
about community responses
to the flights.

1
00:00:00,510 --> 00:00:04,250
Building the future of quiet supersonic flight
…

2
00:00:04,250 --> 00:00:07,260
Science and supplies delivered to the space
station …

3
00:00:07,260 --> 00:00:12,450
And uncovering the farthest star ever seen
– a few of the stories to tell you about

4
00:00:12,450 --> 00:00:15,059
– This Week at NASA!

5
00:00:15,059 --> 00:00:22,110
We’ve selected Lockheed Martin Aeronautics
Company to design, build and test the Low-Boom

6
00:00:22,110 --> 00:00:27,779
Flight Demonstration supersonic experimental
aircraft, or X-plane that reduces a sonic

7
00:00:27,779 --> 00:00:28,779
boom …

8
00:00:28,779 --> 00:00:31,940
… to a gentle thump.

9
00:00:31,940 --> 00:00:38,129
Work is expected to last through Dec. 2021
– followed by flights over select U.S. cities,

10
00:00:38,129 --> 00:00:45,760
starting in mid-2022 to collect data about
community responses to the flights.

11
00:00:45,760 --> 00:00:51,010
More than 5,800 pounds of scientific experiments

and supplies were delivered to the International

12
00:00:51,010 --> 00:00:56,969
Space Station on April 4 to support dozens
of the more than 250 investigations aboard

13
00:00:56,969 --> 00:00:58,499
the space station.

14
00:00:58,499 --> 00:01:04,290
The experiments deal with how the human body,
plants and materials behave in space.

15
00:01:04,290 --> 00:01:10,320
SpaceX’s Dragon resupply spacecraft delivered
the cargo – two days after it was launched

16
00:01:10,320 --> 00:01:11,320
from Florida.

17
00:01:11,320 --> 00:01:17,080
This is the company’s 14th resupply mission
to the station.

18
00:01:17,080 --> 00:01:22,740
Our Hubble Space Telescope has uncovered the
farthest individual star ever seen.

19
00:01:22,740 --> 00:01:27,840
The enormous blue star – nicknamed Icarus
– is located more than halfway across the

20
00:01:27,840 --> 00:01:33,720
universe and would normally be too faint to
view, even with the largest telescopes.

21
00:01:33,720 --> 00:01:39,460
But thanks to a quirk of nature called gravitational
lensing that tremendously amplifies the star’s

22
00:01:39,460 --> 00:01:43,040
feeble glow, Hubble was able to spot the star.

23
00:01:43,040 --> 00:01:51,000
Icarus is so far away that its light has taken
9 billion years to reach Earth.

24
00:01:51,000 --> 00:01:56,800
Our Chandra X-ray Observatory has been used
to study a cosmic cold front located in the

25
00:01:56,800 --> 00:02:03,310
Perseus galaxy cluster that extends for about
two million light years, or about 10 billion

26
00:02:03,310 --> 00:02:04,840
billion miles.

27
00:02:04,840 --> 00:02:09,920
The cold front consists of a “cool” band
of gas – that is about 30 million degrees,

28
00:02:09,920 --> 00:02:14,269
moving through hot gas that is about 80 million
degrees.

29
00:02:14,269 --> 00:02:20,099
It formed about 5 billion years ago and has
been traveling at speeds of about 300,000

30
00:02:20,099 --> 00:02:22,580
miles per hour ever since.