

By Ron Morrell

It seems like I just finished writing the last CO's Corner and described the spring gathering we had at my hangar. It is amazing to me that we are now at the end of the summer and the number of flying days will start dwindling very soon. I want to express my thanks to all of you that made this summer flying season so entertaining, busy and especially, safe! I ask you all to keep that last statement in mind and remember that safety for our pilots,

and talk about his time flying a photo-reconnaissance Spitfire during World War II. We asked HFF if they would like to host our meeting so that Col. Blyth would have the backdrop of their Spitfire to help him out with his recollections. I appreciate the efforts of Kent to bring us such an American hero. One of the tenants of our squadron purpose is: "To promote and honor those individuals who have had the courage to fly Warbird aircraft in the defense

our marshallers and our volunteers, as well as the public that we go out of the way to stay in contact with, is the most important aspect of what we all do as part of a warbird squadron. This coming winter meeting period is a time we can look back at how we kept each other and ourselves safe and managed the risk that we all take every time we do what we enjoy so much.



of the Freedoms enjoyed by free Nations". I encourage all of you to remember that, even though our squadron seems to center around the aircraft, the men and women that designed, built, and flew these aircraft are why we are here. In many cases, these men and women were more important than the machines. They sacrificed during every conflict we have had as well as committed their blood and

Ron Morrell Photo

We also must keep in mind that we can always do better and we must make sure we are identifying ways to mitigate the risks and keep ourselves from becoming complacent. Make no mistake; safe operations are not accidental (pun intended). Thanks to all of you for your diligence.

Another aspect of our squadron that comes back during these meeting months is the reminder that our squadron is not just about flying airplanes and trying not to get too sunburned. Our meetings and our squadron is a successful because of many of our members. The members that use their contacts and bring us great speakers are one of our most important assets. For example, of first meeting this fall will be held at HFF due to the fact that one of our members, Kent Johnson, made an invaluable contact with Lt. Col. John Blyth and asked him to come to our meeting sweat during peacetime to ensure those machines could be used to keep us free.

WARBIRD FLYER

★ ★ Cascade Warbirds ★ ★ EAA Squadron 2 Newsletter

> Commanding Officer Ron Morrell Executive Officer Warren Nadeau Operations Officer Dave Desmon Veterans Affairs R.D. "Crash" Williams Finance Officer Fred C. Smyth Newsletter Editor Frank Almstead Newsletter Publisher Ed Rombauer

This is the official publication of the Cascade Warbirds EAA Squadron 2. As such, it serves principally as a communications vehicle for our membership. The views and opinions expressed in this newsletter are those of the individual writers, and do not constitute the official position of the Squadron or the EAA. As members you are encouraged to contribute articles, comments, squadron news, and anything else involving Warbirds or associated subjects to the editor. He will gladly work with you and see that your material is put into print and included in the newsletter, no matter your level of writing experience or computer expertise. Articles can be submitted via e-mail, to the editor's address. Deadline for submission of articles is generally two weeks prior to the next publication, but earlier is always appreciated!

> Business Office: 1066 Yates Road Oak Harbor, WA 98277

Cascade Warbirds Homepage: www.cascadewarbirds.org

Editorial E-Mail: editor@cascadewarbirds.org

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Ops Tempo by Dave Desmon

ell, the Flying Season is coming to an end, and it's time for our indoor meetings to start back up. We have a great one to begin with - Sat. Oct. 12th at 10 AM at John Sessions' Historic Flight Foundation (HFF) on the West Side of Paine Field in Everett. Some of you may have seen the Internet Film "Spitfire 944" a few months ago. If not, search You Tube for it. Thanks to the efforts of member Kent Johnson. we will have the subject of that film as our speaker on the 12th. LtCol. John S. Blyth was a Photo-Recon Spitfire Pilot in WWII and will be there to tell us about it. I'll bet you didn't know that a Spitfire could fly from England to Berlin and back? In addition, we expect to have John Sessions' Spitfire Mk IX which just won the Hap Arnold Trophy for "Best Military" at the Rolls Royce Heritage Trophy Invitational meet at the Reno Air Races Sept. 15.

Speaking of Reno – It was FABULOUS this year! We had a number of our members competing, including Keith & Vic McMann, and John "Smokey" Johnson, who put up one of the best races of the Week in the T-6 Class vs. Lee Oman. Smokey's Prop was about 6 feet behind Lee's head at the Finish line – and gaining. According to the Official Reno Air Race Assn timers, the difference was less than 0.10 Second!

The Unlimiteds provided plenty of action as well, with #2 Qualifier Hoot Gibson in #232 (ex September Fury) Blowing an induction in the race Saturday, but landing safely. The Planes and Pilots were switched up a bit, with 4 time National Champion Steven Hinton (Steve Hinton's 26 year old son) flying Race #5 "Voodoo", which had never won, and Veteran Race Pilot Matt Jackson – who had never won, flying Steven's old ride – the 10 time Unlimited Champion Race #7 "Strega". Matt lost his canopy at 500 MPH in a qualifying attempt, and the crew stayed up all night for 3 days hand building another one to get him back in the race. Then in his Heat Race on Friday, he had a deadline cut, which resulted in him starting in 7th position in the Gold Final

Sunday. Despite some laps in excess of 500 MPH (!!), the distance was too great for Matt & Strega to make up, and Young Steven is now a 5 time National Champion, and "Voodoo" has her 1st. Oh yeah – "da Bear", and "Dreadnaught", and "Precious Metal", and "Czech Mate", and "Miss America", and a couple of Sea Furies were there, too!

Member Roy Hafeli who has done the announcing at Abbotsford for years was called up to replace the now retired Frank Kingston Smith, and made his debut as "The Voice of RENO" (or ONE of the 3 Voices of Reno, anyway.) Great Job, Roy!! New Member Jon "Jughead" Counsell is the announcer and #7 pilot for the Patriots Jet team who headlined the Airshow. Jughead gave daily "Shout outs" during the Patriots' show to the Cascade Warbirds (Who were in the Front Row, cheering!) as well as having his picture taken with the Ladies of CWB, who were delighted to have THEIR Pictures Taken with Jughead!! - Those Tight, Black Flightsuits are Snappy!! (Jus' Sayin'!)



Dave Desmon Photo

The BEST Thing about Reno, however, was re-connecting with all of our friends and Air Race Family. One couldn't walk 50 feet without bumping into someone you knew, in the Pits, the Boxes, the Heritage Area, or the Hotel – (Which resulted in many late nights, but lots of smiles!) CWB had members Racing, Crewing, Keeping Stats, Taking Photos, Displaying airplanes

Squadron News

in the Heritage Trophy area, Judging Airplanes in the Heritage Trophy, (WINNING in the Heritage Trophy!), Dancing in the Bars, and just generally "Occupying" Reno. It sure was great to see everybody, and to enjoy MANY a cold beverage with you all!! And Cascade Warbirds' Front Row, Finish Line Box A-41 was THE Place to be come Sunday Afternoon!! You should try it sometime!

For those who missed the Email last month – Cascade Warbirds is now 20 years old!! (gee another year, and we can drink!! ;-)) HAPPY BIRTHDAY, US!!

On a serious note – This winter will bring our Election of Officers and Board Members. We are always in need of fresh ideas and energy to help guide the Cascade Warbirds.

As you all know, we don't have many B-25s, TBMs, P-51s, etc... to parade at airshows like we did 10 years ago. One thought is to work on more Formation Flying, if we want to keep doing airshows? Another idea is acts like member Paul Lewis' Oxy-Propane Machine Guns and a target plane with "Smoke". It worked well the last few shows – except when Paul tested his "Guns" during Engine Run-ups, and several of us thought our Engines had come apart!!

If you have ideas, inspiration and drive, and would like to help decide how the NEXT 20 Years of CWB History plays out, Contact any one of your Board Members, and let us know! Nominations will be complete by November, and the Election will be at the January Meeting.

That's about it for now, I hope to see you all at the coming meetings, and of course, the Christmas Party – and Reno 2014, and Oshkosh....

'til then – "Keep 'em Flyin'!"

HISTORIC PROGRAM

An unimaginable treat for us on Saturday, 12 October: LTC John S Blyth will be our featured speaker. As a USAAC pilot in WWII, John flew Spitfires for the 14th Photo Recon Squadron at Mount Farm in the UK. Against the backdrop of Spitfire SL633 at Historic Flight Foundation, Paine Field, we'll hear about flying the missions, why the Spit was the preferred mount, and even how John came to be acquainted with a 60-year-old video of himself. The program starts promptly at 10:00 AM. Be sure to bring a friend and listen to an amazing chapter in aviation history. HFF is located at 10719 Bernie Webber Drive in Mukilteo.

MEA CULPA

Long story short, we had a data foul-up in our last newsletter label printing process. The result was the incorrect due dates shown on several members' labels. If you were "accused" of being behind in your dues, we've made the correction. If you didn't owe, but paid anyway (sorry KR in BC, p.s. send me your email address), you've got another year's credit. The master data base is unblemished, so we'll likely not have this problem again.

SAVE THE DATE

And that date is Saturday, 07 December 2013, our Annual Christmas Dinner Party Gala and Awards Banquet. If you attend only one CWB holiday dinner party this year, make it this one. The date, of course, is significant and we'll have the chance to review our year, swap some stories, and enjoy the camaraderie of our fellows. We'll do this at the Medallion Hotel in Smokey Point - Arlington. More details to follow as the event draws nigh, but reserve your room now by calling 360.657.0500.

DID YOU HEAR US?

Are you getting our email blitzes? Or do you feel left out and don't know what's going on. Maybe we don't have your most recent email address. Send your updates to fred@fcsmyth.com.

DUES

They're due. If your newsletter mailing label says 12/12, send \$20 to CWB, 1066 Yates Road, Oak Harbor, WA 98277. Don't make me ask again.

A WARM WELCOME

It is our privilege to welcome more new members to our group. They'll be wearing their name tags at our meetings, so seek them out and make them feel right at home.

North Bend, OR
JBLM McChord Field
Bellingham, WA
Vancouver, BC

Analog Pilots in a Digital World

by Ed Rombauer

Just when you think that aircraft accidents, especially in commercial flying, are at an all-time low, along comes an accident that grabs our attention in such a way as to obliterate the image of safe flying. I am talking, of course, about the crash of Asiana flight 214 in a Boeing 777 from Seoul to San Francisco. This is one of those accidents that on the surface looks to be very simple (the aircraft landed short of the runway) but is in reality probably quite complex, comprising many different factors and decisions beyond the control of the flight crew. This is not an excuse for the actions or inactions of the pilot. In flying as in many things in life, there are no excuses.

Many years ago while walking past a jewelry store in an east coast city I was attracted by a new (at the time) digital watch. This was one of the first of the liquid crystal, dual time zone display watches on the market. The watch was certainly on the cutting edge of technology, however it only displayed the time no date, no alarm, just the time. For a pilot this was a must have item as it would not only give me the local time but Zulu time for the flight plans. Replacing my old wind-up Wrist Ben with this state of the art digital timepiece was a nice transition from the old technology to the new. After a few weeks of using my new digital watch I discovered that while it was very accurate it was not as user friendly as the old analog watch. Whereas I could quickly glance at the analog watch to observe the time, the digital display forced my brain to convert the digits to a graphic representation of the old watch face. It was not user friendly! Unlike computers, our brains which have developed over the millennia to process the position of what we see, is slow to process digital information.

What has an old digital watch and a modern airliner have in common? About twenty five years ago there was a switch from the old analog instruments that were in use since the invention of the airplane to the more modern flat panel display that is in use today. Also, the non-flight instruments, such as engine gages, were changed to digital readouts. Early on in this transition it became clear that the digital readout of engine parameters was not an attention grabber so tape displays were tried and then as the technology improved the displays became virtual analog gages. Technology had gone full circle. However the Primary Flight Display (PFD) stayed a mixture of graphics and digital information.

The older pilots at the time of the transition to "glass" as it was called, already had many years of experience with the old "clocks", so there was a lot of angst in the transition to the more modern instrumented aircraft, much as was the transition from props to jets. These pilots that moved into more modern aircraft took their instrument scan skills with them and adapted this skill to use with the digital displays. The younger pilots, due to better computer skills, more easily transitioned to the newer technology but did not have the depth of experience in informational scanning. It was a lot easier to note the position of a pointer on a dial than it was to mentally read a digital readout and compare it with a remembered setting. The new PFD required a stare and remember technique rather than a scan of the position of the clock hands.

Before an airline gives a pilot the keys to their new several hundred million dollar flying machine, an experienced pilot is required to fly with the new pilot or co-pilot and make sure that he or she can successfully complete a normal revenue flight. In the case of flight 214 this meant that two captains were flying the aircraft. When this happens it is critical that a clear understanding as to who is in command and how emergencies are handled has been discussed prior to the flight. Did the pilots on flight 214 have this clear understanding?

Without going into the intricacies of programing a 777's flight management computer, it can be said that there are a lot of "gotchas" in the pilot's interfacing with a modern aircraft's flight guidance system. The design engineers designed the system to be used in a "non-creative" way, as in going from A to B to C to D, and any getting creative in this sequence requires a pilot to have a high level of familiarity and experience with the equipment.

When flight 214 departed Korea the entire flight plan was loaded into the FMC before take-off and then on climb out the auto pilot was engaged. This would be the last time the pilots hand flew the aircraft until the landing approach. These long over water flights do not allow for the pilot to get any practice flying without an auto pilot, so they become merely computer operators. As most of these flights end with an ILS approach that is what the computer is set for. In this case the clearance was changed to a VFR visual arrival as the ILS was out of service. Also, approach control probably held the 777 at an altitude that flew it through the normal glide slope. This would require a higher than normal rate of descent to intercept the glide path, leading to the runway, from above. The pilots besides being tired, and at least one of them inexperienced, were going to land on a runway with an over water approach. The seeds for an accident were now sown.

Receiving clearance for landing on runway 28 left, the aircraft was positioned close in to the runway and

It's no wonder that there was a crash. While the manufacturer had built an aircraft that was strong enough to allow almost everyone to survive, and had provided sophisticated piloting instruments to give the pilots the ability to land in any weather conditions, the weak variable in this accident was the pilots training and experience or should I say lack thereof.

I still have that old digital watch that I bought so many years ago, but it's been sitting unused on a

above the ideal glide path. The pilot seeing that he is high disconnects the auto pilot and pushes the control wheel forward to start the descent to the runway. With the airspeed starting to increase the auto throttle is turned off, by which pilot we don't know, and the airspeed starts a slow decrease. In basic



shelf for years. I have found that Mickey's hands on a watch are much better at allowing me to "sneak a peek" when I want to know what the time is than trying to remember the digits on a dial. Someday human factors engineers and pilots will design a display that will accommodate the limitations of the human brain, but it won't help if when all else fails the pilot doesn't have

Ed Rombauer Photo

flight training the student learns that the function of the throttle, controlling power, and the elevator, controlling attitude, can be counter-intuitive. Learning that power controls altitude and the elevator controls airspeed is basic to the operation of all aircraft, however in this case the pilot after dropping below the glide path tried to climb by using the elevator alone. Since the elevator controls the airspeed, it decreased even more. Dropping below the desired glide path is easy to do on an over water approach as there is no real reference to height above the water. With the airspeed falling below minimum flying speed, the pilot pulled the nose up to gain altitude, which in reality only served to slow the aircraft even more. This change in attitude gave the pilots a false feeling of altitude; while the flight deck was high enough to clear the runway, the rear seats were below the runway elevation.

the very basic skill of flying the airplane.

There is a line in an old West Virginia gospel song relating to railroading that applies to flying; it reads "Keep your hand upon the throttle, and your eye upon the rail." In our business of flying airplanes this translates to knowing where you're going and how fast you're getting there. Even for us piston poppers, there is nothing that beats a good old fashioned instrument scan and—keeping your hand on the throttle.

Keep the blue side up and fly safe. \bigcirc

Tanker Talk

By Dan Barry

At a recent Cascade Warbird meeting, a few of us Aseasoned aviators, who had air refueling experience, engaged John Clark in a discussion about the new Air Force

KC-46 tanker and we were all interested in hearing what kind of new technology is being brought into play. John gave us some of the basics, which includes the boom operator now being located up in the cockpit, monitoring the refueling on closed circuit TV while remotely operating the boom. To us old timers, the thought of not having the boom operator back in the tail on his belly, while watching us out of his window, made us feel a bit nostalgic. Of course this technical discussion quickly degenerated into refueling stories, some of which you may have seen on line, all the way from clever exchanges between boomers and receivers to those stories of chasing the elusive basket with a boom equipped aircraft. As we reminisced, I couldn't resist relating the following story.

I was leading a flight of 2 F-105D models out of Takhli Thailand on a strike mission, probably against a target someplace along the Hoh Chi Minh trail on the Laos North Vietnam border. My wingman



Frank O'Rear photo (airrefuelingarchive.wordpress.com/category/f-105/)



F-105s refuling in flight (Wikipedia.com)

was on his second tour, having flown F-100's on the first tour, a good stick, but a guy who just never passed up an opportunity to talk on the radio. As usual, we had to refuel

> as we headed for the target, weather was good and we made a routine rendezvous and joined up with me going to the boom first. I noticed the boom operator had a Playboy type pin up in his window, which wasn't unusual since it wasn't uncommon to see pictures, printed messages, etc; I got my gas and moved over to the tankers left wing and number 2 moved in for his gas. A few minutes later he is topped off and as he disengages and backs away from the boom he says, "Congratulations on your girl friend Boomer", and without missing a beat the Boomer comes back and says, "Oh no Sir, that isn't my girlfriend, that is the co-pilots mother".

I instantly get this mental image of the boomer being a 40 some year old E-6 who has a young lieutenant fresh out of pilot training sitting up front in the copilots seat; who knows how many planes he'd refueled before he got the opportunity to transmit his zinger! •

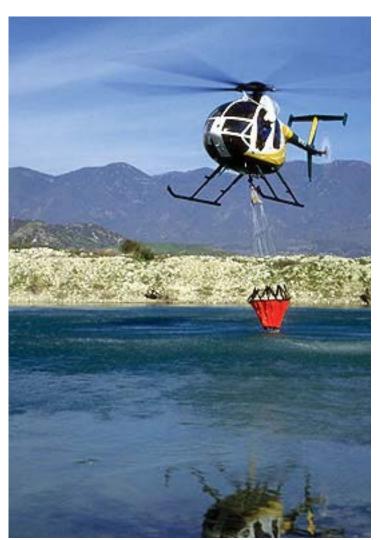
Lessons from the Field: Optical Delusions

By Fred Smyth

The reason that helicopters are so easy to land on moving vessels, and even on moving vehicles, is that they land with relative zero airspeed in relation to the surface. Thus, when approaching to land, at some point the eyes ignore the motion and focus only on the landing surface. Though both the helicopter and the landing surface may be moving, even at significant speed, the relative speed reduces to zero at touchdown.

Automobile drivers in traffic-crowded urban environments experience the same phenomenon. Envision being

stopped at a light with vehicles on either side of you headed in the same direction. If those two vehicles start easing forward and your peripheral vision picks up the movement, you will sense that your vehicle is rolling backward. You may well apply so much pressure on the brake pedal that you would swear it's about to break. In fact, there's a Navy carrier story about just such an occurrence. Supposedly, three jets were lined up, engines running, waiting to taxi to the catapult. As luck would have it, the two outboard jets started to move forward at roughly the same time and the center pilot felt as though he was rolling rearward and about to go over the side of the boat. When greater application of his brakes did not slow his rearward movement, and fearing for his life if the jet rolled over



Hughes 500 with bucket (www.aerospace-technology.com)

the edge, he punched out. The rest of the story is not at hand, but rumor has it he was embarrassed.

As a Part 135 helicopter pilot, I was supporting a bush camp on the North Slope of Alaska in a place called Umiat. The moose there were huge, the caribou herds immense, and the mosquitoes (the state bird) even larger. The surrounding area, technically a desert, was so flat it was tough to get into any real aviating trouble. The camp's makeshift shower was a 55-gallon drum perched atop a three-footsquare scaffold and protocol dictated whoever used the shower schlepped replacement water in five-gallon buckets from the nearby river. Shortly after my arrival, I announced to the camp manager that I could resupply the shower by dipping the drum in the river and delivering it to the scaffold. Two holes were cut in the open rim of the drum, slightly less than diametrically opposed so that the drum hung low on one side, a bridle was attached to those holes,

> and the bridle to my 15-foot sling. I would approach the swift-flowing river facing upstream and when the low-hanging bottom edge of the drum contacted the water, the current would pull it downstream and the lip of the drum would drop to the surface and submerge. The drum filled in a rush.

The river was relatively shallow with some turbulence at the surface and just wide enough that as I hung my head out the door observing my maneuvering, my peripheral vision did not pick up the river bank. Though I was having a bit of a problem on this occasion trying to get the lip of the drum to penetrate the surface (due to lack of finesse on the part of the aircrew), I was having no problem maintaining a static position over the water. Refer back to paragraph one - I was hovering backwards at the speed the river was flowing and I had

no idea what was behind me!

There's no dramatic end to this tale. No one was injured and no property was damaged. But the spurt of adrenalin that day certainly reinforced the lesson that nothing can be taken for granted in the world of aviation. \heartsuit



CASCADE WARBIRD

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Have Your Dues Expired? Check The Expiration Date Below.

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

October 12* Squadron Meeting at HFF 19 Heritage Flt Museum Open House at BLI 24-26 Copperstate November 9 Squadron Meeting at Musuem of Flight Heritage Flt Museum 16 Open House at BLI December Annual Christmas 7* **Dinner Banquet** Arlington, WA 14 Heritage Flt Museum Open House at BLI January Squadron Meeting at 11 Musuem of Flight 18 Heritage Flt Museum Open House at BLI * Denotes Max Effort Event See Website for Detailed List

Check Six



Seen on a box at Reno!. (Dave Desmon Photo)