



Spaceto**Ground**

1
00:00:02,960 --> 00:00:04,640
"HOUSTON, STATION ON SPACE TO GROUND."

2
00:00:05,280 --> 00:00:07,760
WELCOME TO SPACE TO GROUND, I'M SHANEEQUA VEREEN.

3
00:00:08,480 --> 00:00:11,360
IT IS ANOTHER BUSY WEEK ABOARD\h
THE INTERNATIONAL SPACE STATION.

4
00:00:11,360 --> 00:00:13,600
A SPACEWALK, AND INNOVATIVE SCIENCE.

5
00:00:14,800 --> 00:00:16,480
ON WEDNESDAY, JUNE 16TH,

6
00:00:16,480 --> 00:00:20,080
ESA ASTROANUT THOMAS PESQUET AND\h
NASA ASTRONAUT SHANE KIMBROUGH

7
00:00:20,080 --> 00:00:24,080
WENT OUT OF THE QUEST AIRLOCK FOR\h
A 7 HOUR, 15 MINUTE SPACEWALK.

8
00:00:24,080 --> 00:00:26,640
THE TWO ASTRONAUTS SUCCESSFULLY REMOVED THE FIRST

9
00:00:26,640 --> 00:00:30,080
OF THE NEW IROSA SOLAR ARRAYS\h
FROM ITS FLIGHT SUPPORT EQUIPMENT,

10
00:00:30,080 --> 00:00:32,080
AND INSTALLED IT ON ITS MOUNTING BRACKET AT

11
00:00:32,080 --> 00:00:36,160
THE 2B POWER CHANNEL ON THE\h
STATION'S P6 TRUSS STRUCTURE.

12

00:00:36,160 --> 00:00:38,320
BEFORE THE NEW ARRAY CAN BE DEPLOYED AND BEGIN

13
00:00:38,320 --> 00:00:40,640
PROVIDING POWER TO THE ORBITING LABORATORY,

14
00:00:40,640 --> 00:00:43,440
SPACEWALKERS WILL NEED TO
INSTALL THE ELECTRICAL CABLES

15
00:00:43,440 --> 00:00:45,520
AND DRIVE THE FINAL TWO BOLTS TO ENABLE

16
00:00:45,520 --> 00:00:48,720
THE SOLAR ARRAY TO UNFURL
ITS FULLY DEPLOYED POSITION

17
00:00:48,720 --> 00:00:50,320
ON A FUTURE SPACEWALK.

18
00:00:50,320 --> 00:00:52,400
FOR UPDATES ON THE NEXT SPACEWALK,

19
00:00:52,400 --> 00:00:55,200
FOLLOW US ON THE AGENCY'S
WEBSITE, AND THE NASA APP.

20
00:00:56,240 --> 00:00:58,640
BACK INSIDE, THE CREW KEPT BUSY WITH SCIENCE

21
00:00:58,640 --> 00:01:00,880
INCLUDING THE DEPLOYMENT OF SEVERAL CUBESATS.

22
00:01:02,560 --> 00:01:04,560
ONE OF THE CUBESATS, RAMSAT,

23
00:01:04,560 --> 00:01:06,320
WAS DEVELOPED BY ROBERTSVILLE MIDDLE SCHOOL

24

00:01:06,320 --> 00:01:07,600
IN OAK RIDGE, TENNESSEE,

25

00:01:07,600 --> 00:01:09,600
IS ON A MISSION TO STUDY FOREST REGROWTH

26

00:01:09,600 --> 00:01:12,800
IN THE GATLINBURG AREA
FOLLOWING THE 2016 WILDFIRES,

27

00:01:12,800 --> 00:01:14,800
AND RECENT WILDFIRES IN CALIFORNIA.

28

00:01:14,800 --> 00:01:17,680
THIS SATELLITE WILL USE SMALL
CAMERAS TO CAPTURE PICTURES

29

00:01:17,680 --> 00:01:21,200
OF GROWING FORESTS AND RADIO
COMMUNICATION TO SEND THOSE IMAGES

30

00:01:21,200 --> 00:01:24,480
TO GROUND CONTROL IN ROBERTSVILLE
MIDDLE SCHOOL'S STEM CLASSROOM.

31

00:01:24,480 --> 00:01:27,680
RAMSAT'S MISSION, WHICH
COULD LAST UP TO 18 MONTHS,

32

00:01:27,680 --> 00:01:30,320
BEGAN ON MONDAY WHEN IT
DEPLOYED FROM THE SPACE STATION

33

00:01:30,320 --> 00:01:31,280
INTO ITS OWN ORBIT.

34

00:01:32,160 --> 00:01:33,440
ALSO DEPLOYED THIS WEEK,

35

00:01:33,440 --> 00:01:37,120

WAS THE SATELLITE FOR ORBITAL\h
AERODYNAMIC RESEARCH, OR SOAR.

36

00:01:37,680 --> 00:01:40,320

SOAR WILL STUDY TECHNOLOGIES TO ENABLE SATELLITES

37

00:01:40,320 --> 00:01:42,800

TO OPERATE IN VERY LOW EARTH ORBIT.

38

00:01:42,800 --> 00:01:46,800

SUCH SATELLITES COULD BE SMALLER,\h
LIGHTER, AND LESS EXPENSIVE TO LAUNCH.