
SpacetoGround

1
00:00:03,610 --> 00:00:06,000
WELCOME TO SPACE TO GROUND, I'M ISIDRO REYNA.

2
00:00:06,000 --> 00:00:10,880
THIS WEEK, THE SCIENCE CONTINUES ONBOARD THE
INTERNATIONAL SPACE STATION.

3
00:00:10,880 --> 00:00:13,130
THE ASTROBEE PROJECT TEAM CONDUCTED A REMOTE

4
00:00:13,130 --> 00:00:16,640
SCIENCE SESSION DURING THE CORONAVIRUS SHELTER-IN-PLACE ORDER.

5
00:00:16,640 --> 00:00:19,480
ASTROBEES ARE NEXT-GENERATION FREE-FLYING
ROBOTS

6
00:00:19,490 --> 00:00:22,040
THAT OPERATE IN THE INTERIOR OF THE SPACE
STATION.

7
00:00:22,040 --> 00:00:23,710
THEIR PRIMARY PURPOSE IS TO PROVIDE

8
00:00:23,710 --> 00:00:25,960
A FLEXIBLE PLATFORM FOR RESEARCH ON

9
00:00:25,960 --> 00:00:28,260
ZERO-GRAVITY FREE-FLYING ROBOTICS,

10
00:00:28,260 --> 00:00:31,330
ABLE TO HOST A WIDE VARIETY OF PAYLOADS AND
SOFTWARE.

11
00:00:31,330 --> 00:00:33,210
THE TEAM COMMMANDED ASTROBEE REMOTELY FROM

12
00:00:33,210 --> 00:00:35,450

AN INDIVIDUAL TEAM MEMBER'S HOME VERSUS

13
00:00:35,450 --> 00:00:38,360
THE USUAL PROCEDURE FROM AMES RESEARCH CENTER.

14
00:00:38,880 --> 00:00:39,880
THE CREW WORKED ON THE

15
00:00:39,880 --> 00:00:42,700
MANUFACTURING FIBER OPTIC CABLE IN MICROGRAVITY

16
00:00:42,700 --> 00:00:45,070
OR SPACE FIBERS EXPERIMENT, WHICH EVALUATES

17
00:00:45,070 --> 00:00:48,290
A METHOD FOR PRODUCING FIBER OPTIC CABLE IN
SPACE.

18
00:00:48,290 --> 00:00:50,910
MANUFACTURING FIBER OPTIC MATERIALS IN SPACE

19
00:00:50,910 --> 00:00:53,840
HAS THE POTENTIAL TO PROVIDE A HIGHER-PERFORMANCE PRODUCT,

20
00:00:53,840 --> 00:00:56,730
OFFERING DRAMATICALLY LOWER TRANSMISSION LOSSES.

21
00:00:56,730 --> 00:00:59,040
THIS COULD SET THE STAGE FOR IMPROVED IMAGING,

22
00:00:59,040 --> 00:01:03,739
REMOTE SENSING AND NEXT-GENERATION OPTICAL
COMMUNICATIONS ON EARTH.

23
00:01:03,740 --> 00:01:08,020
AS WE PREPARE TO USHER IN A NEW ERA OF HUMAN
SPACEFLIGHT ON MAY 27,

24

00:01:08,020 --> 00:01:10,480
NASA AND SPACEX ARE GEARING UP FOR THE FIRST

25
00:01:10,480 --> 00:01:13,940
OPERATIONAL CREWED FLIGHT OF CREW DRAGON.

26
00:01:13,940 --> 00:01:16,500
THE SPACEX TEAM COMPLETED A STATIC FIRE TEST

27
00:01:16,500 --> 00:01:18,720
OF FALCON NINE'S SECOND STAGE ENGINE,

28
00:01:18,720 --> 00:01:21,620
WHICH WILL PROPEL CREW DRAGON TOWARD THE SPACE STATION.

29
00:01:21,620 --> 00:01:24,660
ADDITIONALLY, NASA HAS ASSIGNED ASTRONAUT
SHANNON WALKER

30
00:01:24,670 --> 00:01:27,820
TO THE FIRST OPERATIONAL CREWED FLIGHT OF
CREW DRAGON.

31
00:01:27,820 --> 00:01:29,490
WALKER WILL JOIN NASA ASTRONAUTS

32
00:01:29,490 --> 00:01:32,049
MICHAEL HOPKINS AND VICTOR GLOVER JR.,

33
00:01:32,049 --> 00:01:36,000
AS WELL AS SOICHI NOGUCHI OF THE JAPAN AEROSPACE EXPLORATION AGENCY

34
00:01:36,000 --> 00:01:39,400
FOR A SIX-MONTH EXPEDITION ABOARD THE ORBITING
LABORATORY.

35
00:01:39,400 --> 00:01:41,760
THE CREW-1 MISSION WILL BE THE FIRST IN A
SERIES

36
00:01:41,760 --> 00:01:46,050
OF REGULAR, ROTATIONAL FLIGHTS TO THE STATION
FOLLOWING THE DEMO-2 MISSION,

37
00:01:46,050 --> 00:01:48,189
WHICH WILL BE THE FINAL MAJOR STEP BEFORE

38
00:01:48,189 --> 00:01:52,030
NASA’S COMMERCIAL CREW PROGRAM CERTIFIES
CREW DRAGON FOR OPERATIONAL,

39
00:01:52,030 --> 00:01:55,240
LONG-DURATION MISSIONS TO THE SPACE STATION.