1
00:00:00,000 --> 00:00:04,970
“Here’s some of the stories trending This
Week at NASA!”

2
00:00:04,970 --> 00:00:10,550
During a Nov. 24 ceremony at the White House,
former NASA mathematician and physicist Katherine

3
00:00:10,550 --> 00:00:15,420
Johnson was one of seventeen individuals to
receive the Presidential Medal of Freedom

4
00:00:15,420 --> 00:00:20,470
from President Obama. It is the nation’s
highest civilian honor – given for meritorious

5
00:00:20,470 --> 00:00:26,050
contributions to the security or national
interests of the United States, to world peace,

6
00:00:26,050 --> 00:00:31,250
or to cultural or other significant public
or private endeavors. Johnson's work influenced

7
00:00:31,250 --> 00:00:36,030
NASA space programs – from Project Mercury
through the space shuttle. Her calculations

8
00:00:36,030 --> 00:00:41,079
were used for some of NASA’s most historic
missions – including the 1961 flight of

9
00:00:41,079 --> 00:00:46,530
Alan Shepard, the first American in space;
the 1962 flight during which John Glenn became

10
00:00:46,530 --> 00:00:51,760
the first American to orbit Earth; and the
1969 Apollo 11 mission to the moon.

11
00:00:51,760 --> 00:00:58,370
Aboard the International Space Station, Expedition
45 Commander Scott Kelly and Flight Engineer

12
00:00:58,370 --> 00:01:04,519
Kjell Lindgren of NASA sent wishes for a safe
and happy Thanksgiving to all on Earth. The

13
00:01:04,519 --> 00:01:09,700
pair also revealed a few of the items on their
Thanksgiving Day menu. Kelly is almost nine

14
00:01:09,700 --> 00:01:14,180
months into his year-long mission, conducting
psychological and biomedical research on the

15
00:01:14,180 --> 00:01:19,040
station. Lindgren is nearing the end of his
five-month mission. He is scheduled to return

16
00:01:19,040 --> 00:01:20,830
to Earth on Dec. 11.

17
00:01:20,830 --> 00:01:27,200
In Russia, preparations and activities continue
for the launch to the space station of NASA’s

18
00:01:27,200 --> 00:01:32,979
Tim Kopra and his Expedition 46/47 crewmates
Yuri Malenchenko of the Russian Federal Space

19
00:01:32,979 --> 00:01:38,720
Agency and ESA astronaut Tim Peake. The trio
will launch to the station aboard a Soyuz

20
00:01:38,720 --> 00:01:42,150
spacecraft on Dec. 15 for a six-month stay.

21
00:01:42,150 --> 00:01:47,850

The first 3-D printed part in space was made
a year ago aboard the International Space

22
00:01:47,850 --> 00:01:52,770
Station. The part – a spare faceplate for
the printer itself, was made from instructions

23
00:01:52,770 --> 00:01:58,770
uploaded by ground controllers on Nov. 24,
2014. Developing the ability to successfully

24
00:01:58,770 --> 00:02:04,320
print 3-D parts in space could enable astronauts
to make spare parts and tools when needed

25
00:02:04,320 --> 00:02:09,569
on long duration spaceflights, such as the
journey to Mars.

26
00:02:09,569 --> 00:02:14,360
Engineers at NASA's Goddard Space Flight
Center recently installed the first of 18

27
00:02:14,360 --> 00:02:20,129
flight mirrors onto the James Webb Space Telescope.
The installation of the 4-foot, hexagonal-shaped

28
00:02:20,129 --> 00:02:26,010
mirror is a critical milestone in construction
of the observatory. All 18 primary mirrors

29
00:02:26,010 --> 00:02:31,519
will function as one large mirror to seek
out and study distant galaxies, stellar systems

30
00:02:31,519 --> 00:02:36,660
and planets that might be able to support
life. Installation of the mirrors is scheduled

31
00:02:36,660 --> 00:02:38,849

to be completed early next year.

32
00:02:38,849 --> 00:02:46,640
NASA recently began its North Atlantic Aerosols
and Marine Ecosystems Study, or NAAMES. The

33
00:02:46,640 --> 00:02:51,470
five-year study, which includes four seasonal
research missions, will use sea vessels and

34
00:02:51,470 --> 00:02:57,620
aircraft to study the annual cycle of phytoplankton,
and the impact that small airborne particles

35
00:02:57,620 --> 00:03:02,640
emitted from the ocean have on the climate-sensitive
North Atlantic. NASA’s Langley Research

36
00:03:02,640 --> 00:03:08,840
Center, Goddard Space Flight Center and Wallops
Flight Facility are supporting the mission.

37
00:03:08,840 --> 00:03:14,879
Three NASA WB-57 High Altitude Research aircraft
based near Johnson Space Center, recently

38
00:03:14,879 --> 00:03:20,360
took a historic formation flight in the skies
over Houston. It was the first time the three

39
00:03:20,360 --> 00:03:27,030
WB-57s have been aloft at the same time since
the early 1970s -- when the U.S. Air Force

40
00:03:27,030 --> 00:03:33,379
had an operational squadron of WB-57s. Since
the early 60’s, the aircraft have routinely

41
00:03:33,379 --> 00:03:39,610
been used for flights higher than 55,000 feet

and as long as seven hours to conduct atmospheric

42
00:03:39,610 --> 00:03:46,030
and Earth science research, cosmic dust collection,
rocket launch support, and other research.

43
00:03:46,030 --> 00:03:48,900
And that’s what’s up this week @NASA …