



# Fist of the Fleet Association

a non profit 501 (c) (19) military organization

## NEWSLETTER

October 2016

Preserving the Past Providing for Today  
Promoting the Future

### **AUTUMN EDITION**

By: Jerry "Ricochet" Fritze

As a former English Major and theatrical performance artist the proper use of language has always been, and remains to this day of paramount importance. A well-constructed thought, fully fleshed-out and written down, and eloquent phrasing can breathe life in to ink and paper. Read anything from the 18th and 19th centuries and you find an expressive form lacking in the technologically modern word. Now it's a tweet, an emoji, or shorthand. Sure, you can get your message across with such means, but it is cold; no feeling and lacking emotion. There is no thought that goes in to anything anymore, no life. It seems as if the spoken language is de-evolving, returning to the grunts and hoots of our Australopithecine antecedents.

Which brings me to my point, word-jacking: taking an existing, defined word and misappropriating it. The media buzz-word for today: Horrific. Definition: causing horror or shock. Suddenly everything is horrific? Really? A guy in a mall with a knife? A single person killed by a moron with a gun? 3 killed in a car accident? These types of events are not *horrific*, they are *tragic*. Definition: causing strong feelings of sadness usually because someone has died in a way that seems very shocking, unfair, etc.

If we start to elevate events beyond what would be their proper context then what do we say about 9/11? Or the Holocaust, or Nagasaki/Hiroshima? USS Arizona? The Titanic? What about the loss with all hands of the battlecruisers during Jutland? Is there really a need to redefine the English language in today's world just by claiming these events belong to the distant past and no longer matter? Go tell that to the ghosts of Stalingrad, Flanders, and Antietam. In my mind language is not a part of culture, language defines culture. We've become careless with language, and it shows up every day not only in how we communicate but when we communicate. We don't know where this is going to end, or even if it can end. We can only hope that societies wake up and take a much needed step back and think for minute and ask "Do we really need a smart refrigerator?" A Smart TV or Car? Are we really going to let our devices define our lives; render language and culture moot and in so doing sacrifice our humanity? The tool that is technology is rapidly overhauling the species that created it, it's now in control. The mad scientists are ever so close to artificial intelligence. They want to hail the thinking machine as their greatest achievement and gift to humanity. But there is a difference between thinking and feeling. Code is not a human language. Code is cold logic; simple, predictive. Ones and Zeros, no heart, no soul. And if you are one of those that think that the "next great leap" in progress is A.I. then I've got news for you: ever see The Terminator? Horrific. Happy Halloween.



#### Mission Statement

Perpetuate the history of Naval Aviation Squadrons VT-17, VA-6B, VA-65, VA-25 and VFA-25,  
Remember deceased veterans and comfort their survivors,  
Conduct charitable and educational programs,  
Foster and participate in activities of patriotic nature,  
Assist current active squadron members, and  
Provide assistance to family members in times of emergency.

[www.fistofthefleet.org](http://www.fistofthefleet.org)

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## President's Message

We have just selected the site for our Fist 17 Reunion and it will be Charleston, SC. I am in contact with the Embassy Suites in North Charleston and will hopefully be completing our contract to hold our event with them soon. We are requesting a block of 50 rooms again and they will supply a separate meeting room for our Ready Room free of charge. The room rates will be a little higher and I will pass that along once the contract is finalized. Charleston is more expensive, but we still get free breakfast, the free cocktail hour, free parking and a free shuttle to and from the airport, which is one mile from the hotel. Mark your calendars for November 9-12, Thursday thru Sunday. We hope to have another great turnout of old and new shipmates. Additional info will follow very soon via email and our website.

Fall is upon us and it has been a stormy one to say the least both politically and meteorologically. Several of our members on the southeast coast have been impacted by Mother Nature and hurricane Matthew. I know we are all hopeful that life is getting back to normal for them. As you know the squadron returned in mid July from a highly successful and extended eight-month deployment aboard USS Truman (CVN-75) with Air Wing Seven attached to Fifth and Sixth Fleets. They are currently busy with the numerous training events, we all remember, as they prepare during this turnaround period for a future deployment.

We welcomed Skipper Scott back to the Fist of the Fleet (FOF) as CO this summer for his third tour with FOF. Now we welcome CDR Chris Dentzer as XO of VFA-25 for his second assignment with FOF. No doubt the squadron leadership is steeped in our long history and couldn't be better served. We wish them every success.

This year's recipient of the "LTJG Harry D. Jones Memorial Award for Excellence" is LT Justin L. Reece, USN, callsign "Neuman". I just forwarded the award package to Skipper Scott for presentation as this newsletter is published. A full report and photos will be available in the Holiday Newsletter in December. Thanks to the members who generously donated to this worthy award. Soon we will also be recognizing the VFA-25 "Sailor of the Year" once a determination is made by the squadron. If you wish to donate to either or both of these future awards please go to the FOFA website at the bottom of the Grants page where you can utilize PayPal or a credit card. You can also mail a check to Chuck Webster, FOFA Treasurer, at his address listed under the officer contacts. Thank you in advance for the continued support of these award programs that recognize the great men and women of VFA-25 who are the current "Fist of the Fleet".

We still need volunteers to serve as President and Secretary beginning this coming January. The Member At Large position will also be up for election. Nick Johnson and I will be stepping down after our two three year terms in office. Please consider serving your Association and moving us forward into the future.

Gary "Dome" Kerans

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### Blue Angles Tour Dates

Nov 5/6 Birthplace of the Blue Angels

Jacksonville Beach FL

Nov 12 Blue Angels Homecoming

Pensacola Beach FL



# SKIPPER'S CORNER



Unfortunately we were unable to get an article from CDR Scott in time for this publication and we do look forward to hearing from him in the Holiday Edition.



You may not have noticed but last month the the University of Arizona Wildcats honored Pearl Harbor and the U.S.S. Arizona with spectacular uniforms vs. Hawaii. The Wildcats' threads were truly one-of-a-kind. The U.S.S. Arizona was commissioned on October 17th, 1916 so the game was played one month short of her 100-year anniversary.

The U.S.S. Arizona had a long history before December 7, 1941, but it's mostly remembered for being one of the battleships sunk during Japan's attack on Pearl Harbor, which caused the United States to become actively involved in World War II. It's agreed a bomb entered the forward magazines beneath the number 2 turret detonating in a cataclysmic explosion, mostly venting through the sides of the ship and destroying much of her interior structure in the forward part of the ship and killing 1,177 officers and crewmen aboard.

Arizona also released a detailed graphic explaining each part of the unique uniform, which will be tough to top this season both for its sentimentality and unique, specific design.

## WE REMEMBER

ARIZONA vs HAWAII - SEPTEMBER 17, 2016  
RECOGNIZE. REMEMBER. HONOR.  
75TH ANNIVERSARY OF PEARL HARBOR

**UNIFORM INSPIRATION**

White Helmets:  
Color of the upper mast structures of U.S.S. Arizona

Grey Jersey:  
Color of the hull of U.S.S. Arizona

Red Pants:  
Color of the keel of U.S.S. Arizona

**BB-39**

**BACK NAMEPLATE**  
U.S.S. Arizona hull number

**LEFT SHOULDER**  
48 star flag Arizona 48<sup>th</sup> state in the union

**AT 'EM ARIZONA**

**BACK HELMET**  
Rally cry of the U.S.S. Arizona

**12-7-41**

**FRONT HELMET**  
December 7, 1941 Day of the attack on Pearl Harbor

**FRONT COLLAR**  
Medallion worn by Esther Ross at ship christening and launch June 19, 1915

**RIGHT SHOULDER**  
47<sup>th</sup> FS Patch, representing 47<sup>th</sup> Pursuit Squadron credited with shooting down eight aircraft on December 7, 1941

**BACK MID-HELMET**  
Bell from U.S.S. Arizona hangs in the Memorial Student Union of the University of Arizona

**SIDE HELMET**  
Block A inspired by football jersey in U.S.S. Arizona team photo

**Have you paid your 2016 Dues? Only Voting Members receive a copy of the Directory**  
**Annual Dues: \$25/YR** **Become a Voting Member!**  
**Life Time Dues \$200** **Visit the Membership Page**  
**Mail dues to Financial Officer:** **[www.fistofthefleet.org](http://www.fistofthefleet.org)**  
**Chuck Webster 39224 132nd St. Bath SD 57427**

## FROM THE COCKPIT

By: LT Chad "IRIS" Duncan



July 15<sup>th</sup> 2016 marked the end of an extended 8 month combat deployment in support of Operation INHERENT RESOLVE in the Fifth and Sixth Fleet areas of operation. During this time, VFA-25 executed over 250 kinetic events delivering over 400,000 pounds of precision guided ordnance that delivered a crushing blow to ISIS and assisted with the liberation of many cities in both Iraq and Syria. In addition to supporting combat sorties, the Fist of the Fleet participated in several multi-national exercises allowing us to broaden our skillset and strengthen international relations between the U.S. and allied nations.

### Fly-In

The fly-in at NAS Lemoore was a special time as pilots were reunited with their loved ones. Walking down the flight line to the hangar bay was a refreshing sight as spouses and young children were enthusiastically holding American flags and welcome home signs. Our Sailors were then able to take some well-earned post deployment leave to spend valuable time with their families. After an 8 month deployment that included eight port calls in four different countries, it is clear to me that nothing matches the vastness, beauty, and patriotism seen in the United States of America. A special thank you to our ombudsman, the Officer Spouses Club, the Family Readiness Group, and all of our friends and families for your unending support on deployment and making the fly-in special!

### Jet Upgrades and Detachments!

Shortly after the return from deployment, a new software upgrade, H10, was installed in all ten Fist aircraft. This upgrade brings enhanced capabilities to our already combat proven F/A-18E Super Hornet, aligning our aircraft with 5<sup>th</sup> generation fighters as we prepare for potential future operations. One of the most noticeable improvements in the cockpit is an upgrade to air-to-air display functionality and an enhanced picture of the forward looking infra-red (FLIR) display. The H12 software upgrade should be heading to the fleet later next year and with it will completely alter the Super Hornet's display management to enhance situational awareness during the complex battlefield of the future. With detachments and exercises coming up, Fist pilots are looking forward to working with other military services to gain valuable experiences. On the radar is an upcoming detachment to Hawaii in November to work with the Hawaiian Air National Guard and their fleet of F-22 Raptors.

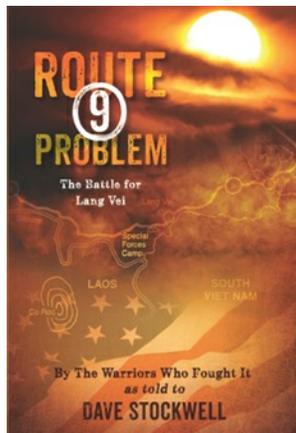
### Hail and Bail

VFA-25 is proud to welcome CWO2 Michael Comrie, his wife Tiffani, and their three children to the Fist ready room family. CWO2 Comrie is heading back to Lemoore after a brief stint with VX-9 in China Lake and brings with him 15 years of experience in aviation ordnance. Welcome aboard!

Every Fist officer progresses through their operational tour at VFA-25 and eventually is called upon for their next assignment. The Fist of the Fleet is proud to pass on those who have proudly served as Fists knowing they have done all former Fists proud. This month, we bid farewell to CWO3 Sarah "Gunner" Dekarske and LTJG Craig Lapilio as both are headed for NAS Whidbey Island in Washington state. Their amazing work ethic and dedication to the mission directly contributed to success of VFA-25 and will have a lasting impression on the command. They will be missed. Fair winds and following seas!



## FIST OF THE FLEET ASSOCIATION NEWS



The website for the new book on Lang Vei is up and running at [www.langveibattle.com](http://www.langveibattle.com). You may order the book and if you drop by please sign the Guestbook, the link for that is on the Contact page. A lot of research and work went in to this publication, and many conversations were held with various squadron personnel involved and much information was shared with the author. With all the information provided to him this may be as close as we can get to the definitive presentation until such time as the actual combat records are released by the Navy.

### URGENT ACTION ITEM

*Please take time to consider your selections for President and Secretary of the Association. Dome and Beef are at the end of their tenure and new officers need to be selected immediately. Send your nominations to the Board of Directors!*

**Request a free Visitors Guide to Charleston, South Carolina at:**

<http://www.charlestoncvb.com/visitors-guide/>

## FROM THE HANGAR DECK



Hello my name is Marquis Ebron, I am an undesignated Seaman. I've been in the Navy for almost two years and onboard VFA 25 since July 2015.

I grew up with the military as part of my everyday lifestyle, so I know and love this life that I am currently part of. My father is currently on active duty and has been serving in the Navy for 26 honorable years. Since I grew up with the navy I have had the ability to move around the globe and to see many places. I got the chance to live on a few beautiful Islands such as, Guam, Hawaii and a dozen other states. I enjoyed being around different cultures seeing many different faces it's a blessing and I've taken advantage of the opportunity I was given. I learned so much from the different people I've encountered.

Moving on to the present, I didn't choose the undesignated lifestyle by choice, it was what I was given and I have taken advantage of it, I have been able to work with different shops picking up different tricks of the trade. I have learned many skills from a wide variety of people. These Sailors have taught me so much on how to succeed in life as a civilian and in the Navy as well. I choose the Navy from among all the other services because I liked the lifestyle living with my father. I liked the structure on time management. It has taught me a lot about managing my days. I also joined because I saw the success my father has had over the years. So I believe I can do

better, I know it won't be an easy task, I have so much to accomplish.

When I reported to VFA 25 I immediately began my training in the Line Division, I enjoyed being part of a team and the ability to help the Plane Captains (PC) and trainees succeed with launching the jets. Unfortunately, my training in the Line Division would be cut short because I could not be a PC due to my vision not being suitable for the flight line and flight deck. Understanding that life takes us in different directions I found other ways to help out my fellow Sailors. While on our 2015-2016 Mediterranean deployment I was temporarily assigned duty to Flight Deck Control (FDC) where I worked with the Aircraft Handling Officer, also known as the "Handler", and a few of the CVW-7 Senior Chiefs. I helped organize the flight plans and any actions that were going to take place, such as flight activities or hangar bay functions. Making sure all the aircraft got what they needed so that they would be in a mission capable status. This was my goal every day.

Being a Seaman made it challenging at times, working with Chiefs and Officers. But having the drive to get the job done over shined the fact I was an E-3. I felt accomplished at the end of cruise. This made my future goals very clear. I want to stay in the Navy if possible just as long as my father, I just love the structure on how things are done. I will eventually get some schooling done but until then my focus is going far in my Navy career.

***The Blue Angels Are Getting a Super Upgrade.*** The elite demonstration squadron would prefer older planes, but time marches on. by: Kyle Mizokami AirShow News

Boeing scored a \$12 million dollar contract to transition the U.S. Navy's Blue Angels flight demonstration squadron to newer jets. The Blue Angels, who have been flying the F/A-18 Hornet since 1986, are moving up to the bigger F/A-18E/F Super Hornet. The Blue Angels currently fly a mixed bag of older Hornet fighters. They've got three of the oldest F/A-18A model, 10 of the newer -C models, and three two-seater models. The -A and -C models are all 20 to 30 years old. The Angels typically fly Hornets that are very much still functional, but too old to keep operating from aircraft carriers. The Blues' own website says their jets arrive from the fleet "at the end of their carrier arrest functionality". According to AirShow News, the conversion to the Super Hornet should be complete by September 2017. It takes a bit because Jets bound for the Blue Angels have their 20-millimeter nose cannons removed and replaced with a smoke-fluid system for laying smoke trails during an air show. The planes also have a fuel pump inverted, a stop watch and adjustable constant-tension stick spring installed, and entire aircraft painted in the iconic blue and gold paint job.

The Blues have stated in the past they would rather stick with the older planes. The website used to state: "While the Super Hornet has more recent technology, the Hornet is more suitable to the needs of the current team due to its light weight and slick maneuverability." But older Hornets are getting tricky to maintain in the field. A combination of aging airframes that need more TLC, difficulty finding parts that are no longer manufactured, and budget cuts have left Navy and Marine Corps Hornet squadrons struggling. For example, as of April, only 87 of the Mariner Corps' fleet of 276 Hornets were in flyable condition. In addition, the carrier version of the F-35 is nearly three years from entering active service. As a result, the Navy may feel it has no choice but to migrate to the newer planes. While the Blue Angels may have preferred the Hornet over the Super Hornet, they'll adapt to the new platform. The team has flown jets with less power, like the A-4 Skyhawk, as well as planes that are bigger and less maneuverable, like the F-4 Phantom. Moving from an older to a newer Hornet is easier than moving to a totally new aircraft, and spare parts will be easier to source, too. The team's September 2017 schedule is just a little bit light compared to other months, with June being another light month. Could October see an all-new fleet of planes gracing air shows nationwide?



## DID YOU KNOW: NAVY, MILITARY AND OTHER INFORMATION

U.K. Carrier HMS *Illustrious* Sold for Scrap by: Sam LaGrone USNI August 2016

Unable to find a permanent home for the retired Royal Navy carrier HMS *Illustrious*, the U.K. Ministry of Defence announced it would sell the ship for scrap to a Turkish firm. *Illustrious* was sold to LEYAL Ship Recycling Ltd. for around \$2.64 million, read the statement. Commissioned in 1982, *Illustrious* was deployed at the conclusion of the first Gulf War and provided aid to the Philippines in response following Typhoon Haiyan. The carrier was decommissioned in 2014.

The sale comes after three cities – Hull, Portsmouth and British Overseas Territory Gibraltar — had entered failed bids to convert the 22,000-ton ship into a museum, according to *The Telegraph*. “The size of the warship and the amount needed to maintain her are understood to have defeated all the bids,” wrote the paper in May. *Illustrious* is scheduled to leave Portsmouth for Turkey in the fall. “We have done all we can for over two years to find a home for the former HMS *Illustrious* in the U.K., and regrettably all options have now been exhausted,” U.K. Minister for Defence Procurement Harriett Baldwin said in the MoD statement.



The MoD has sold two other carriers to Turkish scrap merchants in the last several years — HMS *Ark Royal* for \$3.83 million in 2013 and HMS *Invincible* \$2.64 million. The first of two planned Queen Elizabeth carriers, which will bring a carrier capability back to the Royal Navy, is due in Portsmouth in 2017. “As the former aircraft carrier gets ready to leave Portsmouth, so we can look to the future and the arrival of the new Queen Elizabeth Class carriers, which will ensure that the Royal Navy continues to be a pre-eminent maritime power in the modern world,” former *Illustrious* commander Mike Utleby said in a statement



Northrop Grumman Awarded \$108M Contract for 10 MQ-8C Fire Scouts by: Sam LaGrone USNI September 2016

Naval Air Systems Command awarded Northrop Grumman a \$108.1 million contract for ten MQ-8C Fire Scout unmanned rotary wing aircraft last week, according to a Pentagon contract announcement. The MQ-8C follows the Navy’s MQ-8B UAV built around a Bell 407 helicopter that the company started delivering to the service in 2013. The larger MQ-8C is set to test at sea next year and could deploy on the Littoral Combat Ship as early as 2018.

The Navy plans to operate the UAV in tandem with the manned MH-60 Seahawk Romeo and Sierra helicopters as part of anti-surface warfare orientation of the Littoral Combat Ship. Seahawk pilots will be cross-trained to operate the Fire Scout.

While the C model is built on a different airframe from the B, the two share a common ground control station and many of the same internal components. As part of its current deployment, LCS USS *Coronado* (LCS-4) is fielding the B version of the platform with a new common Raytheon ground control station. Work on the ten UAVs is expected to be completed by 2019, according to the announcement.

*The following is the Sept 2016 contract announcement:*

Northrop Grumman Systems Corp., San Diego, California, is being issued a \$108,118,000 fixed-price, incentive firm target contract for the procurement of 10 Fire Scout MQ-8C unmanned air systems. Work will be performed in San Diego, California (33 percent); Ozark, Alabama (27 percent); Fort Worth, Texas (18 percent); Moss Point, Mississippi (16 percent); and various locations within the U.S. (6 percent), and is expected to be completed in August 2019. Fiscal 2015 and 2016 aircraft procurement (Navy) funds in the amount of \$108,118,000 are being obligated at time of award; none of which will expire at the end of the current fiscal year. This contract was not competitively procured pursuant to Federal Acquisition Regulation 6.302-1. The Naval Air Systems Command, Patuxent River, Maryland, is the contracting activity (N00019-16-C-0055).



# **THE EVOLUTION OF WARFARE: CONCLUSION: LOOKING FORWARD**

## *Air-to-Air*

Raytheon's advanced variant of the AIM-9X Sidewinder air intercept missile has been approved for full-rate production for the U.S. Navy and Air Force. The approval by Navy research, development and acquisition authorities was given to the Air-to-Air Missile Systems Program Office – PMA-259 -- at Naval Air Station Patuxent River and Raytheon Missile Systems and will lead to the production of about 6,000 AIM-9X Block II missiles through 2026. "With our adversaries constantly advancing technologies within their aircraft and weaponry, we must continue to advance our capabilities to stay ahead of future threats," said Capt. James Stoneman, PMA-259 program manager. "AIM-9X FRP is the end product of much engineering and testing to ensure our warfighters are equipped and ready to respond to any scenario."

The upgrade from the Block 1 to the Block 2 series involved adding new software and an enhanced guidance control unit that allows lock-on after launch. Instead of a pilot having to actually see the exact location of a target to lock onto it, a missile sensor locates the target through infrared emissions or datalink. The missile will be carried by Navy F/A-18 Hornet and Super Hornet fighters, the Air Force's F-15 Eagle and F-16 Fighting Falcon and various international partner aircraft equivalents. It can also be carried by new F-35 aircraft.

A longer range, higher altitude Advanced Medium Range Air to Air Missile for ground-based air defense is under development by Raytheon. The AMRAAM-ER will be integrated into the NASAMS launcher, the most commonly used short- and medium-range air defense system in NATO, Raytheon said. "With AMRAAM-ER, Raytheon is rewriting the book on ground-based air defense," said Mike Jarrett, Raytheon vice president of Air Warfare Systems. "The new missile will be even faster and more maneuverable than the current AMRAAM. "By leveraging many existing AMRAAM components, Raytheon can deliver AMRAAM-ER quickly and affordably with very low risk."

AMRAAM, which first came into service in 1991, can be used in both air-to-air and surface-launch scenarios. Some 36 countries use the missile, which has been integrated on the F-15, F-16, F/A-18, F-22, Typhoon, Gripen, Tornado, Harrier, F-4 and the Joint Strike Fighter aircraft. The missile is also the baseline missile for the NATO-approved National Advanced Surface-to-Air Missile System. Raytheon, which said it plans flight testing of the AMRAAM-ER this year, announced its project at an international defense exhibition in the United Arab Emirates.

## *Anti-Radiation*

The AARGM mission is Suppression and/or Destruction of Enemy Air Defenses (SEAD/DEAD). Its primary targets are re-locatable Integrated Air Defense (IAD) targets and targets that utilize shutdown tactics. AARGM counters enemy shutdown capability through the use of a multi-mode seeker. The AGM-88E AARGM is a medium-range air-to-ground missile employed for Suppression and/or Destruction of Enemy Air Defenses (SEAD/DEAD). An ACAT IC Cooperative program with the Italian Air Force, the AARGM system is an upgrade and compliment to the AGM-88 High-Speed Anti-Radiation Missile (HARM).

The AARGM System Development and Demonstration (SD&D) program designed and produced a new Guidance Section, and modified the existing Control Section, which are coupled with the legacy HARM Rocket Motor and Warhead Section, wings and fins. AARGM baseline capabilities include an expanded target set, counter-shutdown capability, advanced signals processing for improved detection and locating, geographic specificity providing aircrew the opportunity to define missile-impact zones and impact-avoidance zones, and a weapon impact-assessment broadcast capability providing for battle damage assessment cueing.

## *Anti-Ship*

Boeing is trying to sell the Navy an upgraded anti-ship and land attack weapon designed to double the range of the service's existing Harpoon. The Harpoon Next-Generation is a sea-skimming land, submarine, air or surface-launched missile guided by GPS and inertial navigation systems to destroy a wide range of targets such as enemy ships, small boats and land targets. It is engineered to fire from Navy submarines and ships such as destroyers, frigates, patrol boats and aircraft including the F/A-18, F-15, F-16 and P-3 surveillance plane. It can also fire from a mobile, land-based truck platform, Boeing officials said. The advanced Harpoon will be offered in response to the Navy's interest in acquiring a new, longer-range, over-the-horizon missile for its Littoral Combat Ship and new Frigate.

"With respect to the LCS/Frigate, we will resource to the requirements in order to increase lethality, looking at suitable options for an over-the-horizon, anti-surface ship capability. As always, we are committed to providing the best capability while balancing affordability in order to defeat the threat," said Lt. J.G. Kat Dransfield, a Navy spokeswoman.

The Harpoon Next-Gen adds the prospect of improved guidance technology, a new engine and new warhead to the existing 15-foot long Navy Block II Harpoon through the use of an upgrade kit or new build effort. The technology changes the range of the weapon from 67 miles out to 134 nautical miles, said James Brooks, a Boeing director. "Fundamentally it is adding more fuel to the weapon and going to a more fuel efficient engine. We are moving towards an alternate warhead. We're looking at a couple of different warheads, including a 300-pound warhead that is smaller than the current warhead but still very effective," Brooks added. The new 300-pound class warhead, which is still being examined and refined by Boeing weapons developers, is optimized for anti-ship attacks, Brooks added. The new, smaller warhead will replace the existing 500-pound warhead on the current Navy Block II Harpoon. Brooks described the new Harpoon Next-Gen engine as a more fuel-efficient off-the-shelf engine with electronic fuel controls. Boeing has delivered more than 7,500 Harpoon and Harpoon Block II missiles to customers around the world. *(Cont'd next page)*

"It allows our warfighters to address any majority of targets that are out there and gives them a stand-off that allows them to address new threats." Elizabeth Kluba, vice president weapons and missile systems, Boeing Global Strike. Boeing is in the early phases of planning a demonstration of Harpoon Next-Gen with the Navy of the new weapon sometime next year. Developers of the weapon said a new kind of guidance technology or seeker could be added to the weapon if desired by the Navy. Also, Boeing officials said additional data links and vertical launch technologies could be added as well. The new weapon could be ready for service by 2017, company officials said. "There is an absolutely critical near-term capability that has been identified by Navy leadership. This is our response to that near term need that has been identified. It is available very quickly to the market in a very affordable fashion," Kluba said. (By: Kris Osborn DoDbuzz.com)

## References

### Ancient Rocketry

en.wikipedia.org/wiki/Huolongjing#Fire\_arrows\_and\_rockets  
nascarkaleidoscope.blogspot.com/2008/09/huolongjing.html  
www.spaceline.org/history/1.html

### Rockets in the 18<sup>th</sup> and 19<sup>th</sup> Centuries

www.1879zuluwar.com/t5931-rockets-employed-by-the-naval-brigade-during-the-zulu-war  
en.wikipedia.org/wiki/Congreve\_rocket  
en.wikipedia.org/wiki/William\_Congreve  
en.wikipedia.org/wiki/William\_Hale\_(British\_inventor)  
www.britannica.com/EBchecked/topic/252310/Hale-rocket  
hconfederateengineers.org/rocket-artillery.html

### Early 20<sup>th</sup> Century through Korea

en.wikipedia.org/wiki/Le\_Prieur  
en.wikipedia.org/wiki/Le\_Prieur\_rocket  
www.chinalakemuseum.org  
www.designation-systems.net (Directory of U.S. Military Rockets and Missiles)  
www.eugeneleeslover.com (Naval Ordnance & Gunnery Vol 1 Nav Ord Chap 11 Rockets & Guided Missiles)

### Modern Naval Missiles

www.designation-systems.net/dusrm/index.html  
www.raytheon.com  
www.lockheedmartin.com  
www.nationalinterest.org  
www.navy.com  
www.dodbuzz.com  
www.generaldynamics.com



*Have a Happy Halloween  
and  
A Happy Thanksgiving!*



If you're wondering what inspiration looks like then I challenge you to read the following article:

[http://www.nytimes.com/2016/10/26/us/pentagon-artificial-intelligence-terminator.html?\\_r=1](http://www.nytimes.com/2016/10/26/us/pentagon-artificial-intelligence-terminator.html?_r=1)

***NEXT TIME IN FISTORY: KOREA-PERILOUS DAYS***