



SPACE TO GROUND

1
00:00:00,600 --> 00:00:02,540
"HOUSTON, STATION
ON SPACE TO GROUND."

2
00:00:03,160 --> 00:00:05,760
WELCOME TO SPACE TO GROUND,
I'M KATHRYN MCLAURIN.

3
00:00:05,906 --> 00:00:08,036
WE'RE HITTING THE ROAD THIS
SUMMER TO SHOW OFF SOME

4
00:00:08,036 --> 00:00:09,566
OF THE SIGHTS AT THE
JOHNSON SPACE CENTER.

5
00:00:10,520 --> 00:00:12,700
TODAY WE'RE IN THE SPACE
VEHICLE MOCKUP FACILITY,

6
00:00:12,700 --> 00:00:14,400
WHERE EVERY STATION
ASTRONAUT TRAINS

7
00:00:14,406 --> 00:00:16,836
IN LIFE-SIZE SIMULATORS
BEFORE THEIR STAY IN SPACE.

8
00:00:17,936 --> 00:00:19,606
THIS WEEK IN SPACE
THOUGH KICKED OFF

9
00:00:19,606 --> 00:00:21,216
WITH AN EARLY MORNING
RELEASE OF DRAGON.

10
00:00:22,116 --> 00:00:25,476
SPACEX'S CARGO SHIP WAS
PACKED WITH OVER 4,100 POUNDS

11
00:00:25,480 --> 00:00:27,080
OF SCIENCE EXPERIMENTS
AND EQUIPMENT

12
00:00:27,080 --> 00:00:30,300
BY THE EXPEDITION 52 CREW TO
PREPARE FOR ITS DEPARTURE.

13
00:00:30,920 --> 00:00:33,936
THE HATCH WAS CLOSED AND DRAGON
WAS DETACHED FROM STATION

14
00:00:33,936 --> 00:00:36,046
OVER THE WEEKEND WITH
THE CREW RELEASING IT

15
00:00:36,046 --> 00:00:38,260
FROM THE STATION'S
ROBOTIC ARM ON MONDAY.

16
00:00:38,660 --> 00:00:41,740
DRAGON FLEW AWAY FROM THE
STATION AND EVENTUALLY REENTERED

17
00:00:41,740 --> 00:00:43,360
THROUGH THE EARTH'S ATMOSPHERE,

18
00:00:43,360 --> 00:00:45,660
SPLASHING DOWN IN THE
PACIFIC OCEAN FOR THE END

19
00:00:45,660 --> 00:00:47,260
OF ANOTHER SUCCESSFUL MISSION.

20
00:00:48,000 --> 00:00:50,460
AND BEING OFF THE PLANET
DIDN'T STOP THE NASA CREW

21
00:00:50,460 --> 00:00:52,180

FROM CELEBRATING
INDEPENDENCE DAY.

22

00:00:52,800 --> 00:00:55,520
PEGGY WHITSON AND JACK FISCHER
GOT DRESSED UP FOR THE FOURTH

23

00:00:55,520 --> 00:00:57,960
OF JULY, DONNING THEIR
MOST PATRIOTIC GEAR

24

00:00:57,960 --> 00:00:59,200
FOR A QUICK PHOTO SESSION.

25

00:00:59,700 --> 00:01:01,620
AS A REMINDER, YOU
CAN FOLLOW BOTH

26

00:01:01,626 --> 00:01:03,596
OF THEM DURING THEIR STAY
ABOARD THE SPACE STATION

27

00:01:03,596 --> 00:01:06,636
ON TWITTER @ASTROPEGGY
AND @ASTRO2FISH.

28

00:01:07,600 --> 00:01:10,380
THIS WEEK'S TWITTER QUESTION
COMES FROM MATT READ WHO WANTED

29

00:01:10,380 --> 00:01:12,620
TO KNOW IF FIREWORKS
COULD WORK IN SPACE.

30

00:01:12,860 --> 00:01:15,056
THEY COULD, BUT WOULD
LOOK VERY DIFFERENT

31

00:01:15,060 --> 00:01:16,360
THAN WHAT YOU SEE HERE ON EARTH.

32
00:01:17,180 --> 00:01:19,280
COMBUSTION EXPERIMENTS
ON THE STATION SHOW

33
00:01:19,286 --> 00:01:21,126
THAT FLAMES FORM
VERY DIFFERENTLY

34
00:01:21,126 --> 00:01:24,436
IN A MICROGRAVITY ENVIRONMENT,
CREATING BALLS OF FIRE FREE

35
00:01:24,436 --> 00:01:25,726
FROM THE CONVECTION PROCESS

36
00:01:25,726 --> 00:01:28,100
OF HOT AIR RISING WE
HAVE HERE ON EARTH.

37
00:01:28,600 --> 00:01:31,560
OUTSIDE A SPACECRAFT THOUGH
IN THE VACUUM OF SPACE,

38
00:01:31,560 --> 00:01:34,216
EXPLODING FIREWORKS WOULD
BE FAR LESS SPECTACULAR

39
00:01:34,220 --> 00:01:35,560
THAN WHAT YOU SEE ON EARTH,

40
00:01:35,560 --> 00:01:38,386
WHERE NO ATMOSPHERE MEANS VERY
FEW COLORS BEYOND THE INITIAL

41
00:01:38,386 --> 00:01:39,806
BURST AND NO SOUND.

42
00:01:40,280 --> 00:01:41,560

LUCKY FOR THE ASTRONAUTS,

43

00:01:41,560 --> 00:01:44,196

THE EARTH CAN PROVIDE SOME
PRETTY SPECTACULAR FIREWORKS

44

00:01:44,200 --> 00:01:45,020

OF ITS OWN.

45

00:01:45,860 --> 00:01:48,020

KEEP SENDING YOUR
QUESTIONS USING THE HASHTAG