



1  
00:00:10,320 --> 00:00:15,849  
This week at NASA

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00:00:15,849 --> 00:00:20,180  
President Barack Obama made a trip to the Kennedy Space Center on Thursday to explain

3  
00:00:20,180 --> 00:00:25,960  
his plan for America's space program. Accompanied by Florida Senator and former shuttle astronaut

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00:00:25,960 --> 00:00:31,890  
Bill Nelson, Apollo astronaut Buzz Aldrin, and NASA Administrator Charles Bolden, President

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00:00:31,890 --> 00:00:37,040  
Obama addressed an audience comprised of elected officials, leaders from industry, academia

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00:00:37,040 --> 00:00:38,890  
and KSC employees.

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00:00:38,890 --> 00:00:48,289  
I am 100% Committed to the mission of NASA and its future. (applause) Because broadening

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00:00:48,289 --> 00:00:52,860  
our capabilities in space will continue to serve our society in ways we can scarcely

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00:00:52,860 --> 00:00:59,640  
imagine. Because exploration will once more inspire wonder in a new generation: sparking

10  
00:00:59,640 --> 00:01:05,039  
passions, launching careers. And because, ultimately, if we fail to press forward in

11  
00:01:05,039 --> 00:01:10,210

the pursuit of discovery, we are ceding our future, ceding that essential element of the

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00:01:10,210 --> 00:01:13,350

American character.

The President's remarks preceded the start

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00:01:13,350 --> 00:01:18,560

of NASA's one-day Conference on the American Space Program for the 21st Century, President

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00:01:18,560 --> 00:01:23,430

Obama said his new budget request to increase NASA's funding by \$6 billion over the next

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00:01:23,430 --> 00:01:28,799

five years is an investment in America's future, and a challenge to the agency to build

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00:01:28,799 --> 00:01:31,530

on its legacy of innovation and discovery.

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00:01:31,530 --> 00:01:37,000

We will partner with industry. We will invest in cutting edge research and technology. We

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00:01:37,000 --> 00:01:45,470

will set far-reaching milestones – and provide the resources to pass them. And step by step,

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00:01:45,470 --> 00:01:50,210

we will push the boundaries not only of where we can go but what we can do.

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00:01:50,210 --> 00:01:55,189

And the President defended his decision to chart a bold, new course for human spaceflight.

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00:01:55,189 --> 00:01:59,300

I understand that some believe that we should

attempt a return to the surface of the Moon

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00:01:59,300 --> 00:02:09,250

first, as previously planned. But I just have to say pretty bluntly the simple fact is,

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00:02:09,250 --> 00:02:17,870

we have been there before. There is a lot more space to explore, and a lot more to learn

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00:02:17,870 --> 00:02:23,100

when we do. I believe it is more important to ramp up our capabilities to reach – and

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00:02:23,100 --> 00:02:28,790

operate at a series of increasingly demanding targets, while advancing our technological

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00:02:28,790 --> 00:02:33,320

capabilities with each step outward. That is what this strategy does. And that is how

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00:02:33,320 --> 00:02:37,949

we will ensure that our leadership in space is even stronger in this new century than

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00:02:37,949 --> 00:02:44,150

it was in the last.

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00:02:44,150 --> 00:02:48,660

STS-125, the fifth space shuttle servicing mission that gave the Hubble Space Telescope

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00:02:48,660 --> 00:02:54,760

a new lease on life, and L-CROSS, the mission that definitively proved the presence of water

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00:02:54,760 --> 00:03:00,480

on the moon, received awards from the Space Foundation at its 26th annual National Space

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00:03:00,480 --> 00:03:02,940

Symposium in Colorado Springs.

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00:03:02,940 --> 00:03:09,729

The award this year goes to the Hubble Telescope repair team crew and Repair mission team

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00:03:09,729 --> 00:03:15,971

For program success in the evolution of space exploration and development, the STS-125 crew

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00:03:15,971 --> 00:03:21,889

of Commander Scott Altman, Pilot Greg Johnson and Mission Specialists Drew Feustel, Mike

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00:03:21,889 --> 00:03:27,840

Good, John Grunsfeld, Mike Massimino and Megan McArthur received the Foundation's annual

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00:03:27,840 --> 00:03:29,799

Space Achievement Award.

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00:03:29,799 --> 00:03:36,400

On behalf of the entire Hubble servicing team I would like to thank the space foundation

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00:03:36,400 --> 00:03:42,160

The LCROSS mission team was presented with the 2010 John L. "Jack" Swigert, Jr., award

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00:03:42,160 --> 00:03:48,430

for Space Exploration. Established in 2004, the annual award is a tribute to the late

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00:03:48,430 --> 00:03:55,389

Coloradan and his enduring legacy of space exploration as a member of the Apollo 13 mission.

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00:03:55,389 --> 00:04:01,150

LCROSS crashed one spacecraft into the moon; another, following minutes behind, found the

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00:04:01,150 --> 00:04:05,079

water by analyzing the debris kicked up after the impact.

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00:04:05,079 --> 00:04:11,110

Thank ya'll very much I must admit this is somewhat surreal for the LCROSS team. I feel

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00:04:11,110 --> 00:04:17,609

a little bit like the independent film winning the best picture at the academy awards.

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00:04:17,609 --> 00:04:22,040

Among the featured speakers of the four-day symposium were NASA Administrator Charles

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00:04:22,040 --> 00:04:25,889

Bolden and his deputy, Lori Garver.

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00:04:25,889 --> 00:04:32,230

What do a lunar habitat module, paper that captures sound as energy, and a drug delivery

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00:04:32,230 --> 00:04:38,010

system for use in space have in common? They're all concepts being developed for commercialization

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00:04:38,010 --> 00:04:43,310

by high school students who competed in the Conrad Foundation's Innovation Summit.

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00:04:43,310 --> 00:04:46,250

Commercial statistics on these costs.

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00:04:46,250 --> 00:04:51,290

Hosted by the Ames Research Center, the three-day

summit featured twenty-five teams from across

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00:04:51,290 --> 00:04:56,010

the country “pitching” their ideas to a panel of experts, much like entrepreneurs

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00:04:56,010 --> 00:05:02,470

trying to woo potential investors. The students also created an online portfolio with videos,

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00:05:02,470 --> 00:05:06,500

blogs, and company logos as part of each presentation.

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00:05:06,500 --> 00:05:10,170

The winning teams were presented with the “Spirit of Innovation” award in memory

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00:05:10,170 --> 00:05:15,580

of the late astronaut Charles ‘Pete’ Conrad, commander of the Apollo XII mission and the

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00:05:15,580 --> 00:05:21,250

third person to walk on the moon. The award includes \$5,000 in seed money for product

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00:05:21,250 --> 00:05:24,210

development.

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00:05:24,210 --> 00:05:28,900

The Global Hawk Pacific robotic plane was on display at the Dryden Flight Research Center

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00:05:28,900 --> 00:05:35,730

after a successful science flight to study the air over the Pacific and Arctic oceans.

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00:05:35,730 --> 00:05:44,020

Also known as Glo-pac, the revolutionary aircraft flew a pre-programmed 14 hour, 4,500 nautical-mile-long

63  
00:05:44,020 --> 00:05:49,900  
flight path that brought it just south of  
Alaska's Kodiak Island. There, at an altitude

64  
00:05:49,900 --> 00:05:55,530  
of almost 61-thousand feet, Glo-Pac's 11  
instruments measured and sampled greenhouse

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00:05:55,530 --> 00:06:01,550  
gases, ozone-depleting substances, aerosols,  
and other indicators of air quality in the

66  
00:06:01,550 --> 00:06:03,740  
upper troposphere and lower stratosphere.

67  
00:06:03,740 --> 00:06:07,531  
Some of the really nice results is the underflights  
of some of the NASA Satellites.

68  
00:06:07,531 --> 00:06:13,750  
There is a collection of NASA satellites that  
orbit the earth 14 a day it's the A-train.

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00:06:13,750 --> 00:06:18,360  
And one of those satellites in the A train  
is the Aura Satellite and we have underflown

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00:06:18,360 --> 00:06:21,460  
it.  
And that provides a measurement that we make

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00:06:21,460 --> 00:06:25,340  
on the global hawk that confirms what is being  
measured from space.

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00:06:25,340 --> 00:06:31,150  
Glo-pac can fly autonomously for up to 30  
hours at altitudes twice as high as a commercial

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00:06:31,150 --> 00:06:37,270

airliner -- and travel about half the Earth's circumference. Scientists say no other science

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00:06:37,270 --> 00:06:43,260

platform provides that range and time to sample rapidly-evolving atmospheric phenomena.

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00:06:43,260 --> 00:06:54,400

Huntsville's U.S. Space & Rocket Center hosted the 17th annual Great Moonbuggy Race.

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00:06:54,400 --> 00:07:00,110

Competing were upwards of 600 student drivers, engineers and mechanics representing more

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00:07:00,110 --> 00:07:06,780

than 70 teams from 18 states, Puerto Rico, Canada, Germany, India and Romania.

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00:07:06,780 --> 00:07:14,130

We got around the obstacle, the tire was flat, the chain was slipping. I burned a lot of

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00:07:14,130 --> 00:07:16,300

energy out there, but I never gave up!

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00:07:16,300 --> 00:07:21,400

Organized by the Marshall Space Flight Center, the Great Moonbuggy Race challenges students

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00:07:21,400 --> 00:07:27,710

to design, build and race lightweight, human-powered buggies that tackle many of the same engineering

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00:07:27,710 --> 00:07:33,450

challenges faced by Apollo-era lunar rover developers at Marshall in the late 1960s.

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00:07:33,450 --> 00:07:39,210

We have a lot of fun. And I think that is the most important part of it. Winning and

84

00:07:39,210 --> 00:07:40,210

having fun.

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00:07:40,210 --> 00:07:45,060

The winning college team from the University of Puerto Rico traversed the treacherous half-mile

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00:07:45,060 --> 00:07:50,919

lunar surface-simulating course of curves, gravel pits and other obstacles in 4 minutes

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00:07:50,919 --> 00:07:56,490

18 seconds. The high school division's winner, the International Space Education Institute

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00:07:56,490 --> 00:08:00,440

of Leipzig, Germany, beat that time by 41 seconds!

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00:08:00,440 --> 00:08:08,240

Please help welcome our moderator and our distinguished panel to the stage. (applause)

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00:08:08,240 --> 00:08:14,180

The John Glenn Lecture Series at the Smithsonian's National Air and Space Museum in Washington

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00:08:14,180 --> 00:08:20,010

honored the 40th anniversary of the Apollo 13 mission. Joining Commander Jim Lovell was

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00:08:20,010 --> 00:08:26,350

Apollo 13 Flight Controller, Gene Kranz; Lunar Module Pilot, Fred Haise; and astronaut Ken

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00:08:26,350 --> 00:08:31,350

Mattingly, who was replaced on the mission

by the late Jack Swigert after contracting

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00:08:31,350 --> 00:08:42,060

measles just before  
the mission's start.

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00:08:42,060 --> 00:08:50,430

Clock starts. Looks good flight.  
In April 1970, Apollo 13 was to have been

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00:08:50,430 --> 00:08:55,830

NASA's third moon landing. But Lovell and  
crew would never make it to the lunar surface.

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00:08:55,830 --> 00:09:01,089

On the way to their destination, the Apollo  
13 spacecraft was crippled by the explosion

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00:09:01,089 --> 00:09:04,560

of an oxygen tank, casting doubts about their  
survival.

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00:09:04,560 --> 00:09:11,670

We didn't know it was an explosion at that  
time. The majority of my controller's data

100

00:09:11,670 --> 00:09:20,050

was absolute gibberish. And the numbers of  
calls that came in in literally a 30 second

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00:09:20,050 --> 00:09:24,620

period as each controller was reporting what  
he thought he was seeing in the console but

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00:09:24,620 --> 00:09:31,520

truly didn't believe it coupled with what  
the crew was seeing It was latterly chaos

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00:09:31,520 --> 00:09:35,850

and then the fortunate thing is that the training

kicked in about 60 seconds.

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00:09:35,850 --> 00:09:40,710

Thus began the crew's perilous but safe return to Earth, made possible through the

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00:09:40,710 --> 00:09:46,510

heroic efforts of the ground control team and the astronauts themselves. Apollo 13 has

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00:09:46,510 --> 00:09:51,050

been called a "successful failure" and one of NASA's finest hours.

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00:09:51,050 --> 00:09:58,120

I think it shows some of the quality of the people of this country who in the past and

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00:09:58,120 --> 00:10:06,610

now through the present have the ability to accomplish things that we normally would not

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00:10:06,610 --> 00:10:10,250

think possible.

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00:10:10,250 --> 00:10:16,690

Yuri's Night 2010 celebrated humankind's achievements in space exploration with music,

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00:10:16,690 --> 00:10:23,240

dance, fashion, and art at countless locations around the world, including several NASA centers.

112

00:10:23,240 --> 00:10:29,810

NASA's leadership team of Administrator Charlie Bolden and Deputy Lori Garver sent

113

00:10:29,810 --> 00:10:32,500

videotaped well-wishes to party-goers.

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00:10:32,500 --> 00:10:36,330

Yuri's night is a especially for the next generation – The forward thinking people

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00:10:36,330 --> 00:10:45,560

who dreaming of our future in space. Together We'll make it happen. Have a great night.

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00:10:45,560 --> 00:10:51,460

Yuri's Night is named for the first human in space, cosmonaut Yuri Gagarin, who rocketed

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00:10:51,460 --> 00:10:56,460

into Earth's orbit on April 12, 1961.

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00:10:56,460 --> 00:10:57,980

And that's This Week @ NASA.