
SpacetoGround

1
00:00:03,100 --> 00:00:05,550
WELCOME TO SPACE TO GROUND, I'M ISIDRO REYNA.

2
00:00:05,550 --> 00:00:07,960
THIS WEEK, THE CREW PREPARED FOR AN UPCOMING SPACEWALK.

3
00:00:09,340 --> 00:00:14,620
EXPEDITION 60 FLIGHT ENGINEERS NICK HAGUE
AND ANDREW MORGAN OF NASA REVIEWED PROCEDURES

4
00:00:14,630 --> 00:00:17,460
FOR A SPACEWALK SCHEDULED FOR AUG. 21ST.

5
00:00:17,460 --> 00:00:21,540
DURING THE SPACEWALK, THE DUO WILL ASSIST
IN THE INSTALLATION OF THE INTERNATIONAL DOCKING

6
00:00:21,540 --> 00:00:23,890
ADAPTER-3 TO THE SPACE STATION.

7
00:00:23,890 --> 00:00:27,910
THE ADAPTER WILL PROVIDE A SECOND DOCKING PORT TO ACCOMMODATE THE FUTURE ARRIVAL

8
00:00:27,910 --> 00:00:31,890
THE BOEING STARLINER AND SPACEX CREW DRAGON COMMERCIAL CREW SPACECRAFT.

9
00:00:31,890 --> 00:00:36,550
THIS WILL BE THE THIRD SPACEWALK FOR HAGUE AND THE FIRST FOR MORGAN.

10
00:00:36,550 --> 00:00:39,700
AN UNPILOTED SOYUZ SPACECRAFT WILL LAUNCH TO THE SPACE STATION NEXT WEEK.

11
00:00:41,160 --> 00:00:46,940
THE LAUNCH OF THE UNPILOTED SOYUZ MS-14 SPACECRAFT IS TESTING THE VEHICLE ON THE UP

12
00:00:46,949 --> 00:00:52,159
2.1A BOOSTER IN PREPARATION FOR ITS USE FOR HUMAN LAUNCHES BEGINNING NEXT MARCH.

13
00:00:52,159 --> 00:00:57,679
THIS BOOSTER HAS BEEN USED FOR PROGRESS CARGO VEHICLE LAUNCHES, BUT NOT YET FOR H

14
00:00:57,680 --> 00:01:02,120
THE SEPTEMBER LAUNCH OF THE EXPEDITION 61
CREW WILL BE THE LAST ON THE OLDER SOYUZ

15
00:01:02,120 --> 00:01:03,479
FG MODEL BOOSTER.

16
00:01:03,479 --> 00:01:08,500
THE SOYUZ MS-14 WILL AUTOMATICALLY DOCK TO THE STATION TWO DAYS AFTER IT LAUNCHES A

17
00:01:08,500 --> 00:01:12,870
SPEND TWO WEEKS AT THE STATION BEFORE IT IS DEORBITED FOR A PARACHUTE-ASSISTED LAND

18
00:01:12,870 --> 00:01:15,009
IN KAZAKHSTAN.

19
00:01:15,009 --> 00:01:16,909
THE KEY TO A LONG JOURNEY IS FUEL.

20
00:01:16,909 --> 00:01:19,640
THIS IS AS TRUE IN SPACE AS IT IS ON EARTH.

21
00:01:21,020 --> 00:01:25,600
SPACECRAFT USE CONSUMABLES LIKE PROPELLANT AND COOLANT TO PERFORM KEY FUNCTIONS

22
00:01:25,610 --> 00:01:28,500
AS MANEUVERING AND MAINTAINING CRITICAL EQUIPMENT.

23
00:01:28,500 --> 00:01:33,189
THE TECHNOLOGY TO REPLENISH THESE CRUCIAL SUPPLIES IN SPACE DOES NOT CURRENTLY EX

24
00:01:33,189 --> 00:01:38,420
THIS WEEK THE CREW WORKED ON NASA'S ROBOTIC REFUELING MISSION 3 EXPERIMENT TO ENAB

25

00:01:38,420 --> 00:01:40,560
DURATION, DEEP SPACE EXPLORATION.

26
00:01:41,000 --> 00:01:45,720
THIS EXPERIMENT WILL DEMONSTRATE INNOVATIVE METHODS TO STORE AND REPLENISH CRYOG

27
00:01:45,729 --> 00:01:46,729
IN SPACE.

28
00:01:46,729 --> 00:01:51,479
IT WILL ALSO STORE THE CRYOGENIC FLUID FOR
SIX MONTHS WITH ZERO BOIL OFF TO DEMONSTRATE

29
00:01:51,479 --> 00:01:54,329
THE EFFICIENT USE OF THESE IMPORTANT CONSUMABLES.

30
00:01:54,329 --> 00:01:58,440
THE RESULTING CAPABILITIES COULD BE APPLIED TO EXPLORATION MISSIONS TO THE MOON AND