



1

00:00:00,890 --> 00:00:05,130

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

2

00:00:05,130 --> 00:00:09,630

On Dec. 11 aboard the International Space Station, NASA’s Kjell Lindgren, Russian

3

00:00:09,630 --> 00:00:15,370

cosmonaut Oleg Kononenko and Kimiya Yui of the Japan Aerospace Exploration Agency, bid

4

00:00:15,370 --> 00:00:20,250

farewell to crew members remaining on the station -- including Commander Scott Kelly,

5

00:00:20,250 --> 00:00:22,740

NASA’s one-year mission astronaut.

6

00:00:22,740 --> 00:00:27,489

The returning members of Expedition 45 then climbed aboard their Soyuz spacecraft for

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00:00:27,489 --> 00:00:29,140

the trip back to Earth.

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00:00:29,140 --> 00:00:36,329

They safely touched down hours later in Kazakhstan – closing out a 141-day stay in space.

9

00:00:36,329 --> 00:00:41,149

Meanwhile, preparations continue at the Baikonur Cosmodrome in Kazakhstan for the launch of

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00:00:41,149 --> 00:00:46,450

the next three additions to the space station crew – including NASA astronaut Tim Kopra.

11

00:00:46,450 --> 00:00:52,000

He's participating in prelaunch training  
with Expedition 46-47 Soyuz Commander Yuri

12  
00:00:52,000 --> 00:00:57,190  
Malenchenko of the Russian Federal Space Agency  
and Flight Engineer Tim Peake of the European

13  
00:00:57,190 --> 00:00:58,879  
Space Agency.

14  
00:00:58,879 --> 00:01:05,170  
Launch of their Soyuz to the station from  
Kazakhstan is scheduled for Dec. 15.

15  
00:01:05,170 --> 00:01:10,770  
Orbital ATK's enhanced Cygnus cargo craft  
arrived at the space station on Dec. 9, three

16  
00:01:10,770 --> 00:01:15,920  
days after launching on a United Launch Alliance  
Atlas 5 rocket from Florida.

17  
00:01:15,920 --> 00:01:20,520  
This is the first flight of the enhanced Cygnus  
– with its greater payload capacity.

18  
00:01:20,520 --> 00:01:26,110  
The 7,000-plus pounds of cargo delivered by  
Cygnus includes science and research, crew

19  
00:01:26,110 --> 00:01:32,270  
supplies and vehicle hardware in support of  
the approximately 250 science and research

20  
00:01:32,270 --> 00:01:39,259  
investigations that will occur during the  
Expeditions 45 and 46 missions.

21  
00:01:39,259 --> 00:01:43,570  
On Dec. 8, members of the media toured the

## Quantum Artificial Intelligence Laboratory

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00:01:43,570 --> 00:01:46,640

or (QuAIL) at NASA's Ames Research Center.

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00:01:46,640 --> 00:01:51,910

The Quantum Artificial Intelligence Laboratory is the agency's hub for an experiment to assess

24

00:01:51,910 --> 00:01:57,500

the potential of quantum computers to perform calculations that are difficult or impossible

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00:01:57,500 --> 00:02:00,000

using conventional supercomputers.

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00:02:00,000 --> 00:02:05,070

The QuAIL team hopes to demonstrate quantum computing and algorithms that may someday

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00:02:05,070 --> 00:02:10,390

dramatically improve NASA's ability to solve difficult optimization problems for missions

28

00:02:10,390 --> 00:02:14,160

in aeronautics, Earth science, and space exploration.

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00:02:14,160 --> 00:02:20,599

NASA's Jet Propulsion Laboratory hosted the annual Invention Challenge recently in

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00:02:20,599 --> 00:02:21,959

Pasadena, California.

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00:02:21,959 --> 00:02:26,590

Middle and high school teams demonstrated unique devices they built to compete in this

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00:02:26,590 --> 00:02:29,599

year's challenge – the “Ball Fling Contest”.

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00:02:29,599 --> 00:02:33,540

The goal of the challenge was to hit three different targets with playground balls in

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00:02:33,540 --> 00:02:35,459

less than 60 seconds.

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00:02:35,459 --> 00:02:40,599

Twenty-one student teams and three teams of JPL engineers and scientists were invited

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00:02:40,599 --> 00:02:41,900

to compete.

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00:02:41,900 --> 00:02:47,620

The competition promotes creativity, strategic thinking and improvement of science, technology,

38

00:02:47,620 --> 00:02:51,470

engineering and math or STEM skills.

39

00:02:51,470 --> 00:02:53,490

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