



# SPACE TO GROUND

1  
00:00:03,040 --> 00:00:04,580  
Welcome to "Space to Ground."

2  
00:00:04,580 --> 00:00:08,240  
Your weekly look at what's happening on board  
the International Space Station.

3  
00:00:08,240 --> 00:00:09,520  
I'm Amiko Kauderer.

4  
00:00:09,520 --> 00:00:13,040  
With the first spacewalk of Expedition 41  
less than a week away,

5  
00:00:13,040 --> 00:00:18,390  
Flight engineers Barry Wilmore, Reid Wiseman,  
and Alexander Gerst readied equipment, tools

6  
00:00:18,390 --> 00:00:23,489  
and, of course, their spacesuits in preparation  
for the two U.S. extravehicular activities

7  
00:00:23,489 --> 00:00:25,220  
scheduled this month.

8  
00:00:25,220 --> 00:00:30,110  
Wiseman and Gerst are set to venture outside  
the orbiting complex on Tuesday October 7

9  
00:00:30,110 --> 00:00:35,520  
at 8:10 am eastern for a six-and-a-half hour  
excursion to transfer a failed pump module

10  
00:00:35,520 --> 00:00:40,940  
to its external stowage platform and to install  
an assembly that provides reliable power to

11  
00:00:40,940 --> 00:00:45,370  
the system that moves the station's robotic

arm between worksites.

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00:00:45,370 --> 00:00:51,060

Wiseman and Wilmore will conduct a second spacewalk later this month on October 15.

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00:00:51,060 --> 00:00:55,170

And this week the station was outfitted with a new science instrument that will help keep

14

00:00:55,170 --> 00:00:56,860

an eye on the weather.

15

00:00:56,860 --> 00:01:02,230

The station's robotic arm was used to remove the ISS rapid scatterometer, or RapidScat,

16

00:01:02,230 --> 00:01:06,680

from the external trunk of SpaceX's dragon cargo ship on Tuesday.

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00:01:06,680 --> 00:01:11,420

The hardware was attached to the outside of the Columbus module and will use the station's

18

00:01:11,420 --> 00:01:16,930

unique vantage point to better forecast weather and monitor severe storms.

19

00:01:16,930 --> 00:01:20,780

And this week's social media question asks us how RapidScat actually works.

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00:01:20,780 --> 00:01:26,520

Well, as the station's first ever rotating radar, RapidScat will use pulses reflected

21

00:01:26,520 --> 00:01:31,229

from the ocean's surface from different angles to calculate surface wind speed and direction

22  
00:01:31,229 --> 00:01:36,619  
- gathering more complex data for a more accurate survey of earth's atmosphere.

23  
00:01:36,619 --> 00:01:40,700  
Keep your questions and comments coming using the hashtag space-to-ground, and make sure

24  
00:01:40,700 --> 00:01:42,610  
to follow the ISS on twitter @space\_station.

25  
00:01:42,610 --> 00:01:48,520  
and for a little bit of fun before we go...we've always heard that everyone puts their pants

26  
00:01:48,520 --> 00:01:53,130  
on one leg at a time, right?...well, astronaut Reid Wiseman proves that's not always the