



# SPACE TO GROUND

1  
00:00:01,000 --> 00:00:02,600  
"Houston, Station on Space to Ground".

2  
00:00:04,180 --> 00:00:05,970  
FLYING ROBOTS IN SPACE...

3  
00:00:05,970 --> 00:00:07,190  
WHAT ELSE COULD YOU WANT?

4  
00:00:08,236 --> 00:00:10,436  
WELCOME TO SPACE TO  
GROUND, I'M DAN HUOT.

5  
00:00:10,766 --> 00:00:12,686  
THE SPHERES SATELLITES  
WERE ZOOMING

6  
00:00:12,686 --> 00:00:14,906  
AROUND THE STATION  
ONCE AGAIN THIS WEEK.

7  
00:00:15,486 --> 00:00:19,316  
THE SYNCHRONIZED POSITION,  
HOLD, ENGAGE, REORIENT,

8  
00:00:19,316 --> 00:00:22,636  
EXPERIMENTAL SATELLITES, OR  
SPHERES, WERE PUT TO WORK

9  
00:00:22,636 --> 00:00:25,606  
WITH A NEW UNIVERSAL  
DOCKING PORT ATTACHMENT.

10  
00:00:25,826 --> 00:00:28,266  
WITH THEIR NEW DOCKING  
AND UNDOCKING ABILITY,

11  
00:00:28,266 --> 00:00:31,626  
THEY SERVED AS A TEST CASE

FOR THE CHALLENGES OF FLYING

12

00:00:31,626 --> 00:00:33,746

AND CONNECTING AUTONOMOUS  
SPACECRAFT.

13

00:00:34,346 --> 00:00:36,256

LESSONS LEARNED FROM  
INVESTIGATIONS

14

00:00:36,256 --> 00:00:39,786

LIKE THIS COULD LEAD TO ROBOTIC  
SATELLITES PERFORMING COMPLEX

15

00:00:39,826 --> 00:00:42,886

WORK IN OUTER SPACE ALL  
ON THEIR OWN, DOING THINGS

16

00:00:42,886 --> 00:00:44,416

LIKE ASSEMBLING SPACECRAFT,

17

00:00:44,556 --> 00:00:47,576

REPAIRING OTHER SATELLITES  
OR REFUELING THEM.

18

00:00:47,766 --> 00:00:51,306

WE COULD ALSO APPLY LESSONS FROM  
THE SPHERES RIGHT HERE ON EARTH,

19

00:00:51,506 --> 00:00:53,936

SPECIFICALLY DEEP  
UNDERWATER IN MISSIONS

20

00:00:53,936 --> 00:00:55,916

TO AN UNCHARTED OCEAN FLOOR.

21

00:00:56,840 --> 00:00:59,240

THE SPRING TRAFFIC SEASON  
IS ABOUT TO KICK OFF

22

00:00:59,296 --> 00:01:01,996  
WITH SPACEX'S TENTH  
RESUPPLY MISSION.

23

00:01:02,486 --> 00:01:05,326  
AN UNMANNED DRAGON  
CARGO CRAFT IS TARGETED

24

00:01:05,326 --> 00:01:07,760  
TO LAUNCH ON SATURDAY, FEBRUARY 18th

25

00:01:07,760 --> 00:01:10,260  
AT 10:01 A.M. EASTERN TIME.

26

00:01:10,586 --> 00:01:14,526  
PACKED WITH NEARLY 5,500  
POUNDS OF SCIENCE AND SUPPLIES,

27

00:01:14,736 --> 00:01:18,336  
IT'S SET TO LAUNCH FROM  
PAD 39A, THE SAME PAD

28

00:01:18,336 --> 00:01:21,086  
THAT FIRST SENT HUMANS TO  
THE MOON AND WAS THE SITE

29

00:01:21,156 --> 00:01:23,006  
FOR THE FINAL FLIGHT  
OF THE SPACE SHUTTLE.

30

00:01:23,616 --> 00:01:26,136  
ONBOARD, THE CREW HAS BEEN  
TRAINING FOR THEIR ROLE

31

00:01:26,136 --> 00:01:28,656  
OF CAPTURING DRAGON ONCE  
IT ARRIVES ON MONDAY.

32

00:01:29,166 --> 00:01:32,226

YOU CAN WATCH DRAGON'S  
JOURNEY LIVE ON NASA TV

33

00:01:32,276 --> 00:01:35,546  
OR BY GOING TO NASA.GOV/NTV.

34

00:01:36,286 --> 00:01:39,196  
OUR VIEWER QUESTION THIS  
WEEK COMES FROM ZACK HANSEN

35

00:01:39,196 --> 00:01:42,786  
IN MR. TELLSTROM'S 4TH GRADE  
CLASS AT SUNRISE ELEMENTARY.

36

00:01:43,226 --> 00:01:46,036  
ZACK WANTED TO KNOW HOW MUCH  
ELECTRICITY GETS COLLECTED

37

00:01:46,036 --> 00:01:47,116  
IN THE SOLAR PANELS.

38

00:01:47,536 --> 00:01:49,846  
THEY'RE BIG SOLAR  
ARRAYS, SO IT'S A LOT.

39

00:01:50,596 --> 00:01:54,276  
ON AVERAGE, THE MASSIVE  
ARRAYS GENERATE 75 KW

40

00:01:54,276 --> 00:01:57,456  
OF CONTINUOUS POWER,  
ENOUGH TO POWER DOZENS

41

00:01:57,456 --> 00:01:58,606  
OF HOMES HERE ON EARTH.

42

00:01:59,096 --> 00:02:02,996  
TWO BLANKETS OF SOLAR CELLS  
MAKE UP EACH SOLAR ARRAY WING

43

00:02:03,196 --> 00:02:05,086  
WITH 8 WINGS TOTAL  
ON THE STATION.

44

00:02:05,496 --> 00:02:08,206  
EACH WING WEIGHS MORE  
THAN 2,400 POUNDS

45

00:02:08,456 --> 00:02:12,346  
AND USES 32,800 SOLAR  
ARRAY CELLS.

46

00:02:12,966 --> 00:02:15,566  
IT SOUNDS LIKE A LOT,  
BUT THESE PROVIDE ALL

47

00:02:15,566 --> 00:02:19,136  
OF THE ELECTRICAL POWER FOR THE  
STATION, ENERGIZING EVERYTHING

48

00:02:19,196 --> 00:02:21,946  
FROM THE LIGHTS AND EXPERIMENTS  
TO THE AIR GENERATORS

49

00:02:21,946 --> 00:02:24,496  
AND LIFE SUPPORT SYSTEMS  
KEEPING THE CREW SAFE

50

00:02:24,496 --> 00:02:26,396  
AND FUNCTIONING IN OUTER SPACE.

51

00:02:27,356 --> 00:02:30,006  
KEEP SENDING YOUR  
QUESTIONS USING THE HASHTAG