1
00:00:00,440 --> 00:00:04,710
“Here’s some of the stories trending This
Week at NASA!”

2
00:00:04,710 --> 00:00:09,879
After an almost five-year journey to Jupiter,
NASA's Juno spacecraft successfully settled

3
00:00:09,879 --> 00:00:15,139
into orbit around our solar system’s largest
planet on July 4 – giving Juno team members

4
00:00:15,139 --> 00:00:17,280
yet another reason to celebrate on America’s
birthday.

5
00:00:17,280 --> 00:00:19,510
“(Applause and cheering) … All stations
on Juno Coord, we have the tone for burn cutoff

6
00:00:19,510 --> 00:00:25,830
on Delta V. (unintelligible), Juno – welcome
to Jupiter.”

7
00:00:25,830 --> 00:00:32,180
In a scenario reminiscent of the Curiosity
rover’s triumphant arrival on Mars, Juno

8
00:00:32,180 --> 00:00:37,210
became the latest NASA spacecraft to pull
off a tricky series of maneuvers to safely

9
00:00:37,210 --> 00:00:39,190
arrive at a distant planet.

10
00:00:39,190 --> 00:00:49,749
“NASA did it again ... (applause) … that
says it all to me. And I am so happy to be

11

00:00:49,749 --> 00:00:51,909
part of the team that did that."

12
00:00:51,909 --> 00:00:56,949
The orbital insertion required Juno to change
direction, increase its rotation rate to help

13
00:00:56,949 --> 00:01:02,109
stabilize itself and decrease its speed by
more than 1,200 miles per hour.

14
00:01:02,109 --> 00:01:08,430
"A mission of this complexity – to accomplish
tonight is just truly amazing."

15
00:01:08,430 --> 00:01:12,680
"The more you know about the mission, you
know just how tricky this was, and to have

16
00:01:12,680 --> 00:01:16,100
it be flawless – I mean, I really can't
put it into words."

17
00:01:16,100 --> 00:01:20,260
Over the next few months, Juno's mission
and science teams will perform final testing

18
00:01:20,260 --> 00:01:25,050
on the spacecraft's subsystems and science
instruments and even collect some preliminary

19
00:01:25,050 --> 00:01:30,160
science data. The principal goal of the mission
is to understand the origin and evolution

20
00:01:30,160 --> 00:01:35,240
of Jupiter – which will advance our understanding
about the role giant planets like Jupiter

21
00:01:35,240 --> 00:01:39,830

might play in the formation of a solar system
– including our own.

22
00:01:39,830 --> 00:01:45,220
On July 6 Eastern time, a Soyuz spacecraft
launched from the Baikonur Cosmodrome in Kazakhstan

23
00:01:45,220 --> 00:01:51,080
toward the International Space Station. Onboard
-- NASA Astronaut Kate Rubins and her Expedition

24
00:01:51,080 --> 00:01:57,670
48/49 crewmates Anatoly Ivanishin of the Russian
space agency Roscosmos and Takuya Onishi of

25
00:01:57,670 --> 00:02:02,860
the Japan Aerospace Exploration Agency. The
crew members are scheduled to arrive and enter

26
00:02:02,860 --> 00:02:07,130
the space station July 9. They'll spend
about four months contributing to more than

27
00:02:07,130 --> 00:02:13,770
250 experiments in fields such as biology,
Earth science, human research, physical sciences

28
00:02:13,770 --> 00:02:15,800
and technology development.

29
00:02:15,800 --> 00:02:21,860
NASA's Stennis Space Center hosted a celebration
of space exploration June 29-July 3 in New

30
00:02:21,860 --> 00:02:28,550
Orleans, in conjunction with the 2016 Essence
Festival. NASA Week included stage presentations

31
00:02:28,550 --> 00:02:34,260
by NASA Administrator Charlie Bolden and astronaut

Victor Glover, and a wide range of other free

32
00:02:34,260 --> 00:02:40,260
activities for visitors to learn about NASA's Journey to Mars, the solar system and beyond,

33
00:02:40,260 --> 00:02:45,450
the International Space Station, the economic significance of NASA, the agency's Earth

34
00:02:45,450 --> 00:02:49,569
science missions, and NASA-sponsored education initiatives.

35
00:02:49,569 --> 00:02:54,750
On July 7, NASA's Armstrong Flight Research Center invited media to preview the Atmospheric

36
00:02:54,750 --> 00:02:59,480
Tomography (ATom) mission that will study greenhouse gases and other particles and gases

37
00:02:59,480 --> 00:03:05,209
in the atmosphere. On July 28, NASA's DC-8 flying laboratory will make a there-and-back

38
00:03:05,209 --> 00:03:11,080
trip over the tropics between Palmdale, California and the equator, before heading out for a

39
00:03:11,080 --> 00:03:16,420
26-day journey on July 31. That leg of the mission will cover from the North Pole to

40
00:03:16,420 --> 00:03:20,959
New Zealand, over to the tip of South America, and north to the Arctic. Data from the mission

41
00:03:20,959 --> 00:03:26,599
will complement satellite observations of

ozone, carbon dioxide and other major atmospheric

42
00:03:26,599 --> 00:03:32,260
gases. ATom will make detailed measurements
of atmospheric chemistry that are difficult

43
00:03:32,260 --> 00:03:37,760
or impossible to make from space. Reducing
concentrations of these gases could help slow

44
00:03:37,760 --> 00:03:42,500
global warming and improve air quality.

45
00:03:42,500 --> 00:03:44,560
And that’s what’s up this week @NASA …