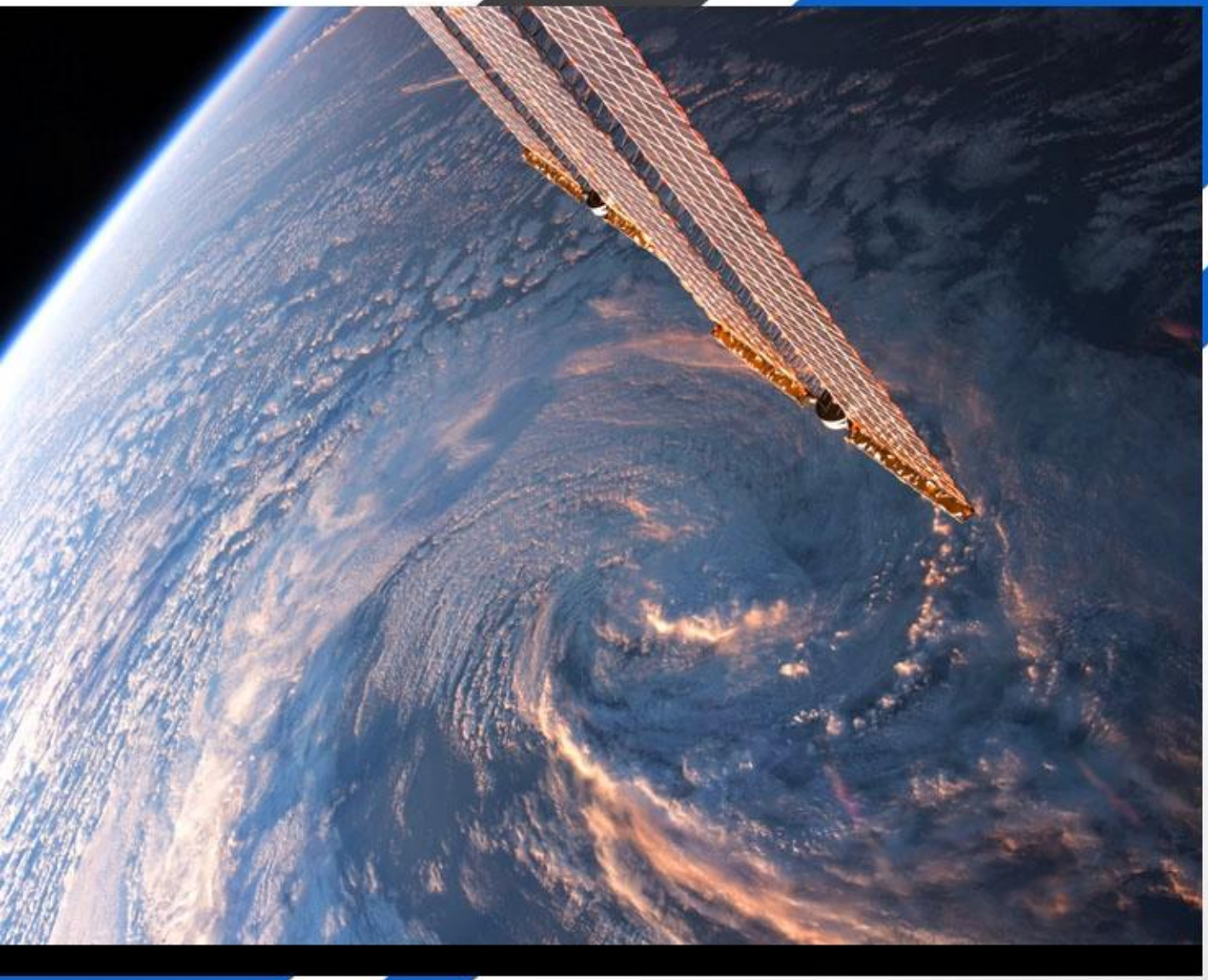

SPACE TO GROUND

1
00:00:00,386 --> 00:00:02,766
HOUSTON, STATION
ON SPACE TO GROUND.

2
00:00:02,956 --> 00:00:05,846
WHO DOESN'T ENJOY A GOOD
VIEW OF PLANET EARTH?

3
00:00:06,356 --> 00:00:09,286
WELCOME TO SPACE TO
GROUND, I'M DAN HUOT.

4
00:00:09,586 --> 00:00:13,416
A NEW JAPANESE PAYLOAD COULD
SOON BE PROVIDING STRIKING VIEWS

5
00:00:13,416 --> 00:00:15,106
OF EARTH LIKE NEVER BEFORE.

6
00:00:15,976 --> 00:00:18,546
THE JAPANESE HIGH
DEFINITION TV CAMERA -

7
00:00:18,576 --> 00:00:21,566
EXPOSED FACILITY 2
PAYLOAD WAS LOADED

8
00:00:21,566 --> 00:00:24,816
INTO THE KIBO AIRLOCK THIS
WEEK BY THOMAS PESQUET.

9
00:00:25,166 --> 00:00:28,326
HE PASSED THE NEW DEVICE
OUT INTO THE VACUUM OF SPACE

10
00:00:28,326 --> 00:00:31,856
WHERE ROBOTIC ARM OPERATORS
WERE STANDING BY TO INSTALL IT.

11

00:00:32,036 --> 00:00:36,606
ONCE OPERATIONAL, ITS 4K AND 2K
RESOLUTION CAMERAS WILL BE USED

12
00:00:36,656 --> 00:00:38,666
FOR OBSERVATIONS OF
THE PLANET BELOW,

13
00:00:38,866 --> 00:00:40,596
INCLUDING NIGHT TIME RECORDING.

14
00:00:41,626 --> 00:00:44,876
PEGGY WHITSON, ONE OF THE
MOST EXPERIENCED ASTRONAUTS

15
00:00:44,876 --> 00:00:48,156
IN NASA'S HISTORY, CELEBRATED
A BIRTHDAY ONBOARD THIS WEEK.

16
00:00:49,226 --> 00:00:53,056
SHE SHARED SOME CANDID THOUGHTS
ON AGING WHILE IN SPACE AS WELL

17
00:00:53,056 --> 00:00:56,656
AS SOME INSIGHT INTO WHY IT
IS IMPORTANT FOR ASTRONAUTS

18
00:00:56,736 --> 00:00:58,496
TO STAY FIT IN MICROGRAVITY.

19
00:00:59,206 --> 00:01:00,516
SPACEFLIGHT IS GOOD FOR AGE.

20
00:01:00,666 --> 00:01:03,736
I HAVE A LOT LESS
WRINKLES UP HERE.

21
00:01:04,306 --> 00:01:07,566
IT'S A GOOD PLACE TO
BE AS YOU GET OLDER.

22
00:01:08,266 --> 00:01:12,056
WE SPEND A LOT OF TIME STAYING
PHYSICALLY FIT IN SPACE.

23
00:01:12,156 --> 00:01:15,316
IT'S IMPORTANT FOR
OUR BONES AND MUSCLES.

24
00:01:15,376 --> 00:01:18,256
WITHOUT GRAVITY AFFECTING US,

25
00:01:18,256 --> 00:01:21,046
WE WOULD LOSE MUSCLE
MASS AND BONE DENSITY.

26
00:01:21,386 --> 00:01:25,706
IN FACT, WE WOULD LOSE BONE
DENSITY FASTER IN A MONTH

27
00:01:25,816 --> 00:01:31,246
THAN A GERIATRIC WOMAN ON EARTH
WOULD LOSE BONE MASS IN A YEAR.

28
00:01:31,936 --> 00:01:34,866
GO WISH PEGGY A HAPPY
BIRTHDAY AND FOLLOW HER MISSION

29
00:01:34,866 --> 00:01:36,986
ON TWITTER @ASTROPEGGY.

30
00:01:37,936 --> 00:01:41,336
AND OUR VIEWER QUESTION THIS
WEEK COMES FROM @ASTRO SID

31
00:01:41,336 --> 00:01:44,686
ON TWITTER WHO WANTED TO KNOW
WHO DESIGNS THE MISSION PATCHES.

32

00:01:45,276 --> 00:01:48,456
WELL LIKE EVERY PART OF
SPACEFLIGHT, IT'S A TEAM EFFORT.

33
00:01:49,306 --> 00:01:52,316
EVERY SPACE STATION CREW GETS
TOGETHER AND COLLABORATES

34
00:01:52,316 --> 00:01:55,076
WITH A GRAPHIC ARTIST,
INCORPORATING HIGHLIGHTS

35
00:01:55,076 --> 00:01:58,096
FROM THEIR MISSIONS OR HOME
COUNTRIES INTO EVERY PATCH.

36
00:01:58,426 --> 00:02:01,026
THIS HAS BEEN THE TRADITION
FOR MANNED SPACE MISSIONS

37
00:02:01,086 --> 00:02:02,916
SINCE THE BIRTH OF
HUMAN SPACEFLIGHT,

38
00:02:03,296 --> 00:02:06,286
AND CAUGHT ON IN JUST ABOUT
EVERY OTHER AREA OF SPACE.

39
00:02:06,596 --> 00:02:08,626
NOW EVERYTHING FROM
CARGO MISSIONS

40
00:02:08,676 --> 00:02:10,796
TO SCIENCE PAYLOADS
JOIN THE TRADITION

41
00:02:10,796 --> 00:02:12,506
IN DESIGNING A SPACEFLIGHT PATCH

42
00:02:12,806 --> 00:02:14,556

TO REPRESENT THEIR
TIME IN SPACE.

43
00:02:15,666 --> 00:02:18,226
KEEP SENDING YOUR
QUESTIONS USING THE HASHTAG