



1

00:00:14,599 --> 00:00:20,440

The crew of STS-131 returned home to Houston following their fifteen days in space aboard

2

00:00:20,440 --> 00:00:23,439

shuttle Discovery.

"Nice landing. Well done."

3

00:00:23,439 --> 00:00:28,880

A crowd of several hundred well-wishers greeted the seven astronauts at Ellington Field after

4

00:00:28,880 --> 00:00:32,599

their flight from the Kennedy Space Center one day after their safe landing.

5

00:00:32,599 --> 00:00:36,930

"It's a very special day and we're very happy to be back in Houston. We were very

6

00:00:36,930 --> 00:00:40,503

happy to be back in Florida yesterday."

The Discovery crew spent ten of their fourteen

7

00:00:40,503 --> 00:00:45,219

days in orbit docked to the International Space Station. They delivered science racks,

8

00:00:45,219 --> 00:00:50,510

new crew sleeping quarters, and several additional tons of equipment and supplies. During three

9

00:00:50,510 --> 00:00:55,800

spacewalks, the crew installed a new ammonia storage tank for the station's cooling system,

10

00:00:55,800 --> 00:01:01,289

replaced a gyroscope for the station's navigation system and retrieved a Japanese experiment

11
00:01:01,289 --> 00:01:05,070
from outside the Kibo laboratory for examination
on Earth.

12
00:01:05,070 --> 00:01:10,270
Joining Commander Alan Poindexter on the flight
was Pilot Jim Dutton and Mission Specialists

13
00:01:10,270 --> 00:01:16,690
Rick Mastracchio, Dottie Metcalf-Lindenburger,
Stephanie Wilson, Clay Anderson, and Japan

14
00:01:16,690 --> 00:01:22,350
Aerospace Exploration Agency astronaut Naoko
Yamazaki.

15
00:01:22,350 --> 00:01:28,250
The first images are in from NASA's Solar
Dynamics Observatory, or SDO, and scientists

16
00:01:28,250 --> 00:01:33,009
who study the sun say they are a stunning
treasure trove of data about Earth's star.

17
00:01:33,009 --> 00:01:38,320
"The first images are now in hand and these
are truly spectacular and they show the details

18
00:01:38,320 --> 00:01:43,510
of our sun that have not been available to
us before in a comprehensive and multidimensional

19
00:01:43,510 --> 00:01:47,859
manner."
"Ignition and lift-off of the Atlas-5 with

20
00:01:47,859 --> 00:01:54,020
the Solar Dynamics Observatory."
Launched on Feb. 11, 2020, SDO is the most

21
00:01:54,020 --> 00:01:59,960
advanced spacecraft ever designed to study
the sun. SDO's images confirm an unprecedented

22
00:01:59,960 --> 00:02:06,170
new capability for heliophysics to better
understand our sun's dynamic processes and

23
00:02:06,170 --> 00:02:09,550
how and why these solar activities affect
everything on earth.

24
00:02:09,550 --> 00:02:14,470
"SDO is the first mission in the Living
With A Star program. It's designed to study

25
00:02:14,470 --> 00:02:20,500
the sun, and how the sun affects us here on
earth. Most of the affects come from the magnetic

26
00:02:20,500 --> 00:02:25,360
field of the sun, and we're going to see
today that, that magnetic field is never the

27
00:02:25,360 --> 00:02:30,330
same twice, it's always changing."
During its five-year mission, SDO will provide

28
00:02:30,330 --> 00:02:35,280
images with clarity ten times better than
high-definition television and will return

29
00:02:35,280 --> 00:02:42,530
more comprehensive science data faster than
any other solar observatory spacecraft.

30
00:02:42,530 --> 00:02:47,030
NASA helped celebrate Earth Day's fortieth
anniversary with nine consecutive days of

31
00:02:47,030 --> 00:02:50,750
activities and public exhibits on the National
Mall in Washington.

32
00:02:50,750 --> 00:02:56,450
The 'NASA Village' of three domed tents highlighted
how NASA science and technology has helped

33
00:02:56,450 --> 00:03:02,250
advance knowledge and awareness about our
home planet with exhibits and hands-on demonstrations

34
00:03:02,250 --> 00:03:07,550
of environmental technologies developed by
NASA, and multimedia presentations by NASA

35
00:03:07,550 --> 00:03:15,400
scientists and others.
Robonaut 2, or R2, as it, or he, is also known,

36
00:03:15,400 --> 00:03:19,630
is scheduled to become the first human-like
robot to take up permanent residence on the

37
00:03:19,630 --> 00:03:24,480
International Space Station.
The 300-pound robot consists of a head, a

38
00:03:24,480 --> 00:03:29,760
torso, and two arms and legs. Developed under
a cooperative agreement by NASA and General

39
00:03:29,760 --> 00:03:36,230
Motors, R2 was designed to assist and work
alongside humans, whether in space or at manufacturing

40
00:03:36,230 --> 00:03:40,370
plants on Earth.
R2 will head into space later this year aboard

41
00:03:40,370 --> 00:03:46,410
space shuttle Discovery. Once aboard the ISS,
R2 will be confined to operations in the station's

42
00:03:46,410 --> 00:03:52,230
Destiny laboratory. However, future enhancements
and modifications may allow it to move more

43
00:03:52,230 --> 00:03:57,290
freely around the station's interior or even
outside the complex.

44
00:03:57,290 --> 00:04:06,520
Discovery's launch on STS-133 is targeted
for September 16.

45
00:04:06,520 --> 00:04:10,020
Hundreds of students from middle schools,
high schools, and colleges representing 20

46
00:04:10,020 --> 00:04:15,850
states were in northern Alabama for the annual
Space Launch Initiative, or LaunchFest.

47
00:04:15,850 --> 00:04:20,910
Each year, NASA challenges young, aspiring
rocketeers from around the country to design

48
00:04:20,910 --> 00:04:25,470
and build these launch vehicles complete with
a working science payload, then send them

49
00:04:25,470 --> 00:04:31,810
aloft, here at LaunchFest, to an altitude
of one mile.

50
00:04:31,810 --> 00:04:35,760
LaunchFest is meant to inspire students to
combine engineering practices with high-flying

51

00:04:35,760 --> 00:04:42,030

creativity and pursue long-term goals as professionals
in the STEM fields of science, technology,

52

00:04:42,030 --> 00:04:46,100

engineering and math.

Launchfest is organized by the Marshall Space

53

00:04:46,100 --> 00:04:53,440

Flight Center and sponsored by ATK Aerospace
Systems.

54

00:04:53,440 --> 00:04:58,900

The STS-130 crew paid a visit to NASA Headquarters
where they played highlights of their February

55

00:04:58,900 --> 00:05:04,070

mission to the International Space Station
for employees and guests. The six-astronaut

56

00:05:04,070 --> 00:05:09,280

crew of space shuttle Endeavour was commanded
by George Zamka; Terry Virts was the pilot;

57

00:05:09,280 --> 00:05:15,360

Mission Specialists were Nicholas Patrick,
Bob Behnken, Steve Robinson and Kay Hire.

58

00:05:15,360 --> 00:05:20,570

Among the number of other D.C. area events,
the STS-130 crew members talked about their

59

00:05:20,570 --> 00:05:24,930

mission with local students at the Smithsonian's
Air and Space museum.

60

00:05:24,930 --> 00:05:33,600

"3-2-1 and liftoff of the space shuttle
Discovery with the Hubble Space Telescope

61
00:05:33,600 --> 00:05:39,240
-- our window on the universe.”
On April 24, 1990, the Hubble Space Telescope

62
00:05:39,240 --> 00:05:43,940
launched aboard Space Shuttle Discovery from
the Kennedy Space Center in Florida. Since

63
00:05:43,940 --> 00:05:50,170
then, the observatory orbiting 350 miles above
Earth has produced hundreds of thousands of

64
00:05:50,170 --> 00:05:53,770
unprecedented images of different corners
of the universe.

65
00:05:53,770 --> 00:06:01,060
“Not many humans get to work on things that
a hundred years from now history will remember,

66
00:06:01,060 --> 00:06:04,639
Hubble is certainly one of them.”
Named after the American astronomer Edwin

67
00:06:04,639 --> 00:06:09,650
Hubble, the telescope’s gaze has helped
determine the age of the universe, the identity

68
00:06:09,650 --> 00:06:15,800
of quasars, and the existence of dark energy.
Hubble is one of NASA's most successful and

69
00:06:15,800 --> 00:06:22,669
long-lasting science missions, shedding light
on many of the great mysteries of astronomy.