



# SPACE TO GROUND

1  
00:00:00,596 --> 00:00:02,966  
"HOUSTON, STATION  
ON SPACE TO GROUND."

2  
00:00:02,966 --> 00:00:05,086  
WELCOME TO SPACE TO  
GROUND, I'M DAN HUOT.

3  
00:00:05,286 --> 00:00:07,946  
THE SCIENCE CONTINUED  
ON STATION THIS WEEK

4  
00:00:07,946 --> 00:00:10,266  
WITH THE CREW OF EXPEDITION 55.

5  
00:00:11,280 --> 00:00:15,280  
JAPANESE ASTRONAUT NORISHIGE  
KANAI INSTALLED A NEW INFRARED

6  
00:00:15,280 --> 00:00:18,580  
SENSOR IN THE STATION'S  
ADVANCED PLANT HABITAT

7  
00:00:18,580 --> 00:00:19,786  
TO MEASURE TEMPERATURES

8  
00:00:19,786 --> 00:00:22,296  
OF THE GROWING DWARF  
WHEAT OVER THE NEXT WEEK.

9  
00:00:22,860 --> 00:00:26,060  
THE AUTOMATED PLANT GROWTH  
CHAMBER HAS BEEN GROWING WHEAT

10  
00:00:26,060 --> 00:00:29,600  
AND A PLANT CALLED  
ARABIDOPSIS FOR SEVERAL WEEKS

11  
00:00:29,600 --> 00:00:32,620

IN ONGOING EFFORTS TO  
IMPROVE OUR ABILITY

12

00:00:32,620 --> 00:00:34,820

TO CULTIVATE CROPS  
IN MICROGRAVITY.

13

00:00:35,706 --> 00:00:38,376

AND ASTRONAUT SCOTT TINGLE  
TOOK A FEW MINUTES TO SPEAK

14

00:00:38,376 --> 00:00:39,726

WITH STUDENTS AND FACULTY

15

00:00:39,726 --> 00:00:41,606

FROM HIS OLD COLLEGE  
STOMPING GROUNDS.

16

00:00:42,246 --> 00:00:44,536

TINGLE SPOKE WITH A  
CROWD AT THE UNIVERSITY

17

00:00:44,536 --> 00:00:46,196

OF MASSACHUSETTS-DARTMOUTH

18

00:00:46,316 --> 00:00:48,586

AND SHARED ONE PRETTY  
SURREAL EXAMPLE

19

00:00:48,586 --> 00:00:51,086

OF HOW EXTREME ASTRONAUT  
TRAINING CAN BE.

20

00:00:51,726 --> 00:00:53,396

"WE'RE TRAINED TO  
OFFER FIRST AID

21

00:00:53,396 --> 00:00:55,036

IN MANY MANY DIFFERENT  
SCENARIOS,

22

00:00:55,266 --> 00:00:58,266

AND WE ACTUALLY TRAINED IN AN  
EMERGENCY ROOM FOR A COUPLE

23

00:00:58,306 --> 00:01:02,236

OF WEEKENDS HELPING  
REAL LIFE PEOPLE.

24

00:01:02,756 --> 00:01:05,376

AND A SHORT STORY,  
THE ONE PERSON,

25

00:01:05,376 --> 00:01:07,206

THE ONE PATIENT I HAD  
COME IN HAD HIS EAR,

26

00:01:07,206 --> 00:01:10,986

THAT HAD BEEN CUT OFF IN A  
FIGHT, AND I ACTUALLY SEW IT

27

00:01:10,986 --> 00:01:14,026

ON FOR HIM, SO IT WAS A  
PRETTY UNIQUE EXPERIENCE."

28

00:01:15,206 --> 00:01:17,736

THIS WEEKS TWITTER QUESTION  
COMES FROM TAY DA FOOL

29

00:01:17,736 --> 00:01:20,676

WHO WANTED TO KNOW HOW OFTEN  
ASTRONAUTS WASH CLOTHES

30

00:01:20,846 --> 00:01:21,866

AND NEED TO CHANGE.

31

00:01:22,386 --> 00:01:26,046

WELL THERE'S NO LAUNDRY SERVICE  
ON STATION SO THE CREW HAS

32

00:01:26,046 --> 00:01:27,186

TO MAKE THEIR CLOTHES LAST.

33

00:01:28,200 --> 00:01:31,040

WATER IS A VERY VALUABLE  
RESOURCE IN SPACE

34

00:01:31,040 --> 00:01:33,840

SO THERE'S NO EXTRA TO  
USE ON WASHING CLOTHES.

35

00:01:34,006 --> 00:01:37,006

MOST DIRTY CLOTHES GET PACKED  
AWAY ON DEPARTING CARGO SHIPS

36

00:01:37,006 --> 00:01:39,276

TO BURN UP IN THE  
EARTH'S ATMOSPHERE ALONG

37

00:01:39,276 --> 00:01:41,746

WITH ANY OTHER TRASH  
AND DISPOSABLE ITEMS.

38

00:01:42,216 --> 00:01:45,796

AS FOR HOW OFTEN THEY CHANGE, IT  
VARIES BETWEEN EACH CREW MEMBER,

39

00:01:45,976 --> 00:01:48,396

WITH SOME WEARING CLOTHES  
FOR A FEW DAYS AT A TIME.

40

00:01:48,956 --> 00:01:53,056

JAPANESE ASTRONAUT KOICHI WAKATA  
WORE SOME EXPERIMENTAL CLOTHES

41

00:01:53,226 --> 00:01:56,136

FOR A MONTH STRAIGHT, BUT THEY  
WERE DESIGNED TO KILL ODOR

42

00:01:56,136 --> 00:01:58,306  
AND BACTERIA AND DRY QUICKLY.