



ANA **GRAMPAW PETTIBONE**
SQUADRON INC.

1 DECEMBER 2017

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 DECEMBER 2017

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 December 2017

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

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



About our speaker's topic:

IN THE LINE OF DUTY MICHAEL J. ADAMS AND THE X-15

About our speaker:

AUTHOR, MICHELLE EVANS

Michelle Evans' research for her book, "The X-15 Rocket Plane, Flying the First Wings into Space" led her to interview nearly 70 people connected to the program, including Adams' wife, children, brother, and friends. Her unique perspective has been able to honor Major Michael J. Adams, and to bring him to life as one of the X-15 astronauts in her fascinating presentation. Michelle Evans is the founder and president of Mach 25 Media and is a writer, photographer, and communications specialist in aerospace. The author of "The X-15 Rocket Plane, Flying the First Wings into Space" (University of Nebraska Press, 2013), her background in aerospace engineering includes serving in the US Air Force working on missile systems and later in private industry accomplishing environmental testing for systems used in airliners and spacecraft. Her current work with Mach 25 Media provides education and display services for astronaut appearances and other space-related events at government facilities, science centers, schools, and other venues across the country and overseas.

The X-15 rocket plane was America's premiere research X-plane. It became the first aircraft to reach hypersonic velocities, and to create a new class of astronauts, ones who flew wings into space rather than rockets. The twelfth and final of these pilot/astronauts was Major Michael Adams from the US Air Force. As soon as the first group of American astronauts was announced in 1959, Adams knew where his career would take him. He was twice



forestalled in his attempts to reach space. First by losing a slot in the second group of American astronauts because of injuries sustained in an F-104 ejection, then by being chosen for the Air Force's Manned Orbiting Laboratory, which was canceled when politics entered the fray. Adams saw the X-15 as his new pathway to space, and was quickly accepted into that elite group, which included such legendary test pilots as Scott Crossfield, Robert White, and Neil Armstrong. Mike Adams was the only X-15 pilot to lose his life while flying the program. Because of this, few people know of him today.



NOV 09, 2017

SPEAKER BRIEFING

Article by DAVID L. MALMAD
GPS/PAO

On Nov 9, 2017, the Grampaw Pettibone Squadron was honored to have as its guest speaker, Major Alan B. Thornhill USMC. The Major provided the audience with an overview of his military

experience and emphasis on his involvement with and the history, characteristics and function of the Bell Boeing V-22 Osprey tiltrotor aircraft.

The Major opened his comments briefly reviewing his background, recent assignments, and initial pilot training flying the CH-46E Sea Knight helicopter before transitioning to the USMC version, which is designated the MV-22. Our speaker noted his almost 6 years flying the MV-22 and just under 1000 hours of pilot time in the aircraft. The Major became very familiar with the MV-22 during his duty as Maintenance Officer with HMM-166. His previous duty with HMMT-164 was the last west coast unit to transition to the MV-22. It is a 2 year process to transition aircraft. There are a total of 16 Fully Operational Capable MV-22 squadrons and 1 training unit. The first operational deployment for the USMC was in Iraq in 2007. The aircraft supports Marine Expeditionary Units (MEU) on the East Coast, West Coast, Afghanistan, Kuwait and Special Purpose in Spain.



The formal presentation began with a graphic overview of the history of V/STOL aircraft. Reference was made to a book on the history of the V-22, *"The Dream Machine: The Untold*

History of the Notorious V-22 Osprey." The Major presented an outline that included: Mission, Capability, Aircraft Profile, Survivability, Operations and Future.

The MV-22 Mission provides the USMC a medium lift assault support aircraft. Assault support provides transport for: Combat Troops, Supplies and Equipment for day or night time operations. As part of the presentation regarding

missions, the aircraft is: Sea and Shore Capable, Combat Transport, Air Delivery, Tactical Aircraft Recovery, Air Evac, Rapid Insertion and Extraction, Aviation Delivered Ground Refueling, Battlefield Illumination and Airborne Command and Control Platform.

Though capability does allow for vertical take-off, 90% of the time activity results in traditional airplane mode. A 24 seat capacity, all though it's a tight space with personal equipment. It's able to carry both internal and external cargo and with basic internal fuel enabling a 3 hour mission range. Internal cargo loads up to 10,000 lbs and external loads as much as 12,500 pounds in a sling load can be carried. Operational missions in Afghanistan were between 90-330 nautical miles from 25 minutes to 1 hr 25 minutes duration. While air-to-air refueling can extend missions to considerable distances, trip duration may be limited due to lack of crew facilities onboard. A combat load of 18 personnel with equipment, cargo or vehicles can be transported depending on mission. Configured as a medivac system will carry 12 litters.

Aircraft design, dimension and landing characteristics, requires a significant landing and takeoff footprint. The MV-22 is 57 feet long and wing span including blade length in vertical mode, extends dimension to over 85 feet. Normal operations with a single aircraft is 100x100 landing zone, increasing in reduced visibility environment to 200x200 feet. Multiple aircraft operations can increase the landing zone to 1200x1200 in low visibility.

The aircraft normally operates at 240 knots indicated for cruise to 260 knots for tactical conditions. A 13,000 foot operating ceiling limit is due to oxygen requirements for passengers. When in a vertical mode, the MV-22 will burn up to 4000#/hr between 0-60 knots airspeed. Conversion mode when moving from vertical to forward flight, the aircraft burns up to 3000#/hr at 120 knots. Airplane mode uses 2400-3600#/hr and cruises at sea level at 220-240 knots. Based on these numbers a typical 3 hour mission operating between 10-15,000 feet can be expected.

Any mission involving rapid insertion or extraction using fast rope/rappel or carrying external loads becomes a challenge due to the amount of downwash from the blades in vertical mode. The first member must maneuver the rope to minimize the effect of the downwash into a more vertical position or risk compromising the movement of personnel or cargo. Other missions enable paraops static line or freefall operations.

Onboard communication is comprised of UHF/VHF, SATCOM and GPS Repeater. An additional system is a unique troop commander situational awareness map, for real time or near real time area activity to support time sensitive missions. One system is the DWS (Defensive Weapon System), belly mounted mini-gun for self-defense.

When landing in desert conditions, the proprotor downwash reduces visibility creating significant operational limitations. Using a 1-5 rating, where 5 indicates no ground reference, the crew must maintain a high level of vigilance in completing a landing. Some automated features may be

utilized to assist landing if available.

The Major noted that due to the speed of the MV-22, mission standards may have the aircraft arrive after air support neutralizes opposition and before rotary units are on scene. Mission cruise is set at 240 knots ground speed till 3 miles from the LZ, speed is reduced and altitude decreases to arrive on scene in about 2 minutes.

Describing the survivability features of the MV-22, the Major noted a combination Aircraft Survivability Equipment (ASE) that includes flare canisters as well as crew served defensive weapons systems, such as M240D 7.62 minigun, GAU-17 DWS 7.62mm or GAU-16 .50 caliber machine gun.

Future capability may include MV-22 as a refueler, a forward firing remote weapons system and enabled communication features that increase aircraft and crew capability.



L to R: Cindy Macha, OPs; Major Alan B. Thornhill; Speaker and Lauren Thornhill, the Speaker's wife.

At the end the Major took questions from the audience. Questions ranged from current USMC inventory, use as an aircraft for POTUS, the downwash comparison with CH53E, engine loss operations, battle damage history and engine survivability under dusty conditions. A few of the answers noted a 300+ aircraft in the USMC

inventory, the MV-22 downwash of 120 knots compared to 80 knots for the CH-53E, a composite body that does require vigilance in avoiding battle damage and a limit of 30 seconds in dusty conditions to protect aircraft engine operation.



CO Column

Tim Brown

Thanksgiving has passed and we are moving into the heart of the holiday season. I really hope that everyone has a great December and that it leads to a very Happy New

Year. Again, I want to thank the staff members for all of their efforts throughout this last year. I also want to thank Bob Cashman for subbing for the PAO when he was unavailable. I also want to thank Joe Murphy and Bruce Guberman for helping out with the audio visual machinery. Without Bob, Bruce and Joe we would not have had all of those outstanding presentations over the past year, or know about them if we did not attend. Thank you all.

We have had changes over the year: lunch cost went to \$18 and members have to pay \$10 to get their OpPlan delivered via USPS. The thing that has not changed is that you continue to support the vibrant SOQ Awards Program through your attendance at the luncheons and monetary

contributions. Cindy continues to find interesting speakers, military and civilian, in a difficult environment (no active duty naval aviation installation close by). Hal continues to produce an outstanding OpPlan which is a great way to show off the vitality of GPS. Thank you all.

Having stated the positives, this year was not without losses. So many of our long time members have taken the last cut. We lost two former CO's of GPS: most recently Dave Newbro but also Mel Locke passed earlier this year. A couple of our important figures, Marv Garrison (former CO) and Andy Benjock (the man who does everything) are not doing well. Keep everyone in your prayers and here is looking forward to a happy, prosperous and healthy new year.

Officers of Grampaw Pettibone Squadron

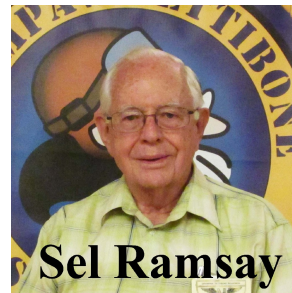
As the Staff Officers of GPS, we are here to keep everything running smoothly and assist members as needed. Please contact the appropriate Staff Officer with your questions and/or comments.

Commanding Officer- Tim Brown - timb53@hotmail.com
Executive Officer - Vincent van den Brink - vincentvdb1@yahoo.com
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Staff Officers Monthly Meeting

When: The 1st Thursday of every month except December.

Where: Usually at Garden Grove Elks Lodge but contact the C.O. in advance if you have not received a reminder email or if you intend to attend to observe and are not on the staff.



MEMBERSHIP

By Sel Ramsay

There is still 2 weeks of free admission for Veterans at Knott's Berry Farm (see last month's OpPlan, or call Knott's). Again, thank you, Knott's!

And thanks, too, to our many members who have contributed to making the recognition awards honoring our Active Duty Sailors of the Quarter and Sailors Of The Year possible!

And we are grateful for the wonderful speakers we have

had who have taken their time to share their interesting viewpoints and adventures with us every month, which keep us knowledgeable and current with Navy activity. We thank them greatly!

A side note of interest: Our field trip to the attack submarine *USS Pasadena* was located at the same spot in Los Angeles Harbor, near the ship *Lane Victory*, that the recent TV program "*NCIS Los Angeles*" had a bomb-laden ambulance take a speedy flying leap into the water!



From the **CHAPLAIN**

Bill Thompson

Christmas Memories

Some things you never forget. I remember the Christmas when I was a kid that Santa brought me a Lionel Train Set. It was a brand new world for me. I don't remember much about the day

except the joy of watching the train perform every time I pushed the throttle. What an absolute peaceful day for me.

I remember the Christmas day I was in Vietnam as another absolute peaceful day. The days before were days of being shot at and ministering to the wounded. But on Christmas both sides agreed to a cease-fire day. My Marines made a life-size manger scene of camels and shepherds made of cardboard boxes. The manger scene was complete with all the familiar figures we know so well--with ammo boxes. And we sang and prayed together (completely out in the open) as if we had been back in the world--(the U. S., that is). And that was an absolute peaceful moment for us. Amazing. Unreal. An absolute joy. Yes, before the 24 hour period was up, we were being shot at again. But most of the day was peaceful.

At the heart of every religion in the world I know, there is the hope of peace for the world.

Share the hope of peace with those you know as you say this year, "Merry Christmas".

May the peace of God be yours...in ways that are real and satisfying to you.

Memorial

MR. DAVID G. NEWBRO Former CO of GPS

Dave was one of the first members I remember from my early days in Grampaw Pettibone Squadron. Great guy, always with a ready smile and hearty handshake. Dave passed away on 9 November. He will be sorely missed. He joined ANA/GPS in 1976. Many of our members knew Dave for almost 30 years. He had already made himself invaluable in the early days by taking care of the printing of the OpPlan and some prep work too.

Then, in 1989, Dave and Ray Pett became the mainstays of

the committee that hosted the very successful ANA Convention in Anaheim. That convention and the advertising dollars generated by Dave and Ray's convention program/booklet carried GPS up till this date. In the same year, Dave, along with four other members were rewarded for their efforts with recognition as "ANA/GPS Fellows". In 1990 he was elected as Executive Officer of GPS and then "flected up" to serve as Commanding Officer in 1991-1992. During the 1990's he represented GPS and the West Coast as a National ANA Trustee.

I have missed Dave's infectious smile and wonderful, outgoing personality for the last few months that he has been unable to attend our luncheons. Audrey endeavored to keep him aware of what was happening at GPS, as over the years Dave had always truly enjoyed helping GPS do well, with great speakers and in support for the SOQ program at NWSSB. Just one parting note: my most vivid memory is that Dave and Bob Olds were the ones who strong armed me into taking on the job that they once occupied... CO of GPS. I do hope I have lived up to his expectations. We will miss you Dave.

Article by Tim Brown

STAFF CHRISTMAS PICTURES

Pictures by Dick Fields



C O Tim Brown and wife Julie.



Morningside Christmas Village

MERRY CHRISTMAS AND HAPPY NEW YEAR