



SPACE TO GROUND

1
00:00:00,729 --> 00:00:02,419
VO: Houston, station on space to ground.

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00:00:02,419 --> 00:00:05,420
Josh Byerly: Welcome to space to ground, your weekly look at what's happening on board

3
00:00:05,420 --> 00:00:05,830
the ISS.

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00:00:05,830 --> 00:00:07,180
I'm Josh Byerly.

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00:00:07,180 --> 00:00:10,299
Orbital Sciences' Cygnus completed its mission this week.

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00:00:10,299 --> 00:00:14,739
The cargo craft was detached from the station on Tuesday and sent into a destructive re-entry

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00:00:14,739 --> 00:00:16,750
into the atmosphere on Wednesday.

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00:00:16,750 --> 00:00:21,080
This brings to a close the first official cargo flight to the station by Orbital Sciences.

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00:00:21,080 --> 00:00:25,599
So the United States now has two commercial companies -- Orbital and SpaceX -- flying

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00:00:25,599 --> 00:00:29,310
up to the ISS, along with international partner vehicles.

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00:00:29,310 --> 00:00:32,730
It may not be one of the most glorious parts of living on station, but the crew did some

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00:00:32,730 --> 00:00:34,030
cleaning this week.

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00:00:34,030 --> 00:00:37,780
Mike Hopkins took some microbial samples
from the station's surfaces.

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00:00:37,780 --> 00:00:40,680
This is done to make sure there's nothing
gross growing inside.

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00:00:40,680 --> 00:00:43,930
They also change the air filters from time
to time to make sure the air stays clean,

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00:00:43,930 --> 00:00:47,629
because they can't exactly open a window
and let some fresh air inside.

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00:00:47,629 --> 00:00:50,449
Did you know that if you were to fly up to
the space station, you'd actually get a

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00:00:50,449 --> 00:00:51,789
little taller?

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00:00:51,789 --> 00:00:54,859
Sounds good, but it can actually cause some
lower back pain.

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00:00:54,859 --> 00:00:57,750
The crew used an ultrasound this week to take
a look at their spines.

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00:00:57,750 --> 00:01:02,530
The data will help flight surgeons better
understand how the spine expands in space

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00:01:02,530 --> 00:01:05,220

and to help prevent some of the discomfort that comes with that.

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00:01:05,220 --> 00:01:08,220

The crew members took some time this week to talk with the media and a group of students

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00:01:08,220 --> 00:01:09,570

in Los Angeles.

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00:01:09,570 --> 00:01:12,140

They spoke about what they've been up to lately and life onboard the station.

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00:01:12,140 --> 00:01:16,520

Mike Hopkins: We also take a lot of pictures. The cupola is actually a fantastic view of

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00:01:16,520 --> 00:01:19,760

the Earth and so you want to try and capture that and share as much of that as you can.

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00:01:19,760 --> 00:01:22,830

Byerly: If you're not following along with the crew on social media, we encourage you

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00:01:22,830 --> 00:01:23,530

to do so.

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00:01:23,530 --> 00:01:27,490

They've been sending down some pretty cool photos of our planet in recent weeks.

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00:01:27,490 --> 00:01:31,280

This week's social media question is, "How long can one stay on board ISS?"

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00:01:31,280 --> 00:01:35,110

Crews typically stay onboard ISS for about

six months, although astronaut Scott Kelly

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00:01:35,110 --> 00:01:39,130
and cosmonaut Mikhail Kornienko are currently
training for a one year mission that will

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00:01:39,130 --> 00:01:41,590
kick off in march of 2015.

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00:01:41,590 --> 00:01:45,990
The goal of this mission is to learn how the
human body reacts to being in space that long

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00:01:45,990 --> 00:01:49,380
and to use that information as we look at
going to an asteroid or Mars.

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00:01:49,380 --> 00:01:51,310
And here's some trivia for you.

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00:01:51,310 --> 00:01:55,190
Cosmonaut Valeri Polyakov holds the record
for longest single spaceflight.

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00:01:55,190 --> 00:02:01,260
He spent 438 days on board Mir, and the longest
trip to the ISS was by Mike Lopez-Alegria

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00:02:01,260 --> 00:02:02,280
and Mikhail Tyurin.

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00:02:02,280 --> 00:02:04,670
They spent 215 days up there.