



SPACE TO GROUND

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

2
00:00:03,056 --> 00:00:05,306
WELCOME TO SPACE TO
GROUND, I'M DAN HUOT.

3
00:00:05,506 --> 00:00:08,096
WITH A BREATHER BETWEEN
ALL THESE SPACEWALKS,

4
00:00:08,186 --> 00:00:10,206
IT WAS TIME FOR SOME
SERIOUS SCIENCE.

5
00:00:11,056 --> 00:00:13,666
NASA'S JOE ACABA
REPLACED A CONTROLLER

6
00:00:13,666 --> 00:00:15,636
IN THE COMBUSTION
INTEGRATED RACK

7
00:00:15,636 --> 00:00:18,986
FOR THE UPCOMING ADVANCED
COMBUSTION VIA MICROGRAVITY

8
00:00:19,036 --> 00:00:20,446
EXPERIMENT, OR ACME.

9
00:00:21,006 --> 00:00:23,706
THE RACK PROVIDES A SAFE
ENVIRONMENT FOR STUDIES

10
00:00:23,706 --> 00:00:26,166
THAT LITERALLY START
FIRES IN SPACE,

11

00:00:26,476 --> 00:00:29,706
AND ACME WILL STUDY FIVE
DIFFERENT GASEOUS FLAMES.

12
00:00:30,216 --> 00:00:34,076
ALL OF THIS AIMS TO IMPROVE FUEL
EFFICIENCY AND REDUCE POLLUTION

13
00:00:34,076 --> 00:00:36,116
IN COMBUSTION PROCESSES
HERE ON EARTH,

14
00:00:36,496 --> 00:00:39,826
WHILE ALSO LEARNING THE BEST
WAYS TO PREVENT FIRES IN SPACE.

15
00:00:40,796 --> 00:00:44,046
SIMULTANEOUSLY, NASA'S MARK
VANDE HEI WAS PREPARING THE

16
00:00:44,046 --> 00:00:45,896
NEWEST BATCH OF SPACE CROPS.

17
00:00:46,436 --> 00:00:50,706
THIS WILL BE THE FIFTH RUN OF
THE ONGOING VEG-03 EXPERIMENT,

18
00:00:50,906 --> 00:00:53,856
PRODUCING A MIX OF
CABBAGE, LETTUCE AND MIZUNA,

19
00:00:54,216 --> 00:00:56,396
ALSO KNOWN AS JAPANESE
MUSTARD GREENS.

20
00:00:57,036 --> 00:01:00,656
THE VEGGIE EXPERIMENTS ARE
CONTINUING TO EXPAND OUR ABILITY

21
00:01:00,656 --> 00:01:02,976

TO GROW FRESH FOODS
IN MICROGRAVITY,

22

00:01:03,336 --> 00:01:06,336
SOMETHING MISSION PLANNERS ARE
HOPING WILL BE AN INTEGRAL PART

23

00:01:06,336 --> 00:01:09,416
OF THE FOOD SUPPLY FOR FUTURE
LONG DURATION MISSIONS,

24

00:01:09,546 --> 00:01:12,226
ESPECIALLY THOSE THAT
FLY WAY BEYOND THE EARTH.

25

00:01:12,566 --> 00:01:15,746
AND A BIG PART OF THE
STATION TURNED 10 THIS WEEK!

26

00:01:15,896 --> 00:01:20,356
THE EUROPEAN COLUMBUS MODULE
FLEW INTO SPACE BACK ON FEB.

27

00:01:20,406 --> 00:01:23,816
7, 2008 IN THE PAYLOAD BAY
OF THE SHUTTLE ATLANTIS.

28

00:01:24,406 --> 00:01:27,546
IT WAS ATTACHED USING THE
STATION'S ROBOTIC ARM JUST TWO

29

00:01:27,546 --> 00:01:30,456
DAYS LATER WHERE IT'S BEEN
A SCIENCE HUB EVER SINCE.

30

00:01:30,936 --> 00:01:33,076
THE MODULE HOUSES EXPERIMENTS

31

00:01:33,076 --> 00:01:36,106
FROM ACROSS THE SPECTRUM

INCLUDING MATERIALS SCIENCE,

32

00:01:36,266 --> 00:01:39,116

FLUID PHYSICS, LIFE SCIENCE,
AND TECHNOLOGY DEVELOPMENT.

33

00:01:39,446 --> 00:01:42,006

IT ALSO HAS SPACE FOR
EXTERNAL EXPERIMENTS,

34

00:01:42,036 --> 00:01:44,836

INCLUDING THE VERY POPULAR
HIGH-DEFINITION EARTH

35

00:01:44,836 --> 00:01:45,836

VIEWING PLATFORM.