

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

I have been thinking about my TV watching habits and have to admit that I have an number of guilty pleasures. The first of them is "The Librarians". I have loved this series especially since Noah Wiley started it years ago with the first tree movies. It's just plain fun adventure trash that I enjoy. When TBS started the series with Rebecca Romijn, I was hooked again. Hey, it's family fun and John Larroquette has always been one of my favorite comedians ever since the days of 'Night Court'. And it doesn't hurt that Noah Wiley occasionally stops by for a visit.

My next group of guilty pleasures on TV is the DC Super Heroes Universe. I am a fan of 'The Flash', 'Supergirl' and 'DC Legends of Tomorrow'. 'Arrow' is OK, but I am not the greatest supporter of it's nitty gritty feel. Although I will admit that Felicity is hot. ;^)

Another guilty please is SIFI's 'Z Nation'. It is campy and just plain fun. And the type of show you can't take seriously.

'Mars' on the NatGeo channel is pretty good to and helps me to keep my geek on.

But one of the ones I really enjoy is 'Alaska the Last Frontier'. Don't ask me why, but I guess I enjoy watching a family pull together and make a go out of it through hardship. But, I have no doubt that life is not for me. Just the idea of doing without modern plumbing today is a turn off.

That the last program that SHE WHO MUST BE OBEYED and I love to watch together is on PBS. The 'Antiques Road Show' as always fascinated me about the special treasures people have in their homes and how little they know about it. It also floors me when people find out their stuff is fake, worth nothing, or worth a fortune. Just the looks on their face are priceless.

So, what is your guilty pleasure on TV? I would love to hear back from you on it.

So on that "Questioning 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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JOHN GLENN | 1921-2016

From: "Tim Bolgeo" tbolgeo@epbfi.com

JOHN GLENN, AMERICAN HERO, AVIATION ICON AND FORMER U.S. SENATOR, DIES AT 95

By Joe Hallett, The Columbus Dispatch, Thursday December 8, 2016 5:35 PM
<http://www.dispatch.com/content/stories/local/2016/12/john-glenn/john-glenn.html>

His legend is otherworldly and now, at age 95, so is John Glenn.



AP FILE PHOTOFormer Sen. John Glenn talks via satellite with the astronauts on the International Space Station in February 2012. In the background is a photo of him in 1962 as he prepared to pilot Friendship 7 around the Earth.

An authentic hero and genuine American icon, Glenn died this afternoon surrounded by family at the Ohio State University Wexner Medical Center in Columbus after a remarkably healthy life spent almost from the cradle with Annie, his beloved wife of 73 years, who survives.

He, along with fellow aviators Orville and Wilbur Wright and moon-walker Neil Armstrong, truly made Ohio first in flight.

"John Glenn is, and always will be, Ohio's ultimate hometown hero, and his passing today is an occasion for all of us to grieve," said Ohio Gov. John R. Kasich. "As we bow our heads and share our grief with his beloved wife, Annie, we must also turn to the skies, to salute his remarkable journeys and his long years of service to our state and nation.

"Though he soared deep into space and to the heights of Capitol Hill, his heart never strayed from his steadfast Ohio roots. Godspeed, John Glenn!" Kasich said.

Glenn's body will lie in state at the Ohio Statehouse for a day, and a public memorial service will be held at Ohio State University's Mershon Auditorium. He will be buried near Washington, D.C., at Arlington National Cemetery in a private service. Dates and times for the public events will be announced soon.

Glenn lived a Ripley's Believe It or Not! life. As a Marine Corps pilot, he broke the transcontinental flight speed record before being the first American to orbit the Earth in 1962 and, 36 years later at age 77 in 1998, becoming the oldest man in space as a member of the seven-astronaut crew of the shuttle Discovery.

He made that flight in his 24th and final year in the U.S. Senate, from whence he launched a short-lived bid for the Democratic presidential nomination in 1984. Along the way, Glenn became moderately wealthy from an early investment in Holiday Inns near Disney World and a stint as president of Royal Crown International.

In one of his last public appearances, Glenn, with Annie by his side, sat in the Port Columbus airport terminal on June 28 as officials renamed it in his honor -- the John Glenn Columbus International Airport.

In addition to his world-famous career in aviation and aerospace, Glenn had a relationship with that particular airport that is likely second to none. Glenn, who turned 8 the month that Port Columbus opened in July 1929, recalled asking his parents to stop at the airport so he could watch the planes come and go while he was growing up in New Concord, 70 miles east of Columbus.

Glenn recalled "many teary departures and reunions" at the airport's original terminal on Fifth Avenue during his time as a military aviator during World War II. He and his wife Annie, who had been married 73 years, later kept a small Beechcraft plane at Lane Aviation on the airport grounds for many years, and he only gave up flying his own plane at age 90.

Privately, this man who had been honored by presidents and immortalized in history books and movies, told friends that for an aviator, seeing his name on the Columbus airport was the highest honor he could imagine.

Glenn, who lived with Annie for the past decade in a Downtown Columbus condo, dedicated his life to public service, devoting many of his later years to Ohio State University, which in 2005 converted the century-old Page Hall into the John Glenn Institute for Public Service and Public Policy and the School of Public Policy and Management. It is now the John Glenn College of Public Affairs.

"He was very proud of the Glenn College," said Jack Kessler, chairman of the New Albany Company, a former Ohio State trustee and longtime friend of the Glenns. "It's a legacy that will carry on his mission toward good public policy."

While Glenn held office as a Democrat, he wasn't partisan, Kessler said. "I never heard him say a bad thing about anyone. Some of his best friends were Republicans, and he could work with anyone."

Surrounded by dozens of students striving to earn master's and doctoral degrees from the institute, Glenn said at its dedication, "If we inspire a few young people into careers of public service and politics, this will all be worth it."

Remarkably physically fit and energetic, Glenn only began encountering health problems in 2013 when he had a pacemaker implanted and missed some public appearances due to vertigo..

In 2011, he and Annie both had knee-replacement surgery, which kept them from repeating a planned road trip like the impromptu 8,400-mile journey throughout the West they took a year earlier in their Cadillac when she was 89 and he 88.

Raised in New Concord, where he and Annie both went to Muskingum College, Glenn aspired to be a medical doctor, but World War II sidetracked that ambition and launched a life of uncommon achievement and bravery. At age 8, he took his first ride in an open-cockpit airplane and ended up virtually living life in the sky, continuing to fly until 2011 when he put up for sale the twin-engine Beech Baron he had owned since 1981.

“I miss it,” Glenn told The Dispatch in 2012 “I never got tired of flying.”

Glenn flew 149 combat missions in World War II and Korea, where his wingman and eventual lifelong friend was baseball legend Ted Williams. In Korea, Glenn earned the nickname “Old Magnet Ass” due to his skill in landing his airplane under any condition, even after it was riddled with bullets and had blown tires.

Born not far from New Concord in Cambridge on July 18, 1921, Glenn and his parents moved about 10 miles west in 1923 to New Concord. His father was a plumber and his mother a teacher who joined a social group called the Twice 5 Club, which got together once a month. Another couple in the club had a daughter, Annie Castor, who was a year older than Glenn, and the two toddlers often shared a playpen while their parents played cards.

Their relationship evolved into a quintessential American love story, with the spark between them first igniting when they were in junior high school.

“To write a story about either of them, if it doesn’t include the other, then it just isn’t complete,” their daughter, Lyn, told The Dispatch in 2007. She and her brother, David, a California doctor, survive.

John and Annie were married on April 6, 1943, and the next January, as they held each other searching for something to say as he prepared to ship out for combat in the South Pacific, John said, “I’m just going down to the corner store to get a pack of gum.”

From that day on, she kept a gum wrapper in her purse.

To many with disabilities, Annie became a heroine in her own right as she struggled to conquer near-debilitating stuttering.

For more than half of her life, she counted on others to speak for her, publicly uncommunicative in a world that demanded more from her as her husband’s fame ascended.

Through it all, John stood by Annie, who, in 1973, underwent an innovative treatment regimen that dramatically improved her speech to the extent that she was delivering speeches on behalf of her husband's 1984 presidential candidacy.

Glenn, who received his pilot's license in 1941, was at home in the sky, soon evident after the Japanese attacked Pearl Harbor and he left Muskingum College to enlist in the Marine Air Corps. In the Pacific, he flew 59 missions over the Marshall Islands.

After being stationed in China and Guam when World War II ended, Glenn was a flight instructor in Texas before being transferred to Virginia. When the Korean War broke out, Glenn applied for combat duty, and flew 90 missions. Overall, he received the Distinguished Flying Cross six times and was awarded the Air Medal with 18 clusters.

After returning from Korea, Glenn became a test pilot. He set a coast-to-coast speed record in 1957, piloting a Navy jet fighter from California to New York in 3 hours and 23 minutes. In 1959, he was selected as one of the country's first seven astronauts, a historic group immortalized in Tom Wolfe's 1979 book *The Right Stuff*, the basis for a movie of the same name.

The United States was enveloped in a cold war with the Soviet Union, and after a series of U.S. rockets had blown up, the American psyche was dealt a blow in 1961 when Russian Yuri Gagarin became the first human in space and the first to orbit Earth.

The third American in space after suborbital missions by Alan Shepard and Gus Grissom, Glenn finally equaled Gagarin's achievement by blasting off on Feb. 20, 1962, after weather and mechanical problems caused his mission to be postponed 10 times.

Crammed into the 7-foot-wide Friendship 7 space capsule atop a 100-foot-tall Atlas rocket loaded with 250,000 pounds of explosive fuel, Glenn launched 160-miles into space, orbiting the world three times at 17,500 miles per hour.

Reflecting many years later, Glenn would say that computers were the greatest technological achievement during his life, but there were none on Friendship 7, and deep into the flight he had to take manual control of the capsule when systems malfunctioned.

As the capsule descended for a watery landing, mission control feared that its heat shield was peeling off. Well past four hours into the flight, Glenn was told of the problem and knew he could be burned alive in an instant (Annie was notified to expect the worst), but the astronaut stayed focused even as fiery pieces of his spacecraft flew by his window.

"You didn't really have time to think about it," he told students at COSI Columbus 45 years later. "Long before you actually got to the flight itself, you sort of made peace with mortality."

Safely splashing in the Atlantic Ocean 800 miles southeast of Bermuda, Glenn's historic flight invigorated the nation and catapulted him into American lore. He addressed a joint session of Congress and rode in a convertible with Annie as 4 million people cheered him in a Manhattan ticker-tape parade.

In 2007, 45 years after his historic orbital mission, Glenn told a Columbus audience how much he longed to return to space right away, only to learn years after leaving the space

program that President John F. Kennedy, fearing the worst, secretly had barred him from other flights to spare the country the potential loss of a national hero.

Glenn admitted in that speech that he was jealous in 1969 when fellow Ohioan Armstrong became the first human to set foot on the moon.

In 1964, only two years after his famous flight on Friendship 7, Glenn ran in the Democratic Senate primary against incumbent Sen. Stephen M. Young. But only six weeks after announcing his candidacy, Glenn dropped out of the race after damaging his inner ear in a bathroom fall, an injury that caused severe dizziness and balance problems. He recovered eight months later.

Glenn ran for the Senate again in 1970, but lost in the primary to Howard M. Metzenbaum, whom he defeated in a rematch four years later. He handily won election that fall over Cleveland Mayor Ralph Perk and won re-election by huge margins in 1980 and 1986.

After winning re-election in 1980 by the largest margin in Ohio history, Glenn ran for president in 1984. He was seen as the leading challenger to former Vice President Walter F. Mondale for the Democratic nomination, and was the candidate many considered to have the best chance of defeating President Ronald Reagan in the general election.

But plagued by a disorganized campaign and with a centrist theme ill-suited to a liberal-dominated Democratic primary process, Glenn finished back in the pack in the important Iowa caucuses and New Hampshire primary. He borrowed \$2 million to compete in the Southern primaries, but he didn't win a state and dropped out of the race.

The debt remaining from that race, which rose to more than \$3 million, became a campaign issue for Glenn in subsequent Senate races and nagged him until 2006 when the Federal Elections Commission finally allowed him to close the books on it after years of chipping away.

The third term of his four in the Senate was dominated by a Senate investigation into allegations that he improperly interceded with S&L regulators on behalf of Charles Keating, who had raised or donated \$242,000 to Glenn's political committees. Glenn personally spent more than \$500,000 to defend his honor, and the Senate Ethics Committee cleared him of wrongdoing.

"I spend half a million dollars on my defense, and I wouldn't pull back a penny of it," Glenn said then. "The reason I felt so strongly about it was that it involved my honor, and if I had to sell everything I had and mortgaged the house, I would have done everything I could to see the truth come out."

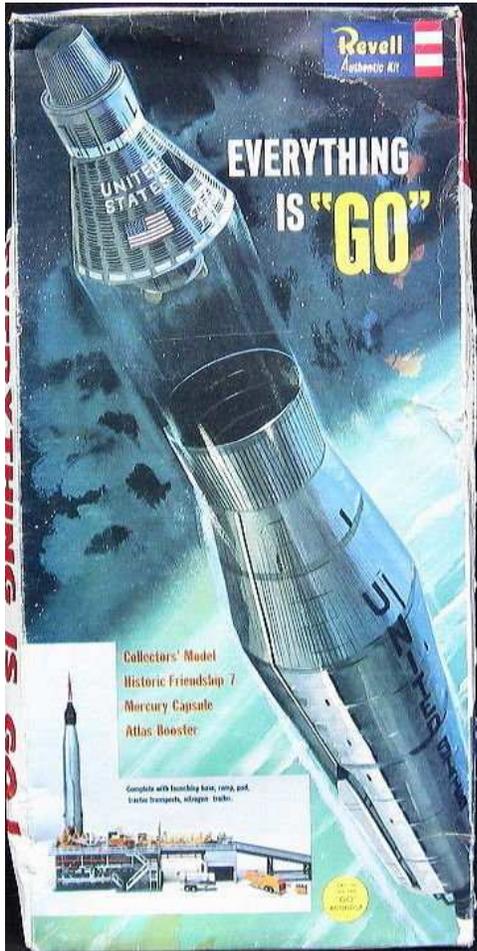
In his final year as a U.S. senator in 1998, Glenn was reborn as an astronaut. At 77, he orbited the Earth with six astronauts aboard shuttle Discovery, once again rendering his body and mind to the study of science, providing insight into how the oldest man ever launched into space held up. Glenn, remarkably fit, became an inspiration once again to mankind.

The events of John Glenn's life, and his footprint on history, are chronicled in countless books and beyond. The Friendship 7 capsule is in the Smithsonian, his papers and

memorabilia are archived at Ohio State, and his life with Annie — and much more — are displayed at the Glenn Historic Site in New Concord.

Joe Hallett is a retired reporter and senior editor of The Dispatch.

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BRIEF MEMORIES OF JOHN GLENN

From: "Michael A. Banks" mynewbook@aol.com

I was fortunate to have met John Glenn just once, when he was campaigning in the early 1970s. Very nice man, he autographed a photo for me. Twenty years later, I contacted his office about an extreme problem with the Federal bureaucracy; the problem was resolved in two days flat!

Like so many others, I watched the launch of Friendship 7 on B&W television in my school classroom. And I built the Revell plastic model shown here (which disappeared years ago).

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From: "Jim Woosley" Jimwoosley@aol.com

THE ABANDONED FRONTIER

by Mark Steyn, Topical Take, December 9, 2016
<http://www.steynonline.com/7627/the-abandoned-frontier>

John Glenn returns to space at the age of 76

John Glenn was a fighter pilot in the Forties, test pilot in the Fifties, space pilot in the Sixties. It was a long life, and a full life, so much so that his quarter-century as a United States senator is by far the least interesting part of his résumé, except insofar as, just before his retirement from electoral politics, he returned to NASA and became, at 76, the oldest man in space. Tom



Wolfe, author of the book that credited Glenn and his team with The Right Stuff, called him "the last true national hero America has ever had" - which, if correct, is a melancholy distinction, and a poor reflection on those who came after.

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AN INTERPRETATION OF THE AMERICAN ANTHEM THAT YOU WILL LOVE

From: "Kay Bolgeo" ronkaybo@bellsouth.net

You have to watch this, it is AWESOME

This is only a minute long. Please watch to the end. Just makes you feel really good!

<https://t.co/wbljQ0ix4X>

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VIDEO: MUPPETS 'PIGS IN SPACE' REBOOT HAS PIG GUTS, HUSSIES, AND ALIEN HUMPING

From: "Tim Bolgeo" tbolgeo@epbfi.com

Beth Elderkin, December 10, 2016

<http://io9.gizmodo.com/muppets-pigs-in-space-reboot-has-pig-guts-hussies-and-1789955087>

Credit:
Screengrab
via YouTube

Just in case a show that gave Fozzie an inter-species relationship, mocked Miss Piggy for her weight and gave Animal side chicks wasn't adult enough, The



Muppets are back in a recreation of one of the most messed-up moments in science fiction movie history. Yippee?

The Muppet Show's iconic space opera "Pigs in Space" is now on YouTube with the first episode in about 20 years, a parody of Alien called "Guess Who's Coming to Dinner." Spoilers, it's an alien.

Specifically, Pepé the King Prawn, who comes bursting out of Captain Link Hogthrob's stomach in a blaze of pig guts glory. Let me repeat that: A Muppet prawn alien bursts out of a pig's stomach. I've seen some things...but nothing prepared me for the image of Pepé circling around in a Muppet's entrails like it was the swimming pool from Poltergeist. Hey, that's kind of like how the actors of Alien weren't prepared for how Ridley Scott scarred them psychologically.

The short episode also features a squid alien face-humping Captain Link, which is clearly a nod to the face-hugging alien in Alien. But again, no part of me wanted to watch a sentient alien hump Link's face while telling the doctor that impregnating the captain's stomach with his prawn spawn is "none of your business." But hey, at least the captain calls Miss Piggy a hussy, after she's introduced in the credits as glutenous. No shaming is too much shaming for Miss Piggy, I guess.

Don't get me wrong, it's awesome to see "Pigs in Space" again. The show was one of my favorite parts of The Muppet Show, especially the episodes where they mocked gender stereotypes in science fiction. In the original series, Captain Link continually belittled Miss Piggy despite her being a capable member of the crew, which reminded me a lot of early sci-fi shows and films. Too bad the latest reboot has basically regressed to calling her a fat slut.

Muppet Treasure Island director Kirk R Thatcher co-wrote and directed this and at least three other episodes of the "Pigs in Space" miniseries at YouTube Space LA last year. The next one will be released later this year, and it's a parody of Gravity starring Sandra Bullock and George Clooney.

[Nerdist]

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Re: Cold Fusion Article

From: "Jim Woosley" Jimwoosley@aol.com

Conley (Powell) and I met Randell Mills twenty years ago when he attempted to pitch his "technology" to Teledyne for investment money.

In twenty years he appears to be no closer to a working model, though he's taken ...er, taken in... a lot of investors...er, investment money.

I call "scam."

PS - this doesn't mean that low energy nuclear reactions don't exist (LENR being a completely different, and physically credible, mechanism than Mill's outlandish BLP). However, all of the technically credible material I've seen on LENR (excepting Steve Jones' early paper suggesting that volcanic helium 3 emissions are due to fusion of sear water

compressed during subduction) has demonstrates reaction rates that are consistent with the low-energy limits of the cross sections given at least one atom which is inertially trapped (as in a lattice of a solid material).

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From: "Conley Powell" <cpowell46@gmail.com>

It beats me how Mills has succeeded in swindling so many people out of so much money over such a long period of time without ever producing anything at all.

I must disagree that there is anything to "low energy nuclear reactions", better known as "cold fusion". For Pons and Fleischmann, it started out with incompetence and rapidly evolved into fraud. Today, more than 27 years later, some of the cold fusioneers are incompetent and some are frauds, and none of them have ever produced anything at all. And I know whereof I speak--I never miss an issue of Infinite Energy magazine!

<S>A<M>E<<*><S>UJ<E>C<T>

Both Jim and I found the same article in Scientific American about these low energy reactions and we thought you might want to read more about it. It is an interesting field of study whether you believe in "Cold Fusion" or not. There is something to this but no one has really defined it yet. UT

IT'S NOT COLD FUSION,...BUT IT'S SOMETHING

An experiment that earned Stanley Pons and Martin Fleischmann widespread ridicule in 1989 wasn't necessarily bogus

By Steven B. Krivit, Michael J. Ravnitzky on December 7, 2016

https://blogs.scientificamerican.com/guest-blog/its-not-cold-fusion-but-its-something/?WT.mc_id=SA_SPC_20161208

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From: "Mike Waldrip" waldripk@gmail.com

MUSINGS OF AN ELDERLY GENTLEMAN

The speed with which a woman says, "Nothing" when asked what's wrong, is inversely proportional to the severity of the shit storm that's coming.

The location of your mailbox shows you how far away from your house you can be in a robe, before you start looking like a mental patient.

My therapist said that my narcissism causes me to misread social situations. I'm pretty sure she was hitting on me.

My 60-year kindergarten reunion is coming up soon and I'm worried about the 195 pounds I've gained.

I always wondered what the job application is like at Hooters. Do they just give you a big bra and say, "Here, fill this out"?

Denny's has a slogan: 'If it's your birthday, the meal is on us.' If you're in Denny's and it's your birthday, your life sucks!

I can't understand why women are okay that J.C. Penney has an older women's clothing line named "Sag Harbor."

What is it about a car that makes people think we can't see them pick their nose?

<J>~<O>~<K>~<E>~<S>

This has been around a few times but I haven't memorized it yet.

BEER

Open a beer ... read the following quotes about beer and enjoy...

"Sometimes when I reflect on all the beer I drink, I feel ashamed. Then I look into the glass and think about the workers in the brewery and all of their hopes and dreams. If I didn't drink this beer, they might be out of work and their dreams would be shattered. I think, "It is better to drink this beer and let their dreams come true than be selfish and worry about my liver."

- Babe Ruth -

"If all you had to look forward to was sleeping with Lady Bird you'd stay drunk too."

- Lyndon B. Johnson -

"When I read about the evils of drinking, I gave up reading."

- Paul Horning -

"24 hours in a day, 24 beers in a case. Coincidence? I think not."

- H. L. Mencken -

"When we drink, we get drunk. When we get drunk, we fall asleep. When we fall asleep, we commit no sin.

When we commit no sin, we go to heaven. So, let's all get drunk and go to heaven!"

- George Bernard Shaw -

"Beer is proof that God loves us and wants us to be happy."

- Benjamin Franklin -

"Without question, the greatest invention in the history of mankind is beer.

Oh, I grant you that the wheel was also a fine invention, but the wheel does not go nearly as well with pizza."

- Dave Barry -

Beer: Helping ugly people have sex since 3000 B.C.!

- W. C. Fields -

Remember "I" before "E," except in Budweiser.

- Professor Irwin Corey -

To some it's a six-pack, to me it's a Support Group. Salvation in a can!

- Leo Durocher -

One night at Cheers (TV Sitcom), Cliff Clavin said to his buddy, Norm Peterson:

"Well, ya see, Norm, it's like this... A herd of buffalo can only move as fast as the slowest buffalo. And when the herd is hunted, it is the slowest and weakest ones at the back that are killed first. This natural selection is good for the herd as a whole, because the general speed and health of the whole group keeps improving by the regular killing of the weakest members! In much the same way, the human brain can only operate as fast as the slowest brain cells. Excessive intake of alcohol, as we know, kills brain cells. But naturally, it attacks the slowest and weakest brain cells first. In this way, regular consumption of beer eliminates the weaker brain cells, making the brain a faster and more efficient machine! That's why you always feel smarter after a few beers."

<J>~<O>~<K>~<E>~<S>

MOVING TO DETROIT

On a flight getting ready to depart for Detroit, Jack was sitting on the plane when a guy took the seat beside him. The guy was an emotional wreck, pale, hands shaking, moaning in fear. "What's the matter?" Jack asked.

"I've been transferred to Detroit, there's crazy people there. They've got lots of shootings, gangs, race riots, drugs, poor public schools, and the highest crime rate."

Jack replied, "I've lived in Detroit all my life. It's not as bad as the media says. Find a nice home, go to work, mind your own business, enroll your kids in a nice private school. It's as safe a place as anywhere in the world."

The guy relaxed and stopped shaking and said, "Oh, thank you.

I've been worried to death. But if you live there and say it's OK, I'll take your word for it. What do you do for a living?"

"Me?" said Jack. "I'm a tail gunner on a Budweiser truck!"

<J>~<O>~<K>~<E>~<S>

GRANNY'S SLEEPING PILLS

A doctor that had been seeing an 80-year-old woman for most of her life finally retired. At her next checkup, the new doctor told her to bring a list of all the medicines that had been

prescribed for her. As the doctor was looking through these his eyes grew wide as he realized Grandma had a prescription for birth control pills.

"Mrs. Smith, do you realize these are birth control pills?"

"Yes, they help me sleep at night."

"Mrs. Smith, I assure you there is absolutely nothing in these that could possibly help you sleep!"

She reached out and patted the young doctor's knee and said, "Yes, dear, I know that. But every morning, I grind one up and mix it in the glass of orange juice that my 16-year-old Granddaughter drinks. And believe me it definitely helps me sleep at night."

You gotta love Grandmas!

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From: "Ray Beloate" beerman@rittermail.com

BRAIN TEASING RIDDLES ... an oldie

The 5 Riddles.....

THE ANSWERS ARE AT THE BOTTOM.

RIDDLE 5 IS AMAZING. IT SHARPENS THOSE GENES IN YOUR BRAIN....

1. A murderer is condemned to death. He has to choose between three rooms. The first is full of raging fires, the second is full of assassins with loaded guns and the third is full of lions that haven't eaten in 3 years.

Which room is safest for him?

- / -

2. A woman shoots her husband. Then she holds him under water for over 5 minutes. Finally, she hangs him. But 5 minutes later they both go out together and enjoy a wonderful dinner together. How can this be?

- / -

3. What is black when you buy it, red when you use it, and gray when you throw it away?

- / -

4. Can you name three consecutive days without using the words Wednesday, Friday, or Sunday?

- / -

5. This is an unusual paragraph. I'm curious as to just how quickly you can find out what is so unusual about it. It looks so ordinary and plain that you would think nothing was wrong

with it. In fact, nothing is wrong with it! It is highly unusual though. Study it and think about it, but you still may find nothing odd. But if you work at it a bit, you might find out.

Try to do so without any coaching!

THE ANSWERS TO ALL FIVE RIDDLES ARE BELOW:

Answers:

1. The third room. Lions that haven't eaten in three years are dead. That one was easy, right?
2. The woman was a photographer. She shot a picture of her husband, developed it, and hung it to dry (shot; held under water; and hung).
3. Charcoal, as used in barbecuing.
4. Three consecutive days are yesterday, today, and tomorrow!
5. The letter "e," the most common letter used in the English language, does not appear in the paragraph.

How did you do?

<J>~<O>~<K>~<E>~<S>

See if you can pass this test.



THE DECEMBER 14TH, 2016 EDITION OF THE REVENGE HUMPH DAY!

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The School of Psychology, University of Pennsylvania conducted a survey called "What really do you see?"

People were asked to focus their attention on this simple picture and then asked if they had noticed anything odd.

Now you also have a chance to test your skills and see if you can pass.....
Study the picture for 5 seconds. What did you notice?

Here are the Results of the Survey:

1. 100% of males failed this test. They were distracted by the woman's large bosom.
2. 100% of the females also failed this test. They were distracted by the wide choice of doughnuts.

The real answer (see below):

There's a mouse on one of the doughnuts.....now don't tell me you saw it. I won't believe you.

I FAILED. UT

<J>~<O>~<K>~<E>~<S>~<of>~<the>~<W>~<E>~<E>~<K>

From: "Mike Williamson" mzmadmike@gmail.com

WE THE PEOPLE ASK THE FEDERAL GOVERNMENT TO TAKE OR EXPLAIN A POSITION ON AN ISSUE OR POLICY:

The next major U.S. Navy Ship should be named "USS The Deplorables"

Created by D.S. on December 04, 2016

Sign This Petition - Needs 99,242 signatures by January 3, 2017 to get a response from the White House

758 SIGNED - 100,000 GOAL

To honor those citizens who rose up to defend America and The Constitution from the globalists.

<https://petitions.whitehouse.gov/petition/next-major-us-navy-ship-should-be-named-uss-deplorables>

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

YOU JUST CAN'T MAKE THIS STUFF UP!

From: "Tim Bolgeo" tbolgeo@epbfi.com

TIM ALLEN HAMMERS 'PRECIOUS SNOWFLAKES' OVER 'MICROAGGRESSIONS' ON 'LAST MAN STANDING' (VIDEO)

by JEROME HUDSON 6 Dec 2016, ABC

<http://www.breitbart.com/big-hollywood/2016/12/06/tim-allen-hammers-precious-snowflakes-microaggressions-last-man-standing/>



Baxter family patriarch Mike Baxter (Tim Allen) took aim at political correctness and microaggressions in the latest episode of ABC sitcom Last Man Standing, entitled “Precious Snowflake.”

The episode sees Mandy Baxter (Molly Ephraim) ask her father to deliver a speech at her business school’s graduation. The speech, however, must be approved by a school committee tasked with rooting out any offensive language, words commonly referred to by the PC police as “microaggressions.”

“Microaggressions?” Mike asks Mandy. “You mean, like, ‘midget warriors’?”

“No,” Mandy replies. “They’re objectionable words or phrases. For instance, ‘Midget warriors.’”

“I know what microaggressions are,” Mike says. “It’s the latest liberal attack at free speech. And a lot of fun if you do ’em right.”

Mandy takes Mike’s speech and flags phrases like “Ladies and Gentlemen” and America is the “land of opportunity” as offensive and unacceptable.

Mike, insistent on delivering a microaggression-inducing speech, reads it to his wife Vanessa (Nancy Travis).

“To quote future Nobel Prize winner Lee Greenwood, ‘I’m proud to be an American.’ Not just because I have the right to speak my mind or carry an awesome gun, but because it’s the land of opportunity,” Mike reads. “Some whiny babies might not think so, but in America, if you work hard, anyone can be successful.”

“The thought police are never gonna approve that speech,” Vanessa warns.

“You know who else wouldn’t approve the speech they want me to give? Me,” Mike replies.

“And God, who I’m also not allowed to mention, but I do!”

“Well, for the love of God, think about this before you send it in,” Vanessa advises him.

In the end, Mike doesn’t deliver his speech. Instead, NewsBusters notes, the speech is given by an immigrant from Pakistan who, Mike explains to Mandy, is what makes America great.

Allen noted in an interview last month that while his character, Mike Baxter, is a conservative Last Man Standing is “written by liberals.”

Last Man Standing air Fridays at 8:00pm EST on ABC.

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

FORGET MARS. WHY WE SHOULD COLONIZE SATURN’S MOON TITAN INSTEAD

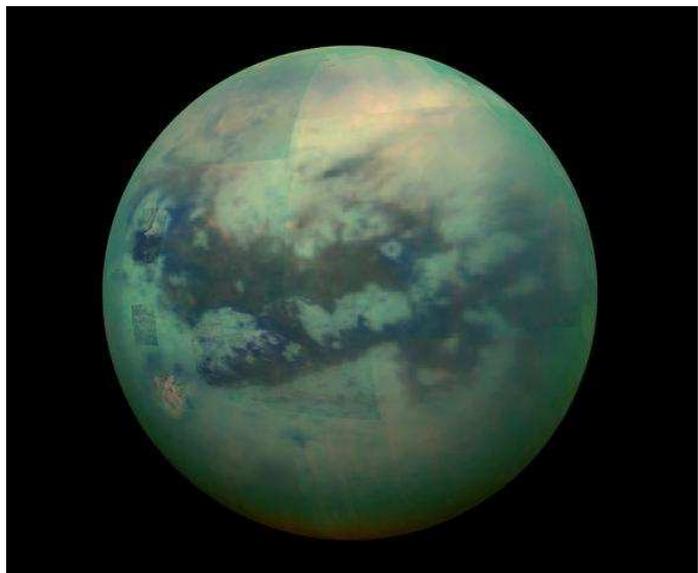
Carol Pinchefsky, Thu, Dec 01, 2016 6:03pm

<http://www.blastr.com/2016-12-1/forget-mars-why-we-should-colonize-saturns-moon-titan-instead>

Colonization of space has been a long-standing dream of humanity, but our technology hasn’t quite caught up with our imagination. Greater advancements in science and tech has put an off-planet colony almost within our grasp. But where to go?

Not the Moon and Mars, says Scientific American. A better destination for civilization would be Titan, a moon of Saturn.

As spaceflight fanciers know, one of the big hitches with colonization of the Moon



and Mars is radiation. Our atmosphere protects us from the worst of the sun's effects, which according toSpace.com, "tear[s] through DNA... The damaged DNA can lead to cancer or other diseases." And SA speaks of "brain damage" as a result of exposure to galactic cosmic rays.

The moon has a wafer-thin atmosphere — any lunar colony would have to be built underground for us puny humans to survive unscathed. Mars' atmosphere isn't very robust, either. Humans would have to settle about 4 meters underground on the moon and 2.7 meters underground on Mars to keep our sieverts down to a safe level, according to author Shaun Moss.

However, the Mercury-sized Titan has an atmosphere fifty percent thicker than ours, a safety blanket against (egads) torn DNA.

SA writes, "It's cold on Titan, at -180°C (-291°F), but thanks to its thick atmosphere, residents wouldn't need pressure suits—just warm clothing and respirators. Housing could be made of plastic produced from the unlimited resources harvested on the surface, and could consist of domes inflated by warm oxygen and nitrogen. The ease of construction would allow huge indoor spaces.

We haven't colonized the Moon, our closest galactic neighbor, yet, so a permanent settlement on a moon of Saturn may be getting ahead of ourselves. But it's nice to know we'll keep our DNA intact when we eventually get there."

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

YOU JUST CAN'T MAKE THIS STUFF UP!

From: "Martin L King Jr" kingjr_martin@yahoo.com

THE 7 WORST EXAMPLES OF FAKE NEWS FROM THE MAINSTREAM MEDIA

John Hawkins, Posted: Dec 10, 2016 12:01 AM

<http://townhall.com/columnists/johnhawkins/2016/12/10/the-7-worst-examples-of-fake-news-from-the-mainstream-media-n2257896>

"It is now clear that so-called fake news can have real-world consequences. This is not about politics or partisanship. Lives are at risk — lives of ordinary people just trying to go about their days and do their jobs, contribute to their communities. It is a danger that must be addressed and addressed quickly....It is imperative that leaders in both the private and public sector step up to protect our democracy and innocent lives."

Who would have ever realized that the woman who lied about landing under sniper fire in Bosnia, receiving classified emails on her private server and about a million other things cared so much about honesty?

Of course, in reality, what's happening is that liberals believe social media contributed to Hillary's loss in 2016; so there's a big push to shut down conservative voices on Twitter and Facebook. The excuse they're using to do that is "fake news."

It would be easy to wave that all off as pure partisanship, but there is some “there there.” There are straight up fake news websites that specialize in turning out untrue stories for fun and profit. For example, here are some fake news websites run by a liberal who wants to embarrass conservatives. Few people other than their ad agencies would care very much if websites like this were bounced off Facebook and Twitter.

It gets much more complicated from there because there are a number of websites that scramble for breaking news, do good reporting, but also churn out crazy stories in the, “How Hillary Is Teaming Up With George Soros To Give Trump Cancer” vein on a semi-regular basis. Then there are other websites that are okay with running sketchy stories if they believe they’ll get traffic out of it. In fact, there are enough websites in those two latter categories that I have provided a list of them to our team at Right Wing News with instructions to never use them as a source on an article.

Of course, liberals being liberals, they lump pretty much every conservative website that gives them a case of the “sads” into the “fake news” category. Breitbart? Fake News. Right Wing News? Fake news. Redstate? Fake news. What they really want is to use “fake news” as an excuse to encourage social media platforms to censor conservatives.

Yet, for every piece of “false news” there are probably five pieces of news put out by left-wing sources that either don’t feel compelled to tell the truth about conservatives, have become largely indistinguishable from Democratic Party press releases or that have fallen so in love with a narrative that they don’t care whether a story is true or not as long as it fits.

There are so many small examples that could be listed that they could fill a book, but why not go big?

1) NEWSWEEK’S FLUSHING THE KORAN STORY: “The shakily-sourced May 9 Newsweek report that interrogators had desecrated a Koran at Guantanamo Bay is likely to do more damage to the U.S. than the Abu Ghraib prison scandals.

Since the story was published, there has been outrage and mayhem in much of the Muslim world. Demonstrations erupted in Pakistan after Imran Khan, a former cricket player and now opposition political figure, read sections from the article at a press conference. Riots broke out throughout Afghanistan, mobs attacked government and aid-organization offices, and 15 people have died so far. Anti-American demonstrations have taken place from North Africa to Indonesia.

Meanwhile, in the face of Pentagon denials, Newsweek has begun backtracking. Newsweek seemed to have had doubts about the report from the beginning, since it ran it not as a straight news story but as a squiblet in the “Periscope” section. Now, in the May 23 issue, editor Mark Whitaker admits that its sourcing was suspect and stated, “We regret that we got any part of our story wrong and extend our sympathies to victims of the violence and to the U.S. soldiers caught in its midst.”

Even if Newsweek publishes a full retraction, the damage is done. Much of the Muslim world will regard it merely as a cover-up and feel reconfirmed in the view that America is at war with Islam. It will undercut the U.S., including in Afghanistan and Iraq, far more than Abu Ghraib did. “We can understand torturing prisoners, no matter how repulsive,”

Newsweek quotes one Pakistani saying, “but insulting the Qur’an is like torturing all Muslims.”

2) **RATHERGATE:** “CBS had an unreliable, mentally unstable man with a grudge against George Bush giving them copies of documents that he claimed were received from a person no one has been able to prove exists. Moreover, the documents, which were supposed to have been created on a typewriter in the early seventies, were written in the exact same font as Microsoft Word, which is on half the computers in America.

In other words, Dan Rather and CBS wanted to help John Kerry win the election so badly that they got scammed by a tall tale that wouldn’t have fooled the average pimply faced high school journalist...”

3) **NBC AND CNN LYING ABOUT THE GEORGE ZIMMERMAN TAPE:** “We mentioned the other day how during a Today Show segment NBC had edited the 911 phone call of George Zimmerman, the man who shot and killed Trayvon Martin. The edited version made him sound like a racial profiler.

Here's the transcript of the audio NBC played:

Zimmerman: This guy looks like he’s up to no good. He looks black.

Here's the actual transcript:

Zimmerman: This guy looks like he’s up to no good. Or he’s on drugs or something. It’s raining and he’s just walking around, looking about.

Dispatcher: OK, and this guy — is he black, white or Hispanic?

Zimmerman: He looks black.

“NBC isn’t the only network slinking away from overcooking the case against George Zimmerman’s alleged racism. On the March 21 edition of Anderson Cooper 360, a CNN audio expert enhanced Zimmerman’s 9-1-1 call and suggested he had used a racial slur, ‘f--ing coon,’ as he was following Trayvon Martin. Reporter Gary Tuchman asserted: ‘It certainly sounds like that word to me.’

...Two weeks later on the same show on April 4, CNN re-assessed the tape with another CNN expert, and now felt it suggests George Zimmerman was just chilly, muttering the words ‘f--ing cold’ under his breath. Tuchman explained: ‘The reason some say that would be relevant is because it was unseasonably cold in Florida that night and raining.’ Oopsy.

...Oddly, on other CNN programs, they’re declaring the word could be ‘punks’ instead of ‘cold.’ With this kind of analysis, if Zimmerman were charged, it would be tough to talk a jury into reading Zimmerman’s mind. CNN can’t seem to do it.”

4) **NBC’S PHONY EXPLODING GM TRUCK:** “Dateline’s report on Nov. 17 featured 14 min. of balanced debate, capped by 57 seconds of crash footage that explosively showed how the gas tanks of certain old GM trucks could catch fire in a sideways collision.

Following a tip, GM hired detectives, searched 22 junkyards for 18 hours, and found evidence to debunk almost every aspect of the crash sequence. Last week, in a devastating press conference, GM showed that the conflagration was rigged, its causes misattributed, its severity overstated and other facts distorted. Two crucial errors: NBC said the truck’s gas tank had ruptured, yet an X ray showed it hadn’t; NBC consultants set off explosive miniature rockets beneath the truck split seconds before the crash -- yet no one told the viewers.

There was plenty of sarcastic speculation about what happened between Monday afternoon, when NBC was defiantly dismissing GM's charges, and Tuesday morning, when it drafted an abject apology largely on GM's terms. NBC News president Michael Gartner says he simply realized that he had goofed by speaking first and asking questions later: "The more I learned, the worse it got. Ultimately I was troubled by almost every aspect of the crash. I knew we had to apologize...."

But most journalists and, for that matter, most news consumers seemed to agree with former NBC News president Reuven Frank, who said, "This is the worst black eye NBC News has suffered in my experience, which goes back to 1950." How could NBC go so far wrong? One veteran correspondent was not surprised. "The whole atmosphere" has been so competitive and overeager, he said, that the network was "an accident waiting to happen."

5) **THE JAYSON BLAIR SCANDAL AT THE NEW YORK TIMES:** "The New York Times is to be commended for ferreting out Jayson Blair, the reporter recently discovered making up facts, plagiarizing other news organizations and lying about nonexistent trips and interviews. A newspaper that employs Maureen Dowd can't have had an easy time settling on Blair as the scapegoat. Blair's record of inaccuracies, lies and distortions made him a candidate for either immediate dismissal or his own regular column on the op-ed page.

....'The Times offered him a slot in an internship program that was then being used in large part to help the paper diversify its newsroom.'

....The Times not only expressly took race into account, but also put Blair's race above everything – accuracy, credibility and the paper's reputation. It hired a kid barely out of college. In fact, it turns out he was not yet out of college. He had no professional journalistic experience, except at the Times. He screwed up over and over again and the paper had to print 50 corrections to articles he'd written.

Despite all this, Blair was repeatedly published on the front page, promoted and sent love notes from the editor in chief, Howell Raines. Ignoring the warnings of a few intrepid whistleblowers, top management kept assigning Blair to bigger stories in new departments without alerting the editors to Blair's history because – as Raines said – it would 'stigmatize' him."

6) **THE ROLLING STONE RAPE STORY:** "Rolling Stone crossed the line in its now-retracted story about sexual assault on the campus of the University of Virginia. Now, it will have to pay.

A jury on Friday found that the magazine had committed defamation against a former UVA associate dean, who had been portrayed negatively in the article 'A Rape on Campus.' Wenner Media, the owner of Rolling Stone, as well as the author of the story were also found liable.

The jury also said that the author, Sabrina Rubin Erdely, committed actual malice — an important decision that means the author either reported something knowing it was false or recklessly disregarded whether something was true or false.

...The article, published in November 2014, instantly drew widespread attention for its graphic depiction of a sexual assault committed by numerous people against a woman at a fraternity party. The article went on to allege that university administrators, the associate

dean in particular, had not responded to the situation. The story was lauded as a realistic portrayal of a problem that has only recently become visible a college campuses across the country.

The admiration was short lived. Other journalists began to investigate some parts of the story and found inconsistencies. Rolling Stone eventually corrected and then entirely retracted the article.”

7) HANDS UP, DON'T SHOOT: "Milwaukee Sheriff David Clarke criticized liberal hysterics about fake news on Tuesday, pointing out that liberal journalists ought to take a good look in the mirror over their reporting on the 2014 death of Michael Brown in Ferguson, Missouri .

The outspoken critic of Black Lives Matter argued on Twitter that 'Fake news' was born in August 2014 in Ferguson MO. when MSNBC, the New York Times and the Washington Post 'all propagated the Hands up, Don't shoot lie.'

Liberal journalists and activists spread far and wide the myth that Michael Brown had his hands up before being gunned down by police officer Darren Wilson. That claim was the origin of the Black Lives Matter movement and eventually lead to violent rioting in Ferguson

The facts of the case showed the 'Hands up don't shoot' claim to be false and that Wilson was justified in shooting Brown."

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

WISCONSIN RECOUNT ENDS WITH MORE EMBARRASSMENT FOR HILLARY

Blake Neff, DCNF, December 13, 2016

http://www.bizpacreview.com/2016/12/13/wisconsin-recount-ends-embarrassment-hillary-423229?utm_source=BizPac+Review+Email+Newsletter&utm_campaign=f16fa03675-EMAIL_CAMPAIGN_2016_12_13&utm_medium=email&utm_term=0_fbf9323fb3-f16fa03675-32881293

Wisconsin's presidential election recount ended Monday with President-elect Donald Trump expanding his lead over former Democratic nominee Hillary Clinton. The recount was requested by former Green Party candidate Jill Stein, who cited concerns about hacking and voter fraud to justify the recount. Stein raised more than \$3.5 million in donations to finance the effort.

But instead of exposing widespread fraud on Trump's behalf, the recount found no major discrepancies and expanded Trump's lead. After a week and a half of recounting, the final tally discovered 1,769 more votes than were counted on election night, and Trump's lead increased by 162 votes.

The increase in Trump's lead amounts to one vote for every \$21,605 spent by Stein.

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GUN CONTROL FLICK 'MISS SLOANE' FLOPS AT THE BOX OFFICE BUT SNAGS GOLDEN GLOBE NOD

FoxNews.com, Published December 13, 2016

<http://www.foxnews.com/entertainment/2016/12/13/gun-control-flick-miss-sloane-flops-at-box-office-but-snags-golden-globe-nod.html>

Movie goers weren't too interested in "Miss Sloane," a film that explores the gun control debate from the perspective of a lawyer who is lobbying for universal background checks for gun ownership. Still, the film's leading lady, Jessica Chastain, landed a Best Actress Golden Globe nomination for the poorly received flick.

The film, which premiered in select cities on Thanksgiving, hit more theaters this past weekend, and it fizzled in its wide expansion, earning \$1.9 million from 1,648 locations.

According to Deadline, "Miss Sloane" cost \$13 million to produce. It currently has a score of 69 percent on review aggregator Rotten Tomatoes.

The movie was projected to earn a paltry \$5 million at the box office, according to the Los Angeles Times, but so far it's fallen short.

In the film, Elizabeth, played by Chastain, leaves her top firm for the opposition when a powerful gun group asks her to devise messaging to turn women against background checks for gun ownership. Chastain is portrayed fighting for the underdogs, using everything at her disposal to try to ensure that the background check bill passes.

The role earned the actress a Golden Globe nomination on Monday morning. Since 2012, Chastain has been nominated for four Golden Globes and won once, in 2013, for "Zero Dark Thirty."

The Associated Press contributed to this report.

SO LET ME GET THIS STRAIGHT. THIS IS A MOVIE MADE BY LIBERALS THAT IS TOUTING GUN CONTROL AND HOW THE NRA OR AN EQUIVALENT IS EVIL. DOESN'T MAKE ANY MONEY. LOOKS LIKE IT'S GOING TO LOOSE MONEY BIG TIME FOR ITS INVESTORS. AND THE LIBERAL ENTERTAINMENT ESTABLISHMENT WANTS TO GIVE IT AWARDS. WHO WOULD HAVE THOUGHT IT. UT

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From: "Tim Bolgeo" tbolgeo@epbf.com

MICROWAVE OIL RECOVERY COULD UNLOCK TRILLIONS OF BARRELS OF OIL AND DRINKABLE WATER FROM OIL SHALE AND OIL SANDS

December 07, 2016

<http://www.nextbigfuture.com/2016/12/microwave-oil-recovery-could-unlock.html>

Peter Kearl is co-founder and CTO of Qmast which is a Colorado-based company pioneering the use of the microwave technology to recover oil. Oil giants BP and

ConocoPhillips are pouring resources into developing similar extraction techniques, which can be far less water- and energy-intensive than fracking.

There is more than 4.285 trillion barrels of oil barrels of oil in the Green River Formation (2011 U.S. Geological Survey of resource in-place). Using oil shale cutoffs of potentially viable (15 gallons per ton) and high grade (25 gallons per ton), it is estimated that between 353 billion and 1.146 trillion barrels of the in-place resource have a high potential for development

The Green river formation is the world’s largest known deposit of kerogen-rich rock and covers Colorado, Utah and Wyoming. This is oil shale.

Oil shale is not shale oil. Shale oil is essentially liquid oil locked up in rock that’s found in deep formations and requires hydraulic fracturing, or fracking, for it to flow freely to the wellbore for extraction. Oil shale, on the other hand, isn’t really oil yet. Instead, it is found in more shallow formations that contain solid organic materials called kerogen. Oil shale must be heated to get oil out of it.



Table 1. Oil shale resources in the principal basins of the Eocene Green River Formation.

[Resource figures are in billions of barrels; --, no resource meets criteria]

	Total resource in-place	Oil yield of 15 gallons per ton (GPT) or greater		Oil yield of 25 gallons per ton (GPT) or greater	
		Oil in-place	As percent of total in-place	Oil in-place	As percent of total in-place
Piceance Basin	1,525 ¹	920	60	352	23
Uinta Basin	1,320 ²	93.6	7	1.3	0.1
Greater Green River Basin	1,440 ¹	133	9	--	0
Total	4,285	1,146	27	353	8

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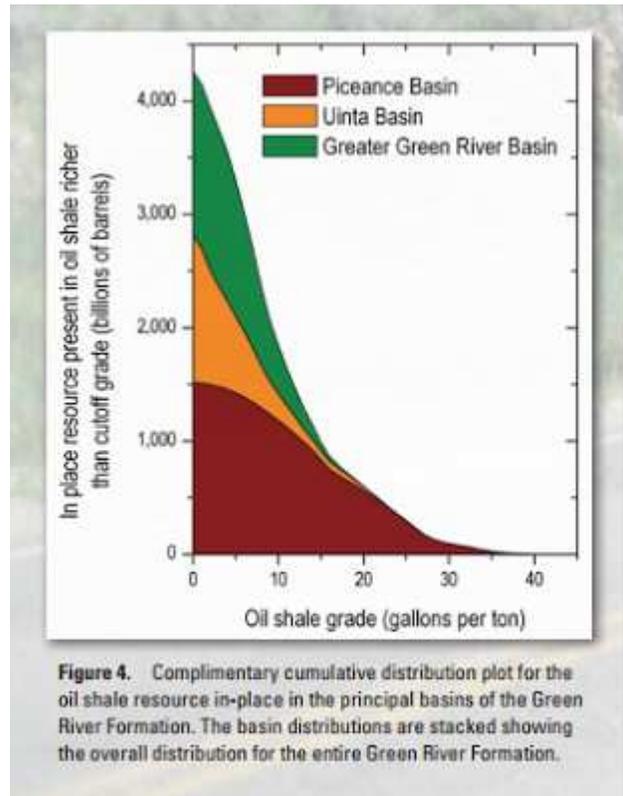
Producers would microwave oil shale formations with a beam as powerful as 500 household microwave ovens, cooking the kerogen and releasing the oil. It also would turn the water found naturally in the deposits to steam, which would help push the oil to the wellbore. “Once you remove the oil and water,” Kearl continues, “the rock basically becomes transparent” to the microwave beam, which can then penetrate outward farther and farther, up to about 80 feet from the wellbore. It doesn’t sound like much, but a single microwave-stimulated well, which would be drilled in formations on average nearly 1,000 feet thick, could pump about 800,000 barrels. Qmast plans to have its first systems deployed in the field in 2017 and start producing by the end of that year.

Qmast estimates his pumping costs will be about \$9 per barrel, which is only about \$2 more than conventional wells.

Qmast would be to lower a high-power, 2.45-gigahertz emitter – essentially a supercharged microwave oven – into the ground.

The idea that a microwave antenna might do the job has actually been around for a while. However, equipment that can create, steer and stabilize the beam was too bulky to fit down a narrow well. Now, designs that will soon make the technology cheap and commonplace are emerging from small outfits, including one Kearn has set up, and from the defense industry.

But just as a ceramic mug in a microwave oven remains cold to the touch while its contents warm up, porous rocks don't heat up when zapped with microwaves. The trick is that any water trapped in their pores will. If that is mixed up with solid hydrocarbons, the boiling water will heat and liquefy these. The water then turns to steam, and everything can flow through the cleared pores and cracks to be collected at the surface

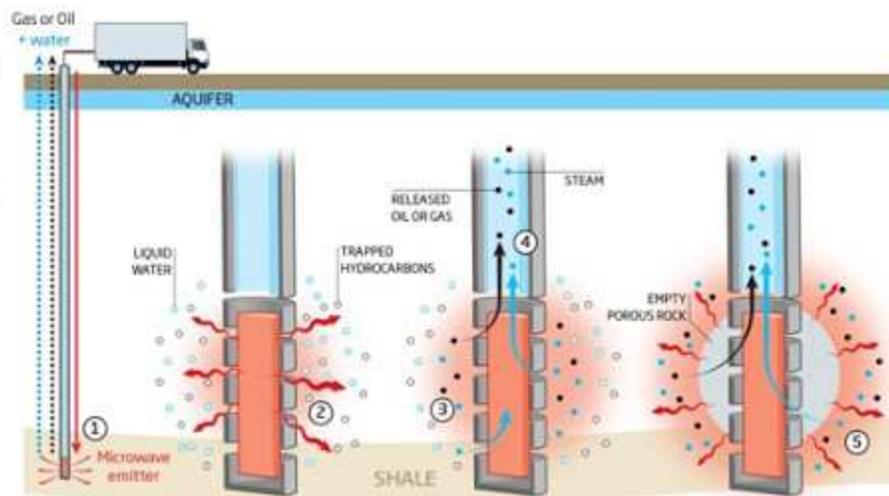


Why frack when you can zap?

Microwave heating can release oil and gas from porous rock - and unlike fracking, the process liberates rather than consumes water

How it works

- 1 A high-powered microwave emitter is lowered down a shaft
- 2 Microwaves heat any water within range
- 3 Water in the porous rock turns to steam, warming liquid and solid hydrocarbons and freeing trapped gas
- 4 Oil or gas (including steam) escapes from the pores and flows up the pipe
- 5 Microwaves can now pass through the emptied porous rock to reach more distant hydrocarbons



Kearl thinks there is another, immediate use for his technology: to unblock existing oil and gas wells that have become too sluggish to be worth operating. In oil wells, this happens when paraffin wax and other impurities build up in the conduits to the pipe. Similarly, fracking well production declines quickly when the shale absorbs water, causing the rock to swell and squeeze into the fractures and block the gas's exit. Many of these wells are abandoned despite there being plenty of remaining oil or gas, and new wells are dug. If microwaves can melt paraffin and boil off water, blocked wells will flow like new. "They could be effectively rehabilitated by microwave heating," says Kearl.

This could help protect environmentally sensitive areas. "If we can produce more oil from old wells, that would lessen interest in drilling for new sources of oil," says Stephen Brown, an energy economist at the University of Nevada, Las Vegas.

John Robinson and his colleagues at the University of Nottingham, UK, are developing a system to dislodge oil trapped in drill cuttings, the contaminated sand left by the drilling process in a conventional well. When the team zaps the mix with microwaves, the heating of any water mixed in with the heavy oil makes oil dribble out, leaving basically clean sand. BP has funded Robinson's team to extract oil from cuttings left by its ocean platforms, making the cuttings safe to put back into the ocean.

The same process can coax oil from tar sands, a forbidding mixture of sand, clay, water and bitumen – a heavy oil sludge that has resisted all efforts to pump it from the sands.

"Low-grade" tar sands reserves might be recovered by zapping – thanks to their payload of water, trapped in this case within the crystal structures of small particles called clay fines. Robinson says his group's long-term goal, like QMast, is to use microwave heat for large-scale production of hydrocarbons.

"If microwave technologies can eliminate the need for water and chemicals in hydraulic fracturing, that would be a significant advance," says Rob Jackson, an earth systems scientist at Stanford University in California. Indeed, rather than consuming vast quantities of water as fracking does, zapping could even unlock fresh water supplies

When Robinson's technique turns the water in tar fines to steam, it yields not just oil but water pure enough to drink. Tar sands are only about 1 per cent water, but oil shale's water content can approach 20 per cent. Current methods of oil and gas extraction use two to five barrels of water per barrel of oil produced, says Eleanor Binner, an engineer on Robinson's team.

"Microwave extraction can yield not just oil, but water pure enough to drink"

By contrast, Kearl says, oil-producing rocks – for example the Green River formation in the western US, which contains the largest oil shale deposit in the world – would yield a barrel of water for every two barrels of oil. "The hydrocarbons and water can be easily separated once condensed," says Robinson.

SOURCES- New Scientist - Forget fracking, microwave zaps could clean up the oil business, Ozy.com, Qmast, USGS

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SPACEX STILL LACKS LICENSE TO LAUNCH IRIDIUM

Dec 7, 2016 Frank Moring, Jr. | Aerospace Daily & Defense Report

http://aviationweek.com/connected-aerospace/spacex-still-lacks-license-launch-iridium?NL=AW-05&Issue=AW-05_20161209_AW-05_818&sfvc4enews=42&cl=article_6_4&utm_rid=CPEN1000003019593&utm_campaign=7862&utm_medium=email&elq2=c7ec31eab2d34aefa914c1f517cb6fd7

SpaceX continues to push for a return to flight of its Falcon 9 launch vehicle in the wake of the Sept. 1 on-pad explosion that destroyed an Israeli communications satellite, but has slipped a planned Dec. 16 launch date into January.

Investigation into the mishap continues, and the FAA has yet to license the commercial launch from Vandenberg AFB, California. The company said Wednesday it hopes to launch “in early January” with the first set of 10 next-generation Iridium low-Earth orbit communications satellites on board.

“We are finalizing the investigation into our September 1 anomaly and are working to complete the final steps necessary to safely and reliably return to flight, now in early January with the launch of Iridium-1,” SpaceX stated in an update posted on the company website.

“This allows for additional time to close out vehicle preparations and complete extended testing to help ensure the highest possible level of mission assurance prior to launch.”

The company has yet to present a final report to the FAA’s commercial space office, which licenses commercial launches to ensure they meet public safety and liability requirements, according to an agency spokesman. While SpaceX has an FAA license to launch Falcon 9 on commercial missions, the Sept. 1 mishap may require amendments to the company’s existing license before it can launch the “Iridium NEXT” spacecraft.

“The investigation into the SpaceX mishap is ongoing,” the agency spokesman said Wednesday. “The FAA continues to work closely with SpaceX as they conduct the investigation in compliance with all applicable regulations and license requirements. The FAA has not issued a license to SpaceX for a launch in December or January at this time.”

The Falcon 9 upper stage liquid oxygen (LOX) tank exploded as it was being loaded for a static test on the company’s pad at Cape Canaveral AFS, Florida (see photo). The company quickly traced the failure to a breach in the tank that holds helium to pressurize the LOX tank (Aerospace DAILY, Sept. 23), and later said it had recreated the failure of a composite overwrapped pressure vessel inside the LOX tank “entirely through helium loading condition.”

“These conditions are mainly affected by the temperature and pressure of the helium being loaded,” the company stated Oct. 28.

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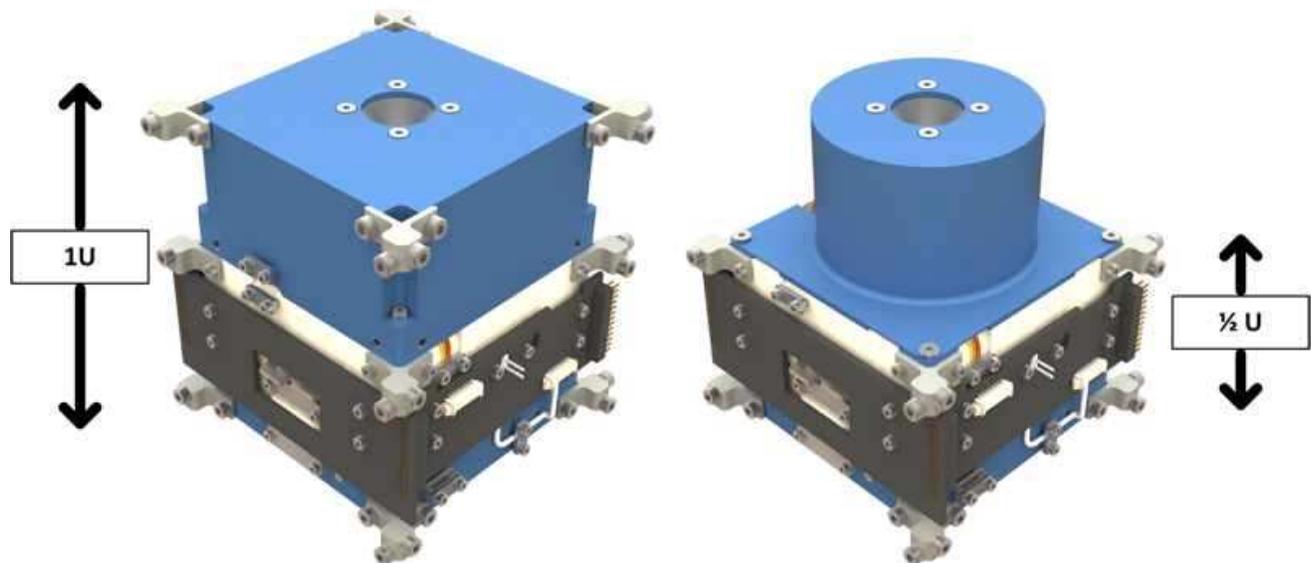
HYDROS™ WATER ELECTROLYSIS THRUSTER

Green Propellant, High-Thrust Propulsion for Orbit-Agile CubeSats

<http://www.tethers.com/HYDROS.html?gclid=CNzyk9f96dACFUI6gQodSbUAQg>

Summary: To enable small, low-cost spacecraft platforms such as CubeSats and nanosats to perform missions requiring orbit agility and stationkeeping, TUI has developed the HYDROS Propulsion System. The HYDROS Propulsion System uses on-orbit electrolysis of water to generate hydrogen and oxygen propellant, which are fed to a simple bipropellant thruster. To enable this, we have developed a compact electrolysis cell designed to operate in microgravity. HYDROS enables you to launch your CubeSat with an inert, green propellant - water - and use solar power to provide high thrust and high specific impulse propulsion. The HYDROS system can provide 100 Ns per 100 ml of water, and is readily scalable to provide larger ?V's.

The HYDROS Propulsion System will be available in two standard configurations: a 1/2U + "Tuna Can" volume [available Summer 2016], and a 1U cube that provides larger impulse bits [Winter 2016].



Status/Availability: The HYDROS thruster is currently at TRL-5; TUI anticipates planned testing will mature it to TRL-6 by Summer 2016. Anticipated availability of flight models is Q1 2016.

HYDROS Product Data Sheet

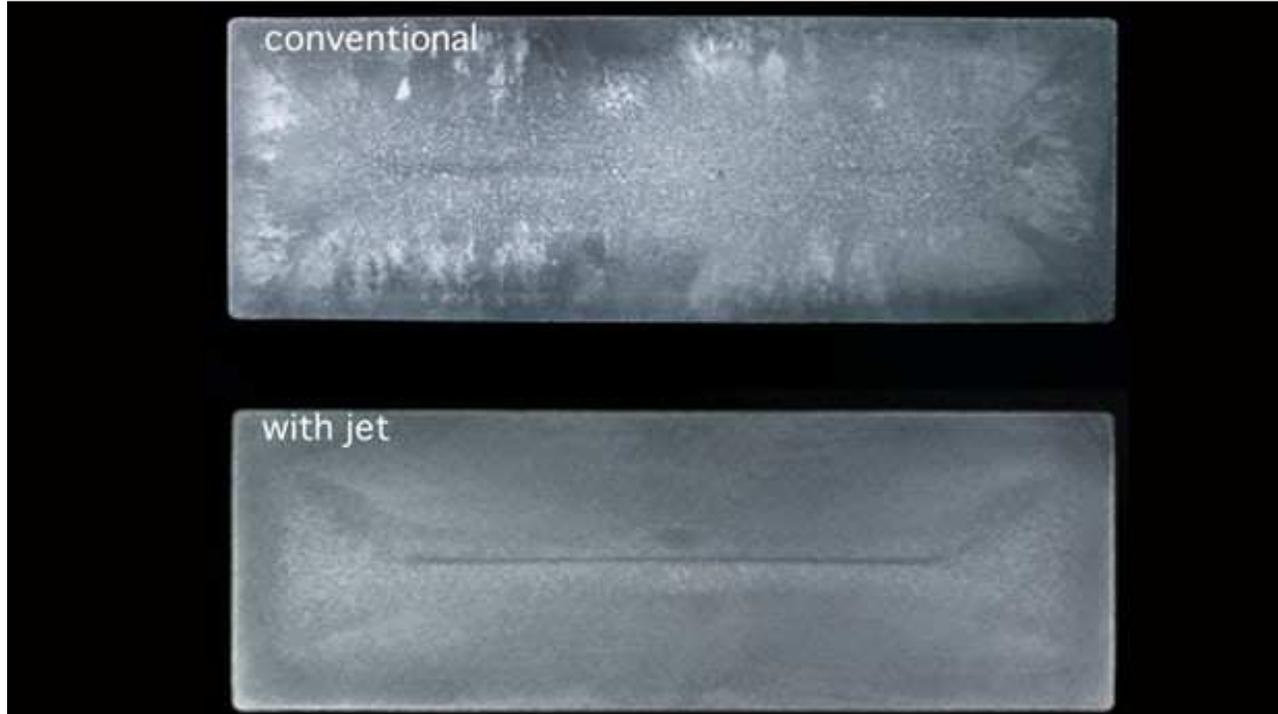
For further information, please Contact TUI

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JETS STIR UP STRONGER ALUMINUM, REDUCE CASTING WASTE

David Szondy, December 11, 2016

<http://newatlas.com/aluminum-castings-jet-agitation-mit/46836/>



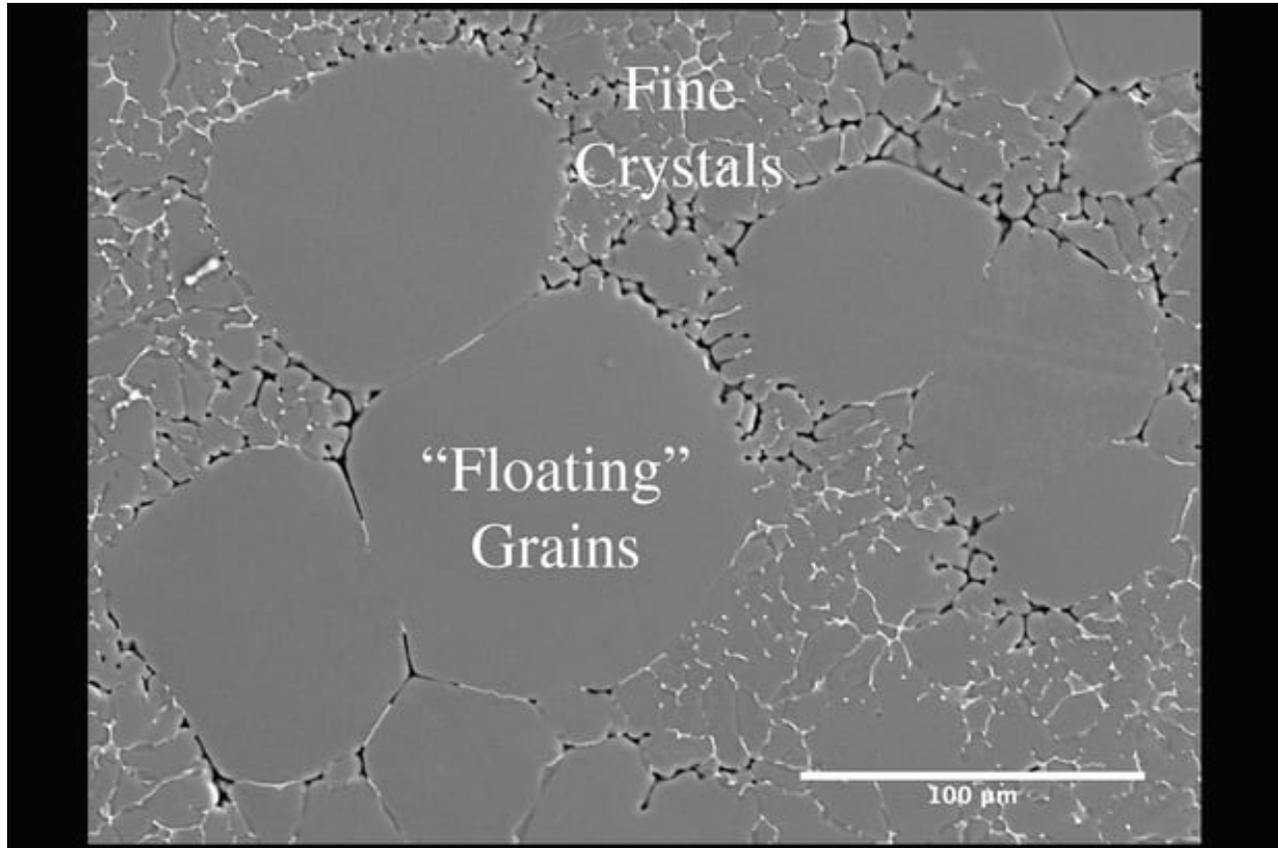
Solidified cross-sections from aluminum ingots were made using a conventional method (top) and a new jet metal process developed by MIT researchers (Credit: MIT)

Aluminum is ubiquitous in our modern age, but it's surprisingly hard to produce alloys for it without putting up with significant waste from bad mixtures. MIT researchers Antoine Allanore and Samuel R. Wagstaff have been studying how aluminum alloys harden and have come up with a way to use jets to produce more even distributions of copper and manganese in castings.

Direct-chill casting is a semicontinuous way of producing aluminum alloy ingots by quickly cooling the molten metal as it's poured into chilled molds. It's a very effective process, but according to Allanore and Wagstaff it leaves something to be desired in terms of quality control. Though an ingot may look perfectly sound on the outside, it may have patches high or low in copper or manganese ranging in size from inches to feet, resulting in weaker slabs of cast metal. This can mean large amounts of aluminum being relegated to the scrap pile.

The problem is these patches often aren't visible on the surface of an ingot because they tend to form in the center of the casting. This means they remain hidden until the casting is rolled. This slows down production and hinders the making of large slabs for trucks or airplane wings.

To produce a more uniform casting, the MIT researchers turned to the macrosegregation index, which is a way of measuring how much an actual mixture differs from an ideal chemical makeup. By manipulating this, the alloy mix can be made 20 percent more even.



A scanning electron microscope image shows large-grain structures contrasting with finer-grain structures in a sample taken during a direct-chill aluminum alloy casting(Credit: MIT)

"Analyzing the structure, and in particular the presence of solid grains, formed as the aluminum alloy turns from liquid to solid is difficult because you cannot see through aluminum, and the material is rapidly cooled from 700° C (1,292° F), and differently sized grains are moving as the aluminum solidifies at the rate of about two to three inches per minute," Allancore says. "The problem is typically a lack of the alloying element near the center of the solidifying slab or ingot."

To gain more control, Allancore and Wagstaff took samples of the molten metal at various times as it was cast and studied the formation and migration of grains. It's this process that causes the macrosegregation, so the researchers tried to prevent this using a jet stream to circulate the metal to keep the alloy homogeneous. This also caused the grains to move about and changed the hardened metal's microstructure, so it's more uniform throughout the cross section.

"All we did was change the jet power as a function of diameter using a magnetic pump to control speed, power and velocity of that jet throughout the casting," Wagstaff says. "The great thing about jets is they are pretty well defined, we understand how they expand, how their forces are distributed as a function of time, as a function of space, so they are a relatively easy phenomenon to study. We ended up coupling magnets with the jet and built a non-contact magnetic pump to generate our jet."

As part of this, the team came up with a numeric index that helped them to gauge how far a sample was deviating from an ideal mix. Combined with the jet, they say an improvement of up to 60 percent is possible. The jet stirring can also improve recycling.

"Not all recycled products of aluminum are the same, because some of them come from a former plane and some of them come from a former beverage can, and these are two different alloys," Allanore says. "So when it comes to society being able to recycle and make new aluminum products of high-quality, we can clearly see that there is an issue of how are we going to deal with those alloying elements. The work that we have done, I believe, is one example of how we can modify existing technologies so that they become more ready to have more recycled material without compromising at the end with the quality of the product that you are making."

The research was published in Metallurgical and Materials Transactions B.

Source: MIT

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NASA LAUNCHING 8 SMALL SATELLITES MONDAY TO IMPROVE HURRICANE FORECASTS

By Jesse Emspak, Space.com Contributor | December 11, 2016 08:23am ET

<http://www.space.com/34985-nasa-cygnessatellite-constellation-launch-webcast-monday.html>



"The mission will focus on surface winds," said Christine Bonniksen, the CYGNSS program executive at NASA, during a press conference Saturday (Dec. 10). "We can get information

to better understand how those hurricanes grow." [NASA's CYGNSS Hurricane-Tracking Satellites in Pictures]

With some help from NASA satellites, the Global Positioning System could be key to getting a better understanding of hurricanes, and help improve forecasts for their strength when they make landfalls.

The Cyclone Global Navigation Satellite System (CYGNSS) mission will use radio signals from the GPS satellites to measure the wind speed near the ground in the tropics, between 35 degrees north and 35 degrees south where most hurricanes are born. CYGNSS is scheduled to be launched from Cape Canaveral, Florida on an Orbital ATK Pegasus XL rocket on Monday, Dec. 12, at 8:24 a.m. EST (1324 GMT). The rocket will be carried up to launch altitude by its L-1011 Stargazer carrier airplane. You can watch the launch live here, courtesy of NASA TV, beginning at 6:45 a.m. EST (1145 GMT).

"Hurricane forecasts have been steadily improving," said Chris Ruf, CYGNSS principal investigator and a professor of Atmospheric Sciences and Electrical Engineering at the University of Michigan. "Forecasts of intensity have not improved anywhere near as much." That's where CYGNSS data could help.

The \$157 million CYGNSS mission consists of eight small satellites, which will orbit the Earth at an altitude of about 316 miles (508 kilometers), inclined at 35 degrees. "CYGNSS is receive half of radar transmitter," said Ruf. "The other half is the GPS satellites."

The group of spacecraft will measure wind speed, using reflected GPS signals. The Earth's surface acts like a mirror, and reflects the GPS signals back into space. If there is no wind, the signal is relatively clear, just like the light from a reflected moon is clear on calm water, Ruf said. When the wind picks up, the "image" formed by the radio signals is blurry because the radio waves scatter, in the same way that a reflected moon on the water is broken up by wavelets.

Wind speed is an important gauge of a hurricane's strength. Current satellite images of storms can only be taken once every three days, said Ruf, because it takes that long for the craft to return to the same spot over Earth's surface. CYGNSS will be able to get measurements every seven hours, which is important for tracking changes that can happen in less than a day.

The Orbital ATK L-1011 Stargazer carrier plane arrives at its Cape Canaveral Air Force Station runway in Florida on Dec. 2, 2016 ahead of its Dec. 12 launch of the Pegasus XL rocket (attached to the plane) carrying NASA's eight Cyclone Global Navigation Satellite System. Credit: NASA/Kim Shiflett

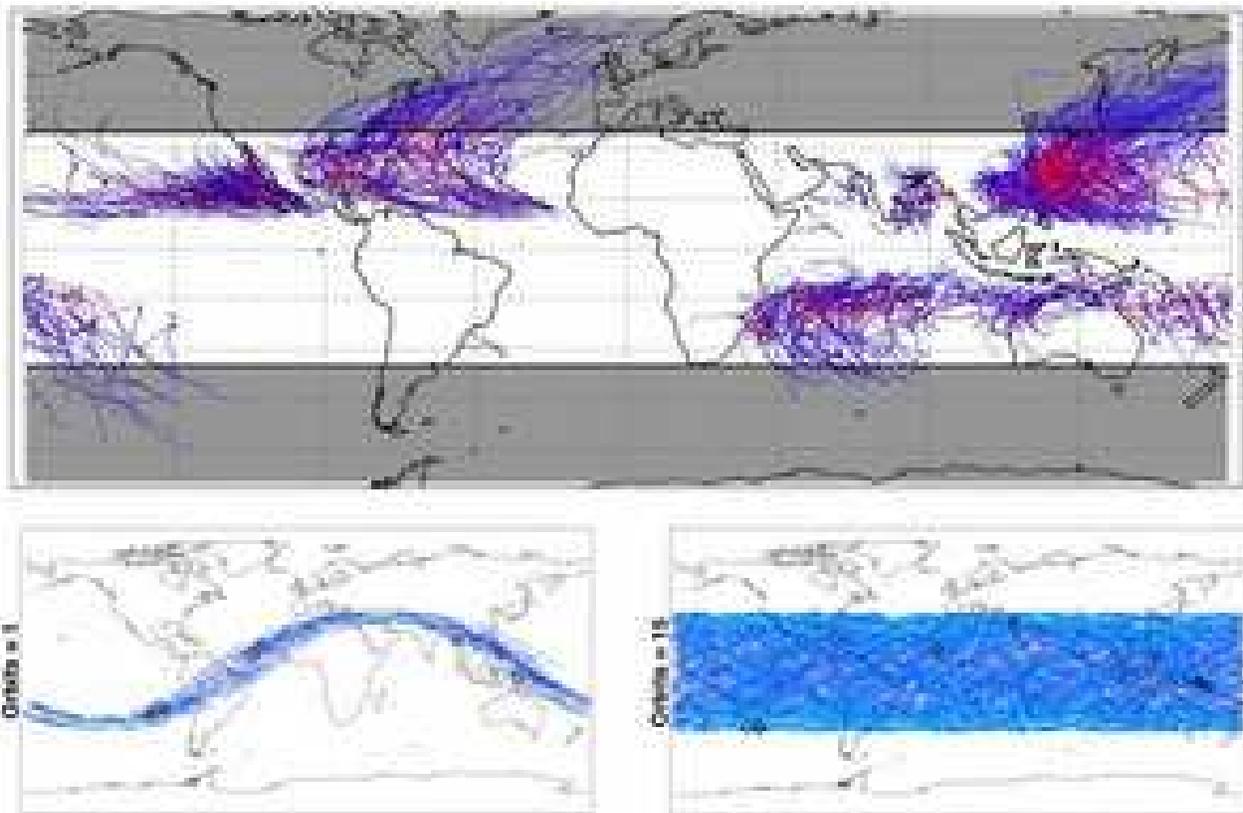


Another issue is the wavelength of the radars that existing satellites use. The now-ended

Tropical Rainfall Measuring Mission, for example, couldn't "see" wind speed because it uses radar at a wavelength designed to see rain. GPS satellites transmit at a 19 centimeter wavelength (about 1500 megahertz) which means they can "see" through the precipitation.

The airplanes that fly into hurricanes give better measurements of wind speed, as well as their vertical structure. But airplanes need to be flown into the storm and one would need to make multiple flights to get good coverage, aside from the danger to pilots and crews.

Weather permitting, on Monday morning, the aircraft will take off from Cape Canaveral Air Force Station and fly to an altitude of about 40,000 feet (12,192 meters). At that point the Pegasus engines will fire and the plane will veer away. The Pegasus will take the eight satellites into low Earth orbit.

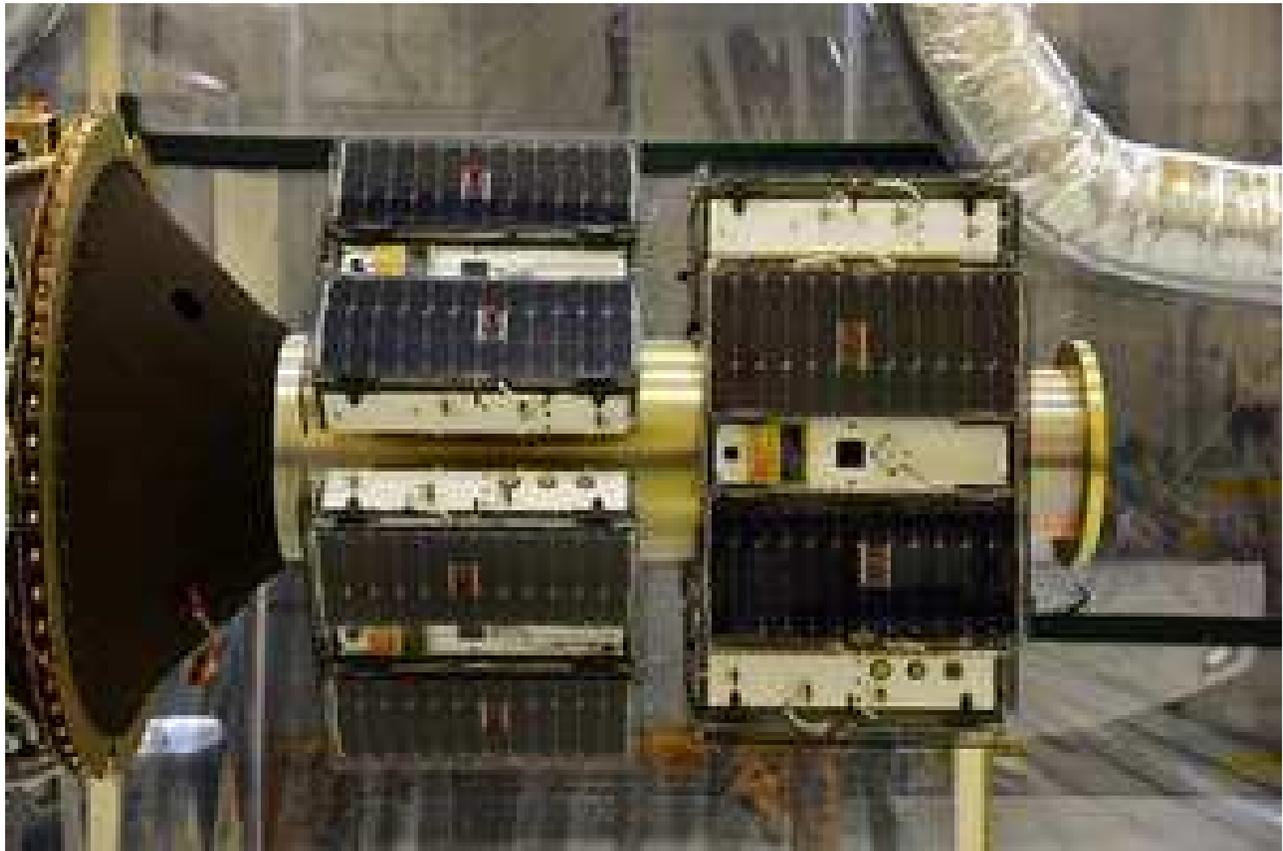


The CYGNSS satellite constellation, launching Dec. 12, 2016, from Cape Canaveral, Florida, will monitor the most hurricane-prone regions of the Earth. Top panel: Historical storm tracks. Bottom left panel: CYGNSS measurements from one orbit over 1.5 hours. Bottom right panel: CYGNSS measurements from 15 orbits over 24 hours. Credit: University of Michigan

The satellites have no propulsion. Instead, to adjust their distance from each other and avoid "lapping" as they go around the Earth, they are able to re-orient themselves so that the flat solar panels will face in different directions. This "drag maneuver" will slow them down, because even in low Earth orbit there is a tiny amount of air, said Aaron Ridley, a CYGNSS scientist with the University of Michigan.

The satellites also don't have the same kind of redundant systems that more expensive and heavier satellites do. "CYGNSS very few redundant systems," said Ruf. "We have eight satellites, and we need six to meet our requirements." Even though that meant that the failure of a single component can cause a satellite to fail, it made them much easier to build, he said.

CYGNSS will never replace the airplanes, Ruf said, but it can complement their measurements; in fact the aircraft will help to confirm that CYGNSS data is accurate.



The eight CYGNSS hurricane satellites undergo tests before being attached to their Pegasus XL rocket for a Dec. 12, 2016 launch from Cape Canaveral, Florida.
Credit: NASA/Randy Beaudoin

Hurricanes won't be the only object of study. "Part of the science team is working on studies of soil moisture, and understanding the [Madden-Julian Oscillation]," which influences rainfall over the Indian Ocean, said Mary Morris, a doctoral student with in climate and space sciences at the University of Michigan.

The total mission lifetime is about two years, but the planners hope that it might be extended, depending on the condition of the satellites and how good the data they return is.

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U-tail Business Jet Shows Noise Benefits In Clean Sky Tests

Dec 8, 2016Graham Warwick | Aviation Week & Space Technology

http://aviationweek.com/technology/u-tail-business-jet-shows-noise-benefits-clean-sky-tests?NL=AW-05&Issue=AW-05_20161212_AW-05_982&sfvc4enews=42&cl=article_7_5&utm_rid=CPEN1000001477803&utm_campaign=7867&utm_medium=email&elq2=da68881c6f2f475d926ee3ad1f055e7a

Europe is wrapping up tests of a tail design that would reduce the airport noise generated by future business jets, and potentially advanced narrowbody airliners.

The U-shaped tail mitigates acoustic emissions by shielding engine jet noise and reflecting it upward away from the ground underneath and to the sides of the aircraft.

A full-scale U-tail has been ground-tested under the Shield demonstration, part of the European Union's Clean Sky aeronautics research program, to validate the shielding effect.

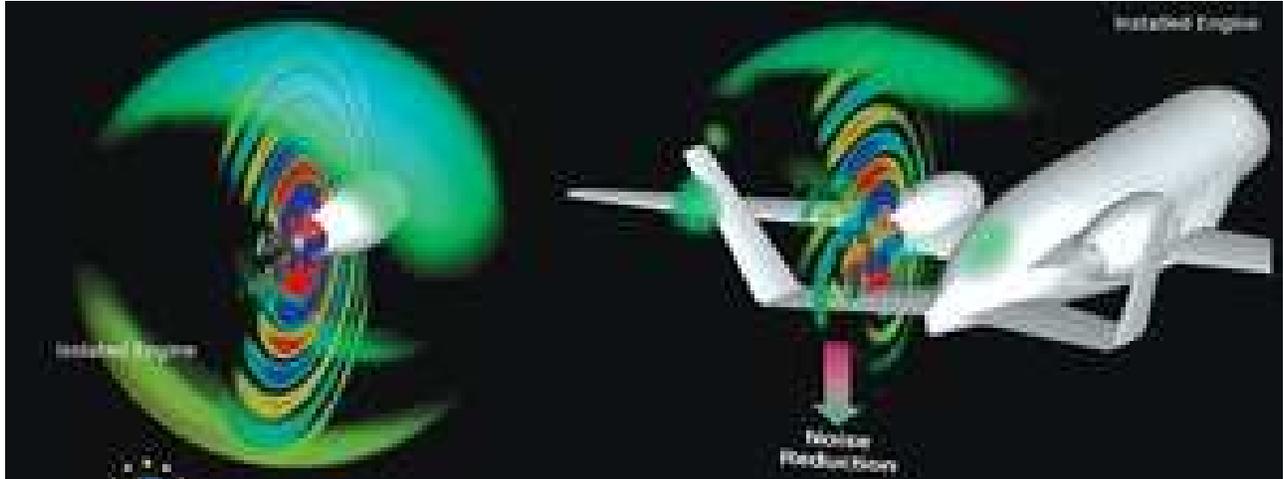


The business jet wind-tunnel model evaluated U-tail and low-sweep laminar flow wing.
Credit: Clean Sky

The U-tail is one of several technologies incorporated in a transcontinental-class low-sweep business jet (LSBJ) concept developed by a Dassault-led team under Clean Sky's Smart Fixed-Wing Aircraft project.

In addition to the new tail, the LSBJ incorporates a low-drag laminar-flow wing, active load control and smart flaps, advanced turbofans and more-electric systems, including electro-thermal wing ice protection.

Compared to a Falcon 2000-class business jet, Dassault calculates an LSBJ entering service in 2020 would burn 32-34% less fuel with equivalent reductions in carbon dioxide, water and nitrogen oxide emissions.



A U-shaped tail shields engine exhaust-jet noise from the ground, reflecting it upward. Credit: Clean Sky

Modeling operations at Bordeaux-Merignac Airport to assess the impact, French aerospace research agency Onera calculates the LSBJ would almost halve the number of people exposed to noise over 55 dB.

Validating the airworthiness and effectiveness of the U-tail has involved a series of wind-tunnel and ground tests. The final step, fatigue testing, is scheduled for December, says Clean Sky.

Low-speed performance and exhaust-jet interaction was evaluated using a large-scale LSBJ model, with simulated turbine engines, in the Large Low-speed Facility at the German-Dutch DNW wind tunnels.

The model was tested with both the U-tail and classic Falcon tail and, in addition to shielding, airframe noise from landing gear, air brakes and slats was measured using a microphone array to localize sound sources. Tones from the turbine simulator were measured using sensors inside the nacelles.



A full-scale U-tail was positioned behind the Falcon 7X to assess shielding of real engine noise. Credit: Clean Sky

Tests with the turbine simulator alone, the model with classic Falcon tail and the full LSBJ configuration showed good shielding by the U-tail of broadband noise from 100 Hz to 60 KHz, says Clean Sky.

Ground tests involved a full-scale U-tail mounted on a rig so that it could be positioned at various angles behind a Falcon 7X. The goal was to validate shielding prediction methods using real engine noise sources.

The U-tail was positioned downstream of the Falcon's center engine and rotated from horizontal to vertical, to simulate directionality, while far-field noise was measured to assess the shielding effect.

The rig is also being used to measure acoustic and thermal fatigue from hot, turbulent exhaust-jet flow impinging on the tail. The goal is to minimize the distance between jet and tail to maximize shielding.

Another U-tail model has been built for flutter testing in Onera's S2MA tunnel in Modane. Areas of particular focus include the corner flow where the horizontal and vertical tailplanes meet.

A concept for a high-speed, long-range business jet has also been assessed under Clean Sky. A Falcon 7X-class trijet, this has a high-sweep wing with natural laminar flow, advanced turbofans and a V-shaped tail.

The V-tail improves drag at high transonic Mach number and reduces weight by eliminating the S-duct for the center engine. The tail also provides acoustic shielding for the center engine, according to Clean Sky.

Clean Sky's innovative empennage project has involved Dassault, Airbus Group, Fokker, FutureAM, RAUG, Romania's Avioane Craiova and research agency INCAS, as well as ARA, DNW, NLR and Onera.

The article was originally published online on November 29, 2016.

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WILSON SAYS TRUMP WIN BRINGS YUCCA MOUNTAIN CLOSER TO OPENING

December 12, 2016

http://www.energycentral.com/news/wilson-says-trump-win-brings-yucca-mountain-closer-opening?utm_source=2016_12_13&utm_medium=eNL&utm_content=93924&utm_campaign=DAILY_NEWS

Donald Trump moving into the White House and former Senate Democratic leader Harry Reid heading back to Nevada, U.S. Rep. Joe Wilson, R-Springdale, is optimistic the Yucca Mountain nuclear-waste repository soon could be back on the federal government's agenda.

The S.C. Republican told the Columbia Rotary Club Monday that the president-elect's transition team has distributed a survey to Energy Department personnel about the long-

delayed facility in southern Nevada that could host nuclear waste now held in South Carolina -- something Nevada's Reid, the Senate's minority leaders, long opposed.

"We've already put \$1.5 billion into permanent storage there," Wilson said, adding he hopes the retiring Reid "goes (home) to his just reward in Las Vegas."

Wilson also hopes the Trump Administration will allow completion of the MOX facility at the Savannah River site -- to convert weaponized plutonium into fuel for nuclear reactors -- that had been plagued by cost overruns.

"On Jan. 20, we're going to see a change on mixed oxides, which means jobs, but it's also about a facility that's 70 percent complete," he said.

That isn't the only thing Wilson sees changing on Jan. 20, the day Trump will be sworn in as president with a GOP -controlled Congress.

For instance, Obamacare soon will be repealed, Wilson predicted, adding he long has been a supporter of the "patient-centered" replacement plan advocated by U.S. Rep. Tom Price, R-Ga., slated to become Trump's health secretary.

Wilson also could have an interesting role in the new Congress. On a day when the headlines focused on alleged Russian hacking surrounding the 2016 election, Wilson will be chairing a House subcommittee focused on defending the country against cyber attacks.

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SCIENTISTS WANT TO GIVE THE ATMOSPHERE AN ANTACID TO RELIEVE CLIMATE CHANGE

It won't solve the underlying problem, but "geoengineering" may have just gotten a bit safer.

by Eric Roston, December 12, 2016, 3:27 PM EST

<https://www.bloomberg.com/news/articles/2016-12-12/scientists-want-to-give-the-atmosphere-an-antacid-to-relieve-climate-change>

As long-term global average temperatures steadily rise, and international efforts to address them steadily fall short, some scientists and engineers are working on increasingly desperate solutions to the symptoms of global climate change.

One approach to "geoengineering" the earth is to mimic the natural atmospheric cooling effect that tends to follow the massive dispersion of sulfur dioxide into the air during a volcanic eruption. There are a few obvious problems with this approach. For instance, it's unclear what nation or international body would be authorized to release the sulfur dioxide. The chemical is also a pollutant that can cause acid rain. It might indirectly both eat away at the layer of ozone that protects living things from ultraviolet light and warm the lower part of the stratosphere above the tropics, about 19 miles up.

A group of Harvard researchers led by David Keith, a professor of applied physics and public policy, just proposed a different solution in the Proceedings of the National Academy of Sciences. An aerosol of calcium carbonate would have a similar cooling effect as sulfur dioxide on the upper atmosphere and help protect the ozone layer as a bonus.

The approach is akin to giving the atmosphere a handful of antacid tablets. The aerosol would block some incoming solar energy and neutralize airborne acid particles that are bad for the ozone.

The new study opens the world's atmosphere-seeding options beyond sulfur dioxide, which has caused much debate inside and outside the scientific community. Turning to a calcium compound that's among the most common on earth "could have significantly less environmental risk than sulfate aerosol," the authors write.

The paper echoes admonishments made last year in a National Research Council study about "albedo modification," a scientific phrase that means increasing the earth's ability to reflect incoming sunlight. The committee that undertook the study was "concerned that understanding of the ethical, political, and environmental consequences of an albedo modification action is relatively less advanced than the technical capacity to execute it."

To put it plainly: Knowing how to do something doesn't necessarily make doing it a great idea.

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From: "Jim Woosley" Jimwoosley@aol.com

THE FEYNMAN LECTURES ON PHYSICS

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

From: "Jim Woosley" Jimwoosley@aol.com

Clearly someone who does care that American wins...

GENERAL JAMES "MADDOG" MATTIS QUOTES

Gen. James Mattis / AP



1. "I don't lose any sleep at night over the potential for failure. I cannot even spell the word."
(San Diego Union Tribune)

2. "The first time you blow someone away is not an insignificant event. That said, there are some assholes in the world that just need to be shot."
(Business Insider)

3. "I come in peace. I didn't bring artillery. But I'm pleading with you, with tears in my eyes: If you fuck with me, I'll kill you all."
(San Diego Union Tribune)

4. "Find the enemy that wants to end this experiment (in American democracy) and kill every one of them until they're so sick of the killing that they leave us and our freedoms intact."
(San Diego Union Tribune)

5. "Marines don't know how to spell the word defeat."
(Business Insider)

6. "Be polite, be professional, but have a plan to kill everybody you meet."
(San Diego Union Tribune)

7. "The most important six inches on the battlefield is between your ears."
(San Diego Union Tribune)

8. "You are part of the world's most feared and trusted force. Engage your brain before you engage your weapon."
(Mattis' Letter To 1st Marine Division)

9. "There are hunters and there are victims. By your discipline, cunning, obedience and alertness, you will decide if you are a hunter or a victim."
(Business Insider)

10. "No war is over until the enemy says it's over. We may think it over, we may declare it over, but in fact, the enemy gets a vote."

(Defense News)

11. "There is nothing better than getting shot at and missed. It's really great."
(San Diego Union Tribune)

12. "You cannot allow any of your people to avoid the brutal facts. If they start living in a dream world, it's going to be bad."

(San Diego Union Tribune)

13. "You go into Afghanistan, you got guys who slap women around for five years because they didn't wear a veil. You know, guys like that ain't got no manhood left anyway. So it's a hell of a lot of fun to shoot them. Actually it's quite fun to fight them, you know. It's a hell of a hoot. It's fun to shoot some people. I'll be right up there with you. I like brawling."

(CNN)

14. "I'm going to plead with you, do not cross us. Because if you do, the survivors will write about what we do here for 10,000 years."

(San Diego Union Tribune)

15. "Demonstrate to the world there is 'No Better Friend, No Worse Enemy' than a U.S. Marine."

(Mattis' Letter To 1st Marine Division)

16. "Fight with a happy heart and strong spirit"

I AM ACTUALLY ENCOURAGED THAT WE WILL HAVE A MAN WHO KNOWS WAR AS THE SECRETARY OF DEFENSE. UT

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