1
00:00:07,089 --> 00:00:11,679
This Week at NASA…
“3-2-1 fueling tower separates, booster

2
00:00:11,679 --> 00:00:20,699
ignition, and liftoff of the Soyuz Rocket
as Alexander Kaleri, Scott Kelly and Oleg

3
00:00:20,699 --> 00:00:26,500
Skripochka begin their journey to the International
Space Station.”

4
00:00:26,500 --> 00:00:31,980
Following several days of traditional pre-launch
activities and preparations, the Expedition

5
00:00:31,980 --> 00:00:37,480
25 crew successfully launched aboard a Soyuz
rocket to begin its two-day journey to the

6
00:00:37,480 --> 00:00:43,329
International Space Station. Soyuz Commander
Alexander Kaleri, and Flight Engineers Scott

7
00:00:43,329 --> 00:00:47,190
Kelly and Oleg Skripochka are joining forces
aboard the complex with station Commander

8
00:00:47,190 --> 00:00:52,460
Doug Wheelock and Flight Engineers Fyodor
Yurchikhin and Shannon Walker, all of whom

9
00:00:52,460 --> 00:00:55,160
have been in orbit aboard the complex since
June.

10
00:00:55,160 --> 00:00:59,730
“It was exciting to watch him rocket off
into space one more time; it’s the third

11
00:00:59,730 --> 00:01:05,269
time I've seen him do this. He's certainly
having a really exciting time right now, especially

12
00:01:05,269 --> 00:01:11,399
that first eight-and-a-half minutes of a rocket
ride into space is just an incredible experience,

13
00:01:11,399 --> 00:01:13,969
and it was great for all of us to get to see
it."

14
00:01:13,969 --> 00:01:22,109
Expedition 25 is the twenty-fifth long-duration
mission to the International Space Station.

15
00:01:22,109 --> 00:01:26,539
The United States Congress has approved the
National Aeronautics and Space Administration

16
00:01:26,539 --> 00:01:32,590
Authorization Act of 2010.\hThe bill provides
NASA with a clear path forward and helps put

17
00:01:32,590 --> 00:01:36,299
America's space program on a more sustainable
trajectory.

18
00:01:36,299 --> 00:01:41,299
"NASA is investment in our future and the
future of our children. The United States

19
00:01:41,299 --> 00:01:47,069
has been a global leader in space exploration
and technology and innovation and our efforts

20
00:01:47,069 --> 00:01:51,770
over the remainder of the Congress should
be aimed preserving that leadership position.

21
00:01:51,770 --> 00:01:56,219
Provisions in the legislation will extend
the life of the International Space Station,

22
00:01:56,219 --> 00:02:02,539
launch a commercial space transportation industry,
develop path-breaking technologies, work to

23
00:02:02,539 --> 00:02:08,380
create thousands of new jobs and help inspire
a new generation of Americans to pursue careers

24
00:02:08,380 --> 00:02:12,410
in science, technology, engineering, and mathematics.

25
00:02:12,410 --> 00:02:18,500
“Today we take a step toward restoring the
goals worthy of a great nation and in doing

26
00:02:18,500 --> 00:02:25,329
so we are saying to the men and women of NASA
currently, and those that come that this nation

27
00:02:25,329 --> 00:02:32,939
still chooses to explore.”
This is an image of a meteorite that was found

28
00:02:32,939 --> 00:02:39,379
and examined last month by NASA's Mars Exploration
Rover Opportunity. The meteorite was first

29
00:02:39,379 --> 00:02:45,150
revealed in images taken on Sept. 16. This
close-up was captured eight days later by

30
00:02:45,150 --> 00:02:51,780
Opportunity’s panoramic camera. Inspection
by a microscopic imager and spectrometer on

31

00:02:51,780 --> 00:02:57,859
the rover’s arm confirmed the rock to be
a nickel-iron meteorite. Opportunity’s team

32
00:02:57,859 --> 00:03:03,129
has informally dubbed the find "Oileán Ruaidh"
(ay-lan ruah), the Gaelic name for an island

33
00:03:03,129 --> 00:03:07,969
off the coast of northwestern Ireland.

34
00:03:07,969 --> 00:03:08,969
And now Centerpieces…

35
00:03:08,969 --> 00:03:14,030
“Okay so now we get into the more interesting
part.”

36
00:03:14,030 --> 00:03:18,920
The Kepler Science Working Group met at the
Ames Research Center to review the progress

37
00:03:18,920 --> 00:03:24,730
of the Kepler Mission and discuss its future
plans. This international group of scientists

38
00:03:24,730 --> 00:03:30,310
convenes every three months to review data
they’re getting from Kepler and devise strategies

39
00:03:30,310 --> 00:03:32,969
for sharing and distributing their discoveries.

40
00:03:32,969 --> 00:03:37,889
“I actually feel looking at the data like
a boy at the seaside, picking up pretty shells

41
00:03:37,889 --> 00:03:42,200
and I’m fortunate to have all these experts,
these astronomers and astrophysicists that

42
00:03:42,200 --> 00:03:46,129
look at these beautiful light curves that
we're producing and understand the scientific

43
00:03:46,129 --> 00:03:50,340
import of these light curves and make these
grand discoveries that have never been made

44
00:03:50,340 --> 00:03:54,799
possible before by any other instrument or
mission."

45
00:03:54,799 --> 00:04:00,519
Kepler is on a three-and-a-half year mission
to search for Earth-size planets in our galaxy.

46
00:04:00,519 --> 00:04:06,389
After one year in space, Kepler has collected
more, and better, data than some researchers

47
00:04:06,389 --> 00:04:12,579
had expected. The spacecraft has already discovered
several exoplanets much larger and hotter

48
00:04:12,579 --> 00:04:19,030
than Earth. Scientists hope to eventually
find smaller, habitable planets with liquid

49
00:04:19,030 --> 00:04:25,419
water that could sustain life as we know it.
The Kepler team has even more to celebrate

50
00:04:25,419 --> 00:04:31,449
this week. The software system devised at
Ames for use by mission scientists to locate

51
00:04:31,449 --> 00:04:38,780
Earth-size exoplanets has been selected as
the agency's Software of the Year by NASA's

52
00:04:38,780 --> 00:04:45,900
Software Advisory Panel. Kepler's Science
Operations Center software system is a suite

53
00:04:45,900 --> 00:04:52,599
of 22 custom-designed tools for processing,
analyzing, and storing transit photometry

54
00:04:52,599 --> 00:04:56,289
and engineering data.

55
00:04:56,289 --> 00:05:01,280
Family and friends of Kennedy Space Center
employees were treated to a look, behind-the-scenes

56
00:05:01,280 --> 00:05:06,910
look during the 2010 Family and Take Our Children
to Work Day Celebration.

57
00:05:06,910 --> 00:05:12,711
Center facilities were opened so guests could
learn about vehicle processing, launch operations

58
00:05:12,711 --> 00:05:18,759
and other center functions. Visitors toured
the Orbiter Processing Facility, had an opportunity

59
00:05:18,759 --> 00:05:22,340
to meet an astronaut at the Launch Control
Center, and walk inside the enormous Vehicle

60
00:05:22,340 --> 00:05:29,050
Assembly Building. A tour highlight was drive
by launch pad 39A to see Space Shuttle Discovery

61
00:05:29,050 --> 00:05:34,710
poised for its targeted November 1 liftoff.

62

00:05:34,710 --> 00:05:41,879
After undergoing a major overhaul and upgrades,
the Boeing / NASA X-48B Blended Wing Body

63
00:05:41,879 --> 00:05:46,729
research aircraft has resumed flight tests
at the Dryden Flight Research Center. The

64
00:05:46,729 --> 00:05:53,300
sub-scale, manta ray-shaped airplane is supporting
NASA's Environmentally Responsible Aviation,

65
00:05:53,300 --> 00:06:01,509
or ERA, project. ERA aims to develop the technology
needed to create quieter, cleaner, and more

66
00:06:01,509 --> 00:06:08,180
fuel-efficient airplanes for the future. The
remotely piloted X-48B flew 80 test flights

67
00:06:08,180 --> 00:06:17,190
over three years in the project's first phase
from July 2007 through March of this year.

68
00:06:17,190 --> 00:06:22,539
From sea to shining sea, America’s national
parks are home to some of the most breathtaking

69
00:06:22,539 --> 00:06:29,199
views on Earth. Now, NASA is helping the National
Parks Service alert its millions of annual

70
00:06:29,199 --> 00:06:33,300
visitors to an attraction in the sky above
their campsites.

71
00:06:33,300 --> 00:06:39,520
To commemorate the 10th anniversary of continuous
human life, work and research on the International

72

00:06:39,520 --> 00:06:46,319
Space Station, NASA has added the coordinates
for 500 national parks and seashores, historic

73
00:06:46,319 --> 00:06:52,940
sites, monuments, and wild and scenic rivers
to its list of locations for which it calculates

74
00:06:52,940 --> 00:06:59,750
opportunities to see the ISS as it passes
overhead. Free from urban light pollution,

75
00:06:59,750 --> 00:07:05,349
parks like Yosemite and the Appalachian National
Scenic Trail can provide a much clearer view

76
00:07:05,349 --> 00:07:11,599
of the orbiting complex as it travels 200-plus
miles above Earth. Park rangers will also

77
00:07:11,599 --> 00:07:16,110
publicize the information at campgrounds and
various landmarks.

78
00:07:16,110 --> 00:07:24,699
Check out sighting times in your area at spaceflight.nasa.gov.
Go to “realtime data” and click on “sighting

79
00:07:24,699 --> 00:07:27,419
opportunities.”

80
00:07:27,419 --> 00:07:29,629
And that’s This Week at NASA!