



RVator's Log

Newsletter of the Twin Cities RV Builder's Group

March 2013

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Upcoming Events

March 23: How about an update on the latest news on ADS-B. Pete Howell and Stein Bruch will make all of this crystal clear. Coffee and goodies. (Details on page 6!!!)

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Minnesota Wing Van's Air Force

Pres: Doug Weiler, 651-398-1184, dcw@mnwing.org

Sec/Treas: Jim Lenzmeier, 651-633-8488, jlenzmer@msn.com

Shop Notes

Will fly for food...

So now that my RV-7 is finished I have WAY too much time on my hands (nope... not going to build another one!) Thus, it was during one of those idle moments a couple weeks ago, that I was staring at a computer screen and had one of those "I wonder what ever happened to _____?" moments. The siren song of a blank Google window drew me in and I typed "Salt Walther" and hit return. Up popped an obit from the Dayton, Ohio newspaper dated last December.



"David "Salt" Walther, the Dayton race car driver whose career – and life – saw some memorable peaks and many terrible lows, has died at age 65..."

You may or may not have followed Indy car racing back in the 70's but Salt Walther was a rookie driver in 1973 who was involved in undoubtedly the worst crash in Indy 500 history. More from the Dayton Daily News article:

"Walther started five Indianapolis 500s and finished ninth in the rain-shortened 1976 race. But he is best known there for his fiery crash in 1973. When the race began his McLaren Offenhauser was launched skyward, spewing 80 gallons of fuel as it sailed upside down into a fence. The battered car burst into flames and spun in the first turn. The melee that followed claimed 11 cars and injured numerous spectators. Walther was trapped upside down in the flames for six minutes. Much of the car melted and he was badly burned on about 60 percent of his body, suffered several broken bones and was given a five percent chance to live. Twice he was given last rites. His crash is considered the worst Brickyard carnage that anyone has survived. His left hand – where the fingers were burned down to nubs and mended by three dozen operations – was usually concealed in a black leather glove after that.

Walther ended up addicted to morphine and that led to abuse of other drugs and a long path of self-destruction and arrests, including one last month on an old obstruction of justice charge."

I can't say I had more than a passing interest in the Indy 500 back then, but little did I know that a couple years later, Salt Walther

would be a player in my early aviation career.

In 1975, I got out of the Air Force in Dayton, Ohio and wanted nothing more than to become a professional pilot flying something more exotic than Cessna 150s and Citabrias. I had about 50 hours of multi-engine time, which I had begged, borrowed, and stole anyway I could. One of the renters at our local airport was chief pilot for Dayton-Walther Corporation. Mark flew a Swearingen Merlin III for the company that was the major manufacturer of heavy truck wheels for GMC, Ford, Mack, and others. They didn't have a full-time co-pilot (their mechanic filled



in most of the time) so it seemed obvious to me that they needed one! After months of subtle arm-twisting, Mark agreed to hire me on a contract basis pending racking up another 50 hours of MEL time (100 was their insurance minimum). I'm in!!!

Flying right seat in the Merlin III was a dream come true. Finally I was a "real" corporate pilot. I even had to wear a tie!! Most of the trips were typical company business for the family-run corporation. But Dayton-Walther was also involved in Indy car racing big time. This was the era of A.J. Foyt, Al Unser, and other big names. George Walther was the CEO of the company and his son Salt was their driver. Prior to the Indy 500 and other times throughout the year, we made many, many trips to and from various tracks around the country.



When I got to know Salt, he was a couple years past his terrible accident. I guess the best way to describe him at the time was a flamboyant yet personable playboy that had lived a life of privilege and wealth. The recovery from his accident had been a miracle yet he seemed to be able to function very well even with a severely damaged left hand. In fact, in addition to racing cars and hydroplanes, he was a private pilot (at least kinda... he bought a Cessna 310 right after getting his license, flew it a couple hundred hours, and then wrecked it during a gear up landing. That was pretty much normal for Salt). A lot of

folks around Dayton called him a spoiled rich kid but I never had any problems with him. But he did like to put on a show.

At this point in my aviation career, I was just a dumb co-pilot. Mark called the shots and I held down the right seat and tried to keep a low profile. A couple trips with Salt come to mind. One day we were about to depart in the Merlin for a race somewhere (they all run together today). We were all ready to go, well past "scheduled" departure time and waiting for Salt to show up. Finally he comes ripping around the hangar onto the ramp driving a brand new Rolls Royce. Salt jumped out dressed in his usual attire: killer shades, beige jumpsuit unbuttoned to his waist, gold chains, flamboyant hair, (yes... reminded me of Elvis in his prime). His bags were in the trunk but when I went to open it, it wouldn't unlatch. We all tried several times trying to free the latch to no avail. We were late and Salt was pretty freaked out. He stormed into the hangar and came out with a serious crowbar and proceeded to pry and bang on the trunk of this previously pristine example of British automotive art. Finally the now scratched and dented truck sprung loose and I heaved three huge bags into the Merlin that must have weighed 50 pound each (full of Salt's "beauty aids" according to Mark). Off we went. Don't remember what happened to the Rolls but there were more where that came from.



Another time we were in Phoenix for a race and about to depart for Dayton. Again we're waiting for Salt to show up and he's late as usual. We wait and wait and finally here comes Salt burning rubber onto the FBO ramp with a van full of girls. Back in the 70's there was a female dance group called the "Golddiggers" which was a group of Vegas showgirls that performed with Dean Martin on TV. They were performing in Phoenix, somehow latched up with Salt and they were all coming with us. One small problem: there were seven passenger seats in the Merlin and two "excess" girls. I hid up in the right seat as Mark "negotiated" with Salt. Next thing I know, I hear the door close, Mark comes up front and begins to crank up the right engine. I look back to see two girls just sitting in the middle of the aisle on the floor. I pretend I didn't see that, kept my mouth shut, and hope we wouldn't get ramp checked when we got home.

Such it was for a few years... happy to be flying for food. Probably bending the rules a few times. Sadly the rest of Salt's career slowly spiraled downhill and his life was spent battling a host of demons. Some of the comments on his passing maybe were a little cruel. Some were kind. Regardless, he was a unique personality in Dayton back then and just one more of the host of colorful characters that played out in my aviation career. RIP Salt...

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MN Wing Rumors

-Doug

Seems like it has been a pretty quiet winter. I haven't heard a lot of news from our membership. Must mean everyone is REALLY hunkered down working on their projects. But a couple items have come my way...

Bernie Weiss' RV-9 project: Tom Berge and Bernie have been hard at it all winter working one or two days a week (most of you know that one day of having Tom help you on your project is equal to a month of me stumbling around trying to figure out why I built two left wings!) By this writing, their RV-9 project should be at Bernie's hangar at ANE which means that the first flight is not too far in the future.

Vince's super paint: You may have noticed on the web site that Vince Bastiani is now flying his newly painted RV-7



Personally I got to see it again recently during a breakfast flight to Superior, and I can attest it REALLY looks nice out in the bright sun. I spent a lot of time looking it over with great detail and I could not find any discrepancies. Midwest Aircraft Refinishing in Hibbing, MN truly does great work. Last report I heard was that they have several other RVs booked for this year.

Has it Been a Year????

-Doug

How is it that has we get older, time seems to shift into the fast forward mode? My RV-7 has now been flying for one year and February was designated to be "annual-inspection-month". The tach shows 144.3 hours of flight time of which 40 of that were test flying. So racking up about 100 hours of "fun flying" was about in keeping with many RV pilots. These babies are so much fun to fly, that I am only restricted by weather and the gas bills. Plus I have this plan in my old

age to fly at least once if not twice a week to stay current. I get rusty real fast!!

One of my first goals for this inspection was to do another weight and balance. My original empty weight was 1138 pounds with no paint. As you know, last summer I had the airplane painted at Wipaire and it was time to weigh it to see how much the paint job added.



My old RV-4 had gained about 35 pounds which I attributed to the multiple layers of clear coat (why is "clear" paint so heavy??) The folks at Wipaire said that I should gain no more than 20 pounds (and they applied just enough clear to make it nice and shiny).

Well it didn't come out quite so lean. Weighing it on the same set of scales, the new weight tallied at 1174. Hmm... 36 pounds... must have been some of that additional fill work I had done. Regardless, now I know where I stand although Pete Howell might start calling me "Sky Pig III".

The actual inspection went well with nothing broken that I could find. I installed a new set of spark plugs since they are so cheap (one great advantage of electronic ignition). I had to find a way to spend some extra money so I bought an upgrade kit for the landing lights. I had a set of Duckworks 100W halogen lights, which are certainly bright however they do draw 15 amps. I am a firm believer in using them as recognition lights all the time near an airport or in the MSP terminal area. So I sprung for Duckworks' HID Xenon bulbs, which use a small power supply mounted on the outboard rib. They are SUPER bright and may burn out your eyeballs if you look at them. They consume 11 amps, which is a little better. They do warn about problems if you have a wingtip mounted VOR antenna (which I do!)



They were right. Later test flights showed that with the lights on, no VOR or ILS reception. So that means landing lights off if I need to use a VOR or ILS, which is like never.... GPS is WAY better.

I did have a problem however on my first flight after the inspection. Taxiing out I got a high fuel pressure warning (32 psi... it's usually around 27). Didn't think too much about it so I took off and on climb out I see that #4 cylinder EGT is almost 200 degrees cooler than the rest. That has never happened before. Seemed odd. I decided to turnaround and come back and land. Took the cowling off and couldn't see anything visually that could cause this. The only thing I had done to the engine was change the plugs and clean the fuel injection nozzles. I put the old plugs back in cylinder #4 and ran it up and the issue was still there.

Tom Berge said I must be getting too much fuel to that cylinder and a call to Aerosport confirmed that diagnosis. So I disconnected the small stainless fuel line to the nozzle and guess what?.... the little stainless restrictor insert was missing!! I must have lost it when I cleaned that nozzle and reinstalled it without the insert. Thus that cylinder was being choked with way too much fuel (and thus the cool EGT). Of course I looked all over the hangar, on the floor, under benches and no luck. Fortunately Aerosport offered to sell me a reworked injector nozzle assembly for \$40 (vs. \$129 for a new one). They even sent it FedEx next day air for free (they have the best customer service on the planet!).

Long story short... reinstalled all the correct pieces and it runs like a top. I did have to have a talk with the "mechanic" who lost that insert. You do get what you pay for!!

Thoughts from Tom

-Tom Irlbeck

Well, everything is going great in old Florida. The flying weather has been a little warm this winter, in the low 80's, I prefer the 70's, but somehow we survive. I've also joined our local "Everglades Soaring Club" to get ready for my grandson



because he wants to fly a glider when he is 14. I haven't flown gliders for over 43 years, and I'm looking forward to this fun adventure again. The club has purchased a "winch" launch system, which I call a Navy "mini-catapult system," which looks like a riot to fly from. May never do another boring air tow again.

Recently, I did the first flight on Tom and Ann Kramer's beautiful RV-7A. Almost 8 years in construction. I had to include Ann's name, although she did not work on the aircraft much, she sure supported her husband during the construction. Some of us noted the picture of their aircraft in Van's "RVAviator" a few years ago, in the living room, which should be renamed the "flying room". Now truthfully, how many of our wives would allow us to store aircraft structures in "their" living rooms? I know my Katy very well after 43 years of marriage, and I have enough common sense not to even attempt that question. As Tom completed "parts" of his 7, they were stored in the flying room. They were not only stored, but the wings were also attached to the fuselage, in the flying room. Well, all has turned out for the best, and Ann is looking forward to her first flight in their "Flying Room Aircraft".

Tom had listened to me when I suggested that he should install a "crotch" strap, as he initially had not installed it. A number of pilots stated that they were not going to be doing aerobatics, and didn't need one. I strongly disagree with this reasoning. When I watch most pilot buckle themselves in, I've noted how they do it, and here are some suggestions. First I've noted that the lap belt is not tightened properly, or enough, then they tighten the shoulder straps too tight. Without a crotch strap, this pulls the lap belt up, and off the "hip" bones, into the stomach area. In an abrupt stop, the lap belt would put a lot of pressure into the stomach area, pushing the stomach up, rupturing the diaphragm, and the stomach ends up where your lungs are supposed to be. Now you may ask, what does Tom know about this? Well, in 1985 my father, an old B-17 pilot was killed as the result of a head on car crash. He would have survived the accident if he had his seat belt on! He hadn't been using it 100% of the time and this was a little short drive,

not far from home. The first police officer on the scene was a long time family friend, and he passed on most helpful information. My dad, slid forward rapidly during the crash, the bottom of the steering wheel hit the stomach area violently, pushing the stomach up, rupturing the diaphragm, and the trauma of the stomach in the lungs is what killed him. This was a survivable crash, "IF" he would have had his seat belt fastened. Now if you don't have a crotch strap, make sure the lap belt is tight, and do not tighten the shoulder straps where as they put any upward tension on the lap belt.

One other item: Do not put in a "vernier" throttle in your RV! For many reasons, as a flight instructor, I noted improper use of the throttle, taxing and flight. Plus, if you're going to fly any formation, it will not work properly because many small adjustments are needed, and the vernier operation is incompatible. The most notable fault I see with using the vernier is during approach phase, trying to make throttle adjustments that are not quick enough to adjust and control the air-speed safely. I could go into many other poor uses, but won't bore you with these, just believe me when I say, do not install a vernier throttle in a single engine aircraft.

Tom and "Bear"

How about a tip....

-Cliff Peterson

The MAP Gauge For Fixed Pitch Props

While flying off the 40 on my 6, I was concerned about the percent of power being developed by the engine. At least 75 percent of power is required during initial testing with the temps in the green to seat the rings on new or re-ringed cylinders. If not, one can potentially glaze the cylinders and you end up burning oil. The Lycoming power charts for the O-320 D1A are configured for a constant speed prop and I had converted it to fixed pitch.

Then I read an article on the use of the MAP to approximate the percent of power and I installed a MAP gauge. The formula - add the MAP reading to the first two digits of the RPM and compare to this relationship: - 42 is 55 percent, 45 is 65 percent, and 48 is 75 percent of power.

MN RVs in Oz

-Doug

With now over 8000 RVs flying in the world, more and more are based outside of the United States. Australia seems to always have been a hotbed of RV flying (remember Jon Johanson who flew his RV-4 around the world, twice!!)

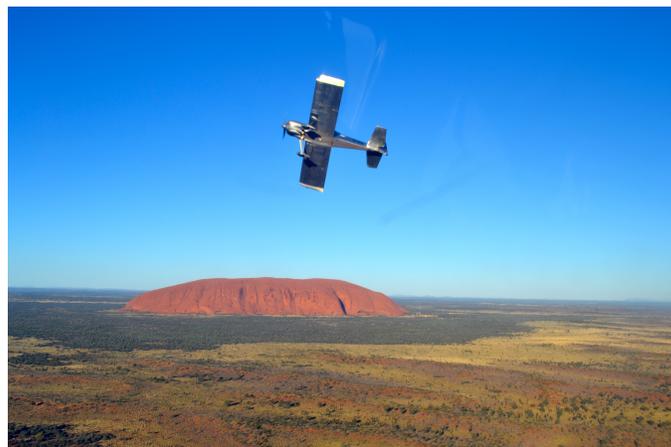
Two Minnesota wing RVs are now fly "down under". Bernie Weiss' "old" RV-7A was sold to a buyer in OZ. I don't know

exactly where it ended up but Bernie flew it out to California when he sold it and an export company took it apart, boxed it up, and off it went.

Several years ago, long-time MN Winger Don Willam sold his RV-4 to an Australian buyer. It is amazing to me that there is such a market for RVs so far away in light of the crating, shipping, and import costs. But having a kit shipped to Australia plus all of the associated parts can add up to some BIG expenses compared to building one here in the states. So I guess arranging to purchase an RV here in the U.S. and then shipping it to Australia is a viable option.

Recently I received this note and photos from Ron Tizzard who is the current owner of Don's RV-4....

This is a photo of Don Willam's RV4 during a flight around Australia in July 2011 (Ayers Rock in the background). Aviation students from Griffith University in Brisbane Queensland organized the trip. It was in aid of the Royal Flying Doctors, raising about \$18,000. The trip also ventured into the heart of Australia as can be seen from these photos. The main photos were taken of Don's aircraft from a Piper aircraft. All in all there were 8 aircraft involved in the trip including a RV8, an RV10 and a 90% replica spitfire.



Minnesota Wing – Van’s Air Force
65 15th Ave. SW
New Brighton, MN 55112-3454

First Class

Minnesota Wing Spring Meeting

Saturday, March 23, 2013, 10 am

**Paul Hove and Doug Weiler’s Hangar
41C Mooney Lane, Lake Elmo Airport**



Are you still a little hazy about just what ADS-B is all about? Our resident avionics nerd Pete Howell along with Stein Bruch will give us an in-depth briefing on just what this means to us as RV builders and pilots.

The hardware is a moving target with a confusing variety of boxes coming on-line so it's time to try and sort things out.

We'll meet at Doug and Paul's hangar at Lake Elmo. To make things simple, please bring along a folding camp chair or similar portable sitting device and that will save moving a bunch of chairs around. As always you will be rewarded with coffee and goodies. IF the ground is thawing out (unlikely!!), please park on the hard surface. See you then!!!!

Directions:

Take the north entrance (south of RR tracks) to Lake Elmo Airport off Manning Ave. Go east past Valter's Aviation, bear to the left past the Civil Air Patrol hangar and make a right on to Mooney Lane. 41C is on the left. Doug's cell is 651-398-1184 and the hangar phone is 651-779-0747