

By Dave Desmon

**B**y now, most of you know about the tragedy that occurred at the 2011 Reno National Championship Air Races. A highly modified and very promising unlimited air racer, the "Galloping Ghost" #177, flown by aviation legend Jimmy Leeward, suffered some kind of failure, and lost control, crashing into the box seating area, right between the 2 Cascade Warbirds Boxes, A-41 and B-40. The crash claimed the lives of our good friends, George and Wendy Hewitt, along with Jimmy Leeward and 8 others.

Friday was a beautiful day for racing in Reno, and we were all looking forward to the 1st Unlimited Gold Heat of the season, and the 1st ever match up between the Galloping Ghost and the fastest of the racers. The line up was exciting – #7 Strega – who had posted a new record 499.16 MPH speed in qualifying, #5 Voodoo right on her heels, #77 Rare Bear – the winningest race plane in Reno unlimited history, #177 The Galloping Ghost, #8 Dreadnought – and #71 Sawbones. #15 Furias was also slated in the heat, but had developed problems earlier in the day, and was expected to run on Saturday.

I was standing with many CWB and Air Racing friends in the aisle between A-41 and B-40, thrilled at what a great race we were seeing. We had just been talking to our good friends George & Wendy, and making plans with them for the evening as the racers came down the chute. Strega and Voodoo stretched out in front, followed by Rare Bear and the Ghost, with 1st lap speeds in the 497 MPH range (on Friday! With 2 more days of racing ahead!). By the 2nd lap, Jimmy Leeward had had enough of 4th place, and pushed the power up and shot past Rare Bear like it was easy. Some reports have him going in excess of 500 MPH at that point. Strega and Voodoo were squarely in the Ghost's sights. THIS was the race we'd come to see!

Rounding pylons 8 & 9 and heading for the home pylon for lap #3, something happened. The Ghost rolled sharply left, pitched in (up), and then back right and popped up. She continued to roll inverted and over the crowd. We saw the left elevator trim tab depart the airplane, and the nose dropped, with every person in the crowd sure it was pointed right at them.

I remember looking up at the reflection in GG's polished spinner (a pretty surreal sight!), and thinking "You're kidding, right??" Then trying to figure out which way to jump. The Ghost hit right in the aisle between A-41 and B-40 about 6 feet from us at over 400 MPH.

We've flown many places with George & Wendy Hewitt, and done many formation flights together. I co-piloted for George as we won the efficiency contest at the 2011 Navion Society National Convention. We were just making plans for the evening as the Gold racers came down the chute (we were going to go race go-carts). We turned to watch the race, and never saw George & Wendy again. Our friend Larry Cruz of Wings West Governors, who has the box just east of ours lost his right hand and had a bad head wound. When I got up off the ground and saw Larry, I thought he was dead. Another of his friends in his box was.

The fantastic thing was the response afterward - both immediately and in the following days. I didn't see anyone lose their cool. Everybody (who could) just picked themselves up, started looking for what needed to be done, and DID it. Within 2 or 3 minutes, I'll bet we had 800 1st responders and helpers in the immediate area. They came pouring out of the stands, the boxes, and the pits. They came in ambulances, helicopters, and fire engines. I hesitate to start naming names, knowing that I only saw a fraction of the overall response, but with that in mind – here goes.... One of our Members, Anne (Coatney) Morrell who is an ER Doctor - also saw Larry, and decided "Not on MY Watch!!". She gathered up curtain material from the boxes, and started applying tourniquets and providing immediate care to Larry and several others. Larry not only survived, but we were in his ICU room 72 hours later, telling fish stories and jokes. I'm convinced Anne saved Larry's life. Thanks, Anne! We were checked on by at least one of the race pilots, member Vic McMann, who rode his bike down from the T-6 pits, and was playing surgical nurse to a former Vietnam corpsman rendering aid. You may have heard of the crew of the Vietnam era Huey that was on

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### WARBIRD FLYER

★★ Cascade Warbirds ★★ EAA Squadron 2 Newsletter

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### XO's Cockpit

(Continued from 1)

display in the Rolls Royce Heritage area - they pulled it out, fired it up, and were medevacing people in it in minutes. I remember looking over and thinking "Where the \*#&\$% did the HUEY come from??" Now I know. Kathy Bauer and Burt West were running around checking on people, and assisting in general.

I was completely AWED by the response. They wanted to put my girlfriend and I on a helicopter, I said "you will NOT -you use them for somebody who's HURT!" (Thinking of Larry, and some others in equally bad shape I'd seen) When we did get to the hospital, (4 to an Ambulance) I figured I'd be waiting for DAYS. In very little time, I had 3 people working on me, cleaning and stitching up wounds. I asked "Isn't there somebody really hurt that needs you more?", they said "No, we're here for YOU".

The next day when George & Wendy's Family started arriving in Reno, our hotel (Circus Circus) insisted on comp-ing their rooms. We were met by managers, asking if there was anything they could do to help. Larry's hotel comp-ed their whole stay. New member Ken Hicks was Johnnyon-the spot with numerous transportation needs, while his wife Carol and daughter Melissa stayed with my injured girlfriend as I attended to the many needs of the family.

I called on Neil and Linda Morrison and threw them into the unenviable spot of helping me to meet George & Wendy's Family members at the airport, accompany them through the interviews with the Coroner, and get them settled. Neil and Linda cut short a family trip to Virginia City, and jumped right into the breech. Believe me, it was HARD! They were magnificent. Thanks, and I'm Sorry, guys!

The FBO where I had parked my Navion (Million Air @ RNO) retrieved it from it's remote parking spot, and put it right in front of their doors. They had 2 BIG Lineboys at our beck and call to help get my girlfriend into it. It was 5 days later when things were finally arranged for George & Wendy, and we finally DID leave - and the plane

and the lineboys were still there. (a fair bit of climbing was involved - with her broken foot). Then Million Air waived the parking fees, and arranged to return our rental car for us, even though we had not rented it through them.

The entire community - at the Races, the hospitals, and in town, was 150% supportive. It was great to see people all pulling together to take care of one another, and to get done what needed to be done.

Even now, our Cascade Warbird members are continuing to check on one another, and offers of assistance are still coming in at 10 times the rate we could possibly use. It was terrible to lose our friends that way, but it happened. We can't change it. Feeling bad won't help. What we can do now is to go forward, and make some good out of it. We need to continue to look out for each other, and do some good. I think we need to insure that we save the Air Races. Larry and I already have a pact to be standing in the Same Spot Next Year, drinkin' Margaritas, Smokin' Cee-gars, and watching the Races.

Maybe we'll just establish our own TFR around the boxes next year!

We will be having a celebration of George & Wendy's lives at the Heritage Flight Museum at the Bellingham Airport on Sat., Oct. 22, starting at 2 PM. Cascade Warbirds will be performing a flyover and Missing Man (Wx permitting!), most likely with Navions that flew with George regularly, and one that he used to fly. All CWB members and friends of George & Wendy are most welcome to come join us there.

Try not to dwell too much on the terrible tragedy, but focus instead on how the whole Cascade Warbird family and the aviation family as a whole have showed and continue to show their very finest in response. Let's see what good we can all make happen together in the weeks and months to come.

# Capt. Walter Spangenberg, Jr., USN (Ret) By Walt Spangenberg

alt learned to fly while in high school at Stevens Airport in Frederick County, Maryland as a Civil Air Patrol Cadet, but took the long way around to earning his Navy Wings. He spent three years at the Naval Academy and two years as a cruiser deck and engineering officer before entering US Navy flight training.

Walt earned his wings of gold in 1950 and was soon off to the carrierbased F4U-4 Corsair squadron VF-783 in 1951 which included a deployment to Korea. 1952 brought an assignment to the re-commisioned Air Group Nine with VF-91 at NAS Alameda flying the F9F-2 Panther which led to another deployment to Korea.

Upon returning from the cruises to Korea, Walt completed aero engineering postgraduate study which was followed by a return to the Pacific Fleet flying the FJ-3 Fury. Following a deployment to the USS Ticonderoga in the Western Pacific, Walt was assigned to VX-4 Test and Evaluation Squadron based at NAS Point Mugu. There he tested the AGM-12 Bullpup air-to-ground

missile while flying the FJ-4B Fury and A4D-2 Skyhawk. This work led to Test Pilot School at NAS Patusent River, MD with flying qualities and performance testing in a wide

variety of aicraft. These aicraft ranged from the multi-engine Piper Aztec and Grumman Mohawk, to the future front line nucleur-strike capable AJ3 Vigilante and the sub hunting P-3 Orion. A liaison visit to the the Royal Navy test squadron at Boscombe Down in England brought the rare opportunity to test the DeHaviland Sea Vixen and Gannet AEW.3.

Walt was current in no fewer than eleven naval aircraft when he left the Test

Center in 1963. As a result of this breadth of experience, Walt was sent for a year to an aicraft ferry squadron wheih was then desperate for pilots with multiple-currency due to the strict impostion of NATOPS qualifications and currency requirements. This requirement was in the interest of safety but tough on the ferry business as it was conducted, like a chess game, from point A to B and then to C and on to D: all in different aircraft! This assignment proved to be a great opportunity to do lots of cross-country flying with stops at

many Naval Air Stations and even Air Force Bases that had been previously unvisited.

A return to the fleet occured in 1964 with assignment as an XO and then CO of the F-4 Phantom squadron VF-143 "Pukin' Dogs" which saw combat deployments aboard the USS Constellation and USS Ranger to Vietnam. It was mostly an air-to-mud game, but there were a few high points, like the Haiphong oil strike in June of 1966

After flying missions in his second war, the flying was all down hill from Walt's point of view. Two tours in Naval Air Systems Commend project management in Washington were divided by a year at sea as a commanding officer of the amphibious assult ship USS Monticello LSD-

35. The Washington assignments were mitigated a bit by proficiency flying in the T-1A SeaStar during the first tour and by towing gliders on weekends at Warrenton, VA.

> After leaving the armed services, Walt spent his post-Navy activity in the aerospace industry. This work mostly involved flight test engineering but his need to get back to the air was improved a little by evening flying with a co-worker in the Beech Bonanza of which he was a part-owner.

Walt has found retirement in the Northwest to be agreeable with participation in the activities of the Whidbey Island Navy

Flying Club (WNFAC) and

the Cascade Warbirds Squadron. Many of Walt's award winning articles can be found in the newsletter archives section of this website. •





### **Squadron News**

#### **HOLIDAY GATHERING**

Fall is in the air and our thoughts naturally turn to the ensuing holiday season. On Saturday, 10 December, we gather again at The Medallion Hotel in Smokey Point for our annual Christmas Gala. The event kicks off at 1730 hours with a no-host cocktail party and dinner will be served at 1900 hours. The price this year remains the same at \$38 each. Prepayment is required; send your checks to CWB, 1066 Yates Road, Oak Harbor, WA, 98277. This is the one event of the year where the only flying allowed is in the stories we tell. But we do give away two seats on next season's B-17 flights, so that's a good reason to attend - just as Al Sauer. The Medallion has again set aside a block of rooms for us so that we can "take the elevator home" after the party. Call 360.657.0500 or 888.784.2320 and be sure to mention that you're with CWB to get the special rate; it's still only \$89. You have until 25 November to make your rezzie.

#### **INEXORABLE**

Like the incoming tide upon the beach, it's time to think again about annual dues. Still only \$20 per year, you can renew now by sending your check

for 2012 to CWB, 1066 Yates Road, Oak Harbor, WA, 98277. Look at the mailing label on this newsletter to see your paid-thru date; you can send one check with your dinner rezzie check and save yourself the price of a stamp. I'm just saying . . .

#### **ANNUAL MEETING**

The annual meeting of the membership is scheduled for 14 January 2012 at the Museum of Flight, Seattle. The meeting with start promptly at 10:00 am (or so) and be followed after by a no-host luncheon in the Wings Cafe. Of note for this meeting is the selection of your board of directors. If you have any interest in participating in the leadership of the squadron and have not already done so, contact Nominating Committee Chair Frank Almstead at fns5@frontier.com.

#### **NEW MEMBERS**

We've had some folks see the light and take the plunge. When you meet them, wish them well and make them feel comfortable.

Ken Hicks Edmonds, WA
Bill Wilson Seattle, WA
Kirstan Norris Bremerton, WA
Vic Norris Bremerton, WA



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are pretty well settled into a routine out here in the Sea of Japan. The airdales fly for three days and then we take a day off for replenishment. We have to do this because after three days the jets have used up all the aviation fuel in the ship and the Corsairs and Skyraiders have carried off all the bombs and rockets." It was also bandied about that the Skyraiders had dropped everything but the kitchen sink on the North Koreans, so of course one of the Skyraider squadrons eventually managed to find an old kitchen sink, strap it on the bottom of an AD and go drop it on North Korea!

We were learning in those days with jet fighters on straight decks, expecting and hoping for new ideas and more advanced equipment.

# What a Difference Three Years Made!

I went to shore duty for three years at the end of the active hostilities in Korea, and came back to the Fleet to find carriers with angle decks, optical landing systems that allowed a constant power-on glide slope to touchdown, and more capable steam catapults. The angle deck and optical landing system were set up to put the aircraft down on the third of four wires with clear deck ahead. The pilot would go to full throttle on touchdown, so if he missed a wire for any reason he had the power to just keep going, fly off the angle and go around for another landing attempt. The steam catapult enabled the ship to launch heavier aircraft with a more even acceleration on the catapult track. We also were flying faster swept-wing FJ "Fury" fighters, with more powerful if not more reliable jet engines, and soon got air refueling probes on the fighters and tanker aircraft in the air wings! It was truly a safer and better world flying jets aboard ship. •

### George and Wendy Hewitt

By Dave Desmon

It is with very heavy hearts that we report that fellow Cascade Warbird Members George and Wendy Hewitt were taken together from us far too early during the Reno Unlimited Gold Heat Race September 16, 2011 as one of the Race Planes, the "Galloping Ghost", crashed into the Box Seat area between the 2 Cascade Warbirds Boxes.

Captain George Hewitt was born in Winnipeg, Manitoba, and served as a pilot in the RCAF before embarking on a 37 ½ year career as a pilot for Air Canada. He had recently retired as a Senior Captain on the Boeing 777, and was very proud to have flown the 1st Air Canada 777 non-stop from Canada to Australia.

George was kind, warmhearted, and delighted in the world around him. His face always bore his trademark enthusiastic smile. George delighted in flying with his Family, and with his Friends, and was especially fond of Formation Flying, which he practiced often with his Cascade Warbirds comrades. George was a "Good Stick", and a fine Wingman. George flew often with his friend Harvey Browne, a WWII Veteran, in Harvey's white Navion to ensure that Harvey was able to continue to fly well past his 95th birthday.

Wendy was born in Vancouver B.C. and dedicated her life to others, working for a number of non-profit organizations including United Way, the Arthritis

Foundation, Blue Skies for Children, the American Red Cross, and the Colorado River Women's Council. She was a lover of life, a dedicated worker, a caring soul, and one of the world's absolute treasures.

George and Wendy were joined in marriage on April 11, 1992 in

North Vancouver, B.C., having met at Vancouver's Grouse Mountain Ski Area. Following George's retirement last year, George and Wendy moved from the Northwest to warmer weather and new adventures at their new home on an airpark in Fort Mohave, Arizona. They enjoyed flying, four-wheeling, RV trips, and swimming, were looking forward to welcoming 2 new Grandchildren, and to learning Chinese, and to visiting China. They continued to come back to the NW to visit and fly with friends

often. Together George and Wendy lived adventurous, happy lives at full throttle.

A service and celebration of the lives of George and Wendy Hewitt will be held on Saturday, Oct. 22, 2011 at 2 PM at the Heritage Flight Museum at the Bellingham International Airport, 4165 Mitchell Way, Bellingham, WA 98226. In lieu of flowers, donations to the Bellingham Mt. Baker Chapter of the American Red Cross http://www. mtbredcross.org/ or Colorado River Women's Council http://crwclub.org would be appreciated. The Cascade Warbirds will also be awarding youth aviation

scholarships in George and Wendy's name. Donations may be made at: http://www.cascadewarbirds.org/. We will miss our Good Friends. Blue Skies and Tail Winds, George & Wendy. •

### Boring?

By Ed Rombauer

The other week, while enjoying the "last of the summer wine," I was having a quiet afternoon lunch at one of my favorite waterfront watering holes. Sitting on the deck with the sun shining and the water sparkling, I was only half listening to the conversation at our table between the three other people with me. I found it easy to tune out a conversation that I didn't have much interest in and allowed my thoughts to wander into the other activities that had attracted my attention.

The harbor was filled with small boats as well as

large cargo ships and there was a constant stream of aircraft flying their arrival patterns into SeaTac. As I politely nodded and smiled at the appropriate times in the conversation, my thoughts and memories were of the many times I had flown these same arrivals upon my return home.



As I allowed my attention to half-heartedly rejoin the conversation, I was jolted back to the reality of the day by a remark from a more puerile member at our table. "The two most boring jobs in the world have got to be running a ferry boat and flying airliners." Not wanting to create a public scene with someone whose only flying experience was a coach seat to Cabo, I smiled and replied that I liked boring flying. Fortunately, it was time to leave, sparing me from having to defend "boring flying."

Someone once wrote that flying is "hours and hours of boredom punctuated by moments of stark

terror." While the term "terror" may be a bit over the top, many of us have experienced moments of heightened anxiety while pursuing our favorite sport. I remember one of my co-workers favorite devices was a cardboard cutout of an aircraft-type gage that he called his "fun meter." Most of the time during normal operations, the fun meter, which he attached to his instrument panel, would indicate a very low reading. Occasionally, it would rise into the mid- orange range when we were flying one of the more difficult night

approaches.

On one occasion, while returning to the West coast from Hawaii, the dispatcher started calling to warn us of deteriorating weather conditions at our destination. Turning to look at the fuel gage, I noticed that the fun meter was indicating midorange. During the next two hours

there was a steady stream of calls from dispatch as they scrambled to change our alternate and stay ahead of the changing conditions. As we approached the coast, the dispatcher was back again with bad news; all the airports on the coast were now below minimums with the exception of one which was scheduled to go down at our arrival time. With the fuel level rapidly decreasing, our alternate, located in the eastern part of the state, was reachable only if we didn't make an approach on the coast. The fun meter had moved into the low red zone.

Contacting approach control, I informed them that we would only be able to start an approach if the visibility was going to stay above minimums. Fall fog in the Pacific Northwest can move in very quickly, and at midnight you are gambling with a bad hand on how much time remains before it completely shuts down any visibility. While modern aircraft with their sophisticated electronics and auto-pilots are very capable of driving a multiton airliner down to a precision landing with the pilot acting only as an observer, it still requires the pilot to see enough runway to stay on the pavement after landing.

With the RVR hovering at 1200 feet (our minimums), and one last glance at the fuel gauge, we started our approach.

Descending through the silence of the midnight fog, I could sense the fun meter being moved up a notch as the fuel decreased. At 100 feet above the runway one or two dimly visible lights were seen, allowing us to land, where we watched the runway lights disappear as the fog drove the visibility to zero. As I stopped the aircraft on the

runway to try and find a turn off, there was a quiet voice from the dark corner of the flight deck, "My fun meter's pegged out!"

The previous anecdote is nothing unusual in the world of revenue flying. Low visibility approaches occur hundreds of times a year with well-trained flight crews bringing their aircraft to a safe arrival. While I have never thought of flying as "boring," neither have I considered my type of flying as overly "exciting." There is however, a category of flying that is definitely exciting—the air show performer. If the pilot is well trained and experienced, most of the time it's the spectator that experiences excitement, while the pilot considers it just another day at the office.

Discounting waiting-around time, most pilots would agree that flying is neither boring nor exciting, but interesting—a top of the green zone on the fun meter. The ability to stay out of the red upper zone of the meter is a measure of the skill and experience of the individual aviator. It's when we start to operate outside of our skill and experience zone that we risk creating a high level of excitement for the pilot. Pushing an aircraft past its limits or piloting beyond your ability means that you have become a test pilot in an experimental airplane. It's always better

for the spectators on the ground to be excited and the pilot bored than

the other way around. As we have recently seen, the most

dangerous situation in air show flying is when both the spectators and the pilot peg out their "fun meters" on the excitement end of the scale, at the same time.

The air show announcer for the Blue Angels will tell the audience that the maneuvers performed by the team are standard maneuvers taught to and used by all Navy

pilots flying those aircraft. Yeah right—that eighteen inch wingtip separation while flying a diamond formation doesn't automatically come with a shiny new set of wings. It's the training and experience that keeps your fun meter firmly in the green.

As I left the restaurant that day, I looked up wistfully to an airliner flying his approach and thought that it would be better to be up there being "bored" than on the ground looking for excitement.

Disclaimer: The above does not apply if you are flying a military aircraft in a combat situation. There's something about being shot at that keeps the fun meter firmly pegged out in the red. •

### Weekend of Serious Fun

By Ron Morrell and Chris Zimmer

The art of flying is many things to different people, but few things have really changed since Oswald Boelcke. As warbird owners many of our aircraft were engineered with capabilities and the intent to exceed basic flight training. This capability can provide operators with a unique opportunity to explore the envelope and experience the exhilaration of exercising a warbird in an arena and attitude where it excels. Recently a group of like-minded Northwest aviators, all of differing skill levels, gathered to hone old skills,

learn new ones, explore their aircraft's potential, and to simply have fun.

For our group, the day consisted of a small amount of basic formation practice enabling a more comprehensive exploration of advanced formations and techniques. The participants consisted of

TYLE JANSMA - AFROC APTURE IMAGES

a RedStar and NATA flight lead pilot, a RedStar wingman, a JLFC wingman who survived another border crossing without incident, and a highly experienced, non-FAST qualified, ex-Naval Aviator (our sandbagger).

#### We called it PACIFIC ROUNDUP 2011

The tac-meet started before a single blade was pulled, or an air bottle uncorked. It began the night before with a gear inspection.

1. Five-point harness: check

2. Helmet: check

3. Parachute: check

4. Flight suit: check

The morning of the first "Round-Up" began as most new ventures do...rough and behind schedule. The

Canadian fog slowed down the arrival of Snowchang Engbrecht. Upon his arrival the group jumped right to the detailed briefing that would set the tone for the day: Safety, Professionalism, and Fun! First we briefed the day's standards for comms, emergency, and general operations. The old adage applies: Brief the standards and fly the brief. The basics were covered quickly (except for reminding the Sandbagger that not all signals and procedures are the same as Miramar in the 1960s). Next: a classroom dialogue of the weekend's

objectives and the basics of three dimensional closure techniques; lead lag pursuit, yoyo, quarter plane, lag roll, and the cone. With all the bookwork out of the way it was time to light the fires and see if any of this hangar dissertation actually translated to stick and rudder.

The four of us saddled up, the roar of open

stacks crackled across the flightline and the tell-tale smoke of round engines drifted across the asphalt. Moments later, we were on the roll. The initial sortie was a warm up and opportunity to practice each of the basic skills one by one in a scripted environment. After nearly an hour of good station keeping practice, and exploring some minor g maneuvers to get warm, we headed back to brief the next step. It's hard to beat the stables of the Heritage Flight Museum for a good debriefing backdrop. We made our way past the mentoring Texan, iconic Mustang, and the selfless L-13. These, well worn, battle horses sat resting, slowly dripping oil and watching, as if pondering whether these new comers were worthy of sharing the tarmac.

The debrief discussion reflected on what we had accomplished and then quickly expanded the lesson plan for part two of the day. The basics have had time

to cure; we were ready to bring these skills together for libations. advanced fun.

A couple of formation take-offs later we were outbound to the practice area with a better appreciation for the complexities of three-dimensional space. The

group split into two-ship elements, allowing room for each element to perform more vertical methods of controlling closure. Utilizing our new skillset we maneuvered our aircraft around the cone, controlling distance and closure, with precision and confidence. After



one final unconventional element rejoin, the formation was RTB for the Bellingham overhead. Our second de-brief was quicker and full of much more animated "hand flying" than the first – an indication that the

elusive dopamine had begun to flow. After a Talledega worthy refuel, our Canadian asset had to depart to make the tightly controlled border crossing. The remaining three were able to fit in one more sortie as we departed Bellingham for home ports. A well-executed vic

takeoff set the final tone for the weekend as the thump of our radials droned into the distance. After some close trail and additional vitamin G, the day wrapped up with a debrief in the appropriate setting, which included tall stools, a wooden bar and an assortment of

Many of the skills we tested over that weekend are the same skills we rely on as a group of operators at shows. Our ability to effectively judge and react has direct safety implications for all of us as a

> community. Learning these techniques and practicing the precision control of our aircraft correlates to the safety of a rejoin and maintaining both consistent spacing and visual during our summer events, but just as important is the heart pounding exhilaration of exploring unusual attitudes and the mechanical, physical, and mental performance

of you and your aircraft as a team.

Overall, it was a small but productive gathering of our Cascade Warbird pilots and it would be refreshing to see more of these types of gatherings

> amongst our group. Any gathering of two or more pilots within our ranks, whether they be like airplanes or practice with dissimilar airplanes, as long as it is done with safety and learning in mind, is a great goal for all of us.

A big Roundup thanks goes out to the Bellingham ground, tower, and fuel crews whose exceptional

hospitality made our day hitch-free, to Greg Anders and Heritage Flight Museum for their hospitality, and to the participating members for all their hard work that made the day safe and fun. O



### Buffalo Soldiers On

By John Clark

What aircraft designed for US Naval carrier service comes to mind when you read about a record of 32 kills for every aircraft lost? The Grumman F6F Hellcat and Chance Vought F4U Corsair probably come to mind. Those would be good guesses but fall short at 19:1 and 11:1 respectively. The Wildcat? Not quite but it's nearly 7:1 kill ratio throughout the war is impressive considering the superiority of Japanese airplanes and pilots early in the war. Would you be surprised if the airplane in question is widely thought of as the worst fighter in all of WWII? The honor of the 32:1 kill ratio goes to the lowly Brewster Buffalo. Yes, the Buffalo. Though removed early in war by US Naval forces, it went on to shine in the European theater against Russian forces.

The Buffalo was designed by Brewster to meet the

specifications set forth in 1935 to replace the Grumman F3F biplane. The by the US Navy for use as a carrierborne fighter. The specification called for a In a performance WWII Shunned by the US Navy and relegated to the Marines In doing so, it became the first Naval fighter to feature an allmetal structure and monoplane design

This tubby design featured a metal frame

and was covered with stressed skinned aluminum which was fastened by flush headed rivets. Systems included hydraulically driven main landing gear, split flaps, and a constant speed propeller. The cockpit was fully covered with a framed semi-bubble canopy to offer superb all around view. Control surfaces were more convential for the time being with fabric. It was powered by a 9 cyclinder single row Wright R-1820 Cyclone which offered 950hp at takeoff. Armament consisted of single 0.30 inch and 0.50 inch machine guns in the nose with 600 total rounds. It's light construction, large wing and relatively high power to weight ratio gave it enough performance to beat all other aircraft in the Navy competition, inleuding the Grumman XF4F-1. The new Brewster Buffulo was quite an advance over the technology then in service with air arms around the world. It could climb at 2750 feet per minute and was capable of over 300 mph in level flight. This was especially significant considering that it was designed for the rugged demands of carrier service. The US Navy placed an order for 54 airframes and it would be designated the F2A-1.

As with nearly all aircraft entering military service, there were changes in the works. Most changes were for the worst when it came to performance. Two wing mounted 0.50 in machine guns and additional combat requirements added weight with no additional increase in power. Next came a more powerful engine that added 250hp to the newly designated F2A-2. While top speed in level flight increased to 323mph, the additional weight reduced climb rate to 2500 ft/min.

The definitive model F2A-3 came about in early 1941 but not before Brewster's production problems and the airplane's flaws had become painfully apparent. In this

latest and last model, the US Navy specified the addition of pilot armor, additional ammunition capacity, wing tanks as well as the need for all fuel tanks to be self-sealing. This once sprightly performer in the eyes of many naval pilots, including then USMC Lt. Gregory Boyington, had become a dog in almost all aspects with the exception of long range cruise flight. Without a new more powerful engine, naval

leaders removed the Buffalo from front line Navy service and sent them to the Marines. One Marine squadron based at Midway Island put up an initially spirited defense knocking down four of the incoming Japanese aircraft prior to the attack on June 4th, 1942. With height and speed lost on the initial run, the Buffalos were swiftly cut down by the superior Japanese pilots in their Mitsubishi Type 0 (Zeke) fighters. Those aircraft that survived throughout the fleet were quickly transferred to the training command.

Yet the story for the Brewster Buffalo was far from over. Brewster produced their model B-339 which was roughly equivilent to the Navy's F2A-1 model albeit with the naval equipment removed. These were the very aircraft which the US Navy had ordered in 1936 but had been delayed to such an extent that only 11 were delivered. The remaining 43 went to the Finnish Air Force. ❖



## Jet Operations on Straight-Deck Carriers

By Walt Spangenberg

t the end of World War II the U.S. Navy had an ample supply of tactical aircraft, Essex Class aircraft carriers and trained aviation personnel, all prepared for an anticipated assault on the Japanese home islands. Fortunately, the war ended and that assault was not required. The Navy then put excess ships in mothballs, many of the aircraft in storage, and many of the trained personnel were released to inactive duty and civilian life.

Well developed procedures for carrier flight operations involved deck-run takeoffs for most of the aircraft, daylight flight in visual conditions most of the time, and a visual landing pattern with the final approach aided by a landing signal officer waving "paddles" to assist as appropriate. There were twelve cross-deck cable landing wires and a nylon web barricade that could catch damaged aircraft or those that missed all of the wires, in order to prevent an errant landing aircraft from crashing into parked aircraft on the forward part of the straight deck. The F4U "Corsair" fighter, as an example, typically flew a final approach at about 85 knots, about 125 feet above the water, following the LSO signals to attain the proper lineup, altitude and airspeed for a throttle "cut" and then a pilot-controlled landing on the deck. With the usual 25 knots of wind over the deck, the aircraft's speed relative to the deck would be 55-60 knots at the cut.

#### **Considerations Relative to Introduction of Jet Aircraft**

Jet aircraft are fundamentally different in several respects that affect carrier operations: they take off, fly, and land significantly faster than propeller-driven aircraft; they consume fuel significantly faster, and in the case of early jet engines, they accelerated and decelerated significantly more slowly than do reciprocating aircraft engines. Operating procedures ashore changed primarily in the use of longer runways to allow for higher takeoff and landing approach speeds. Initial tests indicated that carrier operating procedures would have to be modified to include catapulting all jets to provide the necessary airspeed for takeoff, a wider and slightly higher landing pattern to accommodate the jet's higher pattern speed and turning circle, and a cut in power earlier (further astern of the landing area) in order to allow the jet engine time to accelerate to or near idle rpm. All of these factors made life more difficult for both the pilot and the LSO. It also became SOP, at least in Panther squadrons, to make landing approaches with speed brakes open so that a higher engine rpm would provide faster acceleration to full power in case a wave-off was required. This increased fuel flow, of course, but provided an additional safety factor, especially in shipboard operations.

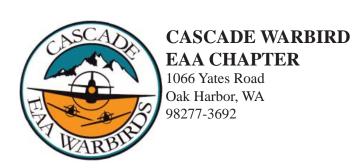
By the year 1950, when combat operations began in

Korea, most carrier air groups had at least one jet squadron, with those in the Atlantic flying the F2H-1 or -2 "Banshee" and those in the Pacific flying the F9F-2 "Panther". The Navy at that time had a small "jet transition unit" at Pensacola, Florida, but most naval aviators transitioned to the much-discussed status of "Jet Pilot" simply by being in the right place at the right time: that is by being on sea duty in a fighter squadron when that squadron's time came to be re-equipped with jets. In the absence of a jet training squadron in the Fleet, the squadron would then train itself to be a jet squadron with the aid of the Pilot's Handbook, the local aircraft manufacturer's Representative, and such additional information as could be picked up informally from aviator who had already made the transition.

As normal carrier operations in Korea settled into a routine, the usual shipboard flight schedule required a 3 hour "double cycle" for the F4U and AD propeller-driven aircraft, and a 1.5 hour cycle for the jets, to accommodate their higher fuel consumption and shorter endurance. This was arranged to allow catapulting the jets first to provide space for deck-run takeoffs by the props; then after 1.5 hours, landing the first group of jets and launching a second group; after 3 hours, launching the second full cycle before landing first the jets and then the props from the first cycle. After each aircraft landed it was taxied across the landing wires ahead of it and across the Davis jet barrier and the palisade; then parked in an available space on the forward flight deck. None of the Navy's carrier aircraft were equipped for air refueling in those days, so any sort of delay in the planned landing sequence could result in fuel problems for the airborne jets. This situation led to the practice of scheduling normal training activities near enough to a "bingo field" ashore so that aircraft low on fuel could land ashore in the event of a foul deck or long delay; or when operating with another carrier nearby, one ship would maintain a "ready deck"

The cachet assumed by some jet pilots regarding their status as mystically advanced beyond the station in life occupied by ordinary aviator often resulted in fun and games telling stories at Happy Hour. There were stories told in jet squadron ready rooms concerning the more senior naval aviator who had no experience in jets. Shipboard recoveries often had some poor souls who were seating fuel state, and one favorite story concerned an unspecified carrier in which the Captain directed his Air Officer to "get on the radio and tell those jet pilots to lean their mixtures like competent naval aviators!" (Jets have no mixture control, of course, and there was just no way to do that.)

The stories told were by no means limited to the aviator. One sailor was said to have written home: "Dear Mom, we Continued on page 4



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#### <u>Cascade Warbirds</u> <u>Quick Look Calendar</u>

#### October

8\* Squadron Meeting at Museum of Flight
 8-9 San Fran Fleet Week
 15 Heritage Flt Museum Open House at BLI

20-22 Copperstate

**November** 

Squadron Meeting at Museum of
 Heritage Flt Museum

Open House at BLI

<u>December</u>

10 Annual Christmas Dinner Banquet Arlington, WA

17 Heritage Flt Museum Open House at BLI

**January** 

Annual Squadron
 Meeting at MoF
 Heritage Flt Museum
 Open House at BLI

\* Denotes Max Effort Event See Website for Detailed List



Two Grumman F9F-2 "Panther" fighters dump fuel as they fly past the carrier USS Princeton, during Korean War operations circa May 1951. (US Navy Photo)