

Welcome to the September 14th, 2016 Edition of THE REVENGE HUMP DAY!

I am looking forward to the next few days with great trepidation. You see, it is time to migrate my old desktop's Windows XP Operating System to Windows Pro 7.0. XP has been great for me, but it has become crankier by the day and locking up every time I turn around. Derek, the Crowned Prince, has told me that when I up grade the Operating System, I will have to reinstall all of my software. Lucky for me, I use very few programs nowadays. Word, Excel, FastStone Image Viewer, Chrome, Etc. But the ones I am going to miss are three different programs. First is the old style PC Paintbrush. I will have to use the new version and that just means a new learning curve. The next I will be loosing is an old Windows 3.1 program, Cardfile. It is not supported. I can replace it with AZZCardfile, so it's not too bad. The last one I will be loosing is Visual Dbase 5.5. That one I will miss. Access is not an option to replace that one and I can use Excel to some extent, but it's not as good to me.

I have been told that under Windows Pro 7.0 that I can setup a virtual machine that will allow me to emulate a 16 bit machine. But I have to admit, I have no idea how to. Looks to me that I will have many hours of studying this new operating system ahead of me. But, not all is dark, I still have my old laptop as the backup machine so I won't be out of touch for so long.

I sometimes try to think out of the box and one thing I have notice is the lack of big cars being produced for the public lately. Other than Rolls Royces, Bentley, etc., that is about all there is in the big sedan lines. I still have my old Park Avenue and I refuse to let it die and I just keep rebuilding it. But most people are not that crazy about their cars. But what do they do. Well, it's really simple, they buy SUV's. I was in the parking lot of Memorial Hospital today taking Popee, my Father-in-Law, to a pacemaker check, and I started looking at all the people coming and going. What I noticed was that around 70% of the older people were driving SUV's. Why you might ask? Simple I say. First of all, they sit higher and can see better. Next, it's a bigger vehicle and they have a lot more room than a small car. And the last big thing is that I can guess that they feel a lot safer with more steel around them. Like I said, simple.

So on that "Intuitive Note", why don't y'all sit back and relax because here's the best in gossip, jokes and science for your reading pleasure!

Uncle Timmy

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From: ""Tim Bolgeo" tbolgeo@comcast.net

By Elizabeth Howell, Space.com Contributor | September 8, 2016 07:45am ET
<http://www.space.com/33999-star-trek-fans-keep-enterprise-flying-50-years.html>

For the past 11 years, Dennis Couch has been helping to keep all the details of the 50-year-old "Star Trek" universe straight on one of the most famous information sources for fans of the franchise: Wikia's Memory Alpha.

The website has been active since 2003 and covers all topics in the "Star Trek" canon, which means all the events that take place in any of the official movies and TV shows. Events in fan films, comics, books, video games and similar media are covered in a sister site, Memory Beta. These encyclopedic websites are built and written entirely by volunteer fans like Couch. In this online community, fans of "Star Trek" — no matter what incarnation of the franchise they love — can actively engage with the content.

(L to R) Chuck Huber, Vic Mignogna and Todd Haberkorn as McCoy, Kirk and Spock for the fan-made web series "Star Trek Continues." This production is one example of how fans of the "Star Trek" universe are keeping it alive today. Credit: Star Trek Continues



"The Memory Alpha community helps generate and maintain interest in 'Star Trek' by providing a resource for people to answer questions, look up information and glean tidbits," Couch, who is currently an administrator for the site, said in an email to Space.com. That means the site serves as not only a gathering point for the fans, but also a resource for collectors and researchers

Memory Alpha is just one example of how "Star Trek" fans can keep their communities thriving between the times when they meet up in person at various conventions. To name a few more examples: There are "Star Trek" hubs on social media, from Twitter to Reddit. Fan-made "Star Trek" films and television series let dedicated Trek lovers both make their own productions and watch other fans' creations.

And in recent years, social media has made it possible for more and more people to reveal themselves as Trek fans, such as NASA astronaut Terry Virts, who did a Vulcan salute while in orbit in 2015 (he also appeared in an episode of "Star Trek: Enterprise").

These are some of the ways that "Star Trek" fans have kept the franchise alive over the years. That enthusiasm is reaching a fever pitch this year, with the celebration of "Star Trek's" 50th anniversary.

CREATOR-FAN INTERACTION

Smithsonian Air and Space Museum Curator Margaret Weitekamp said she is a "Star Trek" fan herself. And as part of her job at the museum, she recently helped with the restoration of the museum's beloved model of the USS Enterprise, the iconic ship from the franchise. The 11-foot (3.4 meters) starship model was used in all episodes of the original "Star Trek" TV series, which ran from 1966 to 1969. She said the fans of "Star Trek" have helped make fandoms generally more mainstream.

"Fan gatherings in the early 1970s for 'Star Trek' have spawned a booming business of fan conventions that are held around the world regularly by small fan groups, and other groups

that make this their business to put on these kinds of events for the fan community," she told Space.com in an interview.

As the internet matured, sci-fi show creators and actors were able to talk with their audiences directly. The sci-fi TV shows "Babylon 5" and "Battlestar Galactica" (the 2004 version) are famous among fans for having the series' staffs interact with fans online while the shows were airing. Today, Weitekamp added, actors often tweet about shows as they are happening, allowing fans to follow along.

The reduced cost of modern day computers and video equipment are making it possible for fans to make their own "Star Trek" creations more and more impressive looking. Fan-made movies today "don't look like [they were] filmed in someone's garage."

But this is also opening new frontiers for CBS and Paramount Pictures, the entities that jointly hold the "Star Trek" copyright. Those companies traditionally encouraged fan films, but are now setting restrictions on how professional such creations can be, Weitekamp said. A much-anticipated fan film called "Star Trek: Axanar" is currently stuck in a lawsuit with Paramount and CBS.

"It shows one of the ways in which these film technologies develop, and [it] makes things a little more complicated for the rights holders," Weitekamp added.



Astronaut Samantha Cristoforetti, proclaimed her love of "Star Trek" while she was living on the International Space Station. Credit: ESA/NASA

MULTIPLE PROMOTIONS

CBS is pursuing many avenues for fans to make their own "Star Trek" projects, especially as the network works on its new "Star Trek: Discovery" series set to debut in 2017. Multiple CBS officials told Space.com they are not

giving interviews about or discussing details of the new show yet.

However, the network is offering licensing to several "Star Trek" exhibits scattered across the U.S. that celebrate the franchise. This includes the traveling "Starfleet Academy Experience" currently in New York City, the Seattle EMP Museum's temporary exhibit on original "Star Trek" props and a traveling "Star Trek" art exhibit called "50 Artists. 50 Years."

Liz Kalodner, CBS' executive vice president and general manager of consumer products, has also been on the convention circuit. She described a conversation she recently had with a fan at a show in Las Vegas.

"Somebody said to me that for 'Star Trek,' people are not coming in costume. They are coming in uniform. And I thought that was just an interesting way to think about it," Kalodner said in an interview. "That's how people think about 'Star Trek.' They are part of the experience. They are part of the bridge. They have the same hopes and dreams as these characters, and they are simply living out that vision."

Fiona Agnew, 26; Nika Jablonski, 27; and Amy Longden, 26, showed their love of "Star Trek" at the "Star Trek": Mission New York convention in September 2016. Credit: Jeremy Lips/Space.com



UNITING THE FANS

A "Star Trek" convention celebrating the franchise's 50-year history just wrapped up in NYC last weekend.

"Star Trek": Mission New York featured events ranging from panel discussions to Trek-related virtual reality experiences, a huge gaming zone and more. One key strength of conventions today, said Mission New York organizer Brian Stephenson, is that people of different "Star Trek" generations can meet and share information. It encourages fans to check out series or movies they have missed, he said.

"I hear that a lot, whether that's 'Voyager' or 'Deep Space Nine,'" said Stephenson, who is global brand marketing director for ReedPOP, a company specializing in pop-culture exhibitions like Mission New York. "You start to have these generations of fans that just want to share the excitement they have and what they think is the best TV show and the best movie."

Many people interviewed for this story also talked about "Star Trek's" relentless optimism, even as the world surrounding the franchise encountered racism, war, refugee crises and other human conflicts. Trek fans always celebrate this belief in a better world when they come together, said Gary Berman, co-CEO of Creation Entertainment, which hosted a Star Trek convention in Las Vegas last month.

"The conventions serve as a common meeting ground for the live celebration of ['Star Trek' creator] Gene Roddenberry's ideals of a positive future that celebrates diversity," Berman said in an email. "Fans feel safe in this environment to honor these views. The celebrities are, of course, a major draw, but the commonality of a shared passion for positivity is the main factor."

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KIRK AND SHOCK: STAR TREK ORAL HISTORY BEAMS FANS BACKSTAGE

From: "Christina Cowan" cowan1028@earthlink.net

We loved it warts and all. (Well, maybe not the hippy episode or Spock's Brain...)
A Q&A with the writers of a new two-volume set that boldly goes to explore the "childish antics," ego clashes, missed opportunities and prescient brilliance behind the scenes of one of TV's most successful franchises.

<http://www.scientificamerican.com/article/kirk-and-shock-star-trek-oral-history-beams-fans-backstage/>

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CALL YOUR SENATOR TO SUPPORT THE PROTECTING INTERNET FREEDOM ACT, S.3034

From: "Jim Woosley" Jimwoosley@aol.com

<https://www.congress.gov/bill/114th-congress/senate-bill/3034>

Summary: S.3034 — 114th Congress (2015-2016) All Bill Information (Except Text)

There is one summary for S.3034. Bill summaries are authored by CRS.
Shown Here:

Introduced in Senate (06/08/2016)

Protecting Internet Freedom Act

This bill prohibits the Assistant Secretary of Commerce for Communications and Information from allowing the National Telecommunications and Information Administration's responsibility for Internet domain name system functions, including the authoritative root zone file and the performance of the Internet Assigned Numbers Authority functions, to cease unless a federal statute enacted after enactment of this bill expressly grants the Assistant Secretary such authority.

The Assistant Secretary must certify to Congress that the U.S. government has: (1) secured sole ownership of the .gov and .mil top-level domains, and (2) entered into a contract with the Internet Corporation for Assigned Names and Numbers that provides the U.S. government with exclusive control and use of those domains in perpetuity.

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J.K. ROWLING IS ABOUT TO RELEASE 3 NEW HARRY POTTER BOOKS | TIME

<http://time.com/4455746/j-k-rowling-pottermore-new-harry-potter-books/>

These are collections of short stories providing backstories of Hogwarts characters, and are only available in ebook formats. (I checked and they are now available on Kindle.)

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Re: The September 7th, 2016 Edition of THE REVENGE HUMP DAY!

From: "Pamela Adams" pamcrippenadams@gmail.com

I managed to dodge the con crud, but did have to jump right back in to work. Two weeks later, I'm kinda caught up.

YOU ARE ONE OF THE LUCKY ONES. ;^)

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Re: Killing Ivy

From: "Lee Dalzell" ladalzell@att.net

To my great disgust, I discovered Raid Wasp and Hornet Spray kills all kinds of vines. It killed the ivy, morning glory, briars AND (the disgust) part of my Rose bush. I had a guy cutting the flower bed back. He found lots of spiders, etc. in the brush so sprayed after cutting....and it all died back. It has been some three weeks and stuff is starting to reappear. The flower bed even had some of the Iris leaves poke their heads up. I did NOT want the rose bush killed and it looks like part of it is coming back. Did you notice that the mosquito spraying is killing bees? The same bees dying out because of diseases, that we NEED.

LEE ANN, THE REASON I SPEND SO MUCH ON BUYING THE IVY KILLER IS THAT IT KILLS THE ROOTS. IVY IS JUST SO PERSISTENT THAT IT IS A BEAR TO GET RID OF. BE HAPPY THAT ONLY THE PLANTS ABOVE GROUND WERE EFFECTED. UT

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Re: The September 7th, 2016 Edition of THE REVENGE HUMP DAY!

From: "Frank Brayman" afranklin3@gmail.com

%&*\$# it all, you and Chattacon are out to get me. They gave me a pin that said "Chattacon XL". Your next year's shirts will say "Libertycon XXX". Timmy, I need a 2XL!!

NA-HA-HA! YOU HAVE STUMBLERD ON OUR NEFARIOUS PLANS! UT

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From: "Mike Williamson" mzmadmike@gmail.com

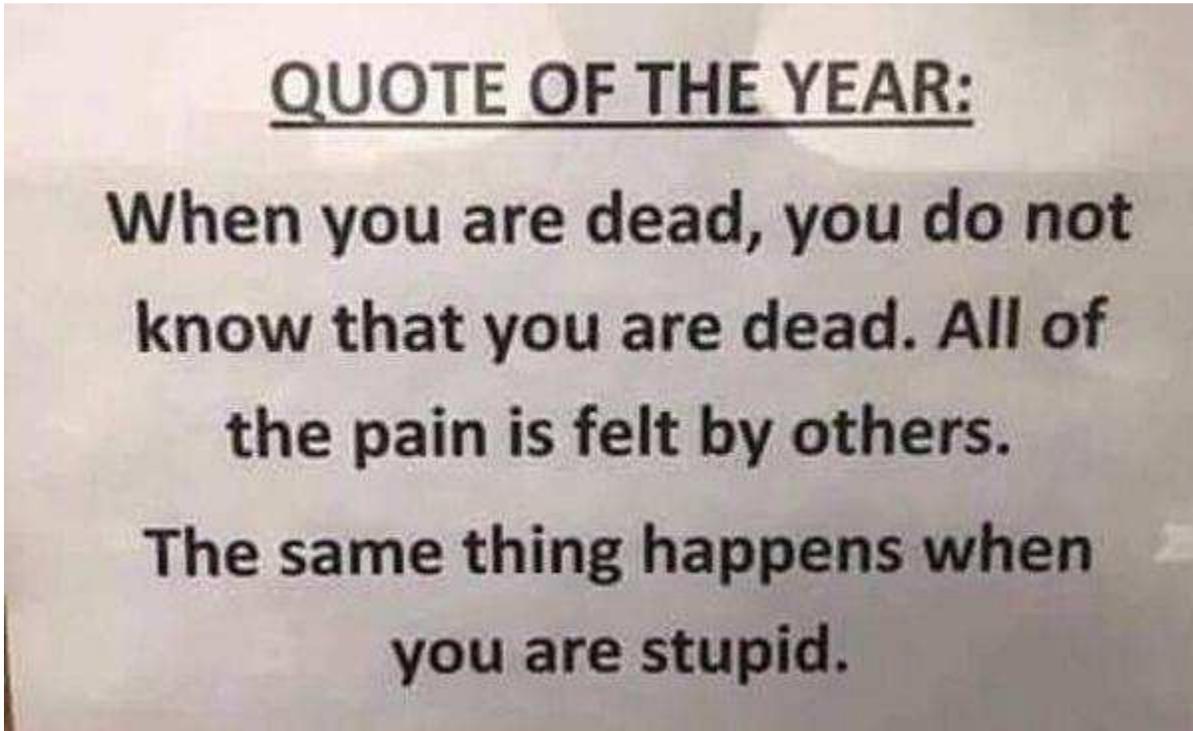
The Washington Redskins finally drop offensive name

Dan Snyder, owner of the NFL Washington Redskins, has announced that the team is dropping "Washington" from the team name, and it will henceforth be simply known as "The Redskins."

It was reported that he finds the word 'Washington' imparts a negative image of poor leadership, mismanagement, corruption, cheating, lying, and graft, and is not a fitting role-model for young fans of football.

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From: "Mike Waldrip" waldripk@gmail.com



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BATMAN '66 MEETS STEED AND MRS PEEL #1

From: "Jim Woosley" Jimwoosley@aol.com

<http://www.dccomics.com/comics/batman-%E2%80%9966-meets-steed-and-mrs-peel-2016/batman-%E2%80%9966-meets-steed-and-mrs-peel-1>

England swings and so does the Dynamic Duo in this historic pairing of two of the hippest shows from 1960s television. DC Comics and BOOM! Studios join forces to bring these iconic characters together for the first time!

As Bruce Wayne shows the beautiful head of a UK electronics company the sights of Gotham, they are interrupted by the felonious feline Catwoman! Unwilling to leave Miss Michaela Gough unprotected, Bruce resigns himself to the fact that Batman cannot save the day. But some new players have arrived in town—though even as the lovely, catsuit-clad Mrs. Peel and her comrade John Steed take control of the situation, nefarious plots continue apace!

DIGITAL FIRST!

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YOU JUST CAN'T MAKE THIS STUFF UP!

From: "Tim Bolgeo" tbolgeo@comcast.net

SAS sniper hero 'killed an ISIS terror leader who was about to incinerate hostages with a flame thrower by shooting its fuel tank from 1,500m'

- * A top ISIS executioner was moments away from burning 12 hostages alive
- * The SAS marksman fired a single 50. round at the flame thrower's fuel tank
- * Bullet caused explosion which killed the feared ISIS leader and henchmen
- * Rescue operation took place in village near Raqqa, Syria earlier this month

By ALEXANDER ROBERTSON FOR MAILONLINE, 11 September 2016

<http://www.dailymail.co.uk/news/article-3783943/SAS-sniper-kills-ISIS-executioner-moments-kills-12-hostages.html#ixzz4JxlJVPdK>

A British sniper took out a feared ISIS executioner as he prepared to murder several hostages by shooting a fuel tank on his back and incinerating him.

The SAS marksman fired a single round from his Barrett .50 calibre sniper rifle at the terrorist, who was about to use a flame thrower to kill 12, from 1,500m.

The bullet hit the flame thrower's fuel tank and caused a huge fireball, also killing three other ISIS members who were ready to film the execution.

A source told the Daily Star Sunday how the rescue operation took place in a tiny village near Raqqa, Syria, earlier this month.



A British sniper took out a feared ISIS executioner as he prepared to murder several hostages by shooting a fuel tank on his back and incinerating him (stock image)

Shortly after the explosion, the prisoners - thought to be civilians - were freed by British and US special forces.

The ISIS executioner killed in the mission is said to have been on a US 'kill list' for several months, due to his method of slaughtering prisoners by burning them alive.

The source told the newspaper: "The SAS team moved into an overwatch position above a village where they were told the execution was going to take place.

"Up to 12 civilians were going to be murdered – eight men and four women. They were suspected of being spies.

"The executioner gave some sort of rambling speech over a loud hailer then when he finished the SAS sniper opened fire.'

The rescue comes a few months after another SAS sniper took out two ISIS car bombers with a single shot when they were driving towards their target in Libya. The heroic sharpshooter saved hundreds of lives by hitting the driver in the head with a deadly shot from 1,000m.



The SAS marksman fired a single round from his Barrett .50 calibre sniper rifle at the terrorist, who was about to use a flame thrower to kill 12, from 1,500m (stock image)

The bullet went through the driver's skull and lodged in the passenger's neck, killing them both.

The jihadis were transporting a massive bomb to Tripoli where they planned to detonate it in a packed market, intelligence revealed.

I AM PROUD TO SAY THAT THE BARRETT .50 CALIBER SNIPER RIFFLE IS MADE IN MURFREESBORO, TENNESSEE. UT

<YOU>~<>~<JUST>~<>~<CAN'T>~<>~<MAKE>~<>~<THIS>~<>~<STUFF>~<>~<UP!>

YOU JUST CAN'T MAKE THIS STUFF UP!

From: "Mike Waldrip" waldripk@gmail.com

SPEED OF CHANGE

In 1998, Kodak had 170,000 employees and sold 85% of all photo paper worldwide. Within just a few years, their business model disappeared and they went bankrupt.

What happened to Kodak will happen in a lot of industries in the next 10 year - and most people don't see it coming. Did you think in 1998 that 3 years later you would never take pictures on paper film again? Yet digital cameras were invented in 1975.

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The first ones only had 10,000 pixels, but followed Moore's law. So as with all exponential technologies, it was a disappointment for a long time, before it became way superior and got mainstream in only a few short years.

It will now happen with Artificial Intelligence, health, autonomous and electric cars, education, 3D printing, agriculture and jobs.

Welcome to the 4th Industrial Revolution –

Welcome to the Exponential Age.

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YOU JUST CAN'T MAKE THIS STUFF UP!

From: "Jim Woolsey" Jimwoolsey@aol.com

5,300 WELLS FARGO EMPLOYEES FIRED OVER 2 MILLION PHONY ACCOUNTS

by Matt Egan @mattmegan5 September 9, 2016: 8:08 AM ET

<http://money.cnn.com/2016/09/08/investing/wells-fargo-created-phony-accounts-bank-fees/>

VIDEO REPORT AT THE WEBSITE.

Everyone hates paying bank fees. But imagine paying fees on a ghost account you didn't even sign up for.

That's exactly what happened to Wells Fargo customers nationwide.

On Thursday, federal regulators said Wells Fargo (WFC) employees secretly created millions of unauthorized bank and credit card accounts -- without their customers knowing it -- since 2011.

The phony accounts earned the bank unwarranted fees and allowed Wells Fargo employees to boost their sales figures and make more money.

"Wells Fargo employees secretly opened unauthorized accounts to hit sales targets and receive bonuses," Richard Cordray, director of the Consumer Financial Protection Bureau, said in a statement.

Wells Fargo confirmed to CNNMoney that it had fired 5,300 employees over the last few years related to the shady behavior. Employees went so far as to create phony PIN numbers and fake email addresses to enroll customers in online banking services, the CFPB said.

The scope of the scandal is shocking. An analysis conducted by a consulting firm hired by Wells Fargo concluded that bank employees opened over 1.5 million deposit accounts that may not have been authorized.

The way it worked was that employees moved funds from customers' existing accounts into newly-created ones without their knowledge or consent, regulators say. The CFPB

described this practice as "widespread." Customers were being charged for insufficient funds or overdraft fees -- because there wasn't enough money in their original accounts.

Additionally, Wells Fargo employees also submitted applications for 565,443 credit card accounts without their customers' knowledge or consent. Roughly 14,000 of those accounts incurred over \$400,000 in fees, including annual fees, interest charges and overdraft-protection fees.

The CFPB said Wells Fargo will pay "full restitutions to all victims."

Wells Fargo is being slapped with the largest penalty since the CFPB was founded in 2011. The bank agreed to pay \$185 million in fines, along with \$5 million to refund customers.

"We regret and take responsibility for any instances where customers may have received a product that they did not request," Wells Fargo said in a statement.

Wells Fargo has the highest market valuation among any bank in America, worth just north of \$250 billion. Berkshire Hathaway (BRKA), the investment firm run legendary investor Warren Buffett, is the company's biggest shareholder.

Of the total fines, \$100 million will go toward the CFPB's Civil Penalty Fund, \$35 million will go to the Office of the Comptroller of the Currency, and another \$50 million will be paid to the City and County of Los Angeles.

"One wonders whether (the CFPB) penalty of \$100 million is enough," said David Vladeck, a Georgetown University law professor and former director of the Federal Trade Commission's Bureau of Consumer Protection. "It sounds like a big number, but for a bank the size of Wells Fargo, it isn't really."

Wells Fargo confirmed to CNNMoney that the 5,300 firings took place over several years. The bank listed 265,000 employees as of the end of 2015.

Related: Barclays fined \$109 million for trying to hide a deal with rich clients

"At Wells Fargo, when we make mistakes, we are open about it, we take responsibility, and we take action," the bank said in a memo to employees on Thursday.

The CFPB declined to comment on when the investigation began and what sparked it, citing agency policy. "We don't comment on how we uncover these matters," a spokesman said.

As part of the settlement, Wells Fargo needs to make changes to its sales practices and internal oversight.

Customers are fuming. Brian Kennedy, a Maryland retiree, told CNNMoney he detected an unauthorized Wells Fargo account had been created in his name about a year ago. He asked Wells Fargo about it and the bank closed it, he said.

"I didn't sign up for any bloody checking account," Kennedy, who is 57 years old, told CNNMoney. "They lost me as a banking customer and I have warned family and friends."

"Consumers must be able to trust their banks," said Mike Feuer, the Los Angeles City Attorney who joined the settlement.

Feuer's office sued Wells Fargo in May 2015 over allegations of unauthorized accounts. After filing the suit, his office received more than 1,000 calls and emails from customers as well as current and former Wells Fargo employees about the allegations.

Wells Fargo declined to say when it hired a consulting firm to investigate the allegations. However, a person familiar with the matter told CNNMoney the bank launched the review after the L.A. lawsuit was filed.

Even though the Wells Fargo scandal took place nationally, the settlement with L.A. requires the bank to specifically alert all its California customers to review their accounts and shut down ones they don't recognize or want.

"How does a bank that is supposed to have robust internal controls permit the creation of over a half-million dummy accounts?" asked Vladeck. "If I were a Wells Fargo customer, and fortunately I am not, I'd think seriously about finding a new bank."

<?>~<YOU JUST CAN'T MAKE THIS STUFF UP!>~<?>

JAMES KIRK COMMANDING USS ZUMWALT DDG 1000

<http://www.public.navy.mil/surfor/ddg1000/Pages/bio1.aspx#.V9QRUNQrlrg>



CAPT James A. Kirk
Commanding Officer

Captain Kirk is a native of Bethesda, Maryland and raised in Hershey, Pennsylvania. He was commissioned at the U.S. Naval Academy in 1990 and has served in a variety of afloat and ashore billets as a Surface Warfare Officer.

He has served afloat on destroyers, cruisers, frigates and staffs including USS Fife (DD 991), USS The Sullivans (DDG 68), USS Hué City (CG 66), USS John S. McCain (DDG 56), and as a Gas Turbine Inspector on the staff of Commander, Pacific Fleet. His most recent sea duty includes command of USS De Wert (FFG 45) and Operations Officer for Carrier Strike Group Seven, Ronald Reagan Strike Group.

Ashore, Captain Kirk has served as Executive Assistant to the Navy's Chief of Legislative Affairs, Action Officer on the Joint Staff, and Executive Assistant to the Director of Surface Warfare (OPNAV N96). He has attended both the U.S. Naval War College and U. S. Army War College graduating with Masters Degrees in National Security Studies. He is currently serving as the commanding officer of Pre-Commissioning Unit Zumwalt (DDG 1000).

<http://www.dailymail.co.uk/sciencetech/article-3780194/The-superstealth-USS-Zumwalt-destroyer-sails-officially-join-Navy-Captain-James-Kirk-helm.html>



A model of the Zumwalt Class destroyer built by Bath Iron Works and Northrop Grumman Shipbuilding is seen displayed during a contract signing ceremony at the

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From: "Tim Bolgeo" tbolgeo@comcast.net

THE OX: A FLAT-PACK TRUCK THAT COULD CHANGE THE WORLD

The Sun, Published September 07, 2016

<http://www.foxnews.com/leisure/2016/09/07/ox-flat-pack-truck-that-could-change-world/>

Meet the Ox, the world's first flat-pack truck. It's an all-terrain vehicle that's been designed by an F1 ace to be low-cost and able to tackle the world's toughest environments.

Unveiled today, the 'ultimate MPV' aims to reach the 80% of the world's population who don't benefit from motor vehicles.

"I had the idea while in the bath," said the 82-year-old inventor, Sir Torquil Norman, speaking to Sun Motors. "This could be the stupidest thing I've ever done, or it could change the world."

The Ox is a multi-purpose truck that can carry 13 people, 1,900kg of cargo and even double up as an ambulance. The aim is noble, to change the lives of millions of people in developing countries.

(Global Vehicle Trust)

To save on delivery costs, it arrives in a flat-pack. It takes three people under 12 hours to assemble it with a toolkit of just 40 spanners. If you can handle an IKEA chest of drawers, you should be able to build a truck.



While it looks like a Tonka toy, the simplistic design is ingenious, the work of ex-F1 design guru Prof Gordon Murray. “If people say it’s ‘crude’ I take that as a compliment. It had to be low cost and rugged. Just making it flat pack took nine months.

“It’s like a kid’s Transformers toy.. It’s the vehicle I’m most proud of. And my career is littered with revolutionary stuff.”

The Ox is packed with great design features. Like the centralized steering wheel, so it works in countries that drive on the left and right.

Or the plywood panels that can be assembled with just one Allen key. Drivers can add engine fluids from the cabin.

The tailgate comes off to form a ramp for heavy cargo. And the rear seats double up as sand ladders in case your vehicle gets stuck.

“It’s the lowest cost off-road vehicle in the world,” said Murray.

It has influential backers, like car-mad Pink Floyd drummer Nick Mason: “This is great. It’s the closest thing to the Ford Model T - it could change society.”

By providing low-cost mobility, the Ox aims to tackle poverty and ill health in the developing world. It’s able to carry twice the load of similar vehicles, and it’s the length of a Skoda Yeti.

It can drive through 75 cm depth of water and has a very wide track to ensure excellent stability on badly rutted roads. It could be air dropped into a disaster zone and assembled on site. “The world cannot afford to make a mess of this,” said Barry Coleman from Riders for Health.

To date the Global Vehicle Trust has invested £3.4m (\$4.5m) to design and build three prototypes. Next, they want investment from a large car manufacturer to realize their dream of spreading the Ox throughout the world.

So what next for the octogenarian visionary inventor, Sir Norman. What can follow creating the Ox? “Ha,” he joked. I’ll be pushing up daisies next.”

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NATURAL GAS EMISSIONS WILL SURPASS THOSE FROM COAL IN U.S.

Carbon dioxide emissions from natural gas-fired power plants will be 10 percent greater than emissions from coal-fired plants in 2016

By Bobby Magill, Climate Central on August 30, 2016

http://www.scientificamerican.com/article/natural-gas-emissions-will-surpass-those-from-coal-in-u-s/?WT.mc_id=SA_ENGYSSUS_20160908



Huntington Beach natural gas fired power plant. Credit: FLICKR

The U.S. is expected to reach a major carbon emissions milestone this year: For the first time, carbon dioxide emissions from burning natural gas for electricity in the U.S. are set to surpass those from burning coal—the globe’s chief climate polluter.

Emissions from burning natural gas are expected to be 10 percent greater than those from coal in 2016, as electric companies rely more on power plants that run on natural gas than those that run on coal, according to U.S. Department of Energy data.

The EIA expects the U.S. will emit about 1.5 billion metric tons of carbon dioxide from natural gas in 2016, compared to about 1.4 billion metric tons from coal.

The milestone comes as an ample supply of low-cost natural gas encourages electric power companies to use more gas than coal. That trend is leading to a continued decline in coal production.

U.S. climate policies, such as the Obama administration's Clean Power Plan, are also encouraging utilities to shift away from coal as a way to cut greenhouse gas emissions. Countries that signed the Paris Climate Agreement are trying to limit emissions to prevent global warming from exceeding 2°C (3.6°F) above pre-industrial levels.

Natural gas emits about half as much climate change-driving carbon dioxide as coal. Perry Lindstrom, a greenhouse gas emissions analyst at the U.S. Energy Information Administration, said the rise of natural gas is reducing the carbon intensity—the amount of carbon dioxide emitted per unit of energy—of the energy Americans consume every day.

“You get more energy per metric ton of CO₂ emitted from natural gas than from coal,” Lindstrom said.

Burning coal for electricity is about 82 percent more carbon intensive than burning natural gas.

There is a downside to the emissions milestone, however. Though natural gas burns cleaner than coal, producing natural gas and piping it to power plants leaks methane into the atmosphere.

Methane is a greenhouse gas more than 35 times as potent as carbon dioxide in driving climate change over the span of a century, and global atmospheric concentrations of it have been increasing steadily since 2007. That increase has been tied partly to U.S. natural gas production.

“While natural gas compares relatively favorably to coal when viewed through the CO₂ lens, the reverse is true for methane,” said Cornell University biogeochemist Robert Howarth. “Some methane is emitted when we mine coal, but far more methane is emitted when we use natural gas, which is not surprising since natural gas is composed mostly of methane.”

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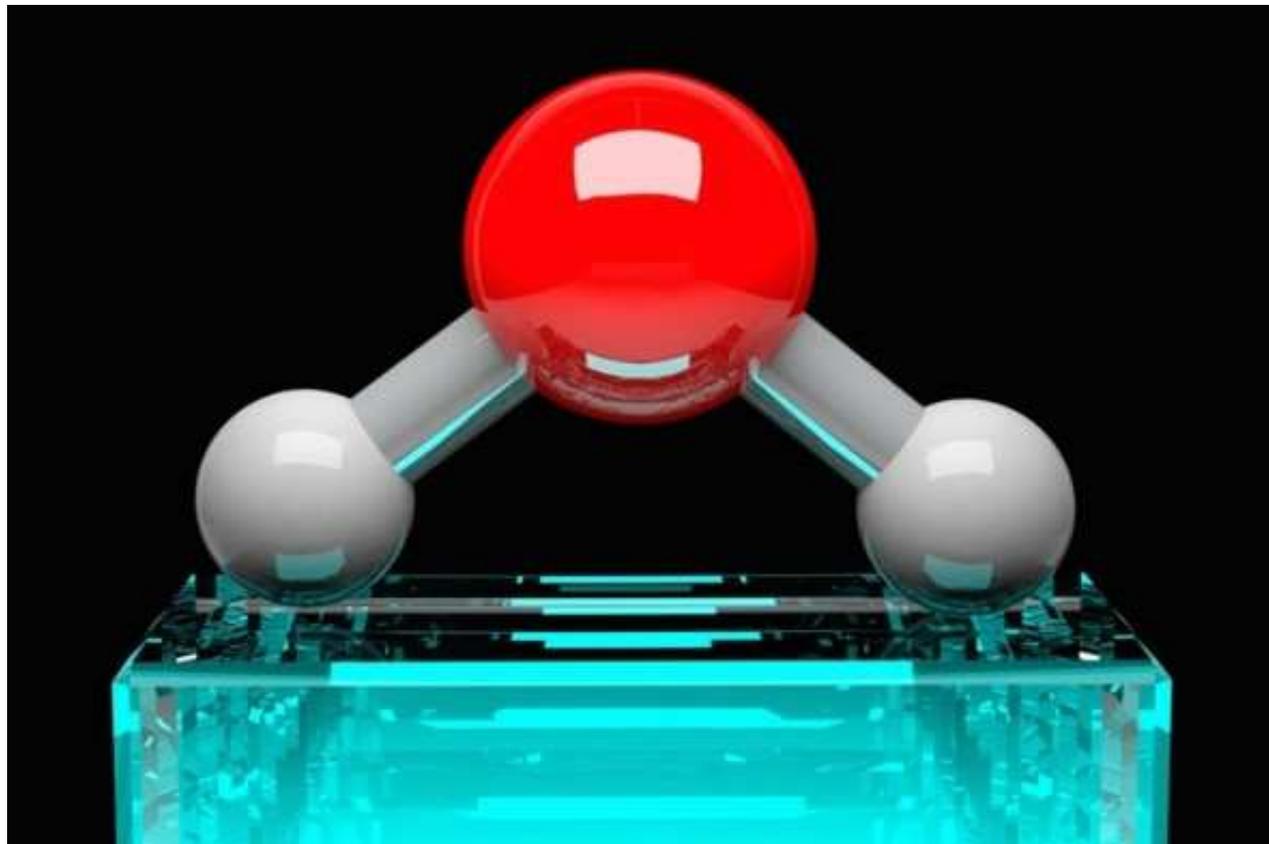
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NEW CATALYST COULD SPLIT WATER CHEAPLY

The goal: Inexpensive hydrogen for fuel cells that power cars and homes

By Umair Irfan, ClimateWire on September 7, 2016

http://www.scientificamerican.com/article/new-catalyst-could-split-water-cheaply/?WT.mc_id=SA_ENGYSUS_20160908



Credit: LAGUNA DESIGN Getty Images

The mysterious workings of a new catalyst could help produce fuels from water and improve fuel cells, scientists say.

Splitting water into its constituent hydrogen and oxygen elements is an important starting point for the development of clean renewable fuels. Producing hydrogen from water could also become a method to store excess renewable energy.

It's a process plants have already mastered via photosynthesis and humans are now working to replicate.

“While photosynthesis is extremely good at oxidizing water, the truth is many man-made processes of doing these things are not that good,” said Thomas Jaramillo, a researcher at the SUNCAT Center for Interface Science and Catalysis in Stanford University’s Department of Chemical Engineering.

Many of the artificial methods of making hydrogen and oxygen from water require materials that are too expensive, require too much energy or break down too quickly in real-world conditions, like the acidic electrolytes in fuel cells.

But splitting water to generate hydrogen may be an important way to cut greenhouse gas emissions. Jaramillo observed that the world produces more than 50 billion kilograms of hydrogen each year and more than 95 percent of it comes from fossil fuels through processes like steam reforming methane.

Jaramillo and his collaborators sought to develop a catalyst for the oxygen evolution reaction, the notoriously slow half of the water-splitting process. A catalyst is a substance that speeds up a chemical reaction or lowers the energy required to get it started without getting used up itself. Making these materials last longer, work faster and use less energy would cut prices and improve efficiency in producing renewable hydrogen.

In a paper published last week in the journal *Science*, the research team presented an oxygen evolution catalyst that worked in harsh conditions and beat all of its competitors.

“The biggest achievement in this paper is that we were able to find a stable catalyst that works in acid,” said co-author Yasuyuki Hikita, a staff scientist at SLAC National Accelerator Laboratory. “The activity that we found has been record-breaking.”

In an oxygen evolution reaction catalyst, one of the key benchmarks is the overpotential, or the amount of electricity needed to drive the reaction. The past record was 320 millivolts, but the new catalysts only needed between 270 and 290 millivolts of overpotential to reach the same level of oxygen production.

Hikita said this is a huge improvement in efficiency and would drastically cut the energy needed in a potential hydrogen production plant that would run around the clock.

The catalyst in this case was a thin film crystal, grown to be as flat as possible, with one layer made from iridium oxide and another layer made from strontium iridium oxide. With a flat, thin crystal, researchers had a better standard of comparison for their simulations.

“Iridium oxide is the only known catalyst that works in acid,” Hikita said.

In their experiments, the researchers also found that the catalyst’s performance improved over time. Measurements showed that the surface of the catalyst changed, but the mechanism that’s sped up oxygen evolution is unclear. “Microscopically, we’re not sure why at this point,” Hikita said. “Part of the strontium goes out into the solution.”

The researchers are now working to make their oxygen evolution catalyst more efficient and less expensive, as well as teasing out the physics of what makes the material work so well. “Iridium is still a very expensive metal,” Hikita said. “How much can we reduce the amount of iridium to achieve the same results? For practical industrial applications, we need to go much, much lower.”

“There’s much further room ahead than there is behind in terms of developing a better catalyst,” Jaramillo said. “You can imagine a catalyst a million times better than the one we made.”

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ECUADOR BEGINS DRILLING OIL IN A PRISTINE CORNER OF THE AMAZON

The highly biodiverse country has rain forest, the Andes and the Galapagos Islands

By Jose Llangari

http://www.scientificamerican.com/article/ecuador-begins-drilling-oil-in-a-pristine-corner-of-the-amazon/?WT.mc_id=SA_ENGYSUS_20160908



Ecuadorian Amazon rainforest. Credit: DALLAS KRENTZEL Flickr

TIPUTINI, Ecuador (Reuters) - Ecuador began drilling for oil on Wednesday near an Amazon nature reserve known as Yasuni, a site that President Rafael Correa had previously sought to protect from development and pollution under a pioneering conservation plan.

Correa in 2007 asked wealthy countries to donate \$3.6 billion to offset revenue lost by not drilling in the Yasuni National Park. But the initiative was scrapped in 2013 after it brought in less than 4 percent of the amount requested.

Correa's government blamed the international community for the failure of a plan once seen as a possible model for other developing countries seeking to resist the lure of oil money.

Wednesday's drilling by the state oil company Petroamazonas began in the ITT (Ishpingo-Tambococha-Tiputini) block at Tiputini, which is just outside Yasuni. Ishpingo and Tambococha are within the Yasuni reserve itself.

Correa has said previously that drilling would affect less than 1 percent of the reserve.

"It's the start of a new era for Ecuadorean oil," said Vice President Jorge Glas after a tour of the site on Wednesday.

"In this new era, first comes care for the environment and second responsibility for the communities and the economy, for the Ecuadorean people," he told reporters, adding that the cost of production was less than \$12 per barrel.

Ecuador is OPEC's smallest member and has suffered heavily from the fall in oil prices. Around half its income comes from oil, according to the World Bank. It is also one of the world's most biodiverse nations, boasting Amazon rainforest, Andean mountains and the Galapagos Islands.

The end of Ecuador's conservation initiative for the eastern Yasuni, a vast swath of rainforest on the equator, drew outrage from environmentalists when it was first announced.

"This is the worst imaginable place to be drilling for oil. The world can simply not afford to lose a place like Yasuni," said Kevin Koenig, Ecuador program director at Amazon Watch, in a statement.

About 1.67 billion barrels of oil lie under Yasuni's soil.

With output from the Tiputini field, Ecuador's oil production will rise to some 570,000 barrels per day (bpd) from a current level of about 550,000 bpd, government officials say.

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SCIENTISTS CRACK SOLAR THERMAL EFFICIENCY OF 97% – A WORLD RECORD

By: Nidhi Goyal | September 5th, 2016

http://www.industrytap.com/scientists-crack-solar-thermal-efficiency-97-world-record/38392?utm_source=Industry+Tap&utm_campaign=eb9f8b34bc-Industry+Tap+Volume+3459+8+2016&utm_medium=email&utm_term=0_05d6224fe0-eb9f8b34bc-44103165



Image courtesy ANU

Researchers at the Australian National University (ANU) have created the world's most efficient solar thermal installation.

Grid-scale renewable energy generation moves closer to commercial reality

Their efforts will help renewable energy compete with the electricity generated from conventional sources.

The ANU team has redesigned the system's receiver for a solar concentrator dish. They have used a 500 square meter solar concentrator dish made up of a concave surface of reflectors, directing sunlight to a receiver suspended at the focal point. It focuses the power of 2,100 suns onto the receiver, through which water is pumped and heated to 500 degrees Celsius.

The team described its ultra-efficient receiver design as a cavity that resembles a top hat with a narrow opening and a wide brim. The dish reflects sunlight onto the water pipes that spiral around the underside of the brim and up into the hat...heating the water and turning it into steam.

It is designed in a way that it halved its energy losses and achieved a 97 percent conversion of sunlight into steam.

As per ANU's Dr. John Pye, this new design could result in a 10% reduction in the cost of solar thermal electricity.

Pye said, "Ultimately the work in this project is all about reducing the cost of concentrating solar thermal energy. Our aim is to get costs down to 12 cents per kilowatt-hour of electricity, so that this technology will be competitive. This new design could result in a 10 percent reduction in the cost of solar thermal electricity. I'm optimistic that our technology can play a role in the grid, by helping to provide power at night without fossil fuel power stations running."

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THIN PLASTIC OVERLAYER DOUBLES EFFICIENCY OF ROOFTOP SOLAR PANELS

John Anderson September 8, 2016

<http://newatlas.com/solar-panel-insolight-overlayer-efficiency/45329/>

Insolight's solar panels have achieved a possible record-breaking 36.4 percent efficiency (Credit: © 2016 EPFL/Alain Herzog)

While the latest commercially available rooftop solar panels boast conversion efficiencies around the 18 to 20 percent mark, there are solar cells capable of achieving efficiencies of over 40 percent. So why aren't these making their way onto roofs? The answer is cost. But



While the latest commercially available rooftop solar panels boast conversion efficiencies around the 18 to 20 percent mark, there are solar cells capable of achieving efficiencies of over 40 percent. So why aren't these making their way onto roofs? The answer is cost. But

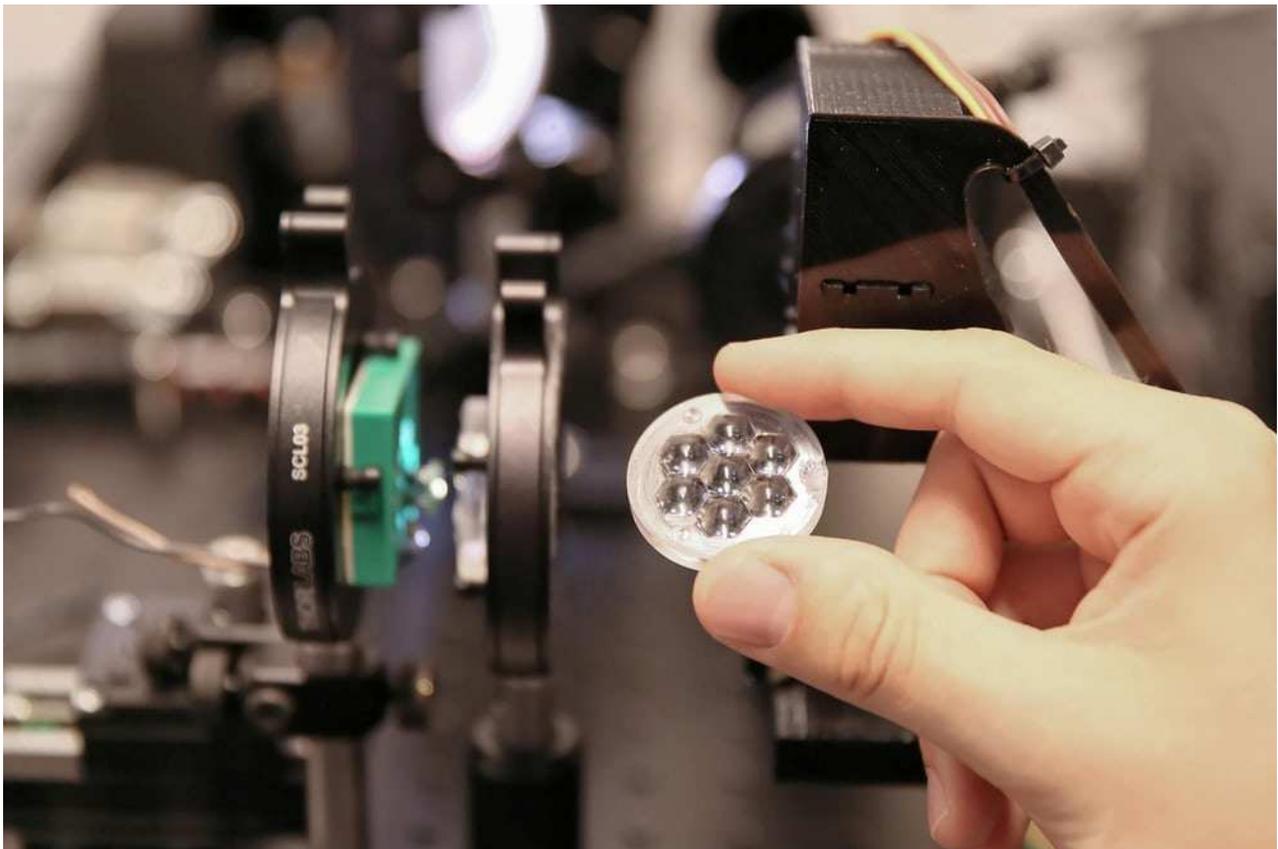
that could be about to change with Swiss startup Insolight developing a thin plastic layer that sits atop a panel and directs the sun's rays to a small area of very high performance solar cells.

While some researchers are devoted to improving the efficiency of solar cells themselves, other efforts to increase energy output involve developing systems that focus as much sunlight onto the cells as possible. But the efficiency is still dependent on the solar cells' performance, while existing concentrators can be cumbersome and need to constantly be repositioned to reap their full benefits.

Insolight's strategy was to use some of the highest rated solar cells already available, which yield 42 percent efficiency by capturing different wavelengths of light. These cells are prohibitively expensive for all but special uses, notably in aerospace, so to keep costs down the company only uses small numbers of the super cells.

They then turned to the issue of how to concentrate the sunlight hitting the cells and developed an injection-molded plate arrayed with plastic bubble lenses that act like a network of tiny magnifying lenses. These focus the light hitting the panel onto segments of the solar cells that are only several square millimeters in size.

"It's like a shower: all the water goes down one small drain, there's no need for the drain to cover the entire floor of the shower," says Laurent Coulot, Insolight's CEO.



The top layer of tiny lenses directs sunlight to a small, very high performance solar cell (Credit: © 2016 EPFL/Alain Herzog)

The plate is attached to a metallic frame that moves just several millimeters throughout the day, guided by a sensor that tracks the sun's position. As a result, this micro-tracking system is able to capture 100 percent of the sunlight regardless of the angle of the sun, which can prove especially important for higher latitudes.

The Fraunhofer Institute in Germany has independently validated performance of a prototype, which Insolight claims achieved a yield of 36.4 percent, or roughly double that of traditional solar panels for the same footprint – which the company says, "is a potential world record for a flat panel that can be mounted on a roof."

The prototype will now be subjected to real-world testing and the company is hopeful they could be on the market before too long. This is in large part because the system is already near market ready as it was designed with components that are easily mass produceable. It's also comparable in size to conventional solar panels, and can be installed with standard mounting systems.

The company believes their cells will be a little more expensive than conventional solar panels, "but this will be quickly offset by the additional energy that will be generated," says Florian Gerlich, Insolight's COO.

The company developed their concept with a grant from the Ecole Polytechnique Federale de Lausanne (EPFL) in the Laboratory of Applied Photonics Devices. The video AT THE WEBSITE gives an overview of the system.

Source: EPFL, Insolight

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GALAXY NOTE 7 RECALL GETS GOVERNMENT TREATMENT AS THE CPSC PILES ON

Posted 17 hours ago by Devin Coldewey, Contributor

<https://techcrunch.com/2016/09/09/galaxy-note-7-recall-gets-government-treatment-as-the-cpsc-piles-on/>

The Consumer Product Safety Commission has finally weighed in on the Galaxy Note 7 debacle, issuing its own statement urging users not just to be careful, as the FAA did, but to "power them down and stop using or charging the device."

Samsung preemptively recalled the device after reports of spontaneous combustion, which the manufacturer blamed on bad lithium-ion batteries. The company is also offering a trade-in



deal, but the CPSC isn't entirely convinced yet.

The government body is "working quickly to determine whether a replacement Galaxy Note7 is an acceptable remedy for Samsung or their phone carriers to provide to consumers."

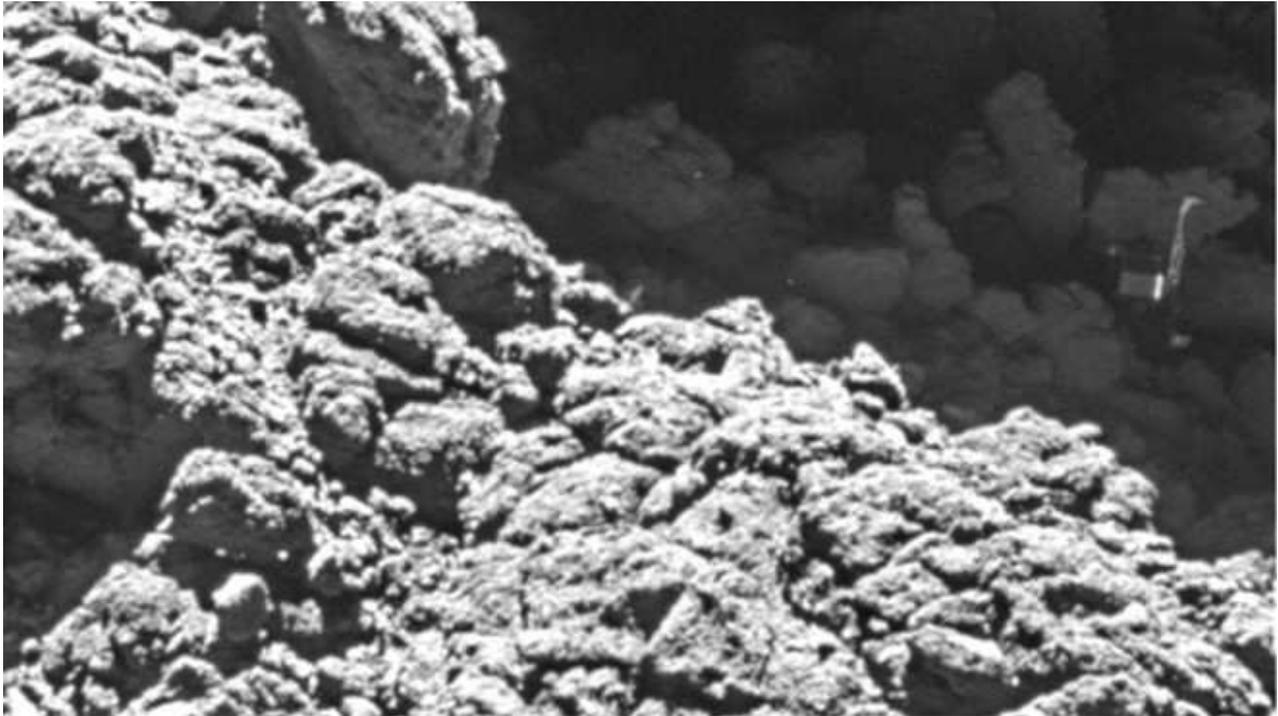
In other words, they may still decide that the problem is of a scale sufficient to issue a complete product recall. This could be the case should the problem causing the fire prove to be in the phone itself, as well as the battery. The CPSC and Samsung are working together on a more official notice with advice on what to do (other than turn it off); until then, stay safe.

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FOUND: PHILAE'S FINAL RESTING PLACE

By Nicole Kiefert | September 7, 2016 2:19 pm

<http://blogs.discovermagazine.com/d-brief/2016/09/07/found-philae-final-resting-place/#.V9WCktQrlrg>



(Credit: ESA)

After not knowing the exact location of the Philae lander for almost two years, the cameras on the European Space Agency's Rosetta orbiter picked up images on Friday of Philae tucked into a crack on Comet 67-P/Churyumov-Gerasimenko.

Philae was attached to Rosetta during its 10-year journey through space to catch up to the comet and was released to touch down in November 2014, making it the first spacecraft to land on a comet. It sent data to Earth for three days before its battery died, causing Philae

to go into hibernation. When the comet came closer to the sun, though, it helped charge it enough to communicate with Rosetta briefly in 2015.

Thanks to radio signals between Rosetta and Philae, the general area of where Philae landed was known, but it had bounced after its initial touchdown and the exact location couldn't be found until now.

Rosetta was 1.7 miles from the comet's surface when it captured the images that show Philae's body and two of its three legs.

Rosetta will join Philae on the surface of Comet 67P, as it is scheduled to crash into the comet on September 30 to investigate the comet from close up and complete its mission.

The data recovered from Philae has already immensely helped scientists to understand the nature of comets and the role they play in universe.

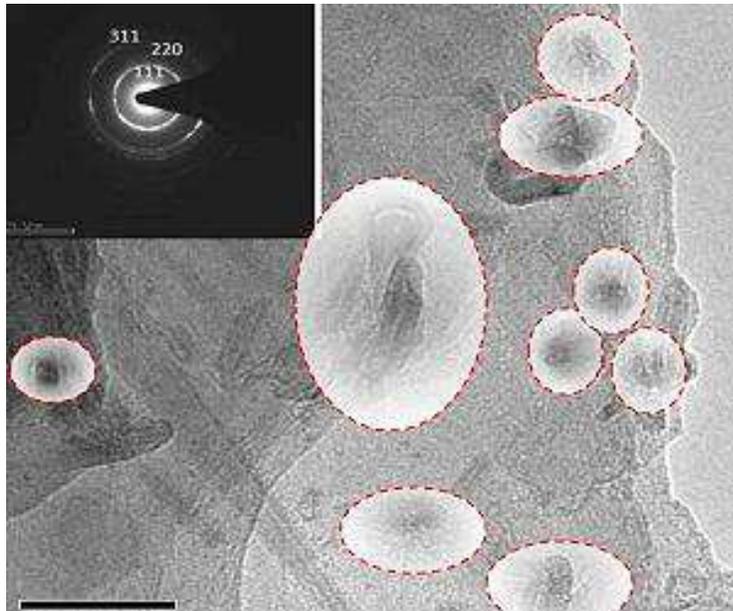
This article originally appeared in Astronomy.com.

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RICE UNIVERSITY-LED TEAM MORPHS NANOTUBES INTO TOUGHER CARBON FOR SPACECRAFT, SATELLITES

by Staff Writers, Houston TX (SPX) Sep 12, 2016

http://www.spacedaily.com/reports/Rice_University_led_team_morphs_nanotubes_into_tougher_carbon_for_spacecraft_satellites_999.html



Transmission electron microscope images show nanodiamonds in samples of nanotubes fired at a target at high velocity. The insert shows the diffraction pattern identifying the formations as nanodiamonds. Image courtesy Ajayan Group and Rice University.

Superman can famously make a diamond by crushing a chunk of coal in his hand, but Rice University scientists are employing a different tactic. Rice materials scientists are making nanodiamonds and other forms of carbon by smashing nanotubes against a target at high speeds. Nanodiamonds won't make anyone rich, but the process of

making them will enrich the knowledge of engineers who design structures that resist damage from high-speed impacts.

The diamonds are the result of a detailed study on the ballistic fracturing of carbon nanotubes at different velocities. The results showed that such high-energy impacts

caused atomic bonds in the nanotubes to break and sometimes recombine into different structures.

The work led by the labs of materials scientists Pulickel Ajayan at Rice and Douglas Galvao at the State University of Campinas, Brazil, is intended to help aerospace engineers design ultralight materials for spacecraft and satellites that can withstand impacts from high-velocity projectiles like micrometeorites.

The research appears in the American Chemical Society journal ACS Applied Materials and Interfaces.

Knowing how the atomic bonds of nanotubes can be recombined will give scientists clues to develop lightweight materials by rearranging those bonds, said co-lead author and Rice graduate student Sehmus Ozden.

"Satellites and spacecraft are at risk of various destructive projectiles, such as micrometeorites and orbital debris," Ozden said. "To avoid this kind of destructive damage, we need lightweight, flexible materials with extraordinary mechanical properties. Carbon nanotubes can offer a real solution."

The researchers packed multiwalled carbon nanotubes into spherical pellets and fired them at an aluminum target in a two-stage light-gas gun at Rice, and then analyzed the results from impacts at three different speeds.

At what the researchers considered a low velocity of 3.9 kilometers per second, a large number of nanotubes were found to remain intact. Some even survived higher velocity impacts of 5.2 kilometers per second. But very few were found among samples smashed at a hypervelocity of 6.9 kilometers per second. The researchers found that many, if not all, of the nanotubes split into nanoribbons, confirming earlier experiments.

Co-author Chandra Sekhar Tiwary, a Rice postdoctoral researcher, noted the few nanotubes and nanoribbons that survived the impact were often welded together, as observed in transmission electron microscope images.

"In our previous report, we showed that carbon nanotubes form graphene nanoribbons at hypervelocity impact," Tiwary said. "We were expecting to get welded carbon nanostructures, but we were surprised to observe nanodiamond as well." The orientation of nanotubes both to each other and in relation to the target and the number of tube walls were as important to the final structures as the velocity, Ajayan said.

"The current work opens a new way to make nanosize materials using high-velocity impact," said co-lead author Leonardo Machado of the Brazil team.

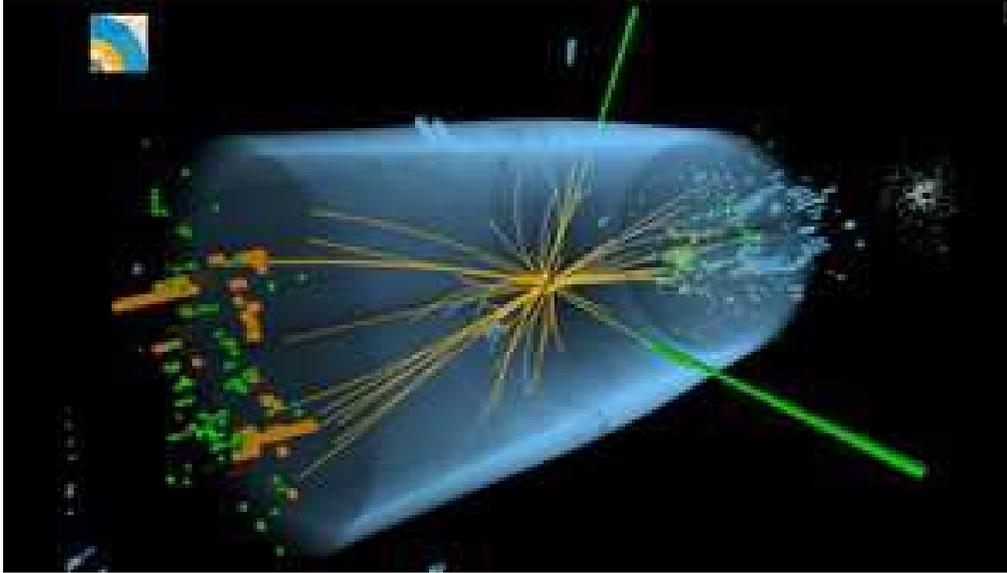
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From: "Jim Woosley" Jimwoosley@aol.com

SOMETHING IS WRONG WITH DARK MATTER

By Don Lincoln, Updated 9:50 PM ET, Wed September 7, 2016

<http://www.cnn.com/2016/09/07/opinions/dark-matter-analysis-lincoln/index.html>



Studying the 'God particle' – In the preface to a 2014 book, astrophysicist Stephen Hawking wrote he was worried that Higgs boson might turn unstable and lead to the end of everything. The "universe could undergo catastrophic vacuum decay,

with a bubble of the true vacuum expanding at the speed of light," Hawking wrote. "This could happen at any time and we wouldn't see it coming." Not to worry too much. Hawking added that such a scenario would require a "particle accelerator that ... would be larger than Earth, and is unlikely to be funded in the present economic climate."

Dr. Don Lincoln is a senior physicist at Fermilab and does research using the Large Hadron Collider. He has written numerous books and produces a series of science education videos. He is the author of "The Large Hadron Collider: The Extraordinary Story of the Higgs Boson and Other Things That Will Blow Your Mind." Follow him on Facebook. The opinions expressed in this commentary are solely those of the author.

(CNN)Nearly a mile under the Black Hills of South Dakota sits a canister of the atomic element xenon, chilled cold enough to turn it to liquid. The canister is the Large Underground Xenon, or LUX, detector -- the most sensitive dark matter detector in the world. But the results of a new analysis by the LUX Collaboration has left scientists perplexed about a substance that has guided the formation of the stars and galaxies since the cosmos began: dark matter.

Since the 1930s, scientists have known that there was something unexplained about the heavens. Swiss astronomer Fritz Zwicky studied the Coma Cluster, a group of about a thousand galaxies, held together by their mutual gravitational interactions. There was only one problem: The galaxies were moving so fast that gravity shouldn't have been able to hold them together. The cluster should have been ripped apart. In the 1970s, astronomers Vera Rubin and her collaborator Kenneth Ford studied the rotation rates of individual galaxies and came to the same conclusion. There appeared to be no way the observed matter contained in galaxies would generate enough gravity to keep the stars locked in their stately orbits.

These observations, combined with many other independent lines of evidence, led scientists to consider several possible explanations. These explanations included the possibility that Newton's familiar laws of motion might be wrong, or that our understanding of gravity needed to be modified. Both these proposals, though, have been largely ruled out.

Another idea was that there was somehow invisible matter that was generating more gravity. Initial ideas centered on the possibility of black holes, brown dwarf stars or rogue planets roaming the cosmos, but those explanations have also been dismissed. Using a ruthless process of elimination worthy of Sherlock Holmes, astronomers have come to believe the explanation for all of the gravitational anomalies is that there must be some sort of new and undiscovered type of matter in the universe, which Zwicky in 1933 named "dunkle materie," or dark matter.

For decades, scientists have tried to work out the properties of dark matter and, while we don't know everything, we know a lot. From astronomical observations, we know there is five times more dark matter in the universe than all the "billions and billions" of stars and galaxies mentioned in Carl Sagan's oft-quoted phrase. We also know that dark matter cannot have electrical charge, otherwise it would interact with light and we would have seen it. In fact, by a process of elimination, we know that dark matter is not any known form of matter. It is something new. Of this, scientists are sure.

However, scientists are less sure about the details.

For decades now, the most popular theoretical idea was that dark matter was a WIMP, short for weakly interacting massive particle. A WIMP would have a mass in the range of 10 to perhaps 100 times heavier than the familiar proton. It was a particle like a heavy neutron (but definitely not a neutron), massive, electrically neutral, and stable on time scales long compared to the lifetime of the universe.

The WIMP was popular for two main reasons.

First, when cosmologists modeled the Big Bang and included WIMPs in the calculation, the WIMPs actively participated in the earliest phases of the birth of the universe but, as the universe expanded and cooled, the space between them grew large enough that they stopped interacting with one another. When scientists calculated how much mass should be tied up in the relic WIMPs, they found it was five times as much mass as ordinary matter, exactly the amount of dark matter seen by astronomers.

The second reason for the popularity of the WIMP idea is that it explained a mystery in particle physics. The recently discovered Higgs boson has a mass of about 130 times that of the proton. Theoretical considerations predicted a much larger mass, but if a WIMP exists, it is easy to reconcile the prediction and measurement. These two reasons account for the popularity of the WIMP idea and are called "the WIMP miracle."

The LUX measurement is simply the most recent and most powerful of a long line of searches for dark matter. They found no evidence for the existence of dark matter and were able to rule out a significant range of possible WIMP properties and masses.

Now this doesn't mean the WIMP idea is dead or that dark matter has been disproven. There remain WIMP masses that haven't been ruled out, and there exist other possible dark matter candidates, including objects called sterile neutrinos, which are possible cousins of the well-known neutrinos generated in nuclear reactors and in the sun. Another recurring proposed dark matter particle is the axion, suggested in the 1970s to explain mysteries in the asymmetry of subatomic processes. (Although neither sterile neutrinos, nor axions, have been observed).

Nobody knows what the final answer will be. That's why we do research. But there is no question that there is a mystery in the cosmos. Galaxies don't act as we expect. The LUX measurement is a powerful new bit of information for astronomers to consider and has added to the general confusion, forcing scientists to take another look at ideas other than WIMPs.

All this reminds me of the old Buffalo Springfield song: "There's something happening here. What it is ain't exactly clear ..."

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JEFF BEZOS JUST UNVEILED HIS NEW ROCKET. AND IT'S A MONSTER.

By [Christian Davenport](#) September 12

<https://www.washingtonpost.com/news/the-switch/wp/2016/09/12/jeff-bezos-just-unveiled-his-new-rocket-and-its-a-monster/>



Jeff Bezos' Blue Origin unveiled details of its New Glenn rocket with a chart showing how it compares to other orbital-class rockets. (Image courtesy of Blue Origin)

The New Shepard rocket that Blue Origin has been launching and landing is a fairly modest thing, 65 feet high, capable of getting just past the edge of space, some 60 miles up. But on Monday, Jeff Bezos' space company announced the design of its new, orbital rocket, a towering, more powerful behemoth designed to take people and commercial satellites to orbit.

In a newsletter, Bezos, who also owns The Washington Post, said the New Glenn rocket would come in two variants--a two stage and a three stage--that would be ready to fly by the end of the decade. Powered by seven BE-4 engines, they would have 3.85 million pounds of thrust at sea level. The rocket would be nearly as tall as the mighty, Apollo-era Saturn V that ferried the Apollo astronauts to the moon.

"Our vision is millions of people living and working in space, and New Glenn is a very important step," Bezos wrote.

The announcement comes at a critical time for the commercial space industry, which aims to reduce the cost of spaceflight and open it up to the masses. Last week, Richard Branson's Virgin Galactic, performed the first test flight of its new spacecraft, SpaceShipTwo, as it prepares to take paying customers into space. And Blue Origin, which also promises to move into the space tourism market, plans to fly a critical test flight of New Shepard, its suborbital rocket, next month.

Two weeks ago, the industry was jolted when SpaceX, the leader in the so-called New Space movement, suffered a catastrophic failure, when its Falcon 9 rocket ignited while on a Cape Canaveral launch pad and blew up in a spectacular fireball. The company is grounded while investigators try to determine the cause of the explosion, and that could lead to a delay of a launch of its new massive rocket, the Falcon Heavy.

Like the reusable New Shepard, the New Glenn's first stage would also be capable of boosting its payload into space, then flying back to the Earth for a soft landing. Bezos has said that being able to reuse rockets, instead of discarding them after each use as has traditionally been the case, is a key step toward lowering the cost of space travel. SpaceX, founded by Elon Musk, has already landed several orbital-class first stages on land or on ships at sea.

In the statement, Bezos wrote that the company's mascot is a tortoise, a symbol from the fable the Tortoise and the Hare. Its motto is "Gradatim Ferociter" – Latin for "step by step, ferociously," he wrote. "We believe 'slow is smooth and smooth is fast.' In the long run, deliberate and methodical wins the day, and you do things quickest by never skipping steps," he wrote.

Bezos said the company plans to launch the New Glenn rocket from Cape Canaveral's Launch Complex 36, which it is refurbishing.

The naming for Blue Origin's rockets is a nod for the 60s-era Space Age, a time that Bezos has said has had a profound influence on him. New Shepard was named for Alan Shepard, who became the first American in space in 1961. A year later, NASA astronaut John Glenn pushed the boundary even further when he became the first American in orbit, circling the globe three times.

Then in 1969, Neil Armstrong became the first man to walk on the moon, which Bezos said would inspire his next venture.

While getting to orbit is a key step, he said it won't be the company's last: "Up next on our drawing board: New Armstrong. But that's a story for the future."

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From: "Jim Woolsey" Jimwoolsey@aol.com

VIDEO: Gowdy: Hillary 'Demonstrably Wrong' That Benghazi Committee Found Nothing

by [TRENT BAKER](#) 11 Sep 2016

<http://www.breitbart.com/video/2016/09/11/gowdy-hillary-demonstrably-wrong-that-benghazi-committee-found-nothing/>

Rep. Trey Gowdy (R-SC) said Sunday on Fox News Channel's "Special Report" that Democratic presidential nominee and former Secretary of State Hillary Clinton is "demonstrably wrong" when she says that the Benghazi Committee found nothing in the investigation.

"Well, she's just demonstrably wrong. The previous committees were wrong about who rescued us. The previous committees never bothered to look at why not a single wheel was turning towards our folks in Benghazi during the attack. The [Accountability Review Board] didn't look at the Department of Defense. The notion that the ARB somehow unlocked all of the mysteries of Benghazi is just ..."

Gowdy later added that it is "without contradiction" that the committee found new information, which he said he knows does not fit Clinton's political agenda.

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ABSOLUTELY & TOTALLY POLITICALLY INCORRECT & AS FAR TO THE CENTER AS YOU CAN GO!

From: "Jim Woolsey" Jimwoolsey@aol.com

Denial of the right to keep and bear arms is the human rights violation that makes all other human rights violations possible.

-- TJ Mason

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I HONESTLY DO NOT KNOW WHERE TO PUT THIS ONE. IT IS FUNNY BUT IT IS ALSO HAS THE RING OF FUTURE TRUTH TO IT BASED ON STUFF I HAVE BEEN READING FOR THE PAST 4 OR 5 YEARS. I'LL LET YOU DECIDE WHAT YOU THINK AND I WOULD LOVE TO HEAR BACK FROM YOU ON THIS ONE.

Future USN Officer Report

I have lost confidence in Captain Smith's ability to command & relieved him of his duties this morning. My lack of confidence stems from:

1. His lack of enthusiasm at a recent Gay Pride ceremony.
2. His failure to blame recent severe weather at his installation on global weather change. Instead, his focus was on the emergency response to keep the facility mission capable.

3. His regular attendance at Christian religious services at the installation Chapel with his wife & two children. His continual display of a traditional family in conservative attire is offensive to many non traditional families.

4. CAPT Smith's wife does not work & volunteers for various traditional charities. There were perceptions that her welcome of male spouses to the Officer's Spouse's Club were not sufficiently sincere & constituted micro aggression.

5. CAPT Smith keeps four personal weapons at the installation armory. One is an AR-15. He regularly checks out his 9 mm pistol to shoot at an off base range during off duty hours. CAPT Smith is well known at this civilian range which is frequented by retired & former military gun fanatics.

6. CAPT Smith's children intimidate other less privileged children by being honor students & athletes. Both have expressed interest in attending reactionary, conservative schools like BYU, Liberty University, Hillsdale College, Texas A&M University, & Gonzaga. Both the son & daughter participated in Scouting & the son was an Eagle Scout.

7. CAPT Smith drives a Ford 150 pick up truck. He has no bumper stickers that support any POTUS initiatives to make the military a more inclusive environment for those previously oppressed & marginalized. His wife drives a Chevy Suburban which also has no bumper stickers. Neither vehicle is supportive of DoD alternate fuel objectives.

8. CAPT Smith plays golf on Sunday afternoons. This caused him to miss the Transgender Bake Sale. His participation in a game associated with privilege, racism, & sexism has been noted by many in the command.

9. CAPT Smith participated in the installation HQ Physical Fitness Test where his superb level of fitness intimidated other members of his command. Some female participants felt that his efforts were designed to humiliate them. While he did cheer on finishers, he did not jog to the finish line with late finishers & had already departed for his office before the last runners completed the run.

10. CAPT Smith has failed to champion female & minority team members when they achieve significant breakthroughs. For example the Pediatrics Dept at the installation hospital is headed by a contracted female (Pakistani) Muslim Doctor. CAPT Smith failed to champion this effort, nor was it featured in the Base Newspaper. The Installation Master At Arms recently promoted a gay man to Chief. He is the first gay Master at Arms to be promoted to Chief at this installation. This achievement was not recognized. During CAPT Smith's time in command a female civilian employee became the Deputy at the base wastewater facility. She is the first woman to hold this position which CAPT Smith, despite effusive praise, failed to mention at her promotion ceremony.

11. CAPT Smith has failed to publicly speak out in support of women in combat.

12. CAPT Smith has a hunting trophy in his office (Elk Antlers). Members of his command find this insulting & a micro-aggression. They are therefore very uncomfortable in his office.

13. CAPT Smith has breakfast in the Dining Facility weekly. It has been noted that he has eggs, bacon, ham, a doughnut, & black coffee. His choices are not a good nutritional example to the sailors.

14. Members of CAPT Smith's command who wish to have a same sex marriage must travel out of State (55 miles) to do so. He has never welcomed them back with a public acknowledgement of their commitment to each other, nor has he taken advantage of that opportunity to condemn local state laws.

CAPT Smith's gross failures to champion issues that are important to the POTUS, SECDEF & SECNAV make him unsuitable to command. I have lost all confidence in his ability to command.

Admiral Bruce Jones, Commanding

IN HUMOR THERE IS SOMETIMES TRUTH. UT

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From: A Friend

MASSACHUSETTS FORCES LGBT 'ACCOMMODATION' RULES ON CHURCHES

BY TYLER O'NEIL SEPTEMBER 9, 2016

<https://pjmedia.com/faith/2016/09/09/massachusetts-forces-lgbt-accommodation-rules-on-churches/>



Image via Shutterstock, a map of Massachusetts colored in like a rainbow flag.

On October 1, 2016, the nation's strictest LGBT non-discrimination laws will come into effect in Massachusetts. According to the "Gender Identity Guidance" released by the

Massachusetts Commission Against Discrimination (MCAD) last week, even churches must refer to transgender individuals by their chosen "gender identity," ignoring their biological sex. This effectively means churches must acknowledge transgender ideology or practice their doctrine on human sexuality in secret — putting Christianity in the closet.

The guidance specifically mentions churches as falling under the "public accommodation" restrictions against "discrimination" on the basis of gender identity: "Even a church could be seen as a place of public accommodation if it holds a secular event, such as a spaghetti supper, that is open to the general public," the MCAD explained.

The restrictions are massive. Any "public accommodation" must allow patrons to use men's or women's restrooms — and locker rooms and changing rooms— "consistent with their gender identity." Such places must also "use names, pronouns, and gender-related terms appropriate to employee's stated gender identity in communications with employee and with others."

These are not small asks for churches, Christian schools, and other organizations which operate on Christian principles.

Genesis 1 explicitly states that God created human beings in his own image, "male and female he created them." Jesus Christ also quotes this passage in a way he does not quote the rest of Genesis 1. In Mark 10:6, he answers the Pharisees on divorce saying, "from the beginning of creation, 'God made them male and female,'" and in Matthew 19:4, he says the same: "Have you not read that from the beginning the Creator 'made them male and female.'"

In Christian theology, biological sex is a gift from God, meant for marriage, which itself is a weak symbol of the love between Christ and his church (Ephesians 5:31). Human sexuality is not a mistake to be corrected, and when God created men and women, he declared creation "very good," as opposed to merely "good" before their creation (Genesis 1:31).

Transgender ideology flatly denies all of this. Contrary to many scientific studies (pediatricians have even called youth transgenderism "child abuse"), it argues that people who identify with the gender opposite their biological sex should be encouraged to do so, even to the extent of undergoing "gender re-affirming surgery." This is a fancy name for bodily mutilation which causes even more confusion than before. But don't listen to me, take it from the horror stories of these de-transitioning women.

Now this ideology is entrenched in Massachusetts law, which "defines 'gender identity' as 'a person's gender-related identity, appearance or behavior, whether or not that gender-related identity, appearance or behavior is different from that traditionally associated with the person's physiology or assigned sex at birth.'" The law entrenches gender identity as a protected status, and extends protection to all public accommodations, including churches.

ISN'T THERE SOMETHING IN THE CONSTITUTION THAT KIND OF TALKS TO THIS LAW? SOMETHING LIKE THE 1ST AMMENDMENT? UT

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ABSOLUTELY & TOTALLY POLITICALLY INCORRECT & AS FAR TO THE LEFT AS YOU CAN GO!

From: "Tim Bolgeo" tbolgeo@comcast.net

9/11 MEMORIAL TRASHED, FLAGS THROWN IN GARBAGE AT OBAMA'S COLLEGE

by [BEN KEW](#), 12 Sep 2016 Los Angeles

<http://www.breitbart.com/tech/2016/09/12/911-memorial-trashed-flags-flags-thrown-in-garbage-at-la-arts-college/>



Occidental College Republicans/Facebook

A memorial produced by College Republicans at Occidental College — Barack Obama's alma mater — to pay tribute to the lives lost in the 9/11 terrorist attacks was vandalised on Saturday night, with the vandals also putting up posters attempting to shame the victims of the tragedy.

The memorial was at Occidental College, a Liberal Arts school in Los Angeles, and was an arrangement of 2,997 American flags, one for each of the lives lost in the attack.

However, the group [revealed on Saturday](#) that the memorial had been destroyed, as they discovered “vandals crushed, snapped, and threw in the garbage every single flag.”

“Today is meant to be a day of respect and remembrance for all the victims and heroes of 9/11. Last night, our club sponsored a memorial for the 2,997 who died exactly 15 years ago,” they said. “Students of all backgrounds came out and planted 2,997 American flags in our quad here at Occidental.”

By the time the vandals were finished, “not one flag was left in the ground,” the group said.

The protestors also “put up posters and flyers up that shamed the victims of 9/11,” and came back for a second round of vandalism after the group rebuilt the memorial.

Members of the Republican group had stood by the flags until the early hours of the morning, but woke up the next day to find that the vandals had returned to remove a further 50 flags.

“When we confronted them, those cowards got away as fast as they possibly could,” the group added.

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From: “Jim Woolsey” Jimwoolsey@aol.com

Leah #OurREVOLUTION?@LeahR77

POOR CNN's Brook STUNNED As Fact Checkers Confirm Clinton Phones Destroyed W Hammers #TuesdayMotivation #MAGA

(<https://twitter.com/LeahR77/status/773219825917235200?s=02>)

If you would like to unsubscribe From: THE REVENGE OF HUMP DAY, please send an email message to Tim Bolgeo tbolgeo@comcast.net and say, "QUIT SENDING ME THIS STUPID RAG!"
