



ANA **GRAMPAW PETTIBONE**
SQUADRON INC.



1 JUNE 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, 14 JUNE 2018

AT THE

GARDEN GROVE ELKS LODGE

LOCATED AT 11551 TRASK Ave., GARDEN GROVE

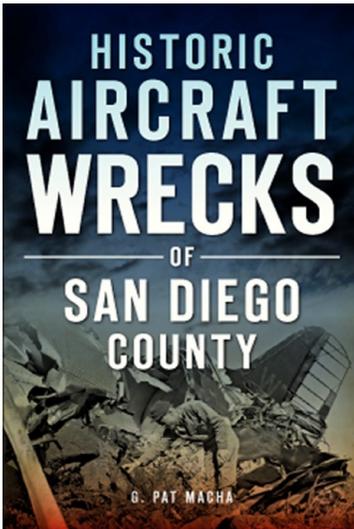
Hangar doors open at 1130, Luncheon is at 1200, secure at 1330.

Please make reservations before 9 PM on Monday 11 June.

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

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

About our speaker topic:



MORE MYSTERIES MITIGATED

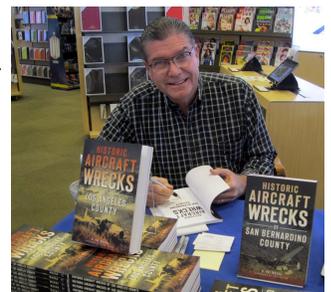


The search for lost aircraft in remote, rugged country is always interesting, but when combined with the relief and gratitude of families who finally learn the fates of their loved ones, it is also inspirational. Pat Macha will share details of his most recent and exotic discoveries, and also tell us some stories of families of lost airmen, who finally found peace, through his dedicated efforts.

About our speaker:

G. PAT MACHA, AUTHOR AND AIRCRAFT ARCHAEOLOGIST

G. Pat Macha is a retired high school history and geography teacher who has explored the mountains and deserts of the western states for 55 years in search of aircraft wrecks. He has authored six books in the field of aircraft archeology, produced a video on wreck finding and hosted the History Channel program, "Broken Wings". He is a noted public speaker lecturing on aviation safety and archeology to a wide range of audiences. Pat has been the coordinator since 1997 in the search for missing Women Airforce Service Pilot (WASP) Gertrude "Tommy" Tompkins Silver. Pat is a member of the American Aviation Historical Society, San Diego Air & Space Museum, and the Western Museum of Flight. For more information concerning Pat's work in the field of aviation accident history and archeology and Project Remembrance, see www.aircraftwrecks.com.



MAY LUNCHEON SPEAKER BRIEFING

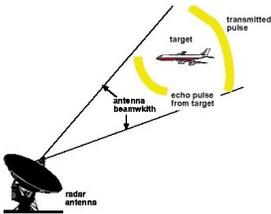
BY DAVID L. MALMAD – PAO

On May 10, 2018, the Grampaw Pettibone Squadron was honored to have as its guest speaker, Mr. Bill Schultz, PhD. Bill is a US Army and US Navy veteran. While in the Navy he acquired his knowledge and understanding of aviation electronics. Bill shared his knowledge and experience of: radar, aviation electronics, career achievements and his professional journey as a technician, university professor and research engineer.

Bill began his presentation by describing a number of events in WWII involving the use of radar. Radar was available in Hawaii on December 7 but not correctly interpreted in time to prevent the attack. Radar was a major contributor in supporting the war effort, though only a small trained population were capable of understanding the full operation and use at the beginning of the war. Its full value was kept secret until after the war.

The battle of Midway had enemy battleships utilizing radar though not on their aircraft carriers. However, US naval aircraft were able to successfully employ the equipment in locating the enemy fleet.

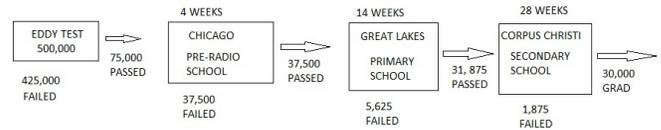
Leyte Gulf in late October 1944 is generally considered the largest naval battle in WWII and, by some criteria, possibly the largest naval battle in history. Radar to track and locate enemy fleet movements as well as utilization as part of the fire control system on a number of naval vessels was amply demonstrated. The US was able to restore as part of the force and utilize 6 battleships previously damaged at the Pearl Harbor attack. Enemy losses included; 1 carrier, 3 light carriers, 3 battleships, 10 cruisers, 11 destroyers as well as 300 aircraft and over 12,500 men. The outcome reduced the Japanese fleet significantly and limited their ability to pose significant challenge to allied forces for the balance of the war.



Our speaker noted that at the beginning of the war knowledge about advanced electronics technology was limited to a few hundred people and only a few were familiar with the concept of radar. The growth of the US military fleet and air arm demanded a corresponding increase in

the capability of qualified, trained personnel in advanced electronics and radar usage and maintenance. The training developed and carried out by the US Navy was considered a secret during the war and only disclosed in more recent years. Even before the war began it was noted that the need for qualified personnel was critical and a training program began as early as January 1942.

The Navy program was one of the most challenging and intense programs. A 46-week highly technical military course was developed. This training compressed a four-year degree in electronics into a program of less than one year. According to Bill, a standardized test was created called the Eddy Test used for a classification examination given throughout *World War II*, and for several years thereafter, as a means of identifying men with the capability and aptitude for being trained in the enlisted ranks as electronics maintenance personnel. Passing the Eddy Test served as the passport to the Electronics Training Program, possibly the best technical training program then available in the armed services. Of the estimated 500,000 who took the test, roughly 6% completed the program and were qualified as an ETP. The test was so secure no public copy is known to exist to this day.



William C. Eddy though hearing impaired made major contributions in the field of electronics, radio communication and radar. Based on his knowledge and skill in the field, in less than a month, Eddy's group had developed plans for what came to be recognized as the most challenging training program of WWII. Popularly called the Electronics Training Program (ETP), composed of a three-month Primary School, followed by a five- or six-month Secondary School, both involving unbelievable 15-hour study days.



According to our speaker, one of the major challenges in the classroom was failure of students to master the hand-held computer of the day, the

slide rule.

Bill noted that the demand for qualified personnel required a number of training facilities be developed. A pre-radio school was needed to qualify capable students. The US Navy took over two junior colleges and a high school in the Chicago area to be used for the pre-radio school programs. Tests were administered weekly and a single failure was grounds for dismissal from the program.

The primary school was conducted on six different college campuses, by engineering faculty. It was then moved to US Navy facilities at Great Lakes Training Center, and Michigan City. The secondary school covered the theory of operation and hands-on experience with the actual Navy hardware, all classified secret.

Because of the secret nature of the training and equipment, it was not considered secure enough at the Naval Academy. The secondary school was re-located to a facility on an off-shore island, Ward Island near Corpus Christi, Texas and guarded by US Marines both along the perimeter as well as inside the facility. The training utilized the latest equipment of the day: Radar, Loran, IFF, Countermeasures and Norden Bomb Sight.

Upon graduation the skills and knowledge acquired was applied within carrier air groups. Carrier air groups were independent of the ship's company and moved from carrier to carrier and might come aboard with newer radio or radar systems that the ships technician may never have seen till that time. It was therefore critical that technicians be trained and capable of working on all manner of equipment.

Our speaker after completing training was assigned on the last Essex Class aircraft carrier, the USS *Philippine Sea*, CV-47. Though the *Philippine Sea* was scrapped after the war, there were 24 vessels in this class and 4 (USS *Hornet*, CV-12; *Intrepid*, CV-11; *Lexington* CV-16 and *Yorktown*, CV-10) exist today as museums with one (USS *Oriskany*, CV-34) sunk and turned into a coral reef.

During a shakedown cruise in 1946 our speaker was assigned, the ship was recalled and equipment, provisions and supplies were brought on-board to support a mission for Admiral Robert Byrd to explore Antarctica. The assignment classified top secret had 6 ski-equipped R4D aircraft and 5000 personnel. The real purpose behind the mission was never disclosed to the support members.

After the cruise, Bill was assigned to a Fleet Airborne Electronic Training Unit as an instructor. He was responsible over a two year period to teach two-month courses to US Navy pilots on theory and

operation of all electronics in use in the US Navy for land, sea and air operations.

Upon completing his service obligation, Bill continued his education and acquired his BS, MS and PhD in Electrical Engineering from the University of Wisconsin. After receiving his doctorate, he was employed at the Cornell Aeronautical Laboratory of Cornell University, at the Buffalo, NY Airport. (1958 – 1975).

He was a research engineer and assistant department head of the Avionics Department, and was the Head of the Computer Center for six years. He served as a full-time visiting assistant professor, in the Graduate School of Electrical Engineering, Cornell University, Ithaca, NY, for the 1960-1961 academic year. By the early 60s, his knowledge of avionics was based on early vacuum tube technology and not viable for continued teaching in an era of integrated circuitry. He transferred his skills to the computer information systems department becoming professor and chair of the Computer Information Systems Department at the State University of New York College in Buffalo for 22 years, 1975 - 1997.

The development of what became radar (**radio, detection and ranging**) began in the U.S. in 1922 when the Naval Research Laboratory in Washington, DC conducted communication experiments with new antenna designs. The researchers noticed that a passing wooden ship in the Potomac River was interfering with their signals. The electromagnetic radiation created by radio waves could detect the presence of an object which blocked the signal. Further discovery occurred a few years later when researchers studying the ionosphere had transmission of radio waves interrupted by a passing aircraft. Further research led to the development and implementation of ground based as well as naval and aircraft equipped radar systems and radar detection devices. This equipment became the basis for the training programs our speaker conducted.

The development of radio communication and radar systems have a interesting history. The first ship to ship radio communication was in 1899, between the cruiser USS New York and battleship USS Massachusetts. The first two-way radio communication across the Atlantic was in 1903 between President Teddy Roosevelt and King Edward II. The first radio broadcast was on Christmas Eve, 1906 when broadcasting to ships at sea.

Our speaker's military training and subsequent education saw application after the service in organizations such as the Cornell Aeronautical Labs. Projects while at the lab included installation of an automatic flight control system to do terrain following flight research in a Martin B-57B Canberra aircraft. Additional research



in a series of variable stability studies in a Douglas B-26 was also conducted. This required a second pilot seat be installed containing flight instruments and controls with augmentation through

an on-board computer which could simulate aircraft designs and features that were not yet operational. The aircraft was called a Rubber Airplane. Another specially modified aircraft, the Convair 540 turbo prop aircraft was flown with an on-board digital computer to act like the Space Shuttle or B-1 bomber. One final project when our speaker was Director of the Computer Center was discussed which involved aeronautical engineers writing a series of

equations of motion for a 1972 American Motors Javelin to demonstrate the capability in terms of weight, horsepower, speed and suspension. By computer simulation, a set of ramps were created for take-off and landing to aid in the performance of a spiral jump. Based on the simulation research a stunt show was created and actual performance carried out at multiple events. The success of the performance led to the demonstration to be included in a James Bond movie, The Man with the Golden Gun in 1974.



Bill Schultz is thanked by Cindy Macha

OUTSTANDING SAILORS FROM SEAL BEACH NAVAL WEAPONS STATION HONORED



Front row: left to right, CDR John Quillinan, MA2 Abigail Weiss, MN3 Carlo Javeloza, MN2(SW) Christain Quezada, MN1(SW/EXW)Garret Schilz
Back Row: MACS Pascal Herrling, MNC Brian Lampman, CMDMC SKirby Lee, Sel Ramsy--Membership Chair for GPS

On May 10, 2018 the Grampaw Pettibone Squadron Luncheon, presented certificates and gifts to the Outstanding Sailors of the Quarter who are stationed at Seal Beach Naval Weapons Station.

For the Naval Weapons Station, Seal Beach, the Senior Sailor of the Quarter is MA1 Brandon Kinnerly; the Junior Sailor of the Quarter is MA2 Abigail Weiss, and the Blue Jacket of the Quarter is MASN Katherine Parsley.

For the Navy Munitions Command Pacific CONUS West Division Unit, Seal Beach, the Senior Sailor of the Quarter is MN1(SW/EXW) Garret Schilz; the Junior Sailor of the Quarter is MN2(SW) Christian Quezada; and the Blue Jacket of the Quarter is MN3 Carlo Jaeloza.

All of them, except two who did not attend because of conflict with duty at the base, received Certificates from Grampaw Pettibone Squadron. CMDMCS(AW/NAC) Kirby Lee, Command Senior Chief for the Weapons Station, introduced the sailors and MNC Brian Lampman and MACS Pascal Herrling assisted with the presentation. We thank local restaurants who participated in the honoring of these special sailors. Located on Main St., Seal Beach, were Avila's El Ranchito Mexican Restaurant, Crema Cafe, Hennessy's Tavern, O'Malley's on Main, and 320 MAIN. On Pacific Coast Highway, Seal Beach, were Finbars Italian

Kitchen, Glory Days Beachside Grill, and Yucatan Grill. On PCH, Long Beach, were Corner Bakery Cafe and Mimi's. On N. Marina Dr., Long Beach, was The Crab Pot Restaurant. Spaghettini was on Old Ranch Parkway, Seal Beach. On Seal Beach Blvd, Seal Beach, was California Pizza Kitchen, Chick-fil-A, Islands, and Romano's Macaroni Grill. On PCH Hwy, Sunset Beach, were Fish Camp and Harry's Rooftop Restaurant. Included also was the Crab Cooker & Fish Market on Newport Blvd., Newport Beach. Each sailor also received an attractive plaque from the USAA Insurance Company

We also had the opportunity to recognize Kirby Lee for his recent promotion which occurred less than two hours before our meeting. He was promoted to Master Chief Petty Officer, which is the highest Enlisted Rank in the Navy. Already he has served a year and a half as the Command Senior Chief for the Naval Weapons Station, Seal Beach. Congratulations to Master Chief Petty Officer Kirby Lee and all of the Sailors of the Quarter being honored today. Article by Bill Thompson



SENIOR CHIEF KIRBY C. LEE
Command Senior Chief, NWSSB
By Tim Brown

I found an announcement that Senior Chief Lee, the man who has been so helpful to GPS relative to our SOQ Recognition Program has been selected to the rank of Command Master Chief. Having very little experience with Navy ranks, I had to look up what is so neat about making CMC. Here is what I found on the Internet on some official U.S. Navy website:

Master Chief Petty Officer is one of the highest ranks available to enlisted members of the United States Navy, and is rated at the maximum enlisted DoD paygrade of E-9. Less than 1% of the Navy's personnel make it to the rank of Master Chief, and those who do are considered to be among the best and the brightest in their respective specialties.

Many Master Chief Petty Officers participate in the **Command Master Chief Petty Officer Program**, which provides advanced leadership and skills training for MCPOs eligible for advancement to senior leadership positions as Command Master Chief Petty Officers.

Promotion to **Master Chief Petty Officer** is similar to the promotion process for the other Chief Petty Officer ranks, and includes review by a sitting board of Master Chiefs in addition to a stringent series of evaluations and service time requirements.

Command Master Chief Petty Officer is the 10th rank in the United States Navy, ranking above Master Chief Petty Officer and directly below Master Chief Petty Officer of the Navy.

Wow! Pretty big deal for sure. I just want to congratulate CMDCM Lee for his promotion and thank him again for making Bill Thompson's job as SOQ Officer appear to be so easy (which I know it is not), for acting as MC at the luncheons and for being present at almost all of our programs.



FROM THE TREASURER
Ray LeCompte

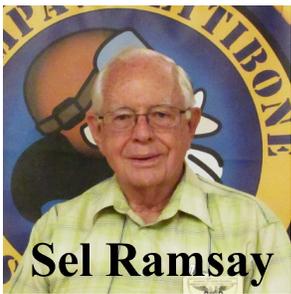
Through the consistent efforts of our "Chaplain," **BILL THOMPSON**, we recognized 3 Sailors of the Quarter from the the Naval Weapons Station, Seal Beach, Ca - PLUS - 3 Sailors of the Quarter

from the Navy Munitions Command Pacific, CONUS West Division, Seal Beach.

Thusly, we had a total of 41 attendees at our Hot Buffet LUNCHEON, only 30 of which were PAID attendees! Go Figure! Best we consider telephoning other members and car pooling in order to up our Luncheon audiences!

The following list of names are those that signed in at the door! And some of whom - also made a contribution over their cost of the Luncheon -- totaling \$58 to the Good Guys fund !! ThankYou !!

Mike Barr, Sel Ramsey, Larry Woodruff, R. D. Miller, Walt Smith, Peter Cherbak, Beatrice Granes, Hal & Anna McDonnell, James Fanhive, Don Pageler, Vincent Van den Brink, Chuck Jones, Bob Olds, Bob Fuhrmann, Garry Chapman, Chuck Stillwell, Pat Lynn, Charles Yonts, Bill Ohonpned, Rod Lasey, Bruce Water, Cindy Macha, Tim Brown, David Malmad, Ray LeCompte, Jim McMath, Dennis Zoga, Chris Kretsinger.



MEMBERSHIP

By Sel Ramsay

Memorial Day and the Elections: Where are the Veterans?

While placing flowers on graves at two cemeteries on Memorial Day I noticed a very big difference from prior years. There were very few graves decorated with flowers or flags.

I would guess that less than 1% were visited.

In the course of searching for new member prospects I ask many people if they are Veterans, thinking that people with some military experience are more likely to be interested in our programs and purpose. I don't get as many "Yes", answers as I used to. The number of Veterans in the House of Representatives and Senate gets smaller each year, too.

The Military Budget and Healthcare for our nation for our nation are huge costs to manage. Many experienced people are leaving office this year. Newcomers will be making expensive decisions without the wisdom of the past. Please make your election choices thoughtfully.



Coast Guard Academy graduation May 24. Ensign Bayley Olds(L) receiving his commission from Vice President Pence(C) and his grandfather(R), former GPS CO Bob Olds.