This Week at NASA…

Ebb and Flow, NASA's Gravity Recovery And Interior Laboratory, or GRAIL spacecraft,

have officially begun collecting science data as they orbit the moon.

Scientists will use the information gathered by the twin spacecraft to produce a high-resolution map of the lunar gravitational field.

That should provide unprecedented detail about the moon's internal structure and composition,

and lead to a better understanding of how Earth and other rocky planets in the solar system formed.

Science activities are expected to conclude on May 29.

Aboard the International Space Station, flame tests continued for the Structure and Liftoff In Combustion Experiment, or SLICE.

The experiment investigates the nature of flames in microgravity.
I'm ready to light the flame.

The station tests have yielded stable lifted flames, which can be simpler to model numerically.

This research in the world's only laboratory in microgravity could lead to reduced pollution emissions and more efficient burning by a wide variety of industries.

So why do we need engineers.

The things that we want to do; the technology development that we have to do to put humans beyond low earth orbit, which is our ultimate goal, require people with engineering backgrounds.

NASA Administrator Charlie Bolden was at Georgia Tech to help kick off STAY WITH IT, a new, White House initiative to attract more U.S. college students to engineering,

So stay with it, stay with it, stay with it.

Along with Intel, MTV, Google and Facebook, the online host for the announcement, the President's Council on Jobs and Competitiveness has forged this new public-private partnership
through which students can learn about engineering internships, financial support and summer bridge programs for entering freshmen.

More than 65 companies have aligned with STAY WITH IT to double their engineering internships this year.

That'll result in more than 7,000 opportunities for hands-on, technical job experience.

Administrator Bolden has been honored with a Patriot Award for his support of employees serving in the National Guard and Reserve.

Guard and Reserve employees or their spouses can nominate supervisors for the Department of Defense honor.

I think it's really important for us as an organization to recognize the talent that they bring and find a way to get them back into the workforce, if they left us to go off to do their reserve or their national guard time, because they bring an incredible
wealth and breadth of talent that we’re always searching for.

Also receiving a Patriot Award but unable to attend the NASA Headquarters ceremony was Associate Administrator for Human Exploration and Operations, Bill Gerstenmaier.

Accepting on his behalf was the directorate’s John Olson.

The Center Operations Directorate is a mission support organization which provides security, procurement, logistical, and technical information, and external relation support to the NASA Glenn Research Center.

I think NASA has been a place that has given me a wealth of opportunities. Um, I came here as a Human Resources Director, and I learned a lot about federal employment because I had never worked for the federal government before.

Um, and then moving into the senior executive candidate development program, it’s the
first time that someone had truly invested
an enormous amount in me for me to figure

And so I think that opportunity in and of
itself is just—spoke volumes about, you

know, what is available to you here at NASA.

A number of people have inspired me, and I
like to believe that you know I get inspiration
daily but most often I have to think of my
grandmother and my mother who are just fabulous

But here at NASA, I’ve met just some phenomenal
women.

I had the opportunity to meet Katherine
Johnson, who is referred to by many people

as a human computer.

And uh, people like Christine Darden and
Crystal Johnson—people who’ve gone into
the senior executive service before me and
have really paved the way.
So, you know, inspiration is all around me.

I hope that I am inspiring the next generation of women managers.

Um, but also inspiring students to be lifelong learners and realize that anything is possible with education and hard work.

About 150 students from 18 schools in Mississippi and Louisiana got an inside look at the Stennis Space Center during a Women's History Month event.

The outing was part of the G.E.M.S. program, for Girls Excited about Math and Science.

The students were treated to activities and workshops – including a fashion show that featured business attire, an introduction to Information Technology, a cryogenics demonstration and details about college and career planning.

Air Force Flight Test Center commander General Robert Nolan and other dignitaries recently
dedicated a street at Edwards Air Force Base in California to honor the late NACA test pilot Scott Crossfield.

Crossfield became the first pilot to reach Mach 2 – twice the speed of sound – in the Douglas Skyrocket on Nov. 20, 1953.

And when you talk about Scott Crossfield, think about the sacrifices and the risk that he took.

Think about flying Mach 2 in the 1950s.

And then, think about a career dedicated to aviation.

In a related presentation, retired NASA Dryden Flight Research Center research pilot Ed Schneider detailed Crossfield's contributions to the advancement of aeronautics and flight research.

Scott had joined NACA at a time when the United States was fully committed to exploring the world of supersonic flight and pushing the
speed and the altitude of manned airplanes to numbers that were really the stuff of fiction in 1945.

Crossfield later helped design the cockpit of the famed X-15 rocket plane while employed by North American Aviation in the late 1950s.

He flew the first 14 developmental demonstration flight tests of the craft before it was turned over to the Air Force and NASA for the joint X-15 hypersonic flight research program.

He received the 1961 Harmon Trophy and the 1962 Collier Trophy, the most prestigious awards for advancements in aeronautics, from President John F. Kennedy in White House ceremonies.

We pilots think of him as one of the best to ever strap on an airplane.

And perhaps I remember him best as an American hero who always came across as an unassuming, well-mannered gentleman.

It doesn't always happen that way.
Hey programs.

NASA employees, family members and community leaders recently gathered at the Space Coast Stadium in Viera, Fla., to celebrate Space Day.

Kennedy Space Center Director Bob Cabana threw out the first pitch before a spring training game between the host Washington Nationals and the Houston Astros.

NASA booths highlighted how agency research and development has contributed to sports, transportation and everyday life.

The public was also treated to an up-close look at a full-scale test version of NASA’s new Orion spacecraft.

Eighty-six years ago, on March 16, 1926, Robert Goddard successfully launched the world’s first liquid-fuel rocket from a field in Auburn, Massachusetts.

Goddard continued his rocket development work...
throughout the remainder of his life, achieving numerous milestones, and helping pave the way for contemporary spaceflight.

Established in 1959, the Goddard Space Flight Center in Greenbelt, Maryland was named in his memory.

And, on that same date 46 years ago, the Gemini Titan 8 launched from Cape Canaveral, Florida, on its way to becoming NASA's first manned docking mission.

Astronauts Neil Armstrong and Dave Scott docked their capsule with an unmanned Agena target vehicle.

While docked, a thruster malfunction caused a near-fatal tumbling of the craft.

The crew was able to stabilize the vehicle, but used up too much fuel in the process, scrapping plans for a spacewalk and other activities.
About ten hours after launch Armstrong and Scott made the first emergency landing of

a manned U.S. spacecraft as Gemini 8 splashed safely down in the western Pacific Ocean.

Thirty years ago, on March 22, 1982, Space Shuttle Columbia launched from the Kennedy Space Center on STS-3.

NASA's third space shuttle mission was one of several test flights to qualify shuttle systems for operational flights.

Commander Jack Lousma and Pilot C. Gordon Fullerton tested the Canadarm Remote Manipulator System and gathered data on how Columbia handled the sun's heat in various attitudes.

STS-3 was the only shuttle mission to land at the White Sands Space Harbor near Las Cruces, New Mexico.

And, 16 years ago, on March 22, 1996, space shuttle Atlantis launched from the Kennedy Space Center on STS-76.

It was the first flight of the SPACEHAB pressurized
module to support shuttle-Mir dockings, and

the third linkup between the U.S. spacecraft and the Russian space station.

The flight delivered Shannon Lucid to Mir to become the first American woman to live on station, and kick off a continuous, two-year U.S. presence in space.

STS-76 was commanded by Kevin Chilton; Richard Searfoss was its pilot.

Mission Specialists were Linda Godwin, Michael Clifford and Ronald Sega.

And that's This Week @ NASA!

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