
SpacetoGround

1
00:00:03,020 --> 00:00:05,210
"HOUSTON, STATION ON SPACE TO GROUND."

2
00:00:05,210 --> 00:00:07,649
WELCOME TO SPACE TO GROUND, I'M LEAH CHESHIER.

3
00:00:07,649 --> 00:00:10,767
IF YOU LOVE LAUNCHES, YOU'RE IN LUCK THIS
VALENTINE'S DAY.

4
00:00:12,331 --> 00:00:15,543
THE RUSSIAN PROGRESS 77 RESUPPLY VEHICLE IS
SCHEDULED

5
00:00:15,543 --> 00:00:18,240
FOR LAUNCH FROM THE BAIKONUR COSMODROME IN
KAZAHKSTAN

6
00:00:18,240 --> 00:00:22,270
ON FEBRUARY 14 AT 11:45 PM ET.

7
00:00:22,270 --> 00:00:24,340
THE SPACECRAFT WILL ARRIVE AT THE SPACE STATION

8
00:00:24,340 --> 00:00:26,530
IN THE EARLY MORNING OF FEBRUARY 17

9
00:00:26,530 --> 00:00:29,770
FOR AN AUTOMATED DOCKING AT 1:20 AM.

10
00:00:29,770 --> 00:00:33,340
CARRYING OVER 1.1 TONS OF CARGO, PROGRESS
WILL DOCK

11
00:00:33,340 --> 00:00:35,000
TO THE PIRS DOCKING COMPARTMENT,

12
00:00:35,000 --> 00:00:37,280

WHERE IT WILL REMAIN OVER THE NEXT SEVERAL
MONTHS,

13
00:00:37,280 --> 00:00:38,930
UNTIL DEPARTING WITH THE PIRS MODULE

14
00:00:38,930 --> 00:00:42,070
FOR A FIREY REENTRY INTO THE EARTH'S ATMOSPHERE.

15
00:00:42,070 --> 00:00:43,070
THIS WILL MAKE WAY FOR

16
00:00:43,070 --> 00:00:45,590
THE FUTURE RUSSIAN MULTIPURPOSE LABORATORY
MODULE

17
00:00:45,590 --> 00:00:48,590
TO BE INSTALLED LATER THIS YEAR.

18
00:00:48,590 --> 00:00:50,920
THE INTERNATIONAL SPACE STATION IS A TEST
BED

19
00:00:50,920 --> 00:00:53,230
FOR TECHNOLOGIES THAT MAY HELP US ON FUTURE

20
00:00:53,230 --> 00:00:56,041
LONG-DURATION MISSIONS TO THE MOON AND MARS.

21
00:00:56,041 --> 00:00:58,270
ANOTHER MAJOR MARS MILESTONE OCCURED THIS
WEEK

22
00:00:58,270 --> 00:01:01,734
WITH THE LANDING OF NASA'S PERSEVERANCE
ROVER.

23
00:01:01,734 --> 00:01:03,210
PERSEVERANCE BEGAN ITS JOURNEY

24
00:01:03,210 --> 00:01:04,879
TO THE RED PLANET LAST JULY,

25
00:01:04,879 --> 00:01:07,889
AND WILL LAND THIS THURSDAY, FEBRUARY 18TH.

26
00:01:07,889 --> 00:01:10,709
ONBOARD PERSEVERANCE ARE THE FIRST SPACESUIT
MATERIALS

27
00:01:10,709 --> 00:01:12,999
EVER SENT TO MARS TO TEST THEIR DURABILITY

28
00:01:12,999 --> 00:01:16,170
AGAINST THE INTENSE RADIATION ON THE MARTIAN
SURFACE.

29
00:01:16,170 --> 00:01:19,219
THE MATERIALS, INCLUDING POLYCARBONATE, VECTRAN,

30
00:01:19,219 --> 00:01:21,979
ORTHO-FABRIC, TEFLON, AND COATED TEFLON,

31
00:01:21,979 --> 00:01:23,929
ARE INCLUDED ON THE CALBIRATION TARGET

32
00:01:23,929 --> 00:01:25,429
OF THE SHERLOC INSTRUMENT,

33
00:01:25,429 --> 00:01:29,380
WHICH WILL SEARCH FOR SIGNS OF PAST MICROBIAL
LIFE.

34
00:01:29,380 --> 00:01:30,601
THIS WEEK'S QUESTION COMES

35
00:01:30,601 --> 00:01:32,329

FROM MS. STILES 3RD GRADE CLASS,

36
00:01:32,329 --> 00:01:34,920
WHO WANTED TO KNOW IF THE ASTRONAUTS COULD
SEE STARS

37
00:01:34,920 --> 00:01:36,736
WHILE THEY ARE WORKING DURING A SPACE WALK?

38
00:01:37,319 --> 00:01:38,649
GREAT QUESTION!

39
00:01:38,649 --> 00:01:41,159
YES, ASTRONAUTS ARE ABLE TO SEE STARS

40
00:01:41,159 --> 00:01:43,590
WHILE THEY LIVE AND WORK ON THE STATION.

41
00:01:43,590 --> 00:01:45,619
JUST LIKE HERE ON EARTH, THE ASTRONAUTS WILL
HAVE

42
00:01:45,619 --> 00:01:47,139
THEIR BEST VIEWS OF THE NIGHT SKIES

43
00:01:47,139 --> 00:01:49,250
WHEN THEY ARE IN A “NIGHT PASS”.

44
00:01:49,250 --> 00:01:50,700
THIS IS THE POINT IN THE ORBIT WHEN

45
00:01:50,700 --> 00:01:52,179
THE EARTH IS BETWEEN THE STATION

46
00:01:52,179 --> 00:01:55,825
AND THE SUN LEAVING THE SPACE STATION IS IN
DARKNESS.