



1  
00:00:07,310 --> 00:00:15,059

This Week at NASA...

"Sascha is opening the hatch. Okay open."

2  
00:00:15,059 --> 00:00:20,369

Soyuz Commander Fyodor Yurchikhin and NASA  
Flight Engineers Doug Wheelock and Shannon

3  
00:00:20,369 --> 00:00:27,039

Walker got a warm welcome from the resident  
Expedition 24 crew after arriving at the International

4  
00:00:27,039 --> 00:00:33,400

Space Station. Yurchikhin, Wheelock and Walker  
will spend six months on the station, joining

5  
00:00:33,400 --> 00:00:39,040

Alexander Skvortsov, Mikhail Kornienko and  
Tracy Caldwell Dyson, who've been there

6  
00:00:39,040 --> 00:00:40,650

since April.

7  
00:00:40,650 --> 00:00:49,290

"There it goes; standing by for main engine  
start. We've got main engine start 5,4,3,

8  
00:00:49,290 --> 00:00:57,120

2, 1 and ignition."

Yurchikhin, Wheelock and Walker arrived at

9  
00:00:57,120 --> 00:01:04,350

the ISS after a two-day journey that began  
with the liftoff of their Russian Soyuz TMA-19

10  
00:01:04,350 --> 00:01:07,610

spacecraft from the Baikonur Cosmodrome in  
Kazakhstan.

11

00:01:07,610 --> 00:01:13,689

“A perfect ascent to orbit for the newest trio of residents headed for the International

12

00:01:13,689 --> 00:01:17,850

Space Station.”

The six Expedition 24 crew members will now

13

00:01:17,850 --> 00:01:23,399

concentrate on more than 130 science experiments being conducted aboard the ISS.

14

00:01:23,399 --> 00:01:26,810

William Borucki SOT: “This discovery is just astounding.”

15

00:01:26,810 --> 00:01:33,590

After continually monitoring the brightness of more than 156,000 stars, NASA's Kepler

16

00:01:33,590 --> 00:01:37,130

team has released the first 43 days of science data...

17

00:01:37,130 --> 00:01:40,979

William Borucki SOT: “This is the biggest release of candidate planets that has ever

18

00:01:40,979 --> 00:01:46,729

happened. The number of candidate planets is actually greater than all the planets that

19

00:01:46,729 --> 00:01:50,799

have been discovered in the last 15 years.”

Launch Announcer: “ 3-2-engine start—1,zero,

20

00:01:50,799 --> 00:01:59,170

and lift off of the Delta II Rocket with Kepler.”

Since its launch on March 6, 2009, Kepler

21

00:01:59,170 --> 00:02:04,880

has been on the hunt to find planets similar in size to our Earth, especially those in

22

00:02:04,880 --> 00:02:09,479

the habitable zone of stars where liquid water and possibly life might exist.

23

00:02:09,479 --> 00:02:12,959

William Borucki SOT: "A planet candidate is some astrophysical signal that we have

24

00:02:12,959 --> 00:02:17,739

picked up that looks like it's coming from a planet orbiting another star. Some of those

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00:02:17,739 --> 00:02:22,430

are actual planets, and some of them are false positives so we have a ground-based program

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00:02:22,430 --> 00:02:26,640

with a dozen different telescopes that stretch from the Canary Islands, to Hawaii, where

27

00:02:26,640 --> 00:02:31,629

we check to see which of those signals is really a planet, and which one isn't."

28

00:02:31,629 --> 00:02:36,850

The findings of those follow-up observations will be released in February 2011.

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00:02:36,850 --> 00:02:41,650

(nat)

A team of astronomers and scientists from

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00:02:41,650 --> 00:02:48,299

NASA, the Japanese Aerospace Exploration Agency and other organizations had a front row seat

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00:02:48,299 --> 00:02:52,620

as the Hayabusa spacecraft made a fiery return to Earth's atmosphere.

32

00:02:52,620 --> 00:03:01,800

"Nice flashes. Oh Wow. Lower right, lower right. Reentry vehicle looks like lower right."

33

00:03:01,800 --> 00:03:07,510

Special cameras and other imaging instruments aboard NASA's DC-8 airborne laboratory captured

34

00:03:07,510 --> 00:03:13,969

the spacecraft's high-speed re-entry over an unpopulated area of central Australia.

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00:03:13,969 --> 00:03:20,099

Hayabusa completed a seven-year journey to return a sample of the asteroid Itokawa. Scientists

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00:03:20,099 --> 00:03:25,230

aren't sure a sample was obtained; if they do find one, it'll weigh no more than a

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00:03:25,230 --> 00:03:26,230

gram.

38

00:03:26,230 --> 00:03:32,640

"We're going to be needing the SERT Hazmat team here."

39

00:03:32,640 --> 00:03:37,540

The Glenn Research Center held a "Mail Room Mayday." The drill was a test of cutting-

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00:03:37,540 --> 00:03:43,920

edge robotic technology to detect a simulated biological contaminant in the center's mailroom.

41

00:03:43,920 --> 00:03:47,780

“We just performed our control, it’s’  
already changing colors to purple, indicating

42

00:03:47,780 --> 00:03:51,640

a valid test, confirming that it’s not likely  
to contain biological materials.”

43

00:03:51,640 --> 00:03:57,920

The exercise evaluated current emergency procedures  
and reactions by local emergency responders.

44

00:03:57,920 --> 00:04:10,849

Seth Harbaugh SOT: “This exercise was a  
tremendous success for us, not only to give

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00:04:10,849 --> 00:04:16,140

us the opportunity to test that robotic capability  
and prove its value to our emergency response

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00:04:16,140 --> 00:04:20,760

capabilities, but it also gave us an opportunity  
to partner with our local response organizations

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00:04:20,760 --> 00:04:24,780

and work together as a team.”

The joint exercise was conducted by multiple

48

00:04:24,780 --> 00:04:30,819

agencies, including OSHA, the U.S. Postal  
Service, local fire departments, and Glenn

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00:04:30,819 --> 00:04:31,819

safety personnel.

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00:04:31,819 --> 00:04:37,710

“That’s a good tank down there.”

The STS-134 crew traveled to the Stennis Space

51

00:04:37,710 --> 00:04:45,840

Center on June 11 for a preflight visit with

employees. STS-134 is the last scheduled mission

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00:04:45,840 --> 00:04:49,970

of the Space Shuttle Program.

“Thanks for all your hard work.”

53

00:04:49,970 --> 00:04:55,270

While at the center, Commander Mark Kelly,

Pilot Greg Johnson and Mission Specialists

54

00:04:55,270 --> 00:05:01,320

Greg Chamitoff, Drew Feustel, Mike Fincke

and European Space Agency Specialist Roberto

55

00:05:01,320 --> 00:05:07,091

Vittori met with employees and toured the

rocket engine test complex, including the

56

00:05:07,091 --> 00:05:12,460

A-2 Test Stand where the last scheduled space

shuttle main engine test was conducted in

57

00:05:12,460 --> 00:05:15,849

July of 2009.

(nat test)

58

00:05:15,849 --> 00:05:22,710

(nat)

A video program sponsored by NASA and the

59

00:05:22,710 --> 00:05:27,949

National Institute of Aerospace aimed at helping

high school students learn about science,

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00:05:27,949 --> 00:05:34,240

technology, engineering and mathematics (STEM)

has won a regional Emmy television award.

61

00:05:34,240 --> 00:05:37,800

“Welcome to NASA Launchpad”

“NASA Launchpad” took home the statue

62

00:05:37,800 --> 00:05:43,169

in the Informational/Instructional category  
for its episode, “Bernoulli’s Principle,”

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00:05:43,169 --> 00:05:46,790

at the 52nd Capital Region Emmy Awards held  
in Washington.

64

00:05:46,790 --> 00:05:50,450

Scott Bednar SOT: “Winning an Emmy was such  
an amazing honor for the two of us, especially

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00:05:50,450 --> 00:05:54,110

at such a young age. But, Tom and I cannot  
take all the credit for this. We work with

66

00:05:54,110 --> 00:05:56,699

such and amazing team who is supporting us  
the entire way through.”

67

00:05:56,699 --> 00:06:00,580

Tom Shortridge SOT: “And we just wanted  
to thank NASA and NIA for giving us the opportunity

68

00:06:00,580 --> 00:06:04,410

to produce this show, and for giving us the  
opportunity to help inspire the next generation

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00:06:04,410 --> 00:06:07,259

of scientists, technologist, engineers, and  
mathematicians.”

70

00:06:07,259 --> 00:06:10,069

(nat)

“NASA Launchpad” is targeted at high school

71

00:06:10,069 --> 00:06:15,550

students and features five- to seven- minute

programs that apply STEM topics learned in

72

00:06:15,550 --> 00:06:23,039

the classroom to real world challenges. Teacher guides accompany the online educational program.

73

00:06:23,039 --> 00:06:31,690

To watch episodes of "NASA Launchpad," log onto [www.nasa.gov](http://www.nasa.gov) and consult NASA TV's

74

00:06:31,690 --> 00:06:37,300

Education Channel schedule , or click on "For Educators" on the Website's main page

75

00:06:37,300 --> 00:06:42,960

and select "eClips."

76

00:06:42,960 --> 00:06:50,720

Making robots, building lunar landers, and competing in a paper airplane contest was

77

00:06:50,720 --> 00:06:56,160

all part of the fun and educational activities at the Marshall Space Flight Center's annual

78

00:06:56,160 --> 00:07:00,220

"Take Our Children to Work Day."

Rhonda Childress-Thompson: "I think it's

79

00:07:00,220 --> 00:07:03,139

good because if we stimulate interest we can create more scientists, engineers and be globally

80

00:07:03,139 --> 00:07:06,889

competitive."

Ian Thompson: "I like the extreme chill

81

00:07:06,889 --> 00:07:24,389

because they froze a bunch of objects using liquid nitrogen and seemed pretty cool."

82  
00:07:24,389 --> 00:07:29,629  
Children spent the day touring NASA facilities,  
visiting their parents' workspace and seeing

83  
00:07:29,629 --> 00:07:32,610  
what they do each day at Marshall.  
Bruce Askins: "Sometimes it's even fun

84  
00:07:32,610 --> 00:07:38,629  
for me to do some of this. It's been so  
long so, it's neat to interact and work

85  
00:07:38,629 --> 00:07:40,030  
with the children."  
Lauren Askins: "I've been here every year

86  
00:07:40,030 --> 00:07:44,169  
and there's a lot of fun things to do, and  
I just love coming."

87  
00:07:44,169 --> 00:07:51,030  
The event was organized by Marshall's Office  
of Diversity and Equal Opportunity.