SpacetoGround

1
00:00:03,129 --> 00:00:05,560
WELCOME TO SPACE TO GROUND, I'M LEAH CHESHIER.

2
00:00:05,560 --> 00:00:10,830
HISTORY WAS MADE THIS WEEK AS NASA ASTRONAUTS CHRISTINA KOCH AND JESSICA MEIR ACC

3
00:00:10,830 --> 00:00:13,180
THE FIRST EVER ALL-FEMALE SPACEWALK.

4
00:00:14,610 --> 00:00:18,380
THROUGHOUT SPACEFLIGHT HISTORY, 14 WOMEN HAVE COMPLETED SPACEWALKS.

5
00:00:18,390 --> 00:00:23,749
ON OCTOBER 18, JESSICA MEIR BROUGHT THAT NUMBER UP TO 15 WHEN SHE FLOATED OUTSIDE

6
00:00:23,749 --> 00:00:30,169
ALONGSIDE 4-TIME SPACEWALKER CHRISTINA KOCH FOR THE FIRST ALL-FEMALE EXTRAVEHICULA

7
00:00:30,169 --> 00:00:35,860
THE PAIR REPLACED A FAULTY BATTERY CHARGE/DISCHARGE UNIT, OR BCDU, WHICH REGULATES

8
00:00:35,860 --> 00:00:40,170
OF CHARGE THE STATION'S BATTERIES RECEIVE
FROM ENERGY COLLECTED BY THE SOLAR ARRAYS.

9
00:00:40,170 --> 00:00:44,850
THE REMAINING SPACEWALKS PLANNED TO CONTINUE INSTALLATION OF LITHIUM-ION BATTERIES

10
00:00:44,850 --> 00:00:46,480
BE COMPLETED AT A LATER DATE.

11
00:00:47,510 --> 00:00:52,380
ANOTHER MAJOR MILESTONE OCCURRED THIS WEEK AS WE REVEALED THE NEXT GENERATION S

12
00:00:52,380 --> 00:00:54,600
FOR THE ARTEMIS GENERATION OF ASTRONAUTS.

13

00:00:55,990 --> 00:01:00,860
THE ARTEMIS PROGRAM WILL TAKE HUMANS FORWARD TO THE MOON IN 2024, LANDING THE FIRST

14
00:01:00,870 --> 00:01:03,220
AND NEXT MAN ON THE LUNAR SOUTH POLE.

15
00:01:03,220 --> 00:01:08,630
THIS NEW SPACESUIT, CALLED THE EXPLORATION EXTRAVEHICULAR MOBILITY UNIT, OR XEMU, WI

16
00:01:08,630 --> 00:01:14,179
ALLOW FOR GREATER MOBILITY AND ADVANCED COMMUNICATION SYSTEMS, PLUS ENHANCED SA

17
00:01:14,179 --> 00:01:18,530
THE SUIT AND SEVERAL OF ITS COMPONENTS WILL BE TESTED ABOARD THE SPACE STATION IN A

18
00:01:18,530 --> 00:01:20,900
ENVIRONMENT TO CONFIRM THE OVERALL PERFORMANCE.

19
00:01:21,940 --> 00:01:27,969
THIS WEEK'S QUESTION COMES FROM KAREN, WHO ASKS ABOUT THE AVERAGE DURATION OF A S

20
00:01:27,969 --> 00:01:32,270
ON AVERAGE, AMERICAN SPACEWALKS LAST ABOUT 6 AND A HALF HOURS.

21
00:01:32,270 --> 00:01:36,950
TEAMS ON THE GROUND ARE CONSTANTLY MONITORING ASTRONAUTS' CONSUMABLES, LIKE OXY

22
00:01:36,950 --> 00:01:42,840
DIOXIDE AND WATER, AND SPACEWALKS CAN SOMETIMES LAST LONGER AS ASTRONAUTS ACCOM