1
00:00:01,010 --> 00:00:07,520
TW@N FINAL for 11/5/2010

2
00:00:07,520 --> 00:00:11,430
This Week @ NASA…

3
00:00:11,430 --> 00:00:15,670
“Disappointed for the team today for sure.
But, as we always say, and it’s’ absolutely

4
00:00:15,670 --> 00:00:19,350
the truth, we’re going to fly when we’re
ready and clearly we’re not ready to fly

5
00:00:19,350 --> 00:00:20,350
today.”

6
00:00:20,350 --> 00:00:24,840
The 35th shuttle mission to the International
Space Station has been scrubbed until the

7
00:00:24,840 --> 00:00:31,180
end of the month according to Mission Managers.
Originally scheduled to lift off on Nov.1,

8
00:00:31,180 --> 00:00:34,730
the STS-133 mission was postponed several
times due to a series of problems including

9
00:00:34,730 --> 00:00:43,030
a circuit breaker problem in the shuttle’s
cockpit, improbable weather, and a hydrogen

10
00:00:43,030 --> 00:00:48,559
gas leak detected while filling the external
tank in preparation for a third attempt to

11
00:00:48,559 --> 00:00:51,890
launch Discovery on Friday, November 5.

12
00:00:51,890 --> 00:00:57,329
STS-133's Mission Management Team discussed
their decision to select a new window of opportunity

13
00:00:57,329 --> 00:01:03,010
– November 30 through Dec. 5, during a
news conference at the Kennedy Space Center.

14
00:01:03,010 --> 00:01:06,730
"Right now the 30th is the first time that
beta opens back up to allow us to allow us

15
00:01:06,730 --> 00:01:09,410
to launch. We'll go make sure that's really
the date we want, and we'll work that through

16
00:01:09,410 --> 00:01:13,130
the normal change process of the shuttle program:"

17
00:01:13,130 --> 00:01:18,230
STS-133, with crew members Commander Steve
Lindsey, Pilot Eric Boe and Mission Specialists

18
00:01:18,230 --> 00:01:23,750
Alvin Drew, Tim Kopra, Michael Barratt and
Nicole Stott, is the last planned mission

19
00:01:23,750 --> 00:01:29,820
for 2010, and Discovery's final flight to
the complex.

20
00:01:29,820 --> 00:01:35,770
The EPOXI mission spacecraft made its planned
flyby of comet Hartley 2 – and the pictures

21
00:01:35,770 --> 00:01:48,960
it sent back to investigation team members
at the Jet Propulsion Laboratory did not disappoint.

22
00:01:48,960 --> 00:01:53,810
“Deep Impact,” so named for the 2005 mission
it initially served as the “in-flight”

23
00:01:53,810 --> 00:02:00,700
spacecraft, flew by Hartley 2 about 435 miles
above its surface, close enough to image the

24
00:02:00,700 --> 00:02:10,200
heart of the comet, its nucleus.
“Congratulations on a fantastic flyby. God

25
00:02:10,200 --> 00:02:12,469
job everybody! ”

26
00:02:12,469 --> 00:02:17,739
“The data we have, I am convinced, the comic
Hartley will have increased our knowledge

27
00:02:17,739 --> 00:02:25,980
of how comments work by at least three Hartleys.
The Hartley is a real unit of information

28
00:02:25,980 --> 00:02:28,799
and three Hartley’s is about a factor of
ten.”

29
00:02:28,799 --> 00:02:34,760
EPOXI, an acronym combining the names of its
two extended missions, is expected to shed

30
00:02:34,760 --> 00:02:43,129
new light on how our solar system formed some
4-point-six billion years ago.

31
00:02:43,129 --> 00:02:48,139
“I always like to tell people that you all
are incredible ambassadors as you’re there

32

00:02:48,139 --> 00:02:53,779
representing just two of the many nations
that are partners in the International Space

33
00:02:53,779 --> 00:03:00,510
Station. What you do is actually a modern-day
Star Trek, if you will; kids are excited about

34
00:03:00,510 --> 00:03:01,689
watching you."

35
00:03:01,689 --> 00:03:06,919
NASA Administrator Charles Bolden helped mark
the tenth anniversary of a continuous human

36
00:03:06,919 --> 00:03:12,030
presence aboard the International Space Station
by discussing life aboard the complex with

37
00:03:12,030 --> 00:03:16,029
its current residents, the Expedition 25 crew.

38
00:03:16,029 --> 00:03:21,359
"Everyday there's new excitement and new
adventure as we venture out with some of the

39
00:03:21,359 --> 00:03:27,459
science that we're doing. And, of course,
being here in space never ceases to amaze

40
00:03:27,459 --> 00:03:30,099
us of the surprises it has in store for us."

41
00:03:30,099 --> 00:03:36,829
Expedition 25 Commander Doug Wheelock and
Flight Engineers Alexander Kaleri, Oleg Skripochka,

42
00:03:36,829 --> 00:03:42,969
Scott Kelly, Fyodor Yurchikhin, and Shannon
Walker are the latest of almost 200 men and

43
00:03:42,969 --> 00:03:48,420
women who, over the past decade, have called
the ISS home while away from Earth.

44
00:03:48,420 --> 00:03:54,349
“I want to thank you for what you’ve done
and for what you represent, and congratulate

45
00:03:54,349 --> 00:03:59,919
you on being the occupants of the station
as we celebrate its tenth anniversary.”

46
00:03:59,919 --> 00:04:05,099
Discovery’s scheduled liftoff provided a
launch pad for other events at the Kennedy

47
00:04:05,099 --> 00:04:10,040
Space Center.
Some 150 people from 35 states and six countries,

48
00:04:10,040 --> 00:04:17,010
including Australia and the Philippines, participated
in a Tweetup at KSC. The Tweeps, as devotees

49
00:04:17,010 --> 00:04:23,090
of the social messaging medium, Twitter, are
known, met informally and spoke with astronauts,

50
00:04:23,090 --> 00:04:28,980
shuttle managers, technicians and engineers,
as well as members of NASA's social media

51
00:04:28,980 --> 00:04:33,700
team.

52
00:04:33,700 --> 00:04:39,290
For nearly eighty years, the LEGO “brick”
has helped enhance children’s creativity

53
00:04:39,290 --> 00:04:45,010
through playing and learning. Now, NASA is
teaming up with LEGO to develop innovative

54
00:04:45,010 --> 00:04:51,220
educational and outreach activities to interest
youngsters in science, technology, engineering

55
00:04:51,220 --> 00:04:56,160
and mathematics. The collaboration, called
“Build the Future, kicked off at Kennedy

56
00:04:56,160 --> 00:05:00,290
with youngsters building their vision of the
future in space.

57
00:05:00,290 --> 00:05:03,470
“What can we build together? That’s beautiful!”

58
00:05:03,470 --> 00:05:09,120
On hand for the event was a woman long associated
with future space travel, actress Nichelle

59
00:05:09,120 --> 00:05:13,250
Nichols, Lieutenant Uhura of “Star Trek”

60
00:05:13,250 --> 00:05:25,630
Something as simple as LEGO used to be used
as a pacifier and fun for kids. Here they

61
00:05:25,630 --> 00:05:27,600
have specific work; it’s fascination that
drives the creative spirit.”

62
00:05:27,600 --> 00:05:32,800
“Building the Future” will strive to educate
youngsters about NASA’s research in exploration,

63
00:05:32,800 --> 00:05:36,890

technologies, science and aeronautics.

64
00:05:36,890 --> 00:05:41,221
“We're working on the technology that will
enable the next generation of supersonic aircraft

65
00:05:41,221 --> 00:05:47,180
that the public can fly on. But we don't want
to do that in a way that creates a disturbance.

66
00:05:47,180 --> 00:05:53,140
So, the technology that we're developing will
result in quiet supersonic aircraft."

67
00:05:53,140 --> 00:05:58,460
NASA recently conducted flight experiments
at Edwards Air Force Base in Southern California

68
00:05:58,460 --> 00:06:04,220
to examine the effect of low-amplitude sonic
booms on large office buildings.

69
00:06:04,220 --> 00:06:10,210
"We're simulating what we anticipate will
be the boom level of a new aircraft by using

70
00:06:10,210 --> 00:06:16,060
an existing F-18 airplane. To do that, we
have to dive the airplane in a unique manner,

71
00:06:16,060 --> 00:06:21,140
and that creates both a quiet boom at the
location where we want to measure, but also

72
00:06:21,140 --> 00:06:29,340
some loud booms in the vicinity.”
As part of the Sonic Booms on Big Structures

73
00:06:29,340 --> 00:06:35,200
effort, two NASA F/A-18 aircraft from the

Dryden Flight Research Center flew a series

74
00:06:35,200 --> 00:06:41,360
of supersonic runs that caused multiple sonic
booms of varying intensity over Edwards.

75
00:06:41,360 --> 00:06:46,720
“Edwards is an ideal place to do this because
there's a lot of open land, we have the supersonic

76
00:06:46,720 --> 00:06:52,960
corridor, and people are generally experienced
with sonic booms, so we don't create a negative

77
00:06:52,960 --> 00:06:56,710
reaction with those loud booms, while we're
trying to focus on getting the data from the

78
00:06:56,710 --> 00:07:00,490
quiet booms.”
NASA engineers are now reviewing data from

79
00:07:00,490 --> 00:07:06,090
sensitive instrumentation installed in a recently-constructed
office building at Edwards to determine the

80
00:07:06,090 --> 00:07:14,950
building's structural response to the momentary
pressure caused by the sonic shockwaves.

81
00:07:14,950 --> 00:07:22,600
Thirty years ago, on November 12, 1980, the
Voyager spacecraft flew by Saturn about 78,000

82
00:07:22,600 --> 00:07:28,040
miles above the planet’s cloud tops. The
result was a series of spectacular photos

83
00:07:28,040 --> 00:07:35,160
like these, as well as the discovery of five

new moons, including Titan and Enceladus.

84
00:07:35,160 --> 00:07:41,680
Also revealed: a ring system consisting of
thousands of bands. Voyager 1 is a NASA mission

85
00:07:41,680 --> 00:07:47,320
that keeps on giving. Forging ahead towards
the boundaries of our solar system at a speed

86
00:07:47,320 --> 00:07:53,100
of almost 36-thousand miles an hour, Voyager
1 continues to collect unprecedented data

87
00:07:53,100 --> 00:07:57,600
about the giant outer planets -- and beyond.

88
00:07:57,600 --> 00:07:59,820
And that’s This Week @ NASA.