1
00:00:07,359 --> 00:00:09,500
This Week At NASA…

2
00:00:09,500 --> 00:00:13,619
“And we have contact.”

3
00:00:13,619 --> 00:00:19,849
The six-member ISS crew spent some time unpacking
following the arrival of the unmanned Russian

4
00:00:19,849 --> 00:00:26,219
spacecraft Progress 39. After a two-day trek
from the Baikonour Cosmodrome in Kazakhstan,

5
00:00:26,219 --> 00:00:31,730
the cargo ship docked to the International
Space Station filled with 2 ½ tons of food,

6
00:00:31,730 --> 00:00:37,610
fuel and other supplies to replenish the station’s
coffers. Three of the station crew, Commander

7
00:00:37,610 --> 00:00:43,800
Alexander Skvortsov, NASA Flight Engineer
Tracy Caldwell Dyson and Russian Flight Engineer

8
00:00:43,800 --> 00:00:49,340
Mikhail Kornienko have also been preparing
for their return to Earth on September 23,

9
00:00:49,340 --> 00:00:52,650
after nearly six months of living and working
in space.

10
00:00:52,650 --> 00:01:01,149
A NASA led team made its 13th trip to the
desert as part of the Research and Technology

11
00:01:01,149 --> 00:01:07,310

Studies -- Desert RATS. This year they tested rovers, robots and habitats that could be

12
00:01:07,310 --> 00:01:13,530
used in future space missions. Desert Rats gives engineers, astronauts and scientists

13
00:01:13,530 --> 00:01:18,900
an opportunity to assess hardware and concepts in locations that are representative of some

14
00:01:18,900 --> 00:01:24,210
of the harsh conditions found in space. This year's testing location was chosen by the

15
00:01:24,210 --> 00:01:28,110
public from online postings on NASA's website.

16
00:01:28,110 --> 00:01:33,729
Some of the demonstrations in this year's studies include: Space Exploration Vehicles,

17
00:01:33,729 --> 00:01:40,159
rovers where astronauts could live for seven days at a time, a Habitat Demonstration Unit/Pressurized

18
00:01:40,159 --> 00:01:46,610
Excursion Module, and the All-Terrain Hex-Legged Extra-Terrestrial Explorers: two heavy-lift

19
00:01:46,610 --> 00:01:52,090
rover platforms that allow the habitat, or other large items, to be transported from

20
00:01:52,090 --> 00:01:56,310
one place to another.

21
00:01:56,310 --> 00:02:01,850
NASA Administrator Charles Bolden joined Dr. Cora Marrett, Acting Director of the National

22
00:02:01,850 --> 00:02:08,051
Science Foundation and other representatives
from NASA, academia and industry for an Education

23
00:02:08,051 --> 00:02:13,250
Stakeholders' Summit aimed at building our
nation’s science, technology, engineering

24
00:02:13,250 --> 00:02:17,870
and mathematics, aka STEM, education and workforce.

25
00:02:17,870 --> 00:02:24,340
Participants also discussed the agency’s
One Stop Shopping Initiative OSSI, and its

26
00:02:24,340 --> 00:02:31,030
new online application tool, SOLAR. Operating
through a single online application, OSSI

27
00:02:31,030 --> 00:02:37,510
and SOLAR will help NASA market to eligible
college and university students a portfolio

28
00:02:37,510 --> 00:02:42,629
of available internships, fellowships and
scholarship opportunities in the agency’s

29
00:02:42,629 --> 00:02:47,110
mission directorates and centers.

30
00:02:47,110 --> 00:02:52,390
The agency’s chief technologist, Bobby Braun,
joined the director of the Johnson Space Center’s

31
00:02:52,390 --> 00:02:57,750
Engineering Directorate Steve Altemus for
an insightful dialogue on risk management

32

00:02:57,750 --> 00:03:03,640
and engineering as part of the “Master with Masters” series. The discussion was facilitated

33
00:03:03,640 --> 00:03:09,190
by Dr. Ed Hoffman, director of the Academy of Program/Project and Engineering Leadership

34
00:03:09,190 --> 00:03:10,190
(APPEL).

35
00:03:10,190 --> 00:03:16,000
“With an organization that does one-of-a-kind missions, that is supposed to push the envelope,

36
00:03:16,000 --> 00:03:21,670
but also wants to have success, how do we define acceptable risk?”

37
00:03:21,670 --> 00:03:27,330
“In the agency, from time to time, it’s been more of a pendulum approach where we

38
00:03:27,330 --> 00:03:32,740
take a lot of risks for awhile and then we get snake bit, and so we become very risk-averse.

39
00:03:32,740 --> 00:03:37,960
I think that for an agency likes NASA, there has to be a balance.”

40
00:03:37,960 --> 00:03:44,550
“We’ve learned to fly missions and fly crews on space station without systems being

41
00:03:44,550 --> 00:03:49,031
pristine. You can’t run flight, after flight, after flight, since “Return to Flight,”

42
00:03:49,031 --> 00:03:55,000

with such a success record, without understanding
and appreciating the risk that goes into it

43
00:03:55,000 --> 00:03:56,409
each time.”

44
00:03:56,409 --> 00:04:02,540
Masters with Masters brings together two highly-skilled
practitioners to share lessons learned and

45
00:04:02,540 --> 00:04:07,849
to examine key issues surrounding project
management and engineering, all in the hopes

46
00:04:07,849 --> 00:04:14,230
of developing and maintaining a cohesive community
of project management and engineering professionals

47
00:04:14,230 --> 00:04:15,379
across NASA.

48
00:04:15,379 --> 00:04:22,740
“Well, it’s a very exciting event. We’re
here today to celebrate the 25th anniversary

49
00:04:22,740 --> 00:04:27,330
of our first comet encounter.”
NASA scientists and others from the field

50
00:04:27,330 --> 00:04:33,860
of cometary studies came together to commemorate
25 years of comet discoveries and to look

51
00:04:33,860 --> 00:04:39,240
ahead at those we might encounter in the future
during a unique symposium at the Newseum in

52
00:04:39,240 --> 00:04:40,240
Washington.

53
00:04:40,240 --> 00:04:46,020
“We’re going to look not only backwards,
but forwards. We’re going to take a little

54
00:04:46,020 --> 00:04:53,139
tour of some ancient history, try to put the
context of what we now know about comets and

55
00:04:53,139 --> 00:05:00,270
how that’s changed over time and, in particular,
look forward to two upcoming encounters.”

56
00:05:00,270 --> 00:05:05,680
Comets are remainders of material formed in
the coldest part of our solar system and played

57
00:05:05,680 --> 00:05:11,270
a major role in Earth’s early evolution
billions of years ago. Some, in fact, believe

58
00:05:11,270 --> 00:05:18,650
that these celestial bodies brought water
and other organic molecules to our planet.

59
00:05:18,650 --> 00:05:24,500
The 2009 astronaut candidate class toured
NASA's Glenn Research Center facilities at

60
00:05:24,500 --> 00:05:31,020
Lewis Field in Cleveland, Ohio and Plum Brook
Station in Sandusky, Ohio. A featured stop

61
00:05:31,020 --> 00:05:37,330
was the enhanced Zero-gravity Locomotion Simulator,
a ground-based simulator that uses improved

62
00:05:37,330 --> 00:05:43,129
exercise countermeasure systems developed
to address the detrimental physiological effects

63
00:05:43,129 --> 00:05:49,029
spaceflight has on the human body. The facility
has been used to develop new treadmill harnesses

64
00:05:49,029 --> 00:05:54,509
that are now in use aboard the International
Space Station.

65
00:05:54,509 --> 00:06:00,719
September is National Preparedness Month,
and in keeping with that theme NASA HQ hosted

66
00:06:00,719 --> 00:06:06,059
a special event to provide information on
how employees can protect themselves, their

67
00:06:06,059 --> 00:06:12,580
homes, and their pets in the case of an emergency.
Members from the agency's Employee Assistance

68
00:06:12,580 --> 00:06:18,309
and Family Preparedness Programs were on hand
to support employees in their efforts to prepare

69
00:06:18,309 --> 00:06:23,800
for the unexpected. And representatives from
external organizations like the Red Cross,

70
00:06:23,800 --> 00:06:30,399
the Humane Society and the DC Fire Department
also lent their support to the day's activities.

71
00:06:30,399 --> 00:06:36,479
The day's events featured a Family Preparedness
Forum with NASA Senior Managers and Administrator

72
00:06:36,479 --> 00:06:40,219
Bolden.
When all hell breaks loose, it really does;

73
00:06:40,219 --> 00:06:45,559
some of you have lived through it, and you
know how this city can go into gridlock. And,

74
00:06:45,559 --> 00:06:48,689
if you haven’t thought about it, and you
haven’t talked with your families about

75
00:06:48,689 --> 00:06:54,022
it, and you haven’t prepared for it, then
it’s a bad, bad, day. We don’t want to

76
00:06:54,022 --> 00:06:58,649
take a bad day and make it even worse because
we didn’t plan, we didn’t prepare, we

77
00:06:58,649 --> 00:07:00,319
didn’t talk about it.”

78
00:07:00,319 --> 00:07:01,969
And that’s This Week At NASA…!