



ANA **GRAMPAW PETTIBONE**
SQUADRON INC.

1 APRIL 2018

www.gpsana.org



Editor Hal McDonnell

The Grampaw Pettibone Squadron is a non-profit organization (IRS Sect. 501(C)(4) which, through meetings, discussions, speaker programs, and periodic field trips, serves to educate squadron members and the general public on the requirements of an adequate national defense, especially maritime aviation, which is essential to a free society, and to support the military professionals (active and reserve) responsible for many aspects of national defense. GPS also seeks to foster the strong pride, esprit, and fraternal bonds which exist among those associated with Naval Aviation.

THE GPS LUNCHEON MEETING

WILL BE HELD ON

THURSDAY, 12 APRIL 2018

AT THE

GARDEN GROVE ELKS LODGE

LOCATED AT 11551 TRASK Ave., GARDEN GROVE

Hangar doors open at 1130, Luncheon is at 1200, secure at 1330.

Please make reservations before 9 PM on Monday 9 April.

COST IS \$18.00. FOR RESERVATIONS Please E-mail

RayLeCompte34@Gmail.com or by Phone: 562-287-4846



About our speaker's topic:

VIETNAM DAILY RECONNAISSANCE

THE CHALLENGES OF INTERDICTING NORTH VIETNAMESE LOGISTICS VIA THE HO CHI MINH TRAIL THROUGH CAMBODIA

As a member of the 4th Infantry Reconnaissance Platoon in remote locations in the Central Highlands in 1970, Sergeant Milliken's job was to employ small unit tactics to detect and identify route of travel and caches of materiel for larger units to attack and interdict. This difficult and dangerous assignment required him and his fellow recon soldiers to seek out enemy concentrations and movements often making first contact with enemy units that far outnumbered his own.

About our speaker:

DOUGLAS MILLIKEN, SERGEANT US ARMY(Ret) VIETNAM WAR, RECON PLATOON

* Retired Automotive Engineer, (developing high performance Garrett™ turbochargers for worldwide motor racing, with Honeywell International)

* Vietnam Veteran (1969-1970) – Sergeant, U.S. Army. Infantry squad leader in the Reconnaissance Platoon of the 3rd Battalion of the 8th Infantry Regiment of the 4th Infantry Division

* Participant in Operation Binh Tay I, the largest U.S. helicopter combat assault of the Vietnam War, in an attack on the Ho Chi Minh Trail in Cambodia

* Recipient of the Bronze Star(V) Medal, the Purple Heart, the Air Medal, and the Vietnam Gallantry Cross



* Author of the book “Testimony of The Protected,” about coping in Vietnam combat before having come to faith, and about eventually coming to faith in the aftermath of combat

* Four time National Go-Kart Champion, in the 1970s

* Volunteer for the Freedom Committee of Orange County, making presentations in school classrooms to educate students about the cost of freedom, as part of the Orange County California “Living History” program.

MAR 8, 2018 SPEAKER BRIEFING

Article by DAVID L. MALMAD – PAO



Gramps' CO thanks Lynn Jenson(R) for a very informative talk.

On March 8, 2018, the Grampaw Pettibone Squadron was honored to have as its guest speaker, Mr Lynn Jenson. Mr. Jenson a 37-year employee of Northrop Grumman, provided the audience with an overview on the development, evolution

and service role of the F/A-18 Hornet, Super Hornet and Growler. This is a twin-engine supersonic, all-weather capable multi-role combat jet, designed as both a fighter and attack aircraft that has served the US Navy, Marines and used by the air forces of several other nations.

Mr Jenson initially spoke about his early days growing up near an airport and how his interest in aviation began. He then proceeded to share information on his background in the aerospace industry and some of his early roles at Northrop, which subsequently became Northrop Grumman. With his skill as both an engineer and writer his assignments included work as a Proposal Engineer on aircraft such as YF23, B2, F5 and others. He described a unique commercial bus design by Northrop involving the use of composite materials that while strong enough for vehicle use would enable law enforcement to fire at the vehicle and penetrate the bus body with minimal deflection if engaged in a law enforcement event.

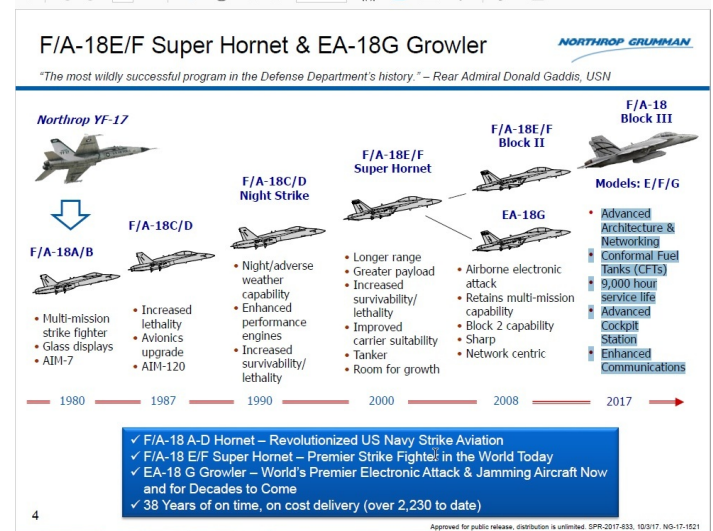
Moving into the core of the presentation, Mr Jenson described the development of the F/A-18 aircraft and business activity at Northrop Grumman. Northrop Grumman is a leading company in the field of global security and retains a role in three industry sectors; Aerospace Systems, Mission Systems and Technology Services.

The F/A-18 was designed by McDonnell Douglas (now Boeing) and Northrop. The aircraft came about when the Northrop YF-17 was developed to compete with the F-16 in the US Air Force's Lightweight Fighter Competition of the 1970s. Though the USAF eventually selected the F-16, the US Navy was exploring the need to select a smaller fighter and felt that Northrop's concept offered greater potential as a replacement for the aging A-7 Corsair attack fighter. Northrop and McDonnell Douglas agreed to jointly produce

an F-18 fighter version for the Navy and an A-18 attack variant for the Marines, but the two missions were later combined. The result was the multi-mission F/A-18 Hornet. The F-18 successfully entered service with both the Navy and Marine Corps during the mid-1980s to replace both the A-7 and F-4 Phantom II.

The initial F/A-18 fighter and attack dual purpose version met service needs effectively. Subsequent development and manufacture of additional models meet the on-going mission roles and eventually augment the existing aircraft inventory.

* F/A -18 /B First Flight -1978 Operational – 1983 Multi-



mission

* F/A -18C/D First Flight - C -1976 D- 1988 Operational -C 1988 D- 1989 Avionics & Weapons Upgrade

* F/A -18C/D Night Strike - First Flight C-1986 D-1989 Operational C- 1988 D- 1989 Night/All weather, Engine Upgrade, Increased Survivability.

* F/A -18E/F Super Hornet - First Flight -1995 Operational – 1999 Longer Range, Greater Payload & Survivability, Tanker Capable.

* F/A -18E/F Block II - First Flight -2011 Operational – 2005 Advanced Radar, Longer Range, Greater Payload & Survivability.

* F/A -18 E/F Block III First Flight -E-2013 Operational – estimate is 2019

* F/A -18G Grower - First Flight -2006 Operational – 2008 Electronic Attack Network Centric

Our speaker indicated one of the features of the F/A-18 is the inclusion of a leading-edge extension, a extension to the aircraft wing surface, forward of the leading edge. The primary reason for adding an extension is to improve the airflow at high angles of attack and low airspeeds, to improve handling and delay the stall. The capability of the aircraft resulted in it replacing existing aircraft. Beyond the original design parameters, the following is a short list of inventory to be replaced or supplemented with the F/A-18 and it's various versions; (A1, A4, A6, F8, RA5C, RF8,

The F/A-18E/F or Super Hornet version is considered mission capable to replace the Grumman A-6. Previously it was proposed as a stealth attack aircraft A-12 was to be the replacement. With the A-12 cancellation the F/A-18E/F model will be the next generation to fill the role. The F/A-18E/F aircraft is physically larger than the earlier versions. Approximately 25% larger airframe, 50% heavier empty weight, 10% longer and about 40% larger internal fuel load.

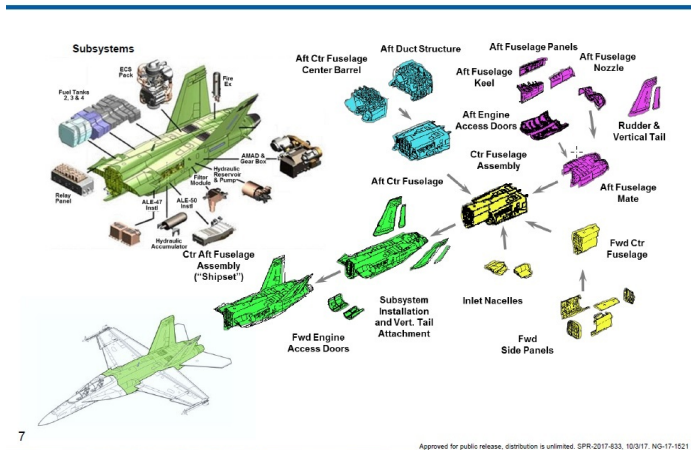
Following the F/A-18E/F version is the EA-18G, also known as the Growler. This version is the replacement for the EA-6B and will provide tactical jamming and electronic protection to U.S. military forces and allies around the world.

Northrop Grumman produces about 40 percent of the work content for F/A-18 and about 50 percent for the EA-18G. The company manufactures the center/aft fuselage and vertical tails for both aircraft, as well as the airborne electronic attack subsystem for the EA-18G.

As part of the design features for the F/A-18E/F and EA-18G is the addition of conformal fuel tanks(CFG). The design of these tanks enable the addition of fuel sources with tanks designed to be shaped and installed above the wings and conform to the fuselage. Mr. Jenson indicated that initial thoughts regarding the addition of the tanks would increase drag in flight. In fact it reduced drag for better performance

Mr Jenson indicated that current production figures show 2251 aircraft built to date of all versions. In addition to aircraft deployment with the U.S. Navy and U.S Marines, a total of 7 additional countries have acquired different versions of the F/A-18. They are; Canada, Australia, Spain, Kuwait, Finland, Switzerland and Malaysia.

F/A-18 Major Components Assembly Sequence



In describing logistics support, it was noted a brief summary of production identified: 12,000 wire harnesses, 23,000 parts and 65,000 connectors. The complexity of the aircraft configuration for each version requires considerable coordination with both primary and sub-contractor support for timely delivery of assigned sections. The accompanying graphic displays the breakdown of manufacturing requirements between Northrop Grumman and Boeing.

In closing, Mr. Jenson opened the floor to questions and responded to inquiries regarding the conformal fuel tanks,



stealth capability of each aircraft version, cost comparison between F18 and F35 and EA-18 defensive systems. In responding, Mr. Jensen noted that conformal fuel tanks once approved were available for all F/A-18 versions and can be retrofitted to earlier models. The stealth capability of the aircraft is met by the shape of the wing, coatings on the surface of the aircraft and the subsystems capability to mask the aircraft in flight. A straight cost comparison based on initial production numbers is \$70 million for the F/A-18 v \$90 -100 million for the F35. The EA-18G Growler does not normally come equipped with defensive systems but can be retrofitted if required with appropriate equipment.



TIM BROWN

I do hope that you have received your Spring 2018 issue of *Wings of Gold*. You might have noticed that there is a two-page spread (pages 44-45) on Grampaw Pettibone

Squadron activities. Thanks to Dave Malmad and Bill Thompson for doing a wonderful job of getting the word out.

There is also a very nice article about Captain Zip Rausa, USNR (Ret), the long-time Editor of WOG, who passed away on 4 January. I bring this up because on 10 March I was with Zip's son, CDR Zeno Rausa, USN (Ret), at a breakfast meeting of Special Forces Association Chapter 78 to listen to COL Paul Longgrear, USA (Ret), tell about the Battle of Lang Vei. Paul made a point of stating that but for Zip's actions, none of the men would have made it out alive after the camp was overrun by an overwhelming number of enemy troops supported by tanks.

Another thing that you need to take a look at is the GPS website (www.gpsana.org). Viki Nazarian, our new webmaster is putting some interesting touches/improvements on the website. She has added a page of business cards for all of the restaurants that support our SOQ Awards Program through gift certificates to the SOQs. If you see a business card for a restaurant that you frequent, and if you know the owner or manager, let that person know how much we appreciate their support of the sailors and GPS.

Finally, I would remind you that this organization needs your support in the form of your participation. I continue to harp on everyone about getting new members but don't forget that we need you to attend the luncheons too. Please make an effort to attend. And, if you are going to attend, please **MAKE A RESERVATION!** At our last meeting we had about half of the group show up without calling or emailing in a reservation. Luckily the Elks did a great job filling the plates of all who attended, but someday I might not get anything to eat because I am the last one in line.

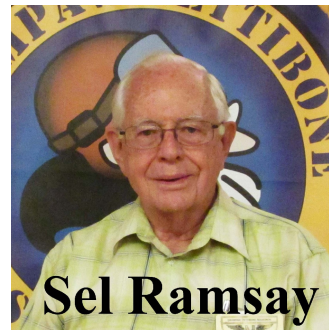


FROM THE CHAPLAIN

Bill Thompson

By the time you read this note, two very significant religious celebrations may be over for this year. I'm thinking of the week of Palm Sunday through Easter Sunday (March 25 through April 1) and Passover (March 30 through April 7). Jews and Christians are called to remember how God chose to rescue us from the evil that frequently invades our lives: both physical and spiritual. Both holidays call us to peace within ourselves and peace with all mankind and with God. There may have been events that preceded both Passover and Easter this year that could have helped us prepare for a more significant time of renewing our relationship with God. Think about the way the young people in Parkland, Florida, have responded to the loss of seventeen of their fellow students and teachers. There has been an amazing response from them to alert all of us not to stand idly by and wait for someone else to deal with this extremely complex problem of violent deaths and suffering. They have responded with determination and unity to do all they can to get our attention and call us to action. They have helped us—even senior citizens—to know we must work together on this problem. An 18 year old

student, a senior at San Juan Hills High School, was quoted in a local newspaper that "The success of last week's walkout was because it was nonpartisan and the focus was on victims. Student support came from both the Young Democrats and the Young Republicans Club. Students with NRA shirts stood in solidarity with us." There were numerous demonstrations all over the country on March 24th. The testimonies we heard are unforgettable. Now, go back, when you have time, and read Isaiah 11:6 which ends with "...and a little child will lead them." Are you thinking what I am thinking?



MEMBERSHIP

By Sel Ramsay

We welcome a new member, John Kim, who was a guest last month and was immediately put to work running our computer, projecting pictures.

Welcome aboard, John!

Please read the article in the current issue of *Wings Of Gold* magazine about Grampaw Pettibone (Page 7).

The GREAT GUYS

Here are some of the Great Guys who have made contributions to Gramps in March. These guys and the members who attend the monthly luncheons are the ones who make possible Gramps' Sailor of the Quarter program Gramps and his staff thank them all and hope to see your name here.

**Mike Barr, Vincent van den Brink,
Tim Brown, Bob Fuhrmann, Bob Helton,
John Kim, Chris Kretsinger, Ray LeCompte,
Edward Mason, Jim McMath,
David Malmad, Bob Olds, Don Pageler,
Rafi Rahamn., Sel Ramsay, Chuck Stilwell,
and Dennis Zager.**

