1
00:00:00,930 --> 00:00:05,040
“Here’s some of the stories trending This
Week at NASA!”

2
00:00:05,040 --> 00:00:10,050
“ … and liftoff of the space shuttle Discovery
with the Hubble Space Telescope, our window

3
00:00:10,050 --> 00:00:11,480
on the universe.”

4
00:00:11,480 --> 00:00:17,499
On April 24, 1990, NASA’s Hubble Space Telescope
rode to space aboard space shuttle Discovery

5
00:00:17,499 --> 00:00:21,310
– on a mission to do just that – discover.

6
00:00:21,310 --> 00:00:25,520
The results over the past 25 years have been
nothing short of remarkable.

7
00:00:25,520 --> 00:00:30,350
“We knew that this was going to be an important
mission, we didn’t know how important.

8
00:00:30,350 --> 00:00:34,220
None of us thought that people would be rewriting
textbooks the way that they continue to do

9
00:00:34,220 --> 00:00:35,470
even today.”

10
00:00:35,470 --> 00:00:39,120
The storied and historic journey into the
cosmos that Hubble’s eyes have taken us

11
00:00:39,120 --> 00:00:44,940
on has led to groundbreaking discoveries,

captivated imaginations and given humans a

12
00:00:44,940 --> 00:00:47,630
better understanding of our place in the universe.

13
00:00:47,630 --> 00:00:52,060
“Humanity has always looked out there to
the heavens to get the meaning and the hope

14
00:00:52,060 --> 00:00:53,060
of the life here.

15
00:00:53,060 --> 00:00:58,880
You see, it’s that kind of gap that you’re
bridging, so people understood that about

16
00:00:58,880 --> 00:01:01,460
Hubble before we carried it up there.”

17
00:01:01,460 --> 00:01:06,900
“Because of the work of the Hubble along
comes the next generation, which is the James

18
00:01:06,900 --> 00:01:13,320
Webb, which will take us farther, see more,
learn more than any other telescope.”

19
00:01:13,320 --> 00:01:18,090
NASA’s celebration of Hubble’s Silver
anniversary included a variety of events …

20
00:01:18,090 --> 00:01:22,651
Administrator Charlie Bolden, other agency
officials and representatives from the Space

21
00:01:22,651 --> 00:01:27,570
Telescope Science Institute were on hand for
the unveiling of the official Hubble 25th

22

00:01:27,570 --> 00:01:30,270
anniversary image at the Newseum in Washington.

23
00:01:30,270 --> 00:01:36,259
A short distance away, many of the astronauts,
scientists, engineers, technicians, educators,

24
00:01:36,259 --> 00:01:41,570
and others who have contributed to Hubble's
success were honored at the Smithsonian's

25
00:01:41,570 --> 00:01:43,640
National Air and Space Museum.

26
00:01:43,640 --> 00:01:48,530
NASA Glenn Research Center employees and the
Cleveland Sight Center helped visually-impaired

27
00:01:48,530 --> 00:01:53,610
students experience Hubble with a variety
of tactile-based activities.

28
00:01:53,610 --> 00:01:59,579
And the Hubble experience is also available
in 3-D, with the IMAX movie Hubble 3D playing

29
00:01:59,579 --> 00:02:04,960
at select theatres through April, and with
downloadable files available at NASA's 3-D

30
00:02:04,960 --> 00:02:18,709
Resources site -- you can 3-D print your own
Hubble model … for details, go to http://nasa3d.arc.nasa.gov/.

31
00:02:18,709 --> 00:02:23,450
NASA also participated in events and activities
celebrating our home planet in observation

32
00:02:23,450 --> 00:02:30,159
of the 45th annual Earth Day on April 22 – including

the Global Citizen 2015 Earth Day event at

33
00:02:30,159 --> 00:02:31,569
the Washington Monument.

34
00:02:31,569 --> 00:02:36,150
The event featured NASA exhibits and hands-on
activities, a message from the International

35
00:02:36,150 --> 00:02:42,310
Space Station, views of Earth from space and
NASA Administrator Charlie Bolden on the concert

36
00:02:42,310 --> 00:02:47,040
stage, with entertainer Will.i.am -- discussing
how NASA uses the unique vantage point of

37
00:02:47,040 --> 00:02:49,620
space to better understand our home planet.

38
00:02:49,620 --> 00:02:53,640
“I want everybody to walk out of here, having
heard the many stories that came from around

39
00:02:53,640 --> 00:02:56,150
the globe and know that they can make a difference.

40
00:02:56,150 --> 00:02:59,489
But it takes every single one of us doing
some one little thing.”

41
00:02:59,489 --> 00:03:05,250
Earth Day activities at Washington’s Union
Station featured NASA Associate Administrator

42
00:03:05,250 --> 00:03:09,760
for Science John Grunsfeld and Chief Scientist
Ellen Stofan.

43

00:03:09,760 --> 00:03:15,760
The event also included imagery shown on NASA's Hyperwall, science gallery exhibits and hands-on

44
00:03:15,760 --> 00:03:16,760
demonstrations.

45
00:03:16,760 --> 00:03:18,734
And, using the hashtag #NoPlaceLikeHome, people from all over the world helped NASA celebrate

46
00:03:18,734 --> 00:03:19,734
environmental awareness online by sharing images of their favorite places or sights

47
00:03:19,734 --> 00:03:20,734
on Earth.

48
00:03:20,734 --> 00:03:21,734
Observing our home planet is at the core of NASA's mission.

49
00:03:21,734 --> 00:03:22,734
The agency knows that Earth is changing – and with a fleet of orbiting spacecraft gathering

50
00:03:22,734 --> 00:03:23,734
scientific data on carbon dioxide in the air, water reserves below ground, the planet's

51
00:03:23,734 --> 00:03:24,734
temperature, and more – we're on it!

52
00:03:24,734 --> 00:03:25,734
The first 3-D printed full-scale copper rocket engine part manufactured at Marshall Space

53
00:03:25,734 --> 00:03:27,419
Flight Center is a milestone and potential cost saver.

54
00:03:27,419 --> 00:03:32,250
The properties of copper make it an ideal
material for some engine parts, but the material

55
00:03:32,250 --> 00:03:38,319
is challenging to work with when using the
3-D printing or additive manufacturing process.

56
00:03:38,319 --> 00:03:43,419
Successfully using this technology could reduce
the time and cost of making rocket engine

57
00:03:43,419 --> 00:03:44,419
parts.

58
00:03:44,419 --> 00:03:51,040
So far, only a handful of copper rocket engine
parts have been made with additive manufacturing.

59
00:03:51,040 --> 00:03:55,680
The annual Human Exploration Rover Challenge
took place recently at the U.S. Space & Rocket

60
00:03:55,680 --> 00:03:57,689
Center in Huntsville, Alabama.

61
00:03:57,689 --> 00:04:02,920
The two-day event, managed by Marshall Space
Flight Center, challenges students to design,

62
00:04:02,920 --> 00:04:08,520
build, test and race lightweight, and human-powered
vehicles both as a research project and to

63
00:04:08,520 --> 00:04:14,329
investigate and test technologies that could
potentially be used on future deep-space exploration

64

00:04:14,329 --> 00:04:15,329
missions.

65
00:04:15,329 --> 00:04:18,370
And that’s what’s up this week @NASA …