



SPACE TO GROUND

1
00:00:00,606 --> 00:00:02,986
"HOUSTON, STATION
ON SPACE TO GROUND."

2
00:00:02,986 --> 00:00:04,976
WELCOME TO SPACE TO
GROUND, I'M GARY JORDAN.

3
00:00:05,260 --> 00:00:07,360
NASA HAS A NEW ADMINISTRATOR.

4
00:00:07,940 --> 00:00:11,436
JIM BRIDENSTINE OFFICIALLY TOOK
OFFICE AS THE 13TH ADMINISTRATOR

5
00:00:11,436 --> 00:00:14,366
OF NASA ON MONDAY AFTER HE
WAS GIVEN THE OATH OF OFFICE

6
00:00:14,406 --> 00:00:15,706
BY VICE PRESIDENT MIKE PENCE

7
00:00:15,736 --> 00:00:18,216
AT THE AGENCY'S HEADQUARTERS
IN WASHINGTON.

8
00:00:18,826 --> 00:00:20,836
AS PART OF THE CEREMONY,
VICE PRESIDENT PENCE

9
00:00:20,906 --> 00:00:23,066
AND ADMINISTRATOR
BRIDENSTINE SPOKE LIVE

10
00:00:23,066 --> 00:00:25,696
WITH NASA ASTRONAUTS
SCOTT TINGLE, DREW FEUSTEL

11
00:00:25,696 --> 00:00:28,006

AND RICKY ARNOLD ABOARD THE
INTERNATIONAL SPACE STATION

12

00:00:28,060 --> 00:00:29,360

WHO OFFERED CONGRATULATIONS.

13

00:00:30,180 --> 00:00:33,600

"A HEARTY CONGRATULATIONS
TO OUR NEW ADMINISTRATOR,

14

00:00:33,646 --> 00:00:37,506

CONGRATULATIONS ON YOUR
SELECTION TO LEAD NASA."

15

00:00:37,916 --> 00:00:41,346

"I JUST WANTED TO SAY AMERICA
LOVES WHAT YOU GUYS ARE DOING,

16

00:00:41,816 --> 00:00:45,646

THAT WE ARE THRILLED FOR
YOUR LEVELS OF EDUCATION,

17

00:00:45,646 --> 00:00:46,406

THAT YOUR COMMITMENT

18

00:00:46,406 --> 00:00:48,346

TO THE PROGRAM YOUR
COMMITMENT TO OUR COUNTRY.

19

00:00:48,666 --> 00:00:50,656

AND WE'RE THRILLED THAT YOU
WERE ABLE TO JOIN US TODAY

20

00:00:50,656 --> 00:00:51,816

ON THIS VERY SPECIAL DAY.

21

00:00:52,186 --> 00:00:54,736

I AM DEEPLY HONORED SO
THANK YOU ALL SO MUCH."

22

00:00:55,426 --> 00:00:56,886

LOTS OF SCIENCE ON
BOARD THIS WEEK,

23

00:00:57,026 --> 00:00:59,786

BUT ONE STANDS OUT AS THE MVP.

24

00:01:00,166 --> 00:01:03,096

NASA ASTRONAUT DREW FEUSTEL
INSERTED FOOD CYLINDERS

25

00:01:03,096 --> 00:01:06,606

IN THE MULTI-USE
VARIABLE-G PLATFORM, OR MVP.

26

00:01:06,726 --> 00:01:09,736

MVP IS A FACILITY THAT
SUBJECTS MANY TYPES OF SAMPLES

27

00:01:09,776 --> 00:01:13,406

LIKE FRUIT FLIES, FLATWORMS,
PLANTS, FISH, CELLS,

28

00:01:13,706 --> 00:01:15,766

PROTEIN CRYSTALS, AND
IN THIS CASE FOOD,

29

00:01:16,176 --> 00:01:17,176

TO ARTIFICIAL GRAVITY.

30

00:01:17,576 --> 00:01:19,786

THE PLATFORM HAS 2
INTERNAL CAROUSELS

31

00:01:19,786 --> 00:01:22,266

THAT CAN SIMULTANEOUSLY
PRODUCE UP TO 2 GS.

32

00:01:22,676 --> 00:01:25,256

ON EARTH, WE'RE ALL STUCK WITH
1 G NO MATTER WHERE WE GO.

33

00:01:25,706 --> 00:01:28,566
THE INTERNATIONAL SPACE STATION
IS THE ONLY RESEARCH FACILITY

34

00:01:28,566 --> 00:01:31,496
WHERE GRAVITY CAN BE A VARIABLE
LONG TERM FOR EXPERIMENTS.

35

00:01:32,336 --> 00:01:33,936
THIS WEEK'S QUESTIONS
COMES FROM CONG,

36

00:01:34,296 --> 00:01:35,966
WHO WANTS TO KNOW
WHAT COLOR THE SUN IS

37

00:01:35,966 --> 00:01:37,486
FROM AN ASTRONAUT'S PERSPECTIVE.

38

00:01:37,806 --> 00:01:39,006
WITHOUT THE ATMOSPHERE
IN THE WAY,

39

00:01:39,076 --> 00:01:40,686
THE SUN ACTUALLY APPEARS WHITE.

40

00:01:41,536 --> 00:01:43,626
HAVE YOU EVER THOUGHT ABOUT
HOW THE SUN IS NEVER REALLY A

41

00:01:43,626 --> 00:01:44,516
CONSISTENT COLOR?

42

00:01:45,026 --> 00:01:46,956
IT'S ESPECIALLY NOTICABLE
AT SUNSET

43

00:01:47,146 --> 00:01:48,906

WHERE THE SUN CAN
BE YELLOW, ORANGE,

44

00:01:49,096 --> 00:01:50,416

EVEN SOMETIMES A LITTLE RED.

45

00:01:50,866 --> 00:01:53,276

THIS IS ACTUALLY SHORTER
WAVELENGTHS OF VISIBLE LIGHT,

46

00:01:53,606 --> 00:01:56,776

YOUR GREENS, BLUES AND VIOLENTS,
SCATTERING AS THEY PASS

47

00:01:56,816 --> 00:01:57,546

THROUGH THE ATMOSPHERE.

48

00:01:57,686 --> 00:02:00,596

FROM THE SPACE STATION, MUCH OF
THE ATMOSPHERE ISN'T IN THE WAY

49

00:02:00,596 --> 00:02:01,856

TO SCATTER LIGHT FROM THE SUN,

50

00:02:02,096 --> 00:02:04,926

SO THE FULL VISIBLE SPECTRUM
COMES THROUGH AS A BRIGHT WHITE.

51

00:02:05,596 --> 00:02:07,326

ASTRONAUTS HAVE CAPTURED
MANY IMAGES

52

00:02:07,326 --> 00:02:08,506

OF THE WHITE SUN FROM SPACE.

53

00:02:08,876 --> 00:02:12,086

WITH 16 SUNRISES AND SUNSETS
PER DAY ON THE SPACE STATION,

54

00:02:12,346 --> 00:02:14,536

THERE ARE TIMES WHERE THE
ASTRONAUTS CAN CAPTURE THE SUN

55

00:02:14,536 --> 00:02:17,156

AGAINST THE HORIZON WHERE
LIGHT IS SCATTERED THE SAME

56

00:02:17,156 --> 00:02:20,646

AS A SUNSET ON EARTH, CREATING
BEAUTIFULLY COLORED SUNSETS EVEN

57

00:02:20,646 --> 00:02:22,916

FROM 250 MILES ABOVE THE PLANET.