:12,630

CYGNSS is a constellation of eight identical microsatellites that will gather never-before-seen

17

00:01:12,630 --> 00:01:18,000

details on the formation and intensity of tropical cyclones and hurricanes.

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00:01:18,000 --> 00:01:23,600

The mission's unique approach of using reflections from GPS signals off the ocean surface will

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00:01:23,600 --> 00:01:29,359

enable it to monitor surface winds and other air-sea interactions in rapidly evolving tropical

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00:01:29,359 --> 00:01:31,140

storm systems.

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00:01:31,140 --> 00:01:36,990

CYGNSS is targeted to launch Dec. 12 from

Cape Canaveral Air Force Station in Florida.

22

00:01:36,990 --> 00:01:42,469

NASA astronaut Peggy Whitson and her Expedition 50-51 crewmates, Oleg Novitskiy of the Russian

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00:01:42,469 --> 00:01:48,490

space agency Roscosmos, and Thomas Pesquet of the European Space Agency, participated

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00:01:48,490 --> 00:01:55,179

in a variety of pre-launch training activities Nov. 1-10 at the Baikonur Cosmodrome in Kazakhstan.

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00:01:55,179 --> 00:02:00,780

The trio, and members of the back-up crew, are preparing for the launch of Whitson, Novitskiy

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00:02:00,780 --> 00:02:06,770

and Pesquet, Nov. 17 Eastern time, for a five-month mission to the International Space Station.

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00:02:06,770 --> 00:02:13,459

A team of NASA, military and contractor personnel recently completed a successful Underway Recovery

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00:02:13,459 --> 00:02:18,230

Test 5 (URT-5) with a test version of NASA's Orion crew module.

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00:02:18,230 --> 00:02:23,280

The test, conducted from the USS San Diego, off the coast of California, demonstrated

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00:02:23,280 --> 00:02:29,230

and evaluated the processes, procedures, hardware and personnel needed to safely recover the

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00:02:29,230 --> 00:02:34,180

real spacecraft from the ocean when it returns

from deep space missions and move it to a

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00:02:34,180 --> 00:02:38,200

secure location inside the well deck of a
Navy ship.

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00:02:38,200 --> 00:02:43,739

New ground support equipment testing, included
attaching tow lines to five attach points,

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00:02:43,739 --> 00:02:48,530

rather than three, on the crew module, and
modifications that make it easier to connect

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00:02:48,530 --> 00:02:51,310

tow lines in rough water conditions.

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00:02:51,310 --> 00:02:57,700

Orion is being developed to carry astronauts
to deep space destinations, including an asteroid

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00:02:57,700 --> 00:03:00,599

and on NASA's Journey to Mars.

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00:03:00,599 --> 00:03:02,640

And that's what's up this week @NASA ...