



1
00:00:07,100 --> 00:00:10,210
This Week at NASA...

2
00:00:10,210 --> 00:00:15,549
"This is something that we are thrilled to
be part of.

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00:00:15,549 --> 00:00:20,520
Again, NASA's not the only player in asteroids,
we know that and Grand Challenges are about

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00:00:20,520 --> 00:00:23,480
leveraging those additional partners."

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00:00:23,480 --> 00:00:28,550
During an asteroid initiative industry and
partner day at NASA Headquarters, Deputy Administrator

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00:00:28,550 --> 00:00:33,930
Lori Garver announced a Grand Challenge focused
on finding and mitigating all asteroid threats

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00:00:33,930 --> 00:00:36,050
to human populations.

8
00:00:36,050 --> 00:00:41,289
Grand Challenges, an important element of
the President's Strategy for American Innovation,

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00:00:41,289 --> 00:00:46,699
are ambitious goals on a national or global
scale that capture the imagination and demand

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00:00:46,699 --> 00:00:49,920
advances in innovation, science and technology.

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00:00:49,920 --> 00:00:55,749
NASA also released a request for information,
or RFI inviting industry and potential partners

12
00:00:55,749 --> 00:01:02,199
to submit ideas on accomplishing the agency's
goal to locate, redirect, and explore an asteroid,

13
00:01:02,199 --> 00:01:04,989
as well as find and plan for asteroid threats.

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00:01:04,989 --> 00:01:09,300
"When you read the RFI you'll see that you
have an opportunity to submit any idea that

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00:01:09,300 --> 00:01:10,300
you want.

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00:01:10,300 --> 00:01:14,200
What we want to be able to do is take the
complete set of those ideas and somehow figure

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00:01:14,200 --> 00:01:18,121
out a way to make the best mission that engages
the most folks and brings the most ideas to

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00:01:18,121 --> 00:01:19,121
the table."

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00:01:19,121 --> 00:01:28,920
For more information about NASA's asteroid
initiative, including a link to the RFI, visit:

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00:01:28,920 --> 00:01:31,930
www.nasa.gov/asteroidinitiative.

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00:01:31,930 --> 00:01:36,299
The latest test of the J-2X engine at NASA's
Stennis Space Center in Mississippi, included

22
00:01:36,299 --> 00:01:42,090
the first gimbal test conducted on the A-1

test stand since the space shuttle main engines.

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00:01:42,090 --> 00:01:46,770
Gimbal tests, during which the engine's nozzle is pivoted back and forth, are critical to

24
00:01:46,770 --> 00:01:52,299
the design process because the engines must move freely to steer rockets like the Space

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00:01:52,299 --> 00:01:56,200
Launch System, NASA's new heavy-lift launch vehicle.

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00:01:56,200 --> 00:02:01,289
This also was the first time in almost a decade that a full engine was installed and tested

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00:02:01,289 --> 00:02:05,539
in the A-1 test stand.

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00:02:05,539 --> 00:02:11,180
NASA's Interface Region Imaging Spectrograph, or IRIS mission is scheduled to start on June

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00:02:11,180 --> 00:02:14,890
26, from Vandenberg Air Force Base in California.

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00:02:14,890 --> 00:02:20,910
IRIS is a NASA Small Explorer Mission to observe the characteristics of solar material as it

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00:02:20,910 --> 00:02:26,630
moves through the little-understood interface region between the sun's photosphere and corona

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00:02:26,630 --> 00:02:31,270
that powers the sun's million-degree atmosphere and drives the solar wind.

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00:02:31,270 --> 00:02:36,330
IRIS will be air-launched on an Orbital Sciences Corporation Pegasus rocket.

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00:02:36,330 --> 00:02:42,310
Live NASA Television coverage begins at 9 p.m. Eastern Time.

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00:02:42,310 --> 00:02:46,960
The Johnson Space Center held a memorial service to honor the life and historic achievements

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00:02:46,960 --> 00:02:50,030
of astronaut Neil Armstrong.

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00:02:50,030 --> 00:02:55,850
Armstrong made history on July 20, 1969, when he became the first person to walk on the

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00:02:55,850 --> 00:02:58,790
moon, as commander of Apollo 11.

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00:02:58,790 --> 00:03:04,710
Among those in attendance were JSC Director Ellen Ochoa and Armstrong's Apollo 11 crewmates,

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00:03:04,710 --> 00:03:06,810
Buzz Aldrin and Michael Collins.

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00:03:06,810 --> 00:03:12,920
"He took all accolades in his stride and he never showed a touch of arrogance, although

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00:03:12,920 --> 00:03:16,340
I think he had plenty of things to be arrogant about.

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00:03:16,340 --> 00:03:19,760
I like to remember him that way.

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00:03:19,760 --> 00:03:22,710
He deserved all of the good things that came his way."

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00:03:22,710 --> 00:03:28,560
A tree dedication was also held for Armstrong at the JSC Memorial Tree Grove.

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00:03:28,560 --> 00:03:32,900
Armstrong was 82 when he died on Aug. 25, 2012.

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00:03:32,900 --> 00:03:44,370
A team of engineers at the Kennedy Space Center is advancing and refining a technology used

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00:03:44,370 --> 00:03:50,020
for decades by NASA to protect its rescue crews around the launch pad.

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00:03:50,020 --> 00:03:56,830
The Cryogenic Refuge Alternative Supply System, or CryoRASS, and a smaller liquid-air filled

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00:03:56,830 --> 00:04:02,610
backpack will store more than twice the amount of breathable air -- and at cooler temperatures

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00:04:02,610 --> 00:04:08,330
-- than traditional compressed systems used in hazardous or emergency situations.

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00:04:08,330 --> 00:04:13,210
"We're excited about this technology because it has the potential to save lives and improve

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00:04:13,210 --> 00:04:19,430
safety in mines, as well as improve safety and save lives, hopefully, in the firefighting

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00:04:19,430 --> 00:04:21,470
and military applications.

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00:04:21,470 --> 00:04:26,730
And it also as we move forward into the next
generation of manned spaceflight, we hope

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00:04:26,730 --> 00:04:33,400
to be able to use this technology to do our
crew rescue as well."

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00:04:33,400 --> 00:04:38,460
The core satellite of the Global Precipitation
Measurement Mission is a step closer to completion

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00:04:38,460 --> 00:04:43,790
after a successful test of its solar array
wings at Goddard Space Flight Center.

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00:04:43,790 --> 00:04:49,130
Engineers watched as the 18-foot long by 9-foot
wide solar arrays were successfully released

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00:04:49,130 --> 00:04:52,120
and locked into place during the test.

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00:04:52,120 --> 00:04:56,120
The arrays will help power the satellite's
electronics and instruments - providing a

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00:04:56,120 --> 00:05:02,030
total of 2,000 watts of energy Scheduled to
launch next year, GPM is an international

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00:05:02,030 --> 00:05:07,410
network of satellites designed to measure
rain and snowfall around the world every three

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00:05:07,410 --> 00:05:10,600
hours.

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00:05:10,600 --> 00:05:15,150
Ames Research Center hosted a gathering of
well-known climate scientists and legislators

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00:05:15,150 --> 00:05:20,690
for the 2013 Water, Energy, Smart Technology,
or WEST, Summit.

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00:05:20,690 --> 00:05:25,810
Sponsored by Sustainable Silicon Valley, the
event featured former NASA Chief Scientist

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00:05:25,810 --> 00:05:31,810
Waleed Abdalati, former NASA climate scientist
James Hansen as well as several other world

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00:05:31,810 --> 00:05:33,340
renowned experts.

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00:05:33,340 --> 00:05:37,930
Ames Center Director Pete Worden welcomed
California Governor Jerry Brown, who shared

71
00:05:37,930 --> 00:05:41,620
his own perspective on the topics discussed
at the Summit.

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00:05:41,620 --> 00:05:46,300
The organization presented Governor Brown
with a document signed by hundreds of scientists

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00:05:46,300 --> 00:05:51,600
around the world declaring a consensus agreement
that the planet is now at a tipping point

74
00:05:51,600 --> 00:06:08,180
and that proactive measures are needed now

to mitigate the damage done by global warming.

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00:06:08,180 --> 00:06:14,750

On June 27, 1995, space shuttle Atlantis became the 100th U.S. human spaceflight launched

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00:06:14,750 --> 00:06:20,560

from Cape Canaveral -- on STS-71, the first space shuttle docking with the-Russian space

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00:06:20,560 --> 00:06:22,120

station Mir.

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00:06:22,120 --> 00:06:27,340

Over a five-day period, the combined American and Russian crews conducted biomedical and

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00:06:27,340 --> 00:06:28,980

scientific investigations.

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00:06:28,980 --> 00:06:34,820

Atlantis, the last of NASA's space shuttles to be retired, will officially go on display

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00:06:34,820 --> 00:06:40,541

June 29 when the Kennedy Space Center Visitor Complex opens the doors of its new Space Shuttle

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00:06:40,541 --> 00:06:43,830

Atlantis exhibit to the public.

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00:06:43,830 --> 00:06:45,570

And that's This Week @NASA.