



# SPACE TO GROUND

1  
00:00:02,020 --> 00:00:03,240  
"WELCOME TO SPACE TO  
GROUND"

2  
00:00:03,680 --> 00:00:07,100  
[Multiple voices]

3  
00:00:07,740 --> 00:00:09,920  
"HOUSTON, STATION  
ON SPACE TO GROUND."

4  
00:00:10,196 --> 00:00:12,456  
WELCOME TO SPACE TO  
GROUND, I'M DAN HUOT.

5  
00:00:12,746 --> 00:00:16,586  
BEFORE WE GET STARTED, WE  
JUST WANTED TO SAY THANKS.

6  
00:00:16,586 --> 00:00:19,616  
TO EVERYONE THAT'S TUNED  
IN OVER THE PAST FEW YEARS

7  
00:00:19,646 --> 00:00:23,016  
TO LEARN WHAT'S GOING ON ABOARD  
THE INTERNATIONAL SPACE STATION,

8  
00:00:23,306 --> 00:00:25,216  
FROM THE STUDENTS  
AND TEACHERS TO ALL

9  
00:00:25,216 --> 00:00:27,436  
OF YOU WATCHING ONLINE,  
THANK YOU.

10  
00:00:27,946 --> 00:00:30,536  
IT'S BEEN A BLAST BRINGING  
YOU TO OUTER SPACE EACH WEEK

11

00:00:30,596 --> 00:00:33,456  
FOR 200 EPISODES AND WE  
LOOK FORWARD TO DOING IT

12  
00:00:33,500 --> 00:00:34,716  
FOR A FEW HUNDRED MORE.

13  
00:00:36,500 --> 00:00:38,160  
HMM, I MISS HAVING  
THAT MUCH HAIR.

14  
00:00:39,396 --> 00:00:42,646  
ANYWAY, THIS WEEK ANOTHER  
CARGO CRAFT IS GETTING READY

15  
00:00:42,646 --> 00:00:44,656  
TO ROCKET TOWARDS  
THE SPACE STATION.

16  
00:00:45,696 --> 00:00:47,506  
ORBITAL ATK IS GEARING

17  
00:00:47,506 --> 00:00:50,146  
UP FOR THEIR EIGHTH RESUPPLY  
MISSION TO THE STATION.

18  
00:00:50,736 --> 00:00:52,826  
THE ANTARES ROCKET  
IS SET TO LIFT OFF

19  
00:00:52,826 --> 00:00:56,006  
FROM THE WALLOPS FLIGHT FACILITY  
IN VIRGINIA AFTER ROLLING

20  
00:00:56,006 --> 00:00:59,006  
OUT TO THE PAD THIS WEEK  
WITH CYGNUS MOUNTED ON TOP.

21  
00:00:59,616 --> 00:01:03,736  
IT'S READY TO LAUNCH ON SATURDAY

MORNING AT 7:37 A.M. EASTERN

22

00:01:03,996 --> 00:01:07,766  
SO WAKE UP EARLY AND TUNE IN  
TO NASA TV OR WATCH ONLINE

23

00:01:07,766 --> 00:01:12,786  
AT NASA.GOV OR ON SOCIAL MEDIA  
AS ABOUT 7,400 POUNDS OF SCIENCE

24

00:01:12,786 --> 00:01:14,786  
AND SUPPLIES ROCKET  
OFF THE SURFACE.

25

00:01:15,636 --> 00:01:18,826  
RANDY BRESNIK SPENT A FEW HOURS  
THIS WEEK GETTING THE STATION

26

00:01:18,826 --> 00:01:20,996  
READY FOR SOME FUTURE  
ROBOTIC ASSISTANTS.

27

00:01:21,926 --> 00:01:24,276  
BRESNIK SPENT TIME  
MAPPING THE INTERIOR

28

00:01:24,276 --> 00:01:28,626  
OF THE JAPANESE MODULE KIBO FOR  
THE UPCOMING ASTROBEE PROJECT.

29

00:01:29,186 --> 00:01:31,516  
SET TO ARRIVE ON  
STATION NEXT SPRING,

30

00:01:31,606 --> 00:01:35,366  
THE TRIO OF SELF-CONTAINED,  
FREE-FLYING ROBOTS WILL BE USED

31

00:01:35,366 --> 00:01:37,786  
TO HELP DEVELOP THE

## TECHNOLOGIES NECESSARY

32

00:01:37,786 --> 00:01:40,776  
TO GIVE ASTRONAUTS A  
HELPING HAND, AIMING TO TAKE

33

00:01:40,776 --> 00:01:44,016  
OVER ROUTINE CHORES LIKE  
CLEANING AND AIR MONITORING.

34

00:01:44,496 --> 00:01:47,886  
DESIGNED TO BE AUTONOMOUS, THIS  
FREES UP THE ASTRONAUTS TO FOCUS

35

00:01:47,886 --> 00:01:49,706  
ON STUFF THAT REQUIRES THE CREW,

36

00:01:49,936 --> 00:01:51,946  
LIKE SCIENCE AND  
COMPLEX REPAIRS.

37

00:01:52,816 --> 00:01:55,496  
THIS WEEK'S TWITTER  
QUESTION COMES FROM KJ WEIS

38

00:01:55,496 --> 00:01:58,106  
AT NORTH KANSAS CITY  
HIGH SCHOOL AND ASKED

39

00:01:58,106 --> 00:02:00,426  
IF YOU CAN SEE DIFFERENT  
PLANET FROM STATION.

40

00:02:00,936 --> 00:02:02,316  
WELL SINCE THEY'RE NOT FAR AWAY,

41

00:02:02,316 --> 00:02:05,466  
THE ASTRONAUTS GENERALLY SEE  
THE SAME PLANETS WE CAN HERE

42

00:02:05,466 --> 00:02:07,940

ON EARTH, BUT THEY GET  
A PRETTY UNIQUE VIEW.

43

00:02:09,080 --> 00:02:11,940

THERE AREN'T ANY HIGH-POWERED  
TELESCOPES FOR ASTRONAUTS

44

00:02:12,016 --> 00:02:14,836

TO GAZE AT OUR PLANETARY  
NEIGHBORS WITH ON STATION

45

00:02:15,196 --> 00:02:18,336

BUT THEIR SUITS OF PHOTOGRAPHIC  
EQUIPMENT GIVES THEM THE CHANCE

46

00:02:18,336 --> 00:02:19,526

FOR SOME UNIQUE SHOTS.

47

00:02:20,066 --> 00:02:23,116

PICTURES LIKE THESE SHOW HOW  
INCREDIBLE VENUS CAN LOOK

48

00:02:23,176 --> 00:02:27,586

WHEN VIEWED FROM 250 MILES ABOVE  
AND ONE ASTRONAUT, DON PETTIT,

49

00:02:27,866 --> 00:02:30,616

WAS EVEN ABLE TO SNAG  
SOME IMAGES FROM SPACE

50

00:02:30,616 --> 00:02:33,596

OF WHEN VENUS PASSED  
DIRECTLY IN FRONT OF THE SUN.

51

00:02:34,616 --> 00:02:36,776

KEEP SENDING US YOUR  
QUESTIONS USING THE

52

00:02:36,776 --> 00:02:38,336  
HASHTAG SPACE-TO-GROUND.

53

00:02:38,626 --> 00:02:41,046  
AND FOR THOSE EDUCATORS  
OUT THERE, BE SURE TO CHECK

54

00:02:41,046 --> 00:02:43,656  
OUT THE SPACE STATION  
RESEARCH EXPLORER APP

55

00:02:43,986 --> 00:02:47,526  
SO YOU CAN SHARE HOW STATION  
RESEARCH RIGHT NOW IS IMPACTING