# **Falco Builders Letter**



Drew Done's Falco lifts off with Stephen Friend at the stick.

# Is There Life After Falco?

by Drew Done

Now that our plane has flown after 5 1/2 years of intense Falco obsession, I am wondering if I will be completely lost with my after-hours spare time, or does life settle down to some form of normality—whatever that is? Yes, we have had our first flight and many others after that, and yes it was successful, and yes to any other question that you could think of.

VH-DJD first flew on 31st March 2001 from Merimbula-a pretty little coastal town in New South Wales-thus becoming the fourth to fly in Australia and the 68th Sequoia Falco to fly in the world. Stephen Friend, a Falco owner and friend of ours for six years was the test pilot with myself as crew member, and as he has 250 hours on his Falco, he was an easy choice to do the first flight. My ego allowed me to dream for the last few years that I would do the test flying myself, but with only five hours retract and constant-speed experience under my belt, I took the Flight Test Guide's very sound advice and swallowed my pride. My intentions were to have far more experience than this, but time and lack of funds got in the way. I hasten to add that I do have 500 hours experience in homebuilt aircraft, but not high-performance ones.

Stephen tackled the job of test flying with a cool, calm (or that's how he appeared) and professional approach, and he is to be congratulated for that. It is easy to be wise after the event—as it was absolutely nothing went wrong—but if anything had, the research and experience that he had would have been invaluable.

There was still plenty of bits and pieces to be done the day prior to test flying, and I

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Drew Done.

started to panic that Stephen's flight to Merimbula (one-hour Falco time) would be wasted, and he would have to return another day. As it turned out everything did get organised and finished by the time he arrived. At first we just walked around DJD, pushing and prodding and checking everything again (this was over and above the duplicate inspections Sequoia suggest). Then we went out on the runway and did all of the control surface checks suggested in the Flight Test Guide (very thorough), and then bought her back to the hangar to double-check everything again. I found a fitting that was loose on the engine fuel pump drain, which shows that no matter how thorough you are, there is still a chance that something will get by you.

After some lunch and bringing the fuel levels back to mid range, we decided that it was now time to go and prove DJD's airworthiness. Gave my wife Judy a kiss and hug, said thanks to her for her devoted support—I don't mean to be too poetic, but you don't know what's going to happen do you!—and then taxied out to line up on 03 Merimbula. As a point of interest, an engine failure on take off before safe turning height, gives you the only option of landing in the lake ahead. After final checks and radio calls at line up, Stephen ad-

vanced everything to the firewall and away we went. I couldn't believe the feeling as we quickly accelerated down the runway—the difference between the acceleration of my previous homebuilt and the Falco was awesome. Within what felt like seconds we were airborne, and I had to restrain myself from yelling out in joy. Almost immediately Stephen said he was happy with the feel and even let go of the stick (figuratively) at 500 feet to feel for out-of-trim. I'm pleased to say it flew hands-off right from the beginning with just a touch of right rudder.

The first flight was done as Sequoia suggest-wheels down and slow-careful turns and climb to a safe height above the field and gently explore the handling. This slow speed is a bit of a misnomer to me as the Falco gear-down speed is the same as my previous aircraft's cruising speed. After 15-20 minutes of checking temperatures and handling, we decided it was time to land. Stephen's touch-down was beautiful and smooth (he can't do anything wrong, can he?), and we taxied back to an ever increasing number of people at the hangar. I usually don't show heaps of emotion generally, but after shaking Stephen's hand, I was out to give Judy another hug and tears came to my eyes. The feeling of joy, pride and relief after 4500 hours of building time, was unbelievable.

The second flight that day, with gear retraction, was as uneventful as the first, and I started to see for myself the way Falcos get up and go when they are given the chance. We were a little apprehensive about the retraction, but it was fine. I just wanted to stay up there forever—the view over the lake and coastline, even though I've seen it literally hundreds of times was beautiful,



Loading the Falco tail section on a trailer for the trip to the airport.

the day superb and the feeling of freedom in a great machine was, to say the least, fantastic! Just looking out over the wing and seeing the sun's reflection put me in awe.

After landing we all went back to our place for a well deserved drink and feed. Maybe I drank a little too much, or just maybe the first flight was being replayed so many times in my mind, but I sure had trouble settling down to sleep that night. The next morning Stephen took Judy for a run in the Falco, and she returned with as big a smile as I've ever seen, so I knew all of the time, not to mention the money, had been worth it.

Later that week our local flying instructor sat me in the left-hand seat and took on the task of bringing me up to speed in an aircraft of the Falcos calibre and also to sit in with me during the next phase of the test flying program. In Australia, it is not so much flying a set number of hours to gain the Certificate of Airworthiness, but flying a program of stalls, take-off and landing measurements etc., all in various C-of-G and weight ranges. Our Falco had been started before Australia adopted an Experimental Category, and as we started under the stricter rules, we chose to continue building under these. This means we will end up with a standard aircraft's registration and Airworthiness Certificate.

After we had completed the bulk of the test program, I applied for an area restriction exemption to be able to fly to Mangalore, Australia's major homebuilders fly-in which is rather like a very small Oshkosh. With the new permit in our pocket, we departed for Mangalore with 11 hours on DJD, flight planning over the top of Mt. Kosciusko, Australia's highest mountain.

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We were very relieved to have perfect weather all the way, as I was apprehensive enough with a new plane, let alone having to deal with bad weather as well. The flight over was fantastic, arriving early to minimise any problems in heavy traffic (well, heavier than our home country airport), and from the moment we landed we were bombarded with questions from participants wanting to know about the Falco. I must admit I didn't tire of answering questions. It was great that Stephen Friend and Ian Ferguson also flew in, so we were able to have 3/4 of the Australian Falco fleet together. We were also privileged to pick up the award for Best Timber Aircraft for 2001 and have the plaque proudly on our cabinet at home.

During the construction of our Falco, the final speed it would achieve and weight was very important to me. Now that she is in the air and I am enjoying flying it so much, the actual speed doesn't seem to be an issue any more. To date all the flying has been done with no clam doors on the front leg, nor has it got the triangle cowl door on yet. We only have the basic gear doors, ie. round holes and 1/2 doors on the mains. The canopy is the standard one, but I did do the cowl modification and the closing of the spinner gap right from the start (check cowl mods on Sequoia's web site).

I was delighted with DID's final empty weight of 562 kgs (1,236 lbs). It was 559 at first with a nose-heavy centre of gravity so I changed to a larger battery which helped a little, but we are still a little nose heavy. If Judy flies by herself, she will have to carry 24 kgs of luggage to be legal (in a no-fuel configuration). We purchased quite a few of the kits and scratch-built things like the fuel tanks, the fuel system and brake system. Also the flap torque tube, the wing fairings, gear doors, seats, rails and belts we assembled ourselves. The actual building time I didn't record very accurately but estimate between 4,500 and 5,000 hours over a 5 1/2 year period. We installed a reconditioned standard IO-360-B1E fuel injected constant speed engine. The plane is painted in two-pack 1999 Ferrari red with adapted Modena stripes in gold.

All of the test flying has been done at, or close to, maximum weight and early performance figures are as follows:

Take-off distance 300 metres to clear ground and 700 metres to clear a 50-foot obstacle—this in still air and not trying too hard, i.e. standard take-off not short field, with climb out IAS of 90 kts.







Stephen Friend and Drew Done check out the Falco, run up the engine and take off for the first time.

Stall speeds in clean configuration, no power are 59 kts, and with gear down and flaps 55 kts.

With 15"/2100, the speeds are 55 and 53 knots respectively.

At the moment we are still running the engine a little harder than what we will probably finally cruise at, but as an indication at 6500' and OAT 8°C the IAS was 158 kts at 24" and 2425—on my calculations this is a TAS of 175-176 kts.

At 8500' and OAT of 9°C (we were farther north and warmer), the IAS was 155 kts at 23" and 2400. This is a TAS of 179 kts.

The fuel burn for the above on a trip of three hours calculated out to 37.5 litres/hour. This included a take-off at sea level and climb to 8500'.

The Falco is sensitive and responsive but definitely not a hard plane to fly. It is a pure pleasure to handle. If I had an early criticism of the Falco, it would be that it hits turbulence fairly hard even in the green IAS zone. Our previous homebuilt plane was a Zenith with cruise of 110 kts and a lighter wing loading, so I'm only comparing it to that and not to a Mooney or the likes.

We have had a few little teething problems since the initial test flight. One was the front leg hitting the mixture control on full retraction which was relatively easy to fix. Fine tuning the gear-down travel with the limit switch was, and still is, a tricky problem and has popped the circuit breaker a number of times. This is with using the suggested new position for the micro switch in the nose bay.

The main problem we encountered with the Falco was my fault, and I hesitate to mention it, but if talking about it helps another builder, then I'll wear the embarrassment. As there were no drawings for the actual battery door installation, I chose to try something different to the piano hinge system which I noticed in photos of other Falcos. I used a strong fibreglass channel, formed on the top inside of a fibreglass door, which clipped in under the timber frame at the top. The door was secured at the bottom with countersunk machine screws through countersunk washers into nut plates in timber blocks. I was pretty proud of the smooth aerodynamic finish.

All was well even up to VNE, but after five hours of test flying, the door decided to part







Top: Rex Koerbin, the local LAME and technical counsellor and Drew in the Falco. Center: Drew and Stephen Friend after the first flight. Above: Judy and Drew Done.

company from the aircraft and wrapped itself around the tail plane at 160 kts where it pounded away like crazy, punching a hole through the skin. This understandably caused considerable concern for myself as pilot and the instructor next to me, as all we could see was a red and white thing flapping furiously on the tailplane, and we thought the damn thing was delaminating. We headed for the nearest strip and landed without incident, but needless to say we now have a door, strengthened with ribs and with a full hinge line and hopefully no more problems.

Apart from these minor problems, everything is up to expectations or better. We love it!!

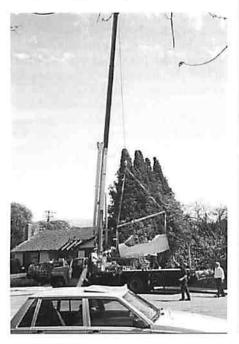
# Cinco de Mayo Falco

by Bob Brantley

Looking back to the late 80's when I started my Falco project, the light at the end of the tunnel was non-existent. All that I could see was page after page of drawings of things that needed to be built and assembled, spending time making jigs just to make and hold other parts. Then there were the radios, an engine, and finally the finish work and paint. Before starting the project, I had vowed not to have a finish date in mind and just make the building of the Falco a "hobby" and enjoy the process without much pressure. Building a Falco was not building to gain an airplane, as we had a Commanche 250 at the time, as much as it was the process of building one. In the back of my mind I did want to finish the Falco and be flying by the time I was 55 which is this coming November, so I'm about six months ahead of schedule.

This worked for me and I spent about nine months a year in building time over the past twelve and a half. Let's see, N988RP, 988 for the year I started, 1988, and RP for Robert Paul, Paul being my middle name. I thought about RJ, Robert and Janet, but there was something about saying Romeo and Juliet every time I used the radios. I guess it's a guy thing.

I have been asked, on more occasions than I can remember, why build something as complicated as a Falco? My reasoning was as follows, a proven design by a proven designer, made of wood which is a medium I like to work in, timeless looks and great performance. This summed up why I wanted to build and fly one and so I did.









June 2001

The fruition of all of the work paid off when in April we were finally ready to fly. I had read Bill Russell's first flight article in the December 2000 issue of the FBL with the thought of being my own test pilot. That was my ego at work and the more I thought about it the more I became convinced that I was not qualified for the job. My insurance company, Avemco, agreed with me. During the building years I had always carried enough insurance coverage to replace the parts in case of fire or vandalism and if I wanted to convert the existing policy to a flight policy certain conditions must apply.

The first was that the test pilot must be current in "make and model" not type. Second I needed at least five hours of dual time signed off by a qualified CFI that was also current in make and model. As we found out, this was a tough condition to meet.

Over the last several years I had stayed in touch with Larry Black in Hollister, California, and had used his experience on a number of technical problems that I had needed help on. When I was ready for a test pilot I asked Larry for some suggestions. Larry said that I should call John Harns in Idaho to see if he would be available. He was available but because of the distance involved suggested that Larry, himself, would make a great test pilot. Well, I called Larry back and found out that he is no longer willing to be a test pilot.

Okay, I called Alfred to find out if he knew of anyone on the West Coast willing and qualified to be the test pilot, and he offered the name of Dan Dorr. I called Dan and he also declined, stating that he just had too few hours in a Falco to feel that he had the necessary qualifications. I was getting nowhere fast and felt that another twelve years would pass before we were airborne.

Somewhere in all of these conversations Larry suggested Pierre Wildman. The name sounded vaguely familiarly, he was building a Falco, and he lived in California. We were making progress! I called and proposed the "opportunity" to Pierre. He was interested but needed some time to talk to his fiancée to see if she would object and to see if his schedule would permit some rearranging. Pierre is in the middle of a house remodel and was getting ready to move when I contacted him, along with being the proud new owner of a Vampire jet fighter. After a few days Pierre called back with some good news. His schedule would allow some time, a couple of Saturday's could be available and fiancée Robin gave her blessing. I'm in your debt, Robin!



Pierre Wildman.

Our first meeting was to be on May 12th but was moved up to May 5th. I was planning to do all of the high-speed taxi tests before Pierre arrived and then pass along the results of the tests. Because of the change of dates I did all of the taxi tests the Friday Pierre arrived. The taxi tests went pretty much as the test booklet described. I made a separate 4x6-index card for each of the six tests. This was easier than trying to find your place in the book, and it gave me room to make notes and enter the various taxi speeds.

The plan was for Pierre to fly from his home base in San Carlos, California, Pierre makes his home in Menlo Park. He would fly from there to Hollister, California to fly Larry Black's Falco. Pierre was not current in the Falco and Larry invited him over to fly with him for the required takeoffs and landings for the currency. I'm due to see Larry, in the course of flying off my required 25 hours, for lunch. My treat Larry! Then from Hollister Pierre flew down to Santa Barbara on Friday evening. Pierre

arrived around seven p.m. and the first thing he wanted to do was see the Falco.

I found Pierre to be very confidant and competent in his ability and methodical in his approach to being a test pilot. He did things by the book, just the way it should be done. Both lanet and I were impressed and felt that we had found the right pilot for the job. After a rather late dinner, we went through the weight and balance, checking my medical and license endorsements and going through my logbook. We then planned what we would do for the first flight the following day. First thing Saturday morning Pierre wanted to give the plane a good inspection and that's where we started. He said that this was only the second time that he was the test pilot for the first flight of an aircraft. His first was when, at the age of eighteen, he tested an airplane that he and his father had restored. When the engine quit after takeoff, that flight ended abruptly with a quick turn back to the airport for a dead stick landing.

In order to minimize any distractions on Saturday morning, I only wanted to have my wife, Janet and my friend, Ken Davids, as spectators. Ken is an A&P and has helped me with some of the mechanical systems and has been great extra pair of hands on more than a few occasions. The one thing Pierre did not need was a crowd of onlookers clustered around. We would show the Falco off to the masses with an EAA hangar party somewhere down the line.

The first thing Saturday morning Pierre wanted to do was a complete and thorough inspection of the Falco especially the engine installation. After removing all of the inspection covers, and with mirror and flashlight in hand, Pierre looked and prodded around as he inspected all of the Falco's systems. I had decided that if someone is willing to risk their life flying an airplane for the first time, the least you could do, as the builder, would be to put aside your personal feelings for any and all corrections that the test pilot might bring forth. If anything was questionable it should be fixed, changed or corrected.

One week before Pierre's arrival, my sonin-law and I had gone through the final check list in readiness for this day. Chuck is a mechanical engineer and had worked for Northrop on the B-2's. He had not seen much of the actual construction of the Falco but I knew that with his background and expertise he was a good choice for an airframe inspector. He would be looking at things with a new pair of eyes which should minimize any oversights.

I would urge you to follow this checklist without any deviations. Sequoia furnishes this to everyone in the final assembly of their Falco and it is also available on the Falco website. It is well thought out and covers every nut and bolt in the airframe. Chuck did find a couple of problems. One was the interference of the left aileron pushrod, at the front, that was binding at the edge of the oval cutout on the front face of the wing spar. The other was that I had crossed the right rudder cable over the left cable at the rear rudder cable pulley. The right must cross under the left to prevent any chafing of the cables.

Pierre only found one thing that needed to be changed. The vacuum pump exhaust hose was venting on the gascolator and, after re-positioning the hose and adding a tie-rap, we were ready to proceed. Going through the final checklist really paid off in the final preparation of the Falco for its first flight. When Pierre had finished his inspection to his satisfaction, there was nothing left to do but fly and so with some apprehension he donned his flight helmet and parachute. While Pierre was readying himself, we tried to calm down a bit with some picture taking.

I don't know if Pierre knew how afraid we were for him or not. We knew among ourselves that he was the most important aspect of this flight, and we wanted him back in one piece, Falco or not. A lot of prayers for his safety were made by us and others, not even known to him, on this Saturday as he taxied out to the active runway.

Pierre did spend a lot of time in the run-up area to make sure that everything was okay with all of the power systems before taking the active runway. My excitement by this time was very evident to everyone around me. This was my baby that had taken twelve and a half years to deliver. Would it fly? Would it hold together? Would the engine continue to run well during the duration of the flight? Would Pierre have to cut the first flight short because of a mechanical problem? And what about all of the glue joints that held everything together to form one harmonous structure? Would they be able to handle the load and stress needed for flight?

All of these thoughts were racing though my mind as Pierre took the active runway and started his takeoff roll. Suddenly he, and my Falco, were airborne. We all





Pierre checks the Falco in the hangar, then fires up the engine for the first flight.

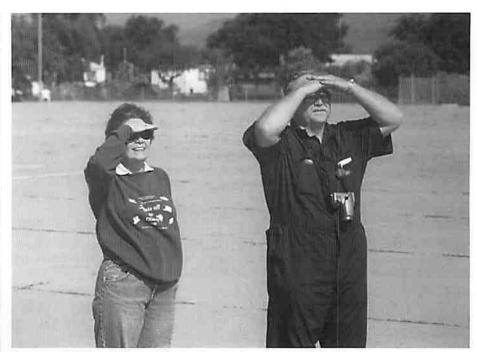
started clapping, and I was jumping for joy. Here, after all these years, was the day that all of the hard work and dedication paid off. It was really flying! We watched as Pierre continued to climb and then he turned southeast, a route that would take him over the shoreline and the Pacific ocean. We finally lost sight of him as he gained altitude, and we headed back to the hangar to try to hear him on the departure frequency with the aircraft scanner we had brought along. Then the waiting started. [It's not like I just went out to sea. The area is rather built up, so I had to do a 45 degree upwind to avoid populated areas, then turned inland once I had 1500 feet. Bob and his group had lost sight of me by then, but I never actually got off shore. Believe me, I wanted the airport close by, just in case!—Pierre]

Santa Barbara is Class B airspace and has two separate arrival and departure frequencies, one for the East and one for the West. As we switched back and forth between the two we listened intently for any communication from a Falco or an Experimental aircraft. We heard nothing until about forty minutes later when we heard Pierre requesting landing instructions. I think that the waiting and the suspense of not knowing how Pierre was doing was the worst part of the whole first flight.

Ken wanted a few pictures of the landing, so we hopped in his pickup truck and headed over to the arrival end the designated runway. Within a few minutes Pierre was over the fence although a bit high on final, and it looked like he had the full, 45 degrees of flaps deployed. Touchdown was long but uneventful and as we waited for Pierre to taxi back a sense of relief came over me. Pierre was back, safe and sound, and so was the Falco. As he turned off the taxiway and headed for us he gave us the thumbs-up sign signifying a good flight. I must say that he looked liked he had enjoyed the flight.

After the congratulations, Pierre put me in the left seat for my first flight and to get a feel for how the Falco handles compared to other types of airplanes. I had no problem in over controlling the Falco. It is very sensitive to any and all control inputs. Two or three fingers on the stick are definitely all that is needed for control. You caress a Falco instead of flying one.

We did a some stalls and slow flight and then took some time flying her for the pure enjoyment. The stalls were quite sharp and it always dropped the left wing. The stalls were somewhat frightening to me, and I have to chalk that up to the lack of current



Janet and Bob Brantley watch the first flight.

flight time in high performance aircraft. On that second flight Pierre did most of the flying, and I was the passenger. We planned to make a third flight later that afternoon after a well deserved break and lunch, and I would be doing the flying.

My second flight was a little better than the first. Shaky on the takeoff, I still over controlled and had a problem keeping the altitude within 100 feet. Other than that I was feeling a bit more comfortable at the controls. This flight was meant to be a "getting to know your airplane" flight and that is what we did. Tooling around the sky in a bright yellow, brand new Falco, what a thrill. We kept the flight to an hour and brought it home for the day. All in all we had a great first flight day with a lot of memories and a lot of excitement.

After the three flights there were a few problems that we needed to address before the next flight. An errant fuel pressure gauge, heavy right wing and an intercom that, because of the noise, was breaking the squelch. That was it. We did test the landing gear retraction system on the second and third flights, and it worked fine.

With the total of two flights I had accumulated 2.1 hours in a Falco. I still needed an additional 2.9 hours before I could solo and be covered with insurance. I knew that it would take some additional instruction, not just another 2.9 hours, before I felt that I was competent enough to solo. Pierre agreed to return in two weeks for another series of flights and possibly give me enough dual instruction to be able to solo. He had also suggested that a backup plan of

action should be formed just in case he was unable to make the second trip and/or weather did not co-operate. He suggested that if I could arrange to fly with John Harns in Idaho, it would not only give me the opportunity to fly another Falco but Pierre had said that John was the smoothest Falco pilot he had flown with. Even if I was able to get checked out with Pierre, flying with John would be a great experience and well worth the effort and the expense. John is also an CFII so the time would be logged as dual received and he could sign me off to solo a Falco if Pierre and I didn't fly. Plans were made to fly up to John's home in Post Falls. John said he would be glad to have me come up, and he had a couple of days during the Memorial Day weekend that we could fly.

The weather patterns around here are such that most of the spring we are shrouded under a marine layer, 600 feet overcast with the tops around three thousand feet. You need to be instrument rated just to be able to depart and go elsewhere. The order of the day is IFR to VFR on top. On Pierre's second trip down that's the type of weather we had to contend with. Weather forecasts were for overcast skies in the morning clearing to partially cloudy in the afternoon. Our plan was to head up to Santa Maria for some pattern work and then work on stalls if weather permitted. When Pierre arrived we were at 1200' overcast and low clouds. My good to go plan was to have at least a 1500' ceiling and if nothing else we could stay in close traffic at Santa Barbara and do the pattern work here. Things have a tendency not to go as planned as I'm sure you know.





May 5, 2001. Ken Davids, Pierre Wildman and Bob Brantley after the first flight.

After Pierre's plane was tied down, off we went for coffee, no break in the weather. Lunch time came and off for a leisurely lunch, still no break in the weather. Back to the airport around 1:30, and we had gained 100' to our ceiling, up to 1300' but by 2:30 it had dropped back down to 1200' and by 5:00 we were still under the marine layer. I hate to give up but both of us agreed that it would be better not to try flying this particular day. You do not want to be flying a new and yet unproven aircraft in IMC no matter what. It was a good thing that I would be heading up to see John Harns. If we hadn't arranged for a back-up plan in advance, I may have been in the hangar a lot longer.

I would like to say that John and his wife Pat are a couple of very gracious people. That is one thing that I have noticed about Falco builders. The whole clan is made up of friendly, "will do anything for you folks". I'm proud to be included in this fraternity, and I hope that I can live up to the challenge of being as helpful to other builders as I found John was to me. I was able to have five flights with John over the course of two days for a total of 4.7 hours.

This was some of the best flying I have ever been privilege to enjoy. John is an ex-navy carrier pilot and Pierre was right, he is smooth on the controls. If you ever get the chance to ride along with John, don't hesitate. The experience that I gained from his instruction was priceless and John was satisfied that I had enough expertise that he endorsed my log book for solo flight in a Falco. One bit of advice he did offer was to

get a couple of hours in the pattern in a high performance airplane like a Bonanza to help ease the transition to flying the Falco. Good Advice.

I did solo 988RP on Memorial Day, and I was somewhat nervous before the flight. I remembered what John had said about flying a Bonanza but, not knowing someone local who had one, I was limited in what I could fly. Most of my recent time has been in an older Arrow and that wasn't what he meant when he suggested a high performance airplane. I made the decision to fly my own Falco after taking a serious look at the dual instruction that both Pierre and John had given me over the past couple of weeks. I wanted the skills that I had learned with them to be fresh in my mind when it was time for that solo ride. I also took a long time on that Monday with the pre-flight and not until everything was ready, including myself, did I climb aboard for that first flight.

As I look back to that flight, it was uneventful even if every bump from an air current caused concern and thoughts of "will the airplane stay glued together?". Fear can be a good emotion at times, it keeps the adrenaline levels increased, and it keeps you ready for action if the need arises. Lucky for me, nothing out of the ordinary was called for. The Falco flew fine and I enjoyed the moment of being one with something that was created with my talents and craftsmanship, a good feeling indeed. I hope to have all of the 25 required hours flown off by the time you receive this issue. Weather permitting, I will.

If you're building, keep up the progress. If you need help, find a Falco pilot close to you who can give you a hand. You don't have to do everything by yourself. The ones that have finished their projects are a gold-mine of information and are willing to pass it on.

Don't get discouraged and don't give up, remember that you need to look only at the part you are working on and not the whole project. With enough of those small parts assembled some day you too will have your own Falco. It is well worth the effort. Then you will be able to join the ranks of flying Falco builders, and you will have an airplane that is truly one of a kind.

We are planning to be in Texas for the next West Coast Falco Fly-in for a short visit anyway, since we don't have rooms reserved. Oshkosh is planned for 2002 but not this year because of our move to the Ozarks. Hope to see you there.

# Living with a Falco, an All Round Experience

by Stuart Gane

For my wife Vivienne and me, living with this aircraft has been an experience, which has enriched both our lives in many ways, some of which were quite unexpected. I never thought for a moment that when I set out to build a Falco in 1986 that it would have such a profound effect on us.

Yes, I knew it was a big commitment in both time and finance and being the sort of personality that I am, once embarked on such a project, I would become very focused until it was finished. I found the task of building the aircraft a most rewarding experience, I learned new skills and acquired knowledge, which has been useful in a variety of ways, although I have still to find a use for all 50 quick-release clamps.

All those days, weeks, months and years working on the Falco have rewarded us both with fun and a wealth of experiences which have made our lives so much richer that it would be hard to find any other project that would come even close to emulating what building and owning a Falco has done for us. Sometimes in most unexpected ways.

For example, it was the catalyst for us both to take up cycling as a means of keeping fit. That came about because the doctor at my annual medical warned me that there was steady increase in my weight. So, the next day I went and bought a mountain bike. Vivienne at first looked surprised when she saw me arrive home with the new bike then said she too would like to take up cycling. I have a niggling feeling she may have regretted that request. However, 18 months later we are still cycling regularly. Falcos do strange things to people.

I can recall other contributors to FBL writing about how when they arrived at a new field in their Falco, strangers would stroll over to the aircraft to ask questions or to pass on complimentary comments about the look of the machine. I too have had similar experiences. It is a very rare occasion when, on arrival for the first time at an airfield, we don't receive some complimentary comment or notice that passers-by stop and look at the Falco. As a result we have made friends in many of the countries we have visited.

Looking through my logbook since owning the Falco, we have visited 10 countries in Europe. Too many trips to recount in this





At Swiss Fly-In at Grenchen and 14500' over the Alps on the way back from Venice.

article, but one of the more memorable destinations and typical of the sort of experience we have had with our aircraft was the journey from Venice's general aviation airport San Nicolo during Easter 2000. San Nicolo was the base used for the Schneider Air Races in the 1920s and early 1930s. The original tower and terminal buildings were built for Mussolini who had great plans for the airport but, like so many of his other plans, they were never realised. Today it is a very quiet field, full of memories. The main airport for Venice is Tessera across on the north side of the lagoon. A very busy place indeed, where you are required to fly accurately when flying inside its controlled airspace, if you are to avoid upsetting all those happy charter passengers, not to mention ATC.

Departure from runway 06 at San Nicolo takes you directly out over the deep ship-

ping lane in the lagoon surrounding Venice. Just as we lifted the aircraft from the grass runway, a very large ocean liner appeared, making its majestic way out of the lagoon with some tall masts threatening to scratch our paintwork. It was a close call, as we roared over the liner no more than 50' above the boats gaping funnel.

On this particular flight, we had filed to fly direct to Chambery in S.E. France, which meant a crossing of the Alps on the Italian French border. The weather was excellent for VFR flight but it did entail a crossing height at FL125.

We should have had oxygen supplies on board but as we had both flown up to 15000' the previous year in the Swiss Alps with no breathing problems, we felt confident we would be okay. I was impressed with the way the Falco performed in spite





On long final for Chambery, France. Stuart and G-GANE.

of being near gross weight when required to climb above 10,000'. The VSI was still showing an 800' climb rate at our crossing altitude.

The crossing was uneventful apart from the period when Turin ATC cleared us en-route to Geneva. For the entire crossing of approximately 15 minutes, we were unable to get a reply from Geneva. What a long period of silence that appeared to be. I checked and re-checked the radios but nothing seemed to be amiss. Eventually I concluded we were not high enough as Mt Blanc at 15,000' was between Geneva and us.

The scenery as you would imagine was spectacular with blindingly white snowfields set amongst sheer-faced grey-black rock. For somebody like me who has no intentions of taking up mountaineering, this is as close as I will ever get to such foreboding but beau-

tiful territory, unless we had an engine failure. We looked in awe at the mountain scenery but all the time our ears were tuned to the sound of the engine, which reassuringly maintained a steady note.

Eventually we were close enough to Chambery to establish radio contact for landing instructions. They must have mistaken us for some other type of aircraft, for at four miles out and still at 10,000' over the Alps we were cleared for a straight-in approach on 36. Probably a nosedive would have enabled us to make it but being the more cautious type and not wanting to explore the nether regions of control flutter, we requested an orbit to lose height at a more sedate decent. We landed with no further problems. Even the surly refueller, who made it quite obvious to us that small aeroplanes should be nailed to the ground, could not dampen our exhilaration from flying safely over such spectacular but unforgiving territory.

Until our departure the next day, the weather had been quite good but as we flew North it was increasingly obvious that the weather was closing in and we would have to divert to avoid a large weather front, which was looming ever larger and blacker every mile we flew towards it.

A rapid check on the map and Jeppesen for suitable fields seemed to suggest Bourges (S.W. Paris) although closed would have to be our best diversion. We landed just before a torrential storm broke on what we thought was a deserted airfield, just as we turned the engine off and began to ponder what we should do next, a Cessna 172 stopped at the entrance to the apron and the passenger climbed out, walked over to our aircraft and said he was the CFI, the field was indeed closed but, if we would like to taxi behind him up to the club hangars, we were welcome to hangar the Falco overnight free of charge.

He also arranged for a club member to ferry us to a hotel for the night. We were driven to number of hotels before we found one with a vacancy. Apparently there was a film festival on in town hence the lack of rooms. We have found on many occasions French towns always seem to have some local festivity taking place whenever we are in desperate need of accommodation. The driver was very generous with his time and petrol and would not accept any payment. However, we were only too pleased to let him borrow our mobile phone so he could let his wife know why he was so late coming home.

The hotel turned out to be rather luxurious, read expensive, with excellent food and facilities. Once settled in, our thoughts turned to two friends who had flown out of Venice the day before to visit Euro Disney.

As it turned out they too had been caught by the appalling weather and were stuck in a tiny tent on a deserted grass airfield with no facilities, no food and the rain was beating down on their tent so hard we could hardly make out what they were saying. From our four-star hotel bedroom, we felt sorry for them!

The following morning it was still raining. The only way we could obtain a weather forecast for our trip home was either an expensive and possibly abortive taxi journey to the airfield or an equally expensive phone call to private aviation weather forecasting company in the UK.

We chose the company. The forecaster was a helpful character, who warned us of dire consequences if we should venture home that day, or even for the next four days! However, he stared a little harder into his crystal ball and advised us there might, just might be a small window of reasonable weather for about three hours if we left at first light, say about 5:00am the next day. Helpful.

Whilst we pondered on the situation and took comfort in the surroundings of our hotel, momentarily feeling pleased that we did not have to sit out this weather out in a small tent, unlike David and Sheila. There appeared to be an easing of the rain and the sky began to lose its leaden colour. Remembering that piece of weather folklore 'rain before seven, dry before eleven' we waited and, sure enough, just after eleven the rain stopped and the low cloud began to lift.

We decided to check out of the hotel and get back to the airport. Again the CFI at the club proved what a great fellowship there is in aviation by allowing us full use of the facilities for obtaining en route forecasts. It was much more promising that our over-priced prophet of doom forecaster from the UK had predicted, and we able to fly home, only having to skirt around a large weather cell some 15 miles out from our home base.

Our experience of VFR flying in Europe and the UK tells us you can never rely on the weather to remain stable for very long, you can expect to encounter some marginal if not un-flyable weather if you go any distance. On the other hand, you get to experience flying in very different environments. You leave one country with its own particular language challenges and can land in another with a whole new linguistic challenge to be encountered. It makes you appreciate how fortunate it is to be an English-speaking pilot. Some countries in Europe can be very bureaucratic, particularly over homebuilt aircraft. In certain countries it is necessary to obtain written permission before you may fly in their airspace.

Invariably the individuals you meet at the foreign fields are most welcoming and like the look of the Falco. The airplane is much admired in Europe. Amongst some of the trophies we have won is a saw, because the Falco was constructed from wood. That was from a Swedish fly-in where the organizers attempted to find an appropriate prize for each type of aircraft.

In Switzerland two years ago, we were presented with two Pilatus Turbo prop control







Top: Falcos at the PFA Rally 2000. Center: G-GANE getting a look over at RSA rally in France. Above: Vivienne and Stuart at Swiss Fly-In 2000.

columns each mounted in a solid billet of aluminium, far too difficult to adapt for use in the Falco. They were so heavy we had to ask a couple of English spotters if they would take them home for us by car. At the same time, we received a watch that had no numbers, only a picture of the Matterhorn mountain.

That led to such comments when asked the time as, 'half-past Matterhorn' or 'it's peak time' and so on. Last year we received two original cartoon drawings of our Falco for best homebuilt and longest distance flown, expertly drawn by a local Swiss pilot. The pilot and passenger look like two monkeys. I hope that was no reflection on our flying skills! There have been other prizes won by our aircraft, which has caused one or two of our flying friends to ask, with tongue in cheek, if we have now got a trophy cabinet.

We have both had a lot of fun flying in the Falco and hope to continue to do so for long in to the future. Talking of the future, we hope to fly to Italy again this Easter holiday, but this time to Florence. And in the summer holidays Portugal is beckoning, weather permitting, as always.

**Falco Builders Letter** 

#### **Construction Notes**

I was reading some of the articles in the Skunkworks section and skipped ahead to the painting section. I was reading about the various fillers such as dry micro used by a number of the builders to fill low spots in the surface of the aircraft.

I just got through repairing hail damage to the wings and fuselage of my Wichita spam can (Cessna 172) and found a great, easily sandable, epoxy-based filler for use on wood, fiberglass, metal, etc. The stuff is called Superfil and is marketed by Polyfiber (Ray Stits' old company).

Superfil comes in two parts and is mixed by weight two parts A to one part B. It contains no MDA, so it is supposedly non-hazardous. It is twice as strong as the stuff called Bondo yet is about one-third of the weight—15 ounces per mixed quart! It will not shrink which is important when you think about this stuff being underneath a \$8,000 paint job. It sands easily (easier than most epoxy and micro concoctions) after curing for 12 hours at 77 degrees.

I intend to keep this stuff on hand for various light filling repairs. You might pass the above info on to some of the other builders.

Also, has anyone used Polyfiber fabric over the Falco airframe in lieu of the glass cloth? If so, what were the results?

—Richard Dickerson

Richard, thanks for the information. The Polyfiber fabric (polyester—Dacron is duPont's tradename for polyester fabric) is intended for application with adhesive dopes and for taughtening with heat. It's a completely different process than 'fiberglassing' the outside of a wooden aircraft with fiberglass cloth and epoxy. You absolutely do not want to use any polyester fabric in the method that we use because of the lack of adhesion between the wood, epoxy and the polyester.

Indeed, because the adhesion is so poor, polyester is used in 'peel-ply' fabrics that are used in a fiberglassing process where you want to put a fabric down over a seam of fiberglass cloth. Once the epoxy has set up, you pull the peel-ply off, and that's not something you want to have happen to your Falco.—Scoti

Is it okay to scarf several pieces of 1.5mm plywood together to sheet frame 8? And on P/N 754 and 774 fin hinges, I have fabricated the angle portion from 25mm (or 1") material. Do you have to trim the short

side to 20mm. I realize there is a weight penality, but I'm more worrine about a movement conflict. Also the radius the stock comes with looks nice.

—Tom Webber

Of course, it's okay to scarf several pieces of plywood together for frame 8 or any other place in the airplane. I don't see any problem with a 25mm base width to the fin hinges.—Scoti

I was doing an annual and unfortunately, my plane fell off the jacks. Fortunately, I was not under it, or I would be in the funeral home today. Here's my question. I now have a 4" x 4" hole in the lower right wing skin just aft of the main wing spar and between two ribs. About rib 4 and 5, I think. The other wing has a 2" x 2" crack in the skin in the lower leading edge, about half way of the wing. There does not appear to be any damage to any structural member, either spar or ribs.

Can you tell me the most appropriate way to repair the skin? Do I need to remove skin out to a structural member such as the spar and ribs and replace it with a scarfed skin?—Glyn Russell

Oops. Sorry to hear about this. The same thing happened to Dave Aronson years ago. Repair is relatively easy. Cut out the broken plywood, and then put in a patch. While you will probably scarf the plywood, I suggest putting in a strip all around the hole on the inside so you have something to push the plywood into. You can also use sheet metal screws as 'clamps' while the glue is drying.—Scoti

I propose to put two coats of varnish over the forward surface of fuselage frame No. 1 before applying the Fiberfrax glue and the Fiberfrax. Is this proper, do you think?

Also, the construction manual says Wicks sells a non-flammatory paint which can be used to paint the walls of the nose wheel tunnel. Can you tell me more? I can't seem to find it in their catalog.

—Garry Wilburn

Two coats of varnish before Fiberfrax is fine, and that's the normal way to do it. I'm not up to date on the paint. It was something they sold for a while that would blister up into a foam if it was hit by a flame.

-Scoti

Please bear with me whilst I ask a really basic question in regards to fuel pressure. Various people from Stephen Friend to LAME to engine workshops have given me conflicting answers to the following question: Where should the fuel pressure gauge read from? That is, should it be from the gauge port on the spider, or should it be from between the engine fuel pump and the FCU?

We started out from the spider and got a very low reading of 2 psi. The LAME disagreed with this and wanted to plumb it into the fuel pump line. This we did and recorded 30 psi on a test gauge. We also recorded 30 psi direct from the electric fuel pump. As you are aware, the combined manifold pressure/fuel pressure gauge redlines at 7 psi or thereabouts, which is obviously useless for 30 psi. Our LAME was questioning whether we had the wrong gauge for our engine (IO-360-B1E), but Stephen feels sure that we should be reading it from the spider. Could you please clarify?—Drew Done

Both parties are correct in the sense that both methods can be used in an aircraft, but it's a design decision on how you do it, and there are merits to both methods. In our design, the fuel pressure is taken from the injector spider and the gauge is designed to read the pressures that you find at the spider.—Scoti

I'm just fitting the aluminium strips around the canopy and windshield. I have seen others make comments in the construction notes about the windshield bow bending as the canopy latch is secured. I have this happening as well to a degree, however I can't see how this wouldn't always be the case to some extent unless the latch is 'perfect' while at maximum tension and 'a bit loose' when in its over-center position, unless the seal is very soft. Mine bends a little in the max tension position, but sits nicely when over-centered.

Did your Falco have this happen at all? Or was the seal soft enough to accept pulling the canopy a little further forward so the bow did not bend at all? I'm guessing that there was some bending but obviously only a minimum is preferred to not stress the windshield.

I think the light at the end of the tunnel is actually a train!

—George Richards

It's best if the tension on the latching mechanism is enough so there is some resistant to closing the latch—and this also holds it in the closing position—but not enough to bend the windshield frame or to cause a depression in the windshield.

—Dr. Ing Alfredo Scoti

#### To Work in a Falco

by Ian Ferguson

Juliet has a thirst for adventurous situations. She took a job for a month as doctor to an aboriginal settlement in the remote Kimberly region of Australia. This region is situated on the continent diagonally opposite to where we have our home.

Juliet was due to start work on the January 4, so we decided to leave home on Sunday December 30 so as to have a leisurely trip and short holiday.

We left home on a warm day at around 10:00 under broken cumulus passing over a patch-work of dry yellow, and green irrigated paddocks heading for the mining town of Broken Hill where we refueled. Past Broken Hill the country became desert with sand hills and low scrubby vegetation, cruising at around 8,500 feet with an indicated air speed of 160 knots (close to 180 knots TAS).

We saw the New Year in Coober Pedy. This is an old opal mining town where many people live under ground due to the heat—44°C (111°F) on our arrival. Initially, we checked into an extremely poor lodging with very basic facilities. The hostess was taken aback when we asked for a couple of glasses. "There is already a cup in your room," she said. Other appurtenances of the room were of a like quality. Needless to say we found something much better the next day in a motel called The Mud Hut because of the structure of its walls.

We were able to hire a vehicle and travel about a bit the day after our arrival, viewing a range of stark hills called The Breakaways and returning to town along a section of the dog fence, probably the longest continuous fence in the world. It extends across the states of South Australia and Queensland for a distance of thousands of miles. It was built with the aim of keeping the dingos (wild dogs) of the Northern cattle country out of the more closely settled sheep country of the South. The fence was only partially successful as might have been expected.

Off again on Tuesday January 1 for Alice Springs and Tennant Creek, refueling at the Alice. (There is an Australian habit of substituting the for one word in a two-word name, eg. 'The Towers' for Charters Towers, 'The Mount' for Mount Morgan.) We departed the Alice around five minutes after a Cessna 210 who was heading for Tennent Creek at 10,000 feet. We were at the bowser filling up when he arrived at







Top: Gorges Fitzroy Mountains. Center: The fence designed to keep dingoes out. Above: The Breakaways near Coober Pedy.

Tennent Creek. Distance 249 nautical miles. He made no comment!

While at the aerodrome a brightly painted C150 arrived en route Geelong in Victoria







Top: The Victoria River at Timber Creek. Center: Ranges in the Kimberley. Above: Oodnadatta.

to London and return. The pilot was sponsored by the Lions Club to raise money for

disabled children. I have since heard that he made the trip successfully. He was



Above: Rock Wallaby in the red rock of the Ord River gorge.

equipped with three GPS's, and two of everything else. Getting lost was not going to be a problem.

After a night at Tennent Creek, we traveled over the Tanami desert on to Kalkerindji, an aboriginal settlement. This used to be the headquarters of Wave Hill station, a very large cattle property also known as the place where aborigines went on strike for the first time. Prior to that, they worked for tucker (food) and keep only. Now they buy their tucker and tend to drink away what money is left. Just north of here is Victoria River Downs, said to be the largest privately owned property in the world.

After a day at Kalkarindji, it was out to the airstrip for my return home, this time via Tennent Creek, Birdsville and Broken Hill, a distance of 1465 nautical miles. Overnight at Birdsville where I paid \$1.38 per liter for fuel—it seemed a lot at the time, but I've paid more since. The only other event of interest was meeting a few old gliding friends at Broken Hill where they had been held up by poor gliding weather in the course of a cross country gliding safari. No photographs on this leg as Juliet had the cameras at Kalkarindji.

Total distance covered 3027 nautical miles flown mostly between eight and ten thousand feet.

Four weeks later it was time to return to collect the wandering doctor. Departed from Yabba North at 08:00 for the Alice via Leigh Creek in South Australia. It was 504 miles to Leigh Creek for fuel (there was



Above: Berkeley river and gorge.

a photograph of my old SF.260 on the wall of the refueller's shed from a previous visit) then on to Alice Springs, arriving at 13:30. I had not allowed for the two hours gain in local time to my final destination and stayed the night in Alice rather unnecessarily.

This time direct from Alice to Kalkarindji over the Tanami desert again. It was in this desert, not far from Kalkerindgi in 1929, that Anderson and Hitchcock died of thirst following a forced landing in a Westland Widgeon while looking for one of our pioneer airman, Kingsford Smith. This was known as the Coffee Royal affair because the lost Kingsford Smith and his crew drank coffee and brandy during their wait for rescue on the West Australian coast. It was scurrilously suggested at the time that Smith's forced landing was a putup affair to gain publicity.

Aircraft have revolutionized conditions in this remote country with small mail/passenger 'planes everywhere and, of course, the Royal Flying Doctor Service. Every station (ranch) has its own strip and usually an aircraft. Often an ultralight as well. Medical emergencies are resolved by satellite 'phone and RFDS, the latter a free service but only available on the authorization of a doctor.

Following my arrival at Kalkarindji, we had an interesting dinner in the local aboriginal club and bar. Next morning we departed south initially, for fuel at Hooker Creek, another aboriginal settlement. (The frequency of *creek* in the place names in this country indicates the importance of water). From there we traveled to Timber Creek, a hundred or so miles north, for a







Top: Tie down with Sentinal Boab—Timber Creek. Center: Estuary of the Ord River near Wyndham. Above: Ayres Rock.

day or two fishing unsuccessfully for Barramundi in the Victoria River. From Timber Creek we travelled to the West to Kununurra, a center of the region



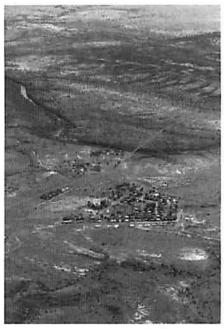




Top: Storm over Gorges in Fitzroy Mountains. Center: Mullock Hills from opal mining—Coober Pedy. Above: Bungle Bungle Mountains.

with a very busy airport. There Juliet caught a few of the elusive Barramundi.

On the way to the Kimberly coast the aircraft produced its only glitch in the shape



Kalkarindji between the Kimberley and the Tanami Desert.

of rough running which caused us to land at Wyndham to change a fouled plug.

Wyndham used to be a pearling port, and later a center for meat export which has now become almost derelict. It would have been good to have some time to look around.

From Wyndham we looked around the Kimberly coast, then back over Kununurra to Lake Argyle, a huge reservoir on the Orde River used for irrigation, then south over the Bungle Bungle ranges to Halls Creek on the fringe of Gibson's Desert for fuel and the night.

The next day we travelled to Ayres Rock. We circumnavigated the Rock and the Olga ranges before landing and refueling, then on to Oodnadatta, a very run-down town with a decaying airport and a derelict railway line and station.

It was an important railhead on the old 'Ghan railway line between Adelaide and Alice Springs, but it was bypassed when the new line was built in the fifties. The railway line was named for the Afghan camel drivers who pioneered land transport in the early days.

After a night in the pub, we refueled and travelled home via Broken Hill. On arrival home we had traveled around seven thousand nautical miles with no aircraft problems other than a fouled plug and the landing gear circuit breaker popping occasionally in turbulence.

Truly a magic carpet.

#### Sawdust

- Media watch. Check out the September Kitplanes for an article on Dave Nason and his Falco.
- Now we are 70. Mel Olson flew his Falco on June 9 and everything went very smoothly. If you haven't seen it already, check out the huge collection of construction photos for Mel Olson on our website.
- Metric Martyr. London—Greengrocer Steven Thoburn fought the system—the metric system, that is—and lost. The 36-year-old fruit-and-vegetable vendor—dubbed the "Metric Martyr" by the British tabloids—was found guilty of selling his wares in pounds and ounces, without the metric measures mandated by European law. It was the first prosecution of its kind in Britain.

Thoburn, whose plight generated a groundswell of public support, now faces a maximum fine of \$1,500 on each of two offenses, and court costs that could run as high as \$90,000. He was also put on six month's conditional discharge, which is similar to probation in the United States.

- From Cecil Rives: You know you've had a good day when your son's photo appears on the cover of Sports Illustrated, your girl friend's on Playboy, and your wife's on a milk carton.
- News from Italy. General Avia closed on August 2000. Mario Marinelli, owner of I-TINI, a 1956 Falco, has set up an Internet 'mail list' for the worldwide Falco community to share news and information. The address is Falco@fly-net.org and you can manage the subscriptions and all orders from the electronic majordomo (maggiordomo Italian) in maggiordomo@fly-net.org and you may subscribe and unsubscribe from http:// www.baskerville.it/cgi/flexmail/ maggiordomoflynet.html And the Falco Club of Italy can be reached at falcoclub@libero.it

#### Calendar of Events

West Coast Falco Fly-In. September 27-30, 2001 at Galveston, Texas. Contact: Bill Russell (713) 952-7771 email: Lsruss1@aol.com or Cecil Rives (713) 467-9894 email: Falco@flash.net.

Oshkosh 2001. Andrea Tremolada plans to fly over from Italy, this time avoiding Brazilian customs officials. And we'll be there so Angela can see what the world's greatest air show is all about.

# Goings On at Sequoia Aircraft

For as long as we've been offering the Falco, Jean Peters has been cutting spruce for Falcos and operating as Western Aircraft Supplies in Calgary. Jean does exceptional work and he has supplied most of the spruce that we use in our Falco kits. But time catches up with us all. Jean is now 70 and is in good health, but he's decided it's time to hang up his saw.

But all is not lost. Jean has sold the entire operation, equipment, materials, etc. to Mark Septav, who will continue to operate Western Aircraft in the same manner as before, but at a new location. The new address is listed on our website under Skunkworks/Sources, but it's now Western Aircraft Supplies, P. O. Box 79, Slocan, BC VOG 2CO, Canada. Telephone: (250) 355-0003, fax: (250) 350-0004. Email: aircraft@telus.net. Mark Septav is 45, a forester by occupation, but he intends to operate Western Aircraft as a full time operation.

It's been a real pleasure to deal with Jean Peters over theyears, and I'm sorry to see him go, but time catches up with us all if we wait long enough. Jean, by the way, still has all ten fingers, though he's nicked them on two occasions. When he cuts wood, he only works in a shop by himself (it's always when you become distracted that you make a mistake) and he tries to never let his fingers get any closer than three inches to a saw blade.

In recent months, Aerolite has been unavailable in the U.S. but you can buy it in England. Doug Henson did a bulk purchase and divided the order among other Falco builders. It appears we will repeat this process many times, so all we ever need is a volunteer who wants to be the Aerolite honcho for a week. Doug Henson provides a description of how he did it in Mailbox, and we would be delighted to assist any Falco builder who wants to handle a bulk purchase. By using our website, we were able to find purchasers for the Aerolite in a week.—Alfred Scott

## Angela's Corner

Hey everybody,

I can't believe it's time for another builder letter to go out, it seems so soon. Time is passing by too quickly. There's not a lot to say from this end except thanks to those builders who have been ordering parts, everyone has been quite prepared which in turn helps me.

I'm getting ready for Oshkosh. There are a few rooms reserved. I have taken some reservations and still have some space available on certain days. If anyone is interested let me know, and I'll see what I can work out. The cost is \$104.00 single and \$111.00 double. We are staying at the Paper Valley Hotel in Appleton, WI. It will be my first adventure to that part of the country, and I am really looking forward to it and to meeting all of you that are able to attend.—Angela Winstead

Mel Olson's Falco shares a hangar with the Citation he flies.



#### Mailbox

Thank you so much for the beautiful tribute to my father, Tony Bingelis, which appeared on your website. I just spoke to my mother in Texas and she, too, was very moved. He was a terrific husband, father and grandfather—but his true passion in life was aviation, and he loved every aspect of it. Though my father is not with us physically any more, we will always have your kind words to help us remember what a wonderful person he was.

Sandra (Bingelis) Colombo richpcolombo@erols.com

Here's a brief progress report for the last four years of work. I purchased the premilled spruce from Western Aircraft and built the ribs, fuselage frames and spars. Building these components was straightforward, as long as each was properly jigged.

The airframe, control systems, and landing gear/retraction system and seats/tracks are completed and built, installed and operational. The fuel tanks and engine mount are built and installed. Thus far, I have built all metal components with the exception of certain specialized operations such as vacuum brazing, anodizing, heat treating, chrome/grind, and welding on critical components. I am no expert welder, and the fuel tank and engine mount weld integrity is too important to be left in the hands of an amateur.

As soon as the canopy arrives, I will complete its installation and start on the instrument and electrical system. A more complete report will be forthcoming when I find some more time.

> Jeff Morriss Cornelius, Oregon

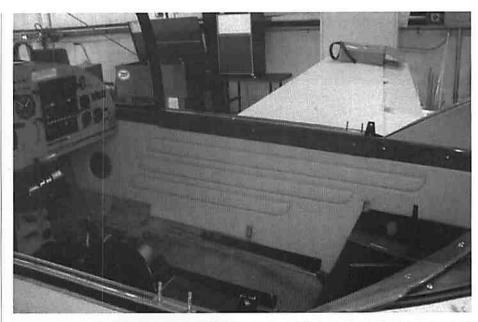
I recently acquired what is left of Tony Bingelis's Falco. Shame on you, whoever did that to Tony's Bird.

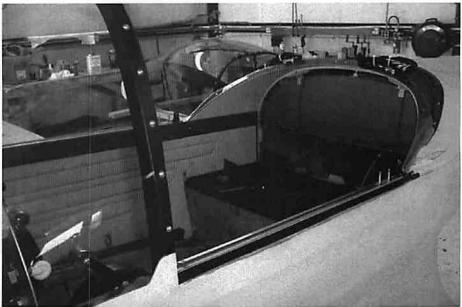
Rick Fitzwater Nan Nuys, California

Just a note to let you know I will be at Oshkosh this summer. My bride will be staying home to do the 'Mom' thing so I will be bringing my twin brother John. We just read about Al Dubiak's flight. Glad to see another bird in the air! Look forward to the company.

We have had a lot of dry weather this winter, so I get my Falco into the air at least once a week, and more when I can swing it. I have over 150 hours on it now.

Dave Nason Kent, Washington dtnason@msn.com





Bill Russell's Falco gets an interior.

The bird is in the paint shop—finally—with the newly overhauled engine installed. Hope to have it back out in late June for some flying time before we go to Oshkosh. Hope to see you and Angela and Andrea there.

Bill Russell Houston, Texas Lsruss1@aol.com

I was delighted that Drew Done asked me to do his first flight—after re-reading your manual, it really wasn't a drama at all. Drew still thinks I'm being effusive but his Falco really does handle better than mine—something to do with the standard canopy allowing a higher seat height and so a higher grip on the stick. It also weighs 40kg less than mine—that shouldn't be possible!

I have allowed myself to be bullied into going to Oshkosh this year, via the UK.

My brother-in-law has an R22 and a Hughes 500 by then, and insists I go with him.

Stephen Friend Ashwell, Breadalbane NSW, Australia ashwell@goulburn.net.au

Checking in from Tallassee, Alabama. My Falco is almost two years old. The tail is built and the wing is ready to skin. I am planning to build the fuselage jig soon. It is starting to look like an airplane and more people are starting to get interested in the project. The principal at the local school would like to bring the seventh grade science class to see the Falco project at this stage and bring the group back at completion. I hope it is finished before they graduate.

Glyn Russell asked me to come to Decatur, Alabama, to give me my first ride in a Falco. I jumped into my 172 and flew to Decatur, about 175 miles. Glyn's Falco is really nice. It is painted white, trimmed in blue. We climbed in and buckled up.

I was pleasantly surprised at the room in the cockpit. The noise is about like the 172. As we taxied to the runway, I was amazed how you could see in every direction. We took off and Glyn climbed to 2,000', leveled off and gave me the controls. It was absolutely fantastic!

If you are building one and haven't flown in one, you should get a ride. It will give you a new outlook on your project and make you want to complete it sooner. We flew for 30 minutes, Glyn made a smooth landing. Flying in Glyn's Falco was great.

We taxied back to the FBO. I climbed into the 172 and taxied to the active runway. The controls felt heavy, I could not see out very well. I will be glad when the Falco is completed so I can park this baby.

Looking forward to seeing you in Oshkosh.

Larry Weldon
Tallassee, Alabama

When I first discovered that Aerolite was no longer carried by Aircraft Spruce & Specialty, I checked with Wicks Aircraft, and finally Alfred. We confirmed that it was no longer sold in the U.S., so Alfred identified a couple of possibilities overseas. I contacted Dave Almey in the UK (SkycraftLtd@aol.com) and inquired about his interest in supplying Aerolite to me. He was more than happy and very helpful.

The manufacturer sells powder in 25 kg bags and hardener in 25 liter containers. Dave was willing to sell it in any quantity I wanted. The price was already going to be higher due to the shipping costs, so a quick calculation convinced me that the only reasonable thing to do was buy it in bag quantities. What the heck does one do with that much Aerolite? Alfred suggested we get some other builders to go in on the deal, so he posted a notice on the Sequoia website. I got enough commitments within a week to convince me I would not be stuck with enough Aerolite for a Spruce Goose project. We were in business.

Dave made the Aerolite purchase as easy as any other mail-order transaction I've made. All negotiations and agreements were via email. He accepted a credit card, ordered from his supplier, then packaged and shipped it to me. The bag of powder fit nicely into one box, while the hardener fit in another. Shipment was via sea freight







Two spectacular British Falcos, belonging to Neville Langrick and Stuart Gane.

since the materials are toxic. Transit time was quoted at about six weeks. It showed up on my doorstep exactly as promised. I decided that eleven equal-sized kits containing five pounds of powder with hardener (about 2.25 liters each) was the minimum size I would resell. I packaged the kits for UPS ground transportation, and sent it on its way to the people who had committed to buy. I charged others exactly what I paid (material and shipping from the UK, a few cents per pound for packing materials, and UPS charges). One builder lived close to me, so he picked up his purchase at my home for no additional shipping costs.

In the end, the cost per pound was about twice what I paid for a three-pound kit a

year ago. But, in my opinion, the cost and added wait time was worth it—I find that Aerolite is easy compared to some epoxy work I've done in a few spots on my project.

One final note. I conducted the repackaging on my driveway one Saturday morning. I used a small food scale to measure the powder. It was interesting to see the odd, curious glances from passersby as I was separating and putting into large ziplock bags what they saw as a mysterious-looking white powder. My guess is that they now suspect my Falco project financing may not be through reputable sources.

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