

A man with short brown hair, wearing a dark suit jacket over a light purple button-down shirt, is speaking. He is positioned on the left side of the frame. Behind him is a large screen displaying the 'SPACE TO GROUND' logo. The logo features the word 'SPACE' in a large, bold, black sans-serif font, with 'TO' in a smaller font centered between two horizontal lines. Below this, the word 'GROUND' is written in a larger, bold, blue sans-serif font. The background behind the man consists of a blue grid pattern with glowing points, suggesting a space or data theme. The overall lighting is dim, with the screen and the man's shirt providing the main light sources.

SPACE  
TO  
GROUND

**#spacetoground**

1

00:00:03,110 --> 00:00:06,410

WELCOME TO SPACE TO GROUND, YOUR WEEKLY LOOK  
AT WHAT'S HAPPENING ON BOARD THE INTERNATIONAL

2

00:00:06,410 --> 00:00:07,410

SPACE STATION.

3

00:00:07,410 --> 00:00:08,410

I'M JOSH BYERLY.

4

00:00:08,410 --> 00:00:11,980

FLIGHT CONTROLLERS ARE STILL LOOKING INTO  
WHAT CAUSED ONE OF THE STATION'S TWO COOLANT

5

00:00:11,980 --> 00:00:13,799

LOOPS TO SHUT DOWN THIS WEEK.

6

00:00:13,799 --> 00:00:17,770

THESE LOOPS CIRCULATE AMMONIA OUTSIDE THE  
STATION TO KEEP THE ELECTRONICS COOL.

7

00:00:17,770 --> 00:00:21,020

THEY SUSPECT A VALVE DIDN'T WORK THE WAY  
IT WAS SUPPOSED TO.

8

00:00:21,020 --> 00:00:24,940

THE CREW IS FINE, AND WE'LL KEEP YOU UPDATED  
AS MISSION CONTROL FIGURES OUT HOW TO FIX

9

00:00:24,940 --> 00:00:25,980

THE ISSUE.

10

00:00:25,980 --> 00:00:29,510

MEANWHILE ORBITAL SCIENCES IS GETTING READY  
FOR ITS CYGNUS TO HEAD TO THE STATION.

11

00:00:29,510 --> 00:00:33,640

IT'LL BE TAKING ABOUT TWENTY-SEVEN-HUNDRED  
POUNDS OF CARGO UP TO THE CREW.

12

00:00:33,640 --> 00:00:37,600

IF YOU LIVE ANYWHERE FROM SOUTH CAROLINA UP  
TO MASSACHUSETTS, MAKE SURE YOU LOOK UP BECAUSE

13

00:00:37,600 --> 00:00:38,770

YOU'LL BE ABLE TO SEE THE LAUNCH.

14

00:00:38,770 --> 00:00:42,790

FOR THE LATEST UPDATES ON THE LAUNCH DATE  
AND TIME, LOG ON TO [NASA.GOV/STATION](https://www.nasa.gov/station).

15

00:00:42,790 --> 00:00:48,960

IN STATION SCIENCE, THE CREW HAS BEEN LOOKING  
AT HOW CIRCADIAN RHYTHMS ARE IMPACTED BY LIVING

16

00:00:48,960 --> 00:00:50,329

IN SPACE.

17

00:00:50,329 --> 00:00:53,180

ANYONE WHO HAS SUFFERED JET LAG KNOWS THE  
IMPORTANCE OF STAYING ON A NORMAL SCHEDULE.

18

00:00:53,180 --> 00:00:54,314

WELL, YOU CAN PROBABLY IMAGINE WHAT IT FEELS  
LIKE GOING AROUND THE WORLD 16 TIMES A DAY.

19

00:00:54,314 --> 00:00:57,739

THIS STUDY TAKES A LOOK AT WHETHER DIFFERENT  
EXERCISE OR EVEN DIFFERENT LIGHTING INSIDE

20

00:00:57,739 --> 00:01:00,640

THE STATION COULD HELP THE CREWS ADAPT.

21

00:01:00,640 --> 00:01:03,270

SCIENTISTS ARE ALSO LOOKING DEEP INTO THE  
EYES OF THE ASTRONAUTS.

22

00:01:03,270 --> 00:01:07,130

OVER THE LAST COUPLE OF YEARS, RESEARCHERS  
HAVE NOTICED THAT SOME OF THE CREW 'S EYES

23  
00:01:07,130 --> 00:01:09,430  
ARE AFFECTED BY BEING UP IN SPACE.

24  
00:01:09,430 --> 00:01:12,580  
THE EYE TENDS TO CHANGE SHAPE, WHICH CHANGES  
VISION.

25  
00:01:12,580 --> 00:01:16,540  
SO THEY'RE NOW USING MULTIPLE WAYS TO STUDY  
THE CREWS' EYES AND FIGURE OUT WHAT'S

26  
00:01:16,540 --> 00:01:17,540  
GOING ON.

27  
00:01:17,540 --> 00:01:21,790  
THE HOPE IS THAT THESE CHANGES CAN BE BETTER  
PREDICTED AND SOLVED, ESPECIALLY WHEN WE TALK

28  
00:01:21,790 --> 00:01:24,310  
ABOUT LONGER JOURNEYS TO AN ASTEROID OR MARS.

29  
00:01:24,310 --> 00:01:26,640  
DO YOU THINK YOU CAN TRAIN LIKE AN ASTRONAUT?

30  
00:01:26,640 --> 00:01:28,720  
MIKE HOPKINS IS GIVING YOU THE CHANCE.

31  
00:01:28,720 --> 00:01:32,590  
MIKE IS A BIG FAN OF PHYSICAL FITNESS, AND  
DURING HIS TIME ABOARD THE STATION, HE'S

32  
00:01:32,590 --> 00:01:35,670  
BEEN SENDING DOWN WORKOUT TIPS AND OTHER FITNESS  
INFO.

33  
00:01:35,670 --> 00:01:40,030

IF YOU'D LIKE TO TAKE A LOOK OR JOIN IN,  
JUST CHECK OUT [WWW.FACEBOOK.COM/TRAINASTRONAUT](http://WWW.FACEBOOK.COM/TRAINASTRONAUT).

34

00:01:40,030 --> 00:01:46,170

ELLIOTT DAVIS TWEETED US THIS QUESTION: WHAT  
TIME ZONE DO THE ASTRONAUTS ON BOARD THE ISS

35

00:01:46,170 --> 00:01:47,270

OPERATE IN?

36

00:01:47,270 --> 00:01:48,460

GOOD QUESTION.

37

00:01:48,460 --> 00:01:52,040

SINCE MISSION CONTROL HOUSTON IS IN TEXAS  
AND THE RUSSIAN FLIGHT CONTROL CENTER IS IN

38

00:01:52,040 --> 00:01:54,900

MOSCOW, WE SPLIT THE DIFFERENCE IN THE TIME  
ZONES.

39

00:01:54,900 --> 00:01:58,890

SO THE CREW AND THE GROUND TEAMS ARE ALL ON  
GREENWICH MEAN TIME, OR UNIVERSAL TIME.

40

00:01:58,890 --> 00:02:03,470

SO THE CREW ENDS UP WAKING UP AROUND MIDNIGHT  
CENTRAL TIME AND GOING TO BED AROUND 3:30PM.