



1
00:00:06,600 --> 00:00:10,910
This Week at NASA...

2
00:00:10,910 --> 00:00:16,420
Technicians at the Kennedy Space Center's
Launch Pad 39A will inspect and replace

3
00:00:16,420 --> 00:00:21,770
a vent seal to ensure space shuttle Discovery's
safe launch targeted for later this

4
00:00:21,770 --> 00:00:27,670
month. The 7-inch quick disconnect seal is
located on the external tank's ground

5
00:00:27,670 --> 00:00:33,510
umbilical carrier plate, or GUCP. It connects
to a vent line that carries hydrogen gas

6
00:00:33,510 --> 00:00:39,620
away from the pad as the external tank, or
ET, is loaded with liquid hydrogen for

7
00:00:39,620 --> 00:00:44,749
launch. A recent analysis moved engineers
to replace the seal with the same

8
00:00:44,749 --> 00:00:50,170
enhancements that led to a successful tanking
test in December. A GUCP seal leak

9
00:00:50,170 --> 00:00:58,089
caused the Nov. 5 scrub of Discovery. STS-133
is now targeted to begin on Feb. 24

10
00:00:58,089 --> 00:01:04,100
with a launch at 4:50 pm Eastern.

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00:01:04,100 --> 00:01:08,180

NASA Administrator Charles Bolden was a guest speaker at the Federal Aviation

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00:01:08,180 --> 00:01:13,180

Administration's 14th annual Commercial Space Transportation Conference in

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00:01:13,180 --> 00:01:14,180

Washington.

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00:01:14,180 --> 00:01:19,820

"Industry has been our partner since our inception. We're ready to take this partnership

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00:01:19,820 --> 00:01:23,909

to a new level and create the good jobs and economic opportunities that come with it."

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00:01:23,909 --> 00:01:28,659

The conference provided a forum for policymakers and technical experts to discuss

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00:01:28,659 --> 00:01:33,670

developments in commercial space transportation and other related industries. The

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00:01:33,670 --> 00:01:38,509

two-day event covered everything from suborbital Flight Vehicles and Pressure Suits to

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00:01:38,509 --> 00:01:42,640

ground and launch systems processing. The event was co-sponsored by the

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00:01:42,640 --> 00:01:52,090

American Institute of Aeronautics and Astronautics.

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00:01:52,090 --> 00:01:56,479

This engine test was one of several events at which NASA senior leaders showed

22
00:01:56,479 --> 00:02:01,369
support for their commercial spaceflight partners.
At the Stennis Space Center,

23
00:02:01,369 --> 00:02:05,820
Administrator Charlie Bolden was joined by
the Associate Administrator for Exploration

24
00:02:05,820 --> 00:02:10,759
Systems Mission Directorate, Doug Cooke, for
the successful test fire of Aerojet

25
00:02:10,759 --> 00:02:14,260
Corporation's AJ26 flight engine.

26
00:02:14,260 --> 00:02:18,610
"The whole NASA family is really proud whenever
we're able to do something like this.

27
00:02:18,610 --> 00:02:25,280
We work every day to try to reach new heights
because we look to reveal things that are

28
00:02:25,280 --> 00:02:28,640
previously unknown so that we can make life
better here on earth."

29
00:02:28,640 --> 00:02:34,721
The AJ26 will power the first stage of Orbital
Sciences Corporation's Taurus II space

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00:02:34,721 --> 00:02:39,890
launch vehicle. NASA has partnered with Orbital
through the agency's ongoing

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00:02:39,890 --> 00:02:45,370
Commercial Orbital Transportation Services
initiative. Under COTS, Orbital is

32
00:02:45,370 --> 00:02:49,940
scheduled to provide eight commercial cargo
flights to the International Space Station

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00:02:49,940 --> 00:02:52,010
beginning early next year.

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00:02:52,010 --> 00:02:57,010
In Boulder, Colo., Deputy Administrator Lori
Garver visited the Sierra Nevada

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00:02:57,010 --> 00:03:01,730
Corporation, whose Dream Chaser vehicle is
being developed with support from the

36
00:03:01,730 --> 00:03:06,200
agency's Commercial Crew Development Program.
Dream Chaser would ferry

37
00:03:06,200 --> 00:03:10,070
astronauts to and from low Earth orbit.

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00:03:10,070 --> 00:03:15,600
Both Garver's and Bolden's trips supported
the 2010 NASA Authorization Act which

39
00:03:15,600 --> 00:03:21,370
calls for the agency to work with commercial
interests to develop new ways to access

40
00:03:21,370 --> 00:03:25,620
and explore space.

41
00:03:25,620 --> 00:03:30,600
At the Ames Research Center, scientists held
a three-day workshop to help local and

42
00:03:30,600 --> 00:03:34,600
regional communities better adapt to climate

change.

43
00:03:34,600 --> 00:03:39,660
Topics included how to manage storm water and energy demands; reduce the risk of

44
00:03:39,660 --> 00:03:46,470
wildfire; recover native, and control invasive species in tidal marshes; and protect

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00:03:46,470 --> 00:03:49,180
supplies of potable water.

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00:03:49,180 --> 00:03:54,040
Ames followed the workshop by hosting a symposium on the impact of climate change

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00:03:54,040 --> 00:04:00,180
specifically on Ames and the Kennedy Space Center.

48
00:04:00,180 --> 00:04:04,150
NASA senior leaders and industry representatives met with members of the Virginia

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00:04:04,150 --> 00:04:09,790
general assembly at the annual Aerospace Day held in Richmond. Virginia has four

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00:04:09,790 --> 00:04:14,760
times more high-paying jobs in the aerospace research and technology industry than

51
00:04:14,760 --> 00:04:19,970
the national average. Langley Center Director Lesa Roe, Wallops Director William

52
00:04:19,970 --> 00:04:24,870
Wrobel, and space shuttle pilot Tony Antonelli were among those meeting with

53
00:04:24,870 --> 00:04:31,190
legislators and staff about how best to leverage
this statistic into more prosperity for the

54
00:04:31,190 --> 00:04:32,660
Commonwealth's economy.

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00:04:32,660 --> 00:04:38,660
"Thank you all for joining us for our sixth
annual Aerospace Day here in Richmond."

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00:04:38,660 --> 00:04:43,530
The two-day event also featured an interactive
forum highlighting how education

57
00:04:43,530 --> 00:04:49,230
programs help prepare Virginia's future
aerospace workforce. Antonelli and assembly

58
00:04:49,230 --> 00:04:54,040
members made live connections with elementary
and middle school students from five

59
00:04:54,040 --> 00:04:55,320
Virginia schools.

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00:04:55,320 --> 00:04:59,540
Together, Langley Research Center and the
Wallops Flight Facility provide more than

61
00:04:59,540 --> 00:05:05,720
10-thousand jobs that bring more than \$1.2
billion dollars a year to Virginia's economy.

62
00:05:05,720 --> 00:05:13,380
More than 300 aerospace firms annually contribute
another \$6 billion.

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00:05:13,380 --> 00:05:17,260

Students at the Ferebee-Hope Elementary School in Washington received a special

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00:05:17,260 --> 00:05:20,950

visit from NASA Associate Administrator for Education Leland Melvin.

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00:05:26,310 --> 00:05:23,630

“Hello!”

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00:05:26,310 --> 00:05:31,440

The first-through-third graders were rapt as Melvin, a former space shuttle astronaut,

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00:05:31,440 --> 00:05:36,800

read aloud to promote the national program, Reading is Fundamental. “The Moon Over

68

00:05:36,800 --> 00:05:42,240

Star” recounts how a young African-American girl named Mae Jemison was inspired

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00:05:42,240 --> 00:05:45,560

by the 1969 Apollo 11 moon landing.

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00:05:45,560 --> 00:05:52,130

“...And Mr. Cronkite said, Neil Armstrong, 38-year-old American, standing on the surface

71

00:05:52,130 --> 00:05:56,590

of the moon on this July 20, 1969...”

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00:05:56,590 --> 00:06:01,750

The RIF event also featured Melvin talking about his flight experiences and the

73

00:06:01,750 --> 00:06:05,150

contributions of African Americans to the space program.

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00:06:05,150 --> 00:06:07,560

"Isn't that cool."

75

00:06:07,560 --> 00:06:16,860

The students were also treated to a moon rock demonstration.

76

00:06:16,860 --> 00:06:22,300

To commemorate the 40th anniversary of Apollo 14, Stennis Space Center planted a

77

00:06:22,300 --> 00:06:28,530

"moon tree" descended from one of the 500 tree seeds that flew on the 1971 NASA

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00:06:28,530 --> 00:06:33,840

moon mission. The seeds, from an American sycamore, were planted near the nearly-

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00:06:33,840 --> 00:06:38,840

completed Infinity Science Center on Stennis' campus. Elementary and high school

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00:06:38,840 --> 00:06:43,480

students in attendance heard from Rosemary Roosa, daughter of the late Stuart

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00:06:43,480 --> 00:06:49,340

Roosa, the Apollo 14 astronaut and former forest firefighter responsible for carrying

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00:06:49,340 --> 00:06:51,090

the seeds into space.

83

00:06:51,090 --> 00:06:55,580

"Daddy used to always teach young children to reach for the stars and tonight be

84

00:06:55,580 --> 00:07:02,230

deterred. So, I think with this tree growing here it'll be a symbol of always looking

85

00:07:02,230 --> 00:07:04,210

up, to reaching for the stars.”

86

00:07:04,210 --> 00:07:10,400

The students met and listened to Apollo 13 astronaut Fred Haise.

87

00:07:10,400 --> 00:07:18,169

“The sycamore tree that we plant here at Infinity will really be an inspiration for

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00:07:18,169 --> 00:07:19,360

many years.”

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00:07:19,360 --> 00:07:23,610

Moon Tree plantings have been held throughout the country and around the world.

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00:07:23,610 --> 00:07:29,290

The American sycamore has been known to live for 300 years.

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00:07:29,290 --> 00:07:31,520

And that's This Week at NASA!

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00:07:31,520 --> 00:07:33,900

For more on these and other stories, log onto: www.nasa.gov.

93

00:07:33,900 --> 00:07:34,900

through the university post-graduate level. The program uses the agency's unique assets

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00:07:34,900 --> 00:07:35,900
and exciting space
endeavors to inspire students and encourage

95
00:07:35,900 --> 00:07:36,900
them to pursue curricula and careers related
to science, technology,

96
00:07:36,900 --> 00:07:37,900
engineering and mathematics.

97
00:07:37,900 --> 00:07:38,900
It is a key part of NASA's effort to help
build the nation's future high-tech workforce

98
00:07:38,900 --> 00:07:39,900
and cultivate the next
generation of explorers.

99
00:07:39,900 --> 00:07:40,900
NASA Television will air footage from the
event during its Video File feed. For NASA