



# Space to Ground

1

00:00:03,020 --> 00:00:05,087

"HOUSTON, STATION ON SPACE TO GROUND."

2

00:00:05,087 --> 00:00:07,752

WELCOME TO SPACE TO GROUND, I'M LEAH CHESHIER.

3

00:00:07,752 --> 00:00:10,020

THIS WEEK, THE CREW ABOARD THE STATION DOUBLED

4

00:00:10,020 --> 00:00:12,657

WITH THE LAUNCH OF A NEW SOYUZ SPACECRAFT.

5

00:00:13,316 --> 00:00:15,570

"AND LIFTOFF!"

6

00:00:15,570 --> 00:00:18,619

ON OCTOBER 14, NASA ASTRONAUT KATE RUBINS

7

00:00:18,619 --> 00:00:20,880

AND ROSCOSMOS COSMONAUTS SERGEY RYZHIKOV

8

00:00:20,880 --> 00:00:23,020

AND SERGEY KUD-SVERCHKOV LAUNCHED TO

9

00:00:23,020 --> 00:00:24,660

THE INTERNATIONAL SPACE STATION FROM

10

00:00:24,660 --> 00:00:27,240

THE BAIKONUR COSMODROME IN KAZAKHSTAN.

11

00:00:27,240 --> 00:00:31,220

THEIR SOYUZ SPACECRAFT LIFTED OFF AT 1:45  
AM ET,

12

00:00:31,220 --> 00:00:34,360

SENDING THE ASTRONAUTS ON A 2-ORBIT, 3-HOUR  
JOURNEY

13

00:00:34,360 --> 00:00:36,660

TO THE ORBITING LABORATORY, WHERE THEY'LL  
LIVE AND WORK

14

00:00:36,660 --> 00:00:38,325

FOR THE NEXT SIX MONTHS.

15

00:00:38,490 --> 00:00:41,480

"SO KATE, AND SERGEY, AND SERGEY, JUST DOCKED.

16

00:00:41,480 --> 00:00:44,980

AND WE ARE REALLY CLOSE TO OPENING THE HATCHES."

17

00:00:44,980 --> 00:00:47,800

UPON ARRIVAL, THEY WERE WELCOMED BY NASA ASTRONAUT

18

00:00:47,800 --> 00:00:49,809

AND STATION COMMANDER CHRIS CASSIDY

19

00:00:49,809 --> 00:00:53,710

AND ROSCOSMOS COSMONAUTS ANATOLY IVANISHIN  
AND IVAN VAGNER.

20

00:00:53,710 --> 00:00:56,890

ON OCTOBER 21, CASSIDY, IVANISHIN, AND VAGNER

21

00:00:56,890 --> 00:00:58,680

ARE SCHEDULED TO RETURN TO EARTH

22

00:00:58,680 --> 00:01:01,340

AFTER 196 DAYS IN SPACE,

23

00:01:01,340 --> 00:01:04,210

LANDING SOUTH OF DZHEZKAZGAN, KAZAKHSTAN.

24

00:01:04,210 --> 00:01:08,070

FIND OUT WHEN TO WATCH BY VISITING [NASA.GOV/LIVE](https://www.nasa.gov/live).

25

00:01:08,761 --> 00:01:11,659

NASA'S SPACEX CREW-1 MISSION IS COMING SOON

26

00:01:11,659 --> 00:01:14,499

TO A SPACE STATION NEAR YOU.

27

00:01:14,499 --> 00:01:16,759

THE FIRST LONG-DURATION COMMERCIAL SPACEFLIGHT

28

00:01:16,759 --> 00:01:19,779

TO THE SPACE STATION IS NOW TARGETED FOR NOVEMBER,

29

00:01:19,779 --> 00:01:21,719

PROVIDING ADDITIONAL TIME FOR SPACEX

30

00:01:21,719 --> 00:01:24,130

TO COMPLETE HARDWARE TESTING AND DATA REVIEWS

31

00:01:24,130 --> 00:01:25,770

WHILE EVALUATING FALCON 9

32

00:01:25,770 --> 00:01:28,200

FIRST STAGE ENGINE GAS GENERATORS.

33

00:01:28,200 --> 00:01:30,590

DURING A RECENT NON-NASA LAUNCH ATTEMPT,

34

00:01:30,590 --> 00:01:33,069

THE GENERATORS EXHIBITED OFF-NOMINAL BEHAVIOR.

35

00:01:33,069 --> 00:01:35,959

THROUGH THE COMMERCIAL CREW AND LAUNCH SERVICES  
PROGRAMS

36

00:01:35,959 --> 00:01:38,994

PARTNERSHIP WITH SPACEX, NASA HAS FULL INSIGHT

37

00:01:38,994 --> 00:01:41,243  
INTO THE COMPANY'S LAUNCH AND TESTING DATA.

38  
00:01:42,678 --> 00:01:44,319  
IF YOU'D LIKE TO HEAR MORE ABOUT CREW-1

39  
00:01:44,319 --> 00:01:46,659  
FROM THE FOUR ASTRONAUTS THEMSELVES,

40  
00:01:46,659 --> 00:01:48,340  
CHECK OUT THE LATEST EPISODE OF

41  
00:01:48,340 --> 00:01:49,810  
HOUSTON, WE HAVE A PODCAST,

42  
00:01:49,810 --> 00:01:52,916  
AVAILABLE AT NASA.GOV/PODCAST.

43  
00:01:53,969 --> 00:01:55,577  
TWITTER USER CHRIS KNOWS THAT

44  
00:01:55,577 --> 00:01:58,289  
ASTRONAUTS ENJOY SPICY FOODS IN SPACE,

45  
00:01:58,289 --> 00:02:03,009  
BUT HE WANTED TO KNOW IF THEY ALSO VALUE FRESHNESS.

46  
00:02:03,009 --> 00:02:04,729  
IN SPACE, ASTRONAUTS CAN'T MAKE

47  
00:02:04,729 --> 00:02:06,549  
A QUICK TRIP TO THE GROCERY STORE,

48  
00:02:06,549 --> 00:02:08,110  
AND RELY ON THEIR FOOD ARRIVING

49  
00:02:08,110 --> 00:02:10,030  
ON RESUPPLY SPACECRAFT.

50  
00:02:10,030 --> 00:02:11,890  
BECAUSE OF THIS, MUCH OF THE ASTRONAUTS'  
FOOD

51  
00:02:11,890 --> 00:02:14,400  
IS THERMO-STABILIZED TO PRESERVE IT

52  
00:02:14,400 --> 00:02:16,100  
FOR LATER CONSUMPTION, BUT SOMETIMES,

53  
00:02:16,100 --> 00:02:18,390  
THEY RECEIVE FRESH FRUITS, VEGETABLES,

54  
00:02:18,390 --> 00:02:20,040  
AND EVEN MEATS AND CHEESES.

55  
00:02:20,040 --> 00:02:22,833  
ADDITIONALLY, AS PART OF THE VEGGIE EXPERIMENT,

56  
00:02:22,833 --> 00:02:24,550  
ASTRONAUTS HAVE BEGUN GROWING PLANTS

57  
00:02:24,550 --> 00:02:26,810  
LIKE LETTUCE ONBOARD, HELPING US PREPARE

58  
00:02:26,810 --> 00:02:29,706  
FOR LONG-DURATION MISSIONS TO THE MOON AND  
MARS.

59  
00:02:30,667 --> 00:02:32,240  
KEEP SENDING IN YOUR QUESTIONS