

# **STRAIGHT SCOOP**

## PACIFIC COAST AIR MUSEUM

Volume XIX, Number 4 April 2014

# Get Your Tickets Now for an Evening with Astronaut Story Musgrave, May 17

NASA's most experienced astronaut, Story Musgrave, will be presenting an inspiring multimedia lecture about his amazing experiences in space and his vision for creating a successful life.

#### Click to buy tickets online for this very special event.

Tickets are also available in the PCAM gift shop.

Pacific Coast Air Museum is honored to make this remarkable evening open to the public and to students of all ages. Story's visionary speeches have captivated audiences all over the world and his expertise and passion for science, technology, innovation, creativity and leadership is sure to inspire the student within us all.

Story joined the U.S. Marines as an aircraft electrician and engine mechanic, became a pilot and accumulated over 18,000 hours in over 160 aircraft. As a parachutist he has 800 freefalls. Story now has seven graduate degrees in math, computers, chemistry, medicine, physiology, literature and psychology, and 20 honorary doctorates. As a NASA astronaut for over 30 years, he flew six space flights, performed the first shuttle spacewalk on Challenger's first flight, piloted an astronomy mission, conducted two classified DOD missions, was the lead spacewalker on the Hubble Telescope repair mission and on his last flight operated an electronic chip manufacturing satellite on Columbia. Story was a part-time trauma surgeon during his 30-year astronaut career. See http://www.storymusgrave.com.

The PCAM fundraiser event will be held 6:30 to 8:30 in the stunning Jackson Theater on the Sonoma Country Day School campus near the museum. Tickets will be \$30 for PCAM members, \$35 for non-members and \$10 for students with a valid school ID.

Read more about this event on the PCAM website: <a href="http://pacificcoastairmuseum.org/events/StoryMusgrave/">http://pacificcoastairmuseum.org/events/StoryMusgrave/</a>









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## The PCAM Mission

"To promote the acquisition, restoration, safe operation, preservation and display of historic aircraft, preserve aviation history and provide an educational venue for the community"



# **President's Message**

It has been fun to celebrate 25 years by looking back in time at our past history but this month I need to diverge for a moment to look forward. In reality it is an interesting perspective to reminisce about the past and then take a proper glance forward again to gain interesting insight to where the museum is headed. On March 14 the Strategic Planning Committee submitted a proposal to Sonoma County Airport Management to occupy the old Dragonfly Leasehold. The proposal included a complete retrofit of the existing office building and existing hangar. Also implied in the document was a move of the museum collection onto the leasehold property and adjacent concrete ramp. We would retain for the time being our currently located office building, patio, and F-15 exhibit. This would conclude the first phase of our move and the acquisition and restoration of the Butler hangar would be our second phase. Bear in mind that we are only in the negotiation phase but the possibility exists that, should the negotiation and permitting phase go smoothly, we could actually see some activity this year.

It is neither the time nor is the newsletter the place to go into the myriad of details involved in this move but please understand that we will be keeping everyone up -to-date on the latest developments. This proposal represents the first significant step toward actual growth for the museum in a very long time and has

# April in Aviation History...

On April 19, 1967, Major Leo Thorsness and his Electronic Warfare Officer, Captain Harold Johnson were flying their "Wild Weasel" F-105F Thunderchief on a mission to destroy North Vietnamese SAMs. They destroyed two SAM sites, but their wingman was shot down. Thorsness shot down a MiG-17 that had approached but had to flee another. They refueled and returned to defend rescue craft against additional MiGs. Thorsness stayed in the combat zone for over 50 minutes despite running out of ammo, then low on fuel he directed a tanker towards yet another low-fuel F-105. Thorsness received the Congressional Medal of Honor. PCAM has an F-105F nearly identical to Thorsness and Johnson's. **©**  many of us very excited about our immediate future. Please read your newsletter to stay informed on any developments.

— Lynn Hunt

# Hot Dog Thursday Returns April 3!

Mark your calendar, whet your appetite, and bring your bib because the first hot dog of the 2014 season is scheduled to be dished out on Thursday, April 3 on the museum patio. Join us between 11:30 and 1:30. \$5.00 (\$4.00



for members) gets you admission, a large hot dog, chips, and soda or water.

Last year, Hot Dog Thursday evolved into a major community event, with people coming in from all over the local area. So come enjoy the Spring sunshine, have a savory lunch, and talk with a bunch of people who share your interest in airplanes and good food!





Thank you to Hot Dog Thursday sponsors <u>Accent</u> <u>Printing and Task Mortgage and Investments</u>! 🗘





# And Speaking of 25 Years Ago...

These photos were submitted by Roger Olson. At the top we have Redwood Fiberglass on a rainy day in about 1989. Below that we have the Pacific Coast Air Museum on a rainy day in 2014. Happy Anniversary PCAM, and congratulations on having come so far. See Lynn Hunt's President's Message on page 2 to find out more about our continued growth.  $\heartsuit$ 





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# Memories of Aerocrafters

#### By Lynn Hunt

No discussion of the early days at PCAM would be complete without mentioning the role of a for-profit company located at the Sonoma County Airport during the same time period, namely Aerocrafters.



Aerocrafters tended to all manner of classic aircraft in facilities now belonging to Sonoma Jet Center. That's a MiG-17 at right.

Founded in 1991 by Steve Penning and myself (we were also Museum President and Vice President, respectively, at the time), the company specialized in the restoration and maintenance of vintage aircraft. During the 1990s the company grew in size from just the founders to eventually employ about 25 people. Aerocrafters remained in business until 2005 when it merged with another company to form Sonoma Jet Center.

Although work was performed on virtually any type of aircraft that came in the Aerocrafters door, the major focus and majority of the work was performed on vintage warbirds. As such Aerocrafters was a good source of information, parts, tools and expertise in assisting the museum during several acquisitions. Aerocrafters also maintained a large parts inventory of which the museum took great advantage. Also in the Aerocrafters inventory was a large number of special tools and equipment which was typically shared with the museum. Along with the tools and equipment usually came the Aerocrafters employees who knew how to use them. Many of the employees also served in vital roles as members and officers of the museum.

One only has to walk among the museum collection to

uncover the history of cooperation between the two organizations. PCAM's flagship Grumman Albatross was flown to Santa Rosa for an Annual Inspection and some restoration work at Aerocrafters. During the inspection some significant corrosion was found in the wings and an estimate to repair the damage was enough to make the owner ask if Aerocrafters knew of a worthy air museum in need of an Albatross. Our IL-I4 was brought up to airworthy condition by a team of volunteers and a crew from Aerocrafters who ferried the aircraft from Nevada to Santa Rosa. Several of the aircraft that flew into Santa Rosa passed through the Aerocrafters hangar including the F-I4 Tomcat for an engine swap and the A-6 Intruder for its de-mil.

PCAM's annual air show often triggered follow-on events at the Aerocrafters hangar as necessary repairs were performed before the visitors could depart. Often, during the air show, mechanics were busy in the Aerocrafters hangar adjusting brakes or performing minor repairs in preparation for the flying activities. Almost regardless of the nature of the emergency and whether there was an air show going on or not, if anyone needed assistance the go-to place and people of choice were the usually smiling faces at Aerocrafters who always seemed willing to help.

In 25 years the museum has matured and for the most part is self sufficient. We have many of our own parts and tools and the trained people to use them. Aerocrafters is gone now but many of those smiling faces remain on and around the airport. And guess what? If you ask them, not much has really changed! 🗘



The Albatross at left (#1911) is still at STS, as is the little trainer in front of it with the Polish national "checkerboard" markings.



# B-36 Peacemaker to Join Flight Wing

Good news, bomber and Cold War fans! PCAM has obtained a flyable B-36H Peacemaker that will become a central part of the Flight Wing. This rather large bird was discovered behind a pile of disused Vought F7U Cutlasses in a dusty old tunnel under NAS China Lake, where it had lain hidden for over fifty years. Details of just how PCAM was selected to receive this rare plane are sketchy, and we've decided it's probably best not to delve too deeply.

PCAM volunteers have been bringing it home in pieces on trailers towed behind their pickup trucks, over the course of several trips. A circuitous route is used to avoid tunnels, overpasses, two-lane roads, overhanging streetlights, road signs, power lines, trees, canyon walls, small towns with narrow main streets, and the various state Highway Patrols along the way, as the sixteen-foot diameter fuselage provides certain challenges.

Once back at PCAM, it will be reassembled and rigged for flight. Despite the lengthening of the airport's runways, our airframe experts are looking into installing canards to improve short-field takeoff and landing performance. PCAM President Lynn Hunt has generously offered to donate a spare pair of B-25 wings for that purpose. Let's all be sure to thank Lynn next time we see him.

Fuel costs for any operable aircraft are always a concern, and the '36 – with its six 4360 radials and four J47 tur-

bojets – is a notoriously thirsty bird. A bake sale will be held sometime this summer to help defray fuel costs. It has also been suggested that we offer paid glider towing services to local sailplane pilots. We are in the process of procuring tow lines approximately 15,000 feet long to help our customers avoid the wake turbulence. We figure we can tow up to twenty sailplanes at a time, qualifying local groups for a club discount. And of course we'll be selling seats for rides; minimum group size will be 390.

We cornered PCAM Director of Museum Operations Christina Olds and before she could get away we made her tell us what she thought of the Peacemaker, to which she replied, "Can't we just get the Cessna 170 flying? It's a really nice little airplane."

When asked for a quote, Director of Aircraft Acquisitions Mark Fajardin deadpanned, "B-36? What are you talking about?"

On a purely practical point, does anyone know where we can get a tow tractor of sufficient size to handle this plane? We think a used Caterpillar D-10 or D-12 bulldozer might just do the trick.



The PCAM B-36H Peacemaker comes in under a low ceiling near STS.

If you are interested in helping to reassemble or maintain the B-36 Peacemaker, contact Crew Chief April Phuyle. Her contact information is available on the website and in the back of this newsletter. 🗘



# B-17 and B-24 to Visit in May

Like PCAM, the Collings Foundation's Wings of Freedom Tour celebrates its 25th anniversary this year. Their B-17G Flying Fortress and B-24J Liberator will be at the Charles M. Schulz-Sonoma County Airport May 28-30, 2014. Come on out and see the planes. For a few dollars you can climb on board and see all the details of these meticulously restored historic aircraft while on the ground. And for a once-in-a-lifetime experience, buy a ticket for half an hour in the air. You'll experience all the sounds, smells, and sights that only an authentic piece of flying history like these can provide. <u>http://www.collingsfoundation.org</u>.





This view can only be had from the nose of a genuine B-17 Flying Fortress. You'll get your chance in May when the Collings Foundation will be in town and you can buy your own ride aboard their beautifully restored B-17 or B-24.

# Annual Bus Trip: Planes & Trains

Our annual bus trip is coming up on Saturday, May 31. This year we'll be making a fun trip to Sacramento to visit the Aerospace Museum of California at McClellan Field. A box lunch picnic will follow. Then we'll head off to the California State Railroad Museum. Mark your calendars and get your tickets early! They are \$50 each. Call Duane at the office (707)575-7900 or send an email to admin@pacificcoastairmuseum.org to reserve your space.

Don't delay! Last year's bus trip filled up a month in advance. 😳



Visit <u>www.aerospaceca.org</u>



Visit <u>www.csrmf.org</u>



# How many PCAM Members Does it Take to Glue a Plane Together?

By Ron Stout

Five, apparently. Gary Casassa, Cody Harrington, Reese Gassmann, Bob Gutteridge and Andy Werback used panel bonding adhesive to glue the trailing edge of the A-7A Corsair II stabilator together. This is a two part adhesive from the auto industry that sets up very quickly and they needed to get all of the parts, clamps and related bits together before the glue set up.

The A-7A was donated to the Museum a few years ago. Mark Fajardin put most

Left to right, Gary Casassa, Cody Harrington, Reese Gassmann, Bob Gutteridge and Andy Werback

of it together and found that we were missing many pieces. Bob Gutteridge and I made a couple of trips to Victoria, BC to retrieve the instrument panel, control stick and many other cockpit pieces from another A-7A. I swear that they built the plane around the instrument panel, since it was so difficult to get back in! These parts were installed last year and she made it to our Air Show for the first time. Thank you Gary, Cody, Reese, Bob, and Andy for continuing the restoration!  $\heartsuit$ 

# The Human Race: It's Time to Soar!

## Help Earn Money for PCAM Education Programs

Come join our PCAM Human Race team on May 10 as we walk or run the annual 3K or 10K fundraising event to raise money for our Pacific Coast Air Museum education programs. The Human Race is an annual community fundraiser sponsored by The Volunteer Center of Sonoma County. This is a unique opportunity for individuals, families and businesses to work together to raise money to support the local non-profit organization of their choice.

This year's Human Race theme, "A Time To Soar", is a perfect fit for us at the museum. Our team, along with the Reach Medical team and local businesses close to the airport will set out at a slow walk or a fast clip at 8:00AM on Saturday, May 10th - beginning and finishing in Santa Rosa at Herbert Slater Middle School - 3500 Sonoma Avenue. If you want to



The Human Race is always a fun community event, as this photo from a past Race will attest.

be a timed runner, please go to <u>www.humanracenow.org</u> to download the entrance form to return with a \$35 entry fee. There is no fee to walk or run the 3K and 10K in the group. Please call or email Christina at 575-7900 (<u>christina.olds@pacificcoastairmuseum.org</u>) if you'd like to join the team. We have extra donation forms in the office, will provide forms at the membership meeting and can also mail one to you. Start collecting money TODAY from family, friends or co-workers. Any size donation, very small or wonderfully large, will help support our Museum's ability to provide education programs for the youngsters in our community. **③** 





# EAA Chapter 124 Announces 2014 CAFE Electric Aircraft Symposium

The CAFE Foundation (Comparative Aircraft Flight Efficiency) has announced its preliminary program for the 2014 CAFE Electric Aircraft Symposium. This eighth annual event has again attracted an outstanding international faculty of leaders in all of the relevant technologies. Members of EAA Chapter 124 and the



general public are invited to join CAFE this spring for this exciting two-day meeting in Sonoma County. Registration is available online.

The CAFE Foundation is offering EAA 124 members a reduced tuition of \$185. The regular price is \$549 per person. This includes breakfasts, Friday lunch, and snacks. The Friday evening theme dinner includes short presentations and discussions covering additional topics relevant to electric aircraft. Dinner is optional at a cost of \$50. The reduced EAA tuition is recognized when you use the special link below.

EAA 124 members should register at <u>http://</u> cafefoundation.org/v2/ea\_eas\_2014\_reg.php?type=eaa

The general public should register at <u>http://</u> cafefoundation.org/v2/ea\_eas\_2014\_reg.php

Other information about the 2014 Electric Aircraft Symposium Program can be found here: <u>http://cafefoundation.org/v2/EAS/2014/EASVIII-</u> earlybird.html

CAFE Foundation creates and advances the understanding of personal aircraft technologies through research, analysis, and education. 🗘

## **Gift Shop April Deal**

Doolittle Raiders XL tee shirts are now just \$4.99. Duane not included. 🗘



#### Air Show Flashback

Kent Pietsch lands his Interstate Cadet on "the world's smallest aircraft carrier." Kent's comic routine draws smiles and gasps, with parts falling off his plane, a wingtip dragged along the runway, and a roll of toilet paper tossed out and repeatedly cut into smaller and smaller pieces with his wing.





# In Case You Missed It: March 19 Guest Speaker — Charley Taylor

## Catapult and Arresting Gear Officer Aboard USS Enterprise CVN 65

The photo was posted to the PCAM website. It showed a younger Charley Taylor, now the PCAM Speaker Coordinator and himself the next speaker at our monthly meeting. It showed him on the deck of the USS Enterprise, clad in the yellow garb of a Catapult and Arresting Gear Officer. That in itself was no mystery, because his topic at the March meeting was launching and trapping Navy aircraft aboard our first nuclear carrier. But that photo revealed something disturbing, something unex-

plained. It raised questions. Nagging questions. Questions that refused to be ignored. Sure, we knew Charley would describe his experiences back in the 1970s launching and recovering F-4 Phantoms, F-14 Tomcats, A-6 Intruders, and the large and intimidating RA-5C Vigilantes. That was a given. That was to be expected. But Charley – What's with that beard?

described in this story are still in use today, it is written in the past tense because it portrays one person's past experiences on a now decommissioned vessel.

## **Catapult and Arresting Gear Education**

Charley flew A-6 Intruders with the Navy during the Vietnam War. He had 271 catapult launches and arrested landings over the course of six years. During the war, experienced combat pilots would be transferred into and out of combat squadrons fairly regularly. Once the war was over there was less need for combatproven pilots in active squadrons so the Navy kept them out of the cockpit and let other less-experienced pilots take their places. If a veteran pilot wanted sea

duty he'd have to find another job and many went to work on flight decks. Charley was assigned to catapult and arrestor gear duty, for which his many launches and recoveries had amply prepared him.

Early in his presentation Charley told of a bad nighttime launch he experienced as a pilot. The shot didn't feel right as he went down the track. He looked at his instruments

We didn't learn about the beard until about 40 minutes into his presentation. The beard, he said, was a gift of sorts from Admiral Zumwalt, the Chief of Naval Operations, who had decreed that officers could grow beards if they weren't flying. Beards soon sprouted all over the ship like weeds after a spring rain. Charley's came in red (see photo) which was quite a surprise, since he was not a redhead. Then someone else became Chief of Naval Operations and the beards had to go.

The deck of a carrier is an incredibly cramped and complex system, given the life-or-death activities involved. It requires a large and supremely professional crew to do things efficiently and safely. Charley gave us just a brief look into this world of forty years ago, and explained something of his small but vital role in it.

Note: Although some of the practices and equipment

and saw that his airspeed indicator read zero and was not moving, and his altimeter was spinning backward. His artificial horizon indicated that the plane had pitched up dramatically. At only about 60 feet altitude the plane was uncontrollable and just as it stalled he called for eject. Both he and his bombardier/navigator made it out OK and were quickly recovered. This is part of the reason why the Navy preferred experienced pilots for running catapults and arrestor gear; they understood at an instinctive level the importance of getting everything right in preparation for launch and recovery.

He was sent to school in Lakehurst, New Jersey. The training center was in one of the old and very large dirigible hangars constructed before World War II. Classrooms stood along the outside wall, and inside the han-

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gar was a mockup of a carrier deck with. Charley and other Catapult and Arresting Gear Officers were trained to be in charge of both the catapults and the arresting gear. On the carrier deck they would wear the yellow uniforms that designate their role. Other roles were signified with different colors.

## Launching Them

Overall responsibility for managing launch and recovery operations on the flight deck resided with the Air Boss, a senior officer who watched everything from a glass booth on the carrier's island. The ship's captain and perhaps an admiral would watch everything as well, so all the top brass knew the moment something was amiss.

On the Enterprise (CVN 65), steam from the nuclear plant (it had eight reactors rather than the usual one) was piped to four catapults, two at the bow and two on the angled deck. Each was independently controlled through valves and launch controls and each had a crew to manage it. You could not simply hook a plane up and launch it; the steam pressure in the catapult had to be adjusted for each shot to ensure that that particular plane reached its optimal takeoff speed which



Charley signals the launch of an F-14. Note his non-standard outfit. At the end of this particular cruise, the catapult crew dressed as cowboys to send the aircraft off in style as they left the ship to return to their land bases. The Catapult Officer monitored steam pressure via gauges in a steam chest accessible through a hatch in the deck (at right). He telegraphed his adjustments to operators below decks, who turned the valves to allow more or less steam in. Controls on newer catapults are more conveniently located.



The launch bridle (diagonal black lines) is clearly visible as this F-4 Phantom is readied for launch (U.S. Navy Photo)

depended upon the aircraft design, the load it carried, the wind speed and angle over the deck, air temperature, and other variables. Launch too fast and the plane might be hard to manage. Too slow, and it could stall and dive into the sea. The weight of the plane was calculated in advance and written on its side in grease pencil, and several crew members checked and crosschecked with each other to make sure things were right and that the steam pressure was dialed in correctly. There was a carefully choreographed sequence of visual signals preparatory to launch, culminating in the pilot's salute, the catapult officer's hand hitting and then rising from the deck, and a single button push that would release steam into the cat and send the plane on its way. At night, these signals were augmented with various hand-held lights and by flashing the lights on the plane.

When activated, the steam pushed two enormous pistons in the catapult rapidly forward. A shuttle connected to the pistons protruded through the deck. Older aircraft types were attached to the shuttle with a steel cable or bridle. After launch, the bridle fell off the aircraft and was retrieved for reuse. After a specified number of launches, the bridle was pitched over the side. Charley quipped that the Gulf of Tonkin must be half full of catapult bridles. Newer aircraft have a fitting on the nose gear that attaches to the shuttle, and no bridle is needed. Charley regularly handled both types of aircraft.

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It takes a few seconds for enough steam pressure to build up in the catapult to ensure a strong and decisive launch. Thus, the shuttle and the plane must be held back until the optimal launch pressure is achieved. Older airplanes required special one-time-use steel "hold-back" fittings that were designed to break when the optimal pressure was released. Half of the fitting took off with the plane. Both halves were eventually pitched over the side. The Gulf of Tonkin must be half full of broken hold-back fittings. Newer catapults use a hydraulic hold-back that can be adjusted to release at the right time. Charley handled both types.

Part of Charley's job was to make sure the blast deflection plates were raised and lowered appropriately. These plates were installed in the deck just aft of the catapult and were hydraulically raised prior to launch. Without them, the jet blast would sweep the deck of everything for several hundred feet: equipment, tractor tugs, other aircraft, and yes, crewmen. After launch the plates were lowered again so another plane could be placed on the catapult.

#### **Recovering Them**

We now switch to the aft end of the ship. The Landing Signal Officer or LSO was responsible for directing the pilot in to land or in Navy parlance, "trap." Charley's job as a Catapult and Arresting Gear Officer was to make sure the arresting gear was set properly to receive them and that the deck was clear and ready. He signaled readiness to the LSO and the Air Boss via red and green lights that he controlled through a deadman's switch. When held down, the switch turned the lights on the carrier deck green, signaling that all was good for landing. If released, the switch turned the lights red to warn that things were not ready.

Similarly to the catapults, the arresting gear had to be adjusted for each plane depending on its gross weight. Each of the four arresting cables was controlled by its own huge engine that ran the width of the ship. The cable was spooled up under the deck, and when the plane caught it a metering system fed out the cable under carefully calculated tension. This tension depended upon the speed and weight of the plane, the weight of fuel and stores left on board, wind, and so forth. The tension was set to stop every plane, light or heavy, at approximately the same spot. If weight setting was too high it could damage the plane, break the tail hook, or even break the cable, and the plane could run off the



An F-8U Crusader lands on CVA-31, the Bon Homme Richard. Charley says F-8s were always a handful, because their high landing speed and long length made it hard for the pilot to judge where his hook was in relation to the wire. (U.S. Navy Photo)

end of the deck and into the water. Many planes and pilots have been lost through such accidents. Too low and the plane could overrun its stopping point, take more time to clear from the deck, or even run off the end of the angled deck.

Charley and his counterparts had to know at a glance what type of plane was on final, so they could get their baseline settings correct. They learned to recognize their silhouettes during the day, and the configuration of their navigation and other lights at night.

Arrestor cables or "cross-deck pendants" could only be used for 100 traps. After that they were pitched over the side. The Gulf of Tonkin must be half full of discarded arrestor cables. It took careful tracking to make sure no cable was overused and posed the threat of breaking, especially since some invariably were used more than others; the #3 cable was the target cable for each landing and thus wore out faster. Charley was

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not responsible for keeping score, but someone was. A cable could be changed at any time, including during a recovery phase, and it took only sixty to ninety seconds to do so.

Catapult and arrestor gear officers each made up their own reference tables of weights, speeds, and equipment settings for each type of plane under various weight loads. By calculating and creating these tables themselves they were far more certain to internalize the characteristics of each plane and the physics involved, and thus be able to make the right choices and adjustments under pressure.



An RA-5C on USS Independence, circa 1966. This big plane always taxed the catapults and arresting gear to their maximum. Note the raised rectangular blast shield just behind the plane. (U.S. Navy Photo)

#### Vigilance over the Vigilantes

Charley told a number of stories of launches and recoveries, which he plans to include in a forthcoming book. If related here, they would take up every page of this edition so we will focus on one of his favorite aircraft: The Navy's RA-5C Vigilante reconnaissance plane.

The Vigilante was a direct development of the A-5 Vigilante, a short-lived supersonic, carrier-based nuclear strike bomber. The A-5 was notable for a number of features, one being the unique tubular bomb bay between the engines. The nuclear payload was to be dropped out the back, through a round hatch concealed by the tail cone. The later RA-5C fast reconnaissance aircraft had extra removable fuel tanks occupying the former bomb bay. The Vigilante was the heaviest bird on the ship at the time, and quite a handagain right on queue. A fine, efficient show for the visiting officer from the rival service, which was good because he was in the right seat of a KA-6D, the aerial tanker version of the A-6 Intruder, and was in the queue to launch. The plane next to his and a little ahead was an RA-5C. It was placed on the catapult. The deflection plate was raised. All hands went to their stations. Signals were exchanged. Engines were run up to maximum, the pilot saluted, and the Vigilante shot down the track. Its internal fuel tanks - prey to one of Newton's various laws - slithered out the back and smashed through the tail cone. The reader should note that this is not standard procedure. The tanks crashed to the deck and burst open just as the plane's exhaust plume – a 20-foot torch from the afterburner – swept across them. A large patch of burning fuel, accompanied by the customary smoke, now covered the deck and forward end of the catapult. The Vigilante departed with no problem, but presumably got set up for

ful to launch and recover. It always taxed the catapults nearly to their maximum, and always launched in afterburner.

One time a US Air Force Captain was visiting the Enterprise on an exchange program. This man, a former F -105 Wild Weasel pilot, had experienced everything

> the North Vietnamese could deliver in terms of SAMs. AAA. and other hazards in the combat zone. He was there to get a taste of naval aircraft ops. One day he was participating in a launch and recovery sequence. Several planes were catapulted with no unusual circumstances, all catapults working flawlessly, their crews operating efficiently, and the jet blast deflection plates rising from the deck and lowering



a rapid recovery since it had left most of its fuel behind on (or rather all over) the carrier. The well-drilled fire crews immediately set to work with foam and water putting out the conflagration. Meanwhile in the KA-6D, a stony silence reigned. Its pilot was not going to even hint in front of his passenger that this bothered him in the least. After a short time, the fire was out. But when the blast deflector plates were raised for the next launch, the fuel that had pooled in their recesses ignited and the fire team went to work again. There were no injuries and not enough damage to even report it as an accident. Sometime during all this, the Air Force Captain turned to his pilot and asked, with eyes as big as saucers peering out over his  $O_2$  mask, "Does this kind of thing happen often?" Without the slightest irony or hesitation, the pilot replied, "Yeah, pretty much."

Another time, Charley was supervising launches on a hot, windless day in the Indian Ocean. A Vigilante took its place on the cat. Charley ran his calculations and discovered that by using the highest steam pressure he had ever seen -720 pounds per square inch - and with full afterburner that Viggie would launch at a dangerously slow airspeed of only four or five knots over stall. He signaled to the air boss that it was no-go for launch. They either needed more steam or more wind over the deck, as the key element in a launch is air speed at the end of the catapult stroke. The air boss called the captain. The captain called the engineering team. The engineering team sent more steam to the turbines to speed the ship up and increase relative wind speed over the deck. But with a limited amount of steam generating capability, this taxed things beyond their normal limits, and Charley saw the steam pressure in his catapult dropping. The plane would still be too close to stall speed. He needed both more steam and more speed but could only get one or the other. Charley scrubbed the launch again. He wasn't going to risk a pilot and a plane on a marginal launch in a noncombat situation. Later that day he received a chewing -out from the ship's captain, but no punishment. After all, regardless of the frustration and disruption it caused, it was the correct call to make. Perhaps that captain just needed someone to vent upon, having realized that his mighty nuclear powered carrier could be hamstrung by calm winds, just like its sail-driven forebears of previous centuries.

We are indebted and express our thanks to Charley Taylor for the unique view he gave us of the life of a Catapult and Arresting Gear Officer during and just after the Vietnam era. Enterprise CVN 65 has since been decommissioned, and the last launch of a Phantom, Crusader, Intruder, Vigilante and even the Tomcat took place many years ago. Arresting gear now use a centrifugal engine, and electromagnetic catapults are in development to replace the giant steam cats. Pilotless aircraft have been tested on the latest generation of supercarriers. But for now the challenge, thrill, and danger of night-time launches and bad-weather recoveries of manned aircraft all remain much the same. Until we have drone deck crews to serve drone aircraft, the intelligent, dedicated, and highly competent men and women on the deck and out in the weather are as important to defending this nation as are the planes and pilots they launch and bring home.

For more information on carrier flight operations we suggest you try Wikipedia for starters: <u>http://en.wikipedia.org/wiki/</u> <u>Modern United States Navy carrier air operations</u>.

## About Charley Taylor

Born in Kansas, Charley was an Air Force "brat" who moved around the country with his family and graduated from Arizona State University, joining the US Navy prior to graduation. After earning his commission as an Ensign at Aviation Officer Candidate School in Pensacola, Florida, and receiving his Navy Wings sixteen months later, he made two combat deployments aboard USS Enterprise flying the A-6 Intruder with VA-196 (featured in the book and movie Flight of the Intruder). He later returned to the Enterprise as a Catapult and Arresting Gear Officer. He eventually served 25 years in the Navy and retired as a Commander. He has spent the last 21 years working in the public sector in the human resources field. He and his wife Charlene came back to the Bay Area in 2000 to be near their twin daughters and three grandchildren. Now semiretired, Charley divides his time between his family, PCAM, the "Mentor Me Petaluma" program, training HR staff in Contra Costa County, and writing.



## April 16 Guest Speaker:

## Navy Pilot and Author Captain David Leue' (Ret.) on Flying F4U Corsairs and F9F Panthers in Korea

Korean Conflict - A Fighter Pilot's Diary tells the story of Captain David Leue' flying F-4U Corsairs and later F-9F Panthers during the Korean War.

His detailed work takes us back over sixty years to describe an upstate New York youth who grew up during WWII and entered the US Navy shortly after war's end. He describes flying his first combat missions over Korea as well as the arduous steps that led to earning his designation as a Naval Aviator and



wearing his Navy "Wings of Gold."

His book describes the politics that led to the Korean War as well the political developments during that conflict. Captain Leue's Navy career spanned 32 years and saw him promoted through the ranks from Sea Apprentice to Captain. His career went on to include leading an A-4 Skyhawk squadron flying combat during Vietnam, chronicled in his book *Vietnam Combat – An Attack Pilot's Diary*. Captain Leue' will be offering autographed copies of each book at our member's meeting on April 16.  $\bigcirc$ 

#### Just for Fun...

At Right: The H-34 Choctaw keeps its engine down low and in the nose, rather than up under the rotors as on most helicopters. It's a nine-cylinder Wright radial; the Choctaw was one of the last big helicopter designs to use a reciprocating engine. Most use turbines. This rare view under the hood was available to Museum visitors over the March Open Cockpit Weekend.

#### **New Members Since January**

Nancy Sandborn Family, Sebastopol Michael Combs. Novato Teresa & Scott Whitmire Family, San Rafael Ron Pearson, Fulton, CA Ed Kinney, Santa Rosa Loren Kramer, Petaluma **Robert Hunter**. Willits Stephen Cooper Family, Santa Rosa Hugh Maugg, Junior Member, Santa Rosa Walter Shock, Rohnert Park Michael Joyce, Sebastopol Brian & Roxanna Hemmerlin Family, Santa Rosa Carl Burchfiel, Santa Rosa Steve Suter Family, Santa Rosa Andrew McDermott Family, Sonoma Christopher Theodorou, Hercules, CA Wayne Williams, Worthington, OH Margaret Frame, Santa Rosa Wally & Noelani Tillery Family, Petaluma E. Marshall Kelly, Cloverdale lim Joyce Family, Sebastopol Alex Bellu Junior Member, Windsor Mark Crowley, Windsor Louis Gugliemino WW2 Vet & Family, Healdsburg Greg Kirchoff, Santa Rosa





## The Pacific Coast Air Museum

#### Location

One Air Museum Way, Santa Rosa, CA, 95403 <u>www.pacificcoastairmuseum.org</u> 707-575-7900

At the Charles M. Schulz-Sonoma County Airport, north of Santa Rosa. Hwy 101 north to Airport Blvd. and go west. Turn left on North Laughlin Rd, right on Becker Blvd. then right on Air Museum Way.



#### Hours

Tuesday, Thursday, Saturday and Sunday. 10:00 a.m.—4:00 p.m.

#### "Climb Aboard"

A selected aircraft is available to "Climb Aboard" the third weekend of each month (weather permitting). Please visit our web site at <u>www.pacificcoastairmuseum.org</u> or call 707-575-7900 for details or more Information.

#### **Member Meetings**

Normally held on the third Wednesday of each month, 7:00 p.m. at Mesa Beverage Company, Inc. 3200 N. Laughlin Road, Santa Rosa, CA

#### "Straight Scoop" Newsletter

The museum newsletter, "Straight Scoop" is published monthly and is available online on the museum's web site. Members are encouraged to submit articles for possible publication. Deadline: the 26th of the month prior to publication. All articles in the newsletter are covered by copyright. If you wish to submit articles or use any of the content, please contact Peter Loughlin, Editor: <u>pcam-</u> news@loughlinmarketing.com, 707-575-7900.

#### **Membership Renewals**

\$40 per year individual; \$60 per year for families. Send renewals to the museum, address below.

#### **Address Corrections**

Please send to Pacific Coast Air Museum, One Air Museum Way, Santa Rosa, CA 95403

Visit our web site at <u>www.pacificcoastairmuseum.org</u> or call 707-575-7900 for more Information.

Read the "Red Baron Flyer," the quarterly newsletter of the Charles M. Schulz-Sonoma County Airport: http://www.sonomacountyairport.org/red-baron-flyer

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PCAM YouTube Video Channel http://www.youtube.com/user/ PCAMvideos



STRAIGHT SCOOP April 2014

#### **REMEMBER THESE DATES**

Thursday April 3	11:30 a.m 1:30 p.m.	Hot Dog Thursday
Wednesday April 16	7:00 p.m 9:00 p.m.	PCAM Member Meeting at Mesa Beverage
Thursday May I	11:30 a.m 1:30 p.m.	Hot Dog Thursday
Saturday May 10	Begins 8:00 a.m.	The Human Race Walk & Run Fundraiser "It's Time to Soar"
Saturday May 17	Begins 10:00 a.m.	Santa Rosa Rose Parade—come watch the PCAM float!
Saturday May 17	6:30 p.m 8:30 p.m.	Event with NASA Astronaut Story Musgrave
May 28-30	ТВА	Collings Foundation B-17 & B-24 at STS
Thursday June 5	11:30 a.m 1:30 p.m.	Hot Dog Thursday
Saturday June 21	5:00 p.m 7:00 p.m.	Annual Pig BBQ & 25th Anniversary Party
Saturday July 19	ТВА	PCAM Palooza Dance
Friday Sep 19	ТВА	Air Show Gala
Sat & Sun Sep 20 & 21	All Day	Wings Over Wine Country Air Show

Pacific Coast Air Museum One Air Museum Way Santa Rosa, CA 95403 707-575-7900 www.pacificcoastairmuseum.org