

Falco Builders Letter



91 Sequoia Falcos have now flown, but Giovanni Fulcheri's is actually the 89th to fly because they flew the plane before Graeme Lean and Larry Weldon.

First Flight: Giovanni Fulcheri

by Valeria Ansaldi

When first I met Giovanni Fulcheri in Villanova Mondovi (Cuneo, Italy), about ten years ago and before he came my father-in-law, I did not imagine at all what was hidden inside this quiet middle-aged man.

Spending some time with him you can immediately understand that he is not the kind of person who wastes his time with words. Hard worker, great strong hands, good at doing everything, many ideas and projects always in his mind.

One day I was told he was working at a plane. Just because I wanted to be polite with the family I made some more questions and Maria, his wife, started telling so many stories about it. I smiled. And I thought: "So many words for a model aircraft!"

I had not understood anything, of course... but in my mind nobody could build a real plane all alone. I had never heard such a thing before!

Later on, I changed my mind.

Giovanni has always had a great passion for airplanes. His wife still remembers all the weekends they spent at the little airport in Cuneo Levaldigi watching planes, talking to pilots and taking flying lessons to get a license.

And so he did. First he got the license but, after that, he realized that there was something else he was interested in. He was completely fascinated by the technical details: how an aircraft is made, its mechanical components... When he saw an aircraft he thought about all the mechanics involved in it.

Giovanni has always been one of those rare people who can do anything with his hands, his ideas and just a few tools.

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One day, reading an issue of *Volare*, a magazine on airplanes published here in Italy, he read all the story of the designer Stelio Frati, and he was completely taken by a photo of a Falco. He read about Sequoia Aircraft in America, as well. Since then he started imagining himself creating and building his own plane. And not just an aircraft but the most beautiful one!

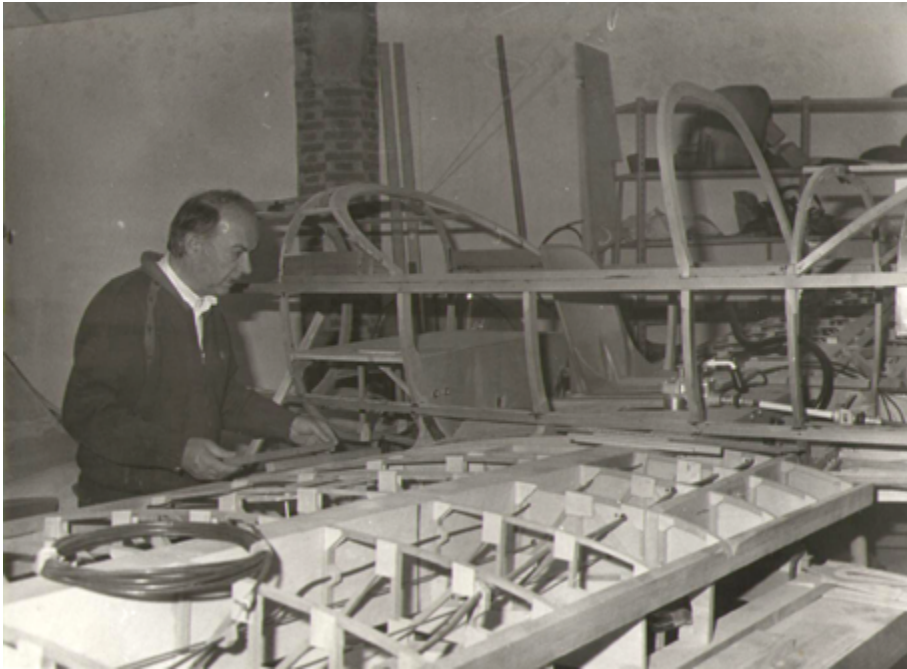
The family has always trusted in his ability and talent, and everyone supported him in this idea of building a Falco, even though it was a great expense. So he got in touch with Sequoia Aircraft, and he went to meet Eng. Frati. He met Mr. Frati twice, once before buying the first kits and a second time some years later.

In 1988 he bought the first kits after he found the right place to work. He has lived almost all his life in the countryside, in a very peaceful and quiet village. He had an old country house near his home with a wide storeroom at the ground floor. With some change that place became his shop, the place where he spent most of his time after work for about the next ten years. He started building the fuselage and the tail completely alone. No one ever helped him, and he had to overcome all the trouble of working on his own. But this was what he wanted and overcoming each difficulty gave him the energy and the enthusiasm to carry on with the work.

There were bad times, as well. After some years he was forced to stop building the Falco because of his job. These years were quite tiring and stressful, and the idea of the half-built plane in the store room was so sad. Everyone in the family thought that it was the end of a dream.

Three or four years passed without working at the Falco anymore. But after that bad period of time Giovanni decided that he did not want to give up his project. Beginning again after some years was not easy. He started spending every weekend working at the Falco again. He assembled the engine and the propeller.

In the meanwhile some people started hearing that there was this man who was



building a plane all alone. Some journalists both from local newspapers and specialised magazines came to see and asked for an interview. Giovanni has always tried to avoid all this kind of things because of his reserved character. And also because he was not building the plane in order to have a sort of notoriety but just because he liked building it. He always said that when he finished it, he would had liked to fly with his wife during their holidays.

About ten years ago the wide ground floor of the country house became really too small to carry on working at the Falco, and he had to move it. Well, you know, moving a plane (which can't fly, yet!) is not so easy. So it was a hard job. First of all he needed to ask for the permission to pull down a wall of the store room to get out the plane. In the meanwhile Giovanni had designed and built a special truck on which he could put the plane for the moving.

On the planned day a helicopter came and hooked the truck with the plane on it. It was an incredible and unforgettable day at the village. Everyone ran to see the show because of the noise made by the helicopter which landed on a field next to the house! The Falco was moved thirty kilometers away to a flying field. It stayed there in a hangar until the first flight. At that time, at a first look, the plane looked like it was almost complete, but all the instruments were missing.

Since then some more years passed. Giovanni carried on working on it during his free time, sometimes with a great enthusiasm again, other times not: he felt he was getting older and more tired. But among all the up and down the day arrived when he said: "The Falco I-DIET is ready to fly". (The registration code comes from Gio-

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Articles, news items and tips are welcome and should be submitted at least 10 days prior to publication date.

vanni's sons: Diego and ETtore!)

All the previous tests were excellent so it was really time to fix the date for the first flight. It took place on a very cold day in February 2008. We went there at the flying field early in the morning so the grass runway was frozen and hard, and the plane could easily run.

The pilot was Attilio Caiazzo, whom Giovanni knew among the Falco pilots, with a great experience and passion in piloting Falcos.

On that day Giovanni and Attilio checked so many things, so many times, running here and there for a hour, surrounded by a few of us almost breathless... both for the chilling temperature and the anxiety.

The engine was running and so noisy interrupting the the peace of the countryside on a winter Sunday morning. We were in a small group of six or seven people, while Giovanni was standing a little apart.

A man ran by with his dog, and he came towards us just in time to see a small beautiful red plane becoming, in a twinkle of an eye, just a dot in the middle of the sky.

A breath of relief echoed, then there was a little clap and just a pat on Giovanni's back. The Falco was flying up and down above our heads surrounded by the delightful view of the Alps while the first morning sun was shining. There was no time to talk. We ran to our cars and drove to Cuneo Levaldigi airport, some kilometers away.

When we arrived the Falco and the pilot—with a big smile on his face—were already waiting for us. All the tension had disappeared, and it was time to celebrate and smile. It was an unforgettable Sunday morning.

Later on that day Attilio flew Falco to a small airport in Alessandria, about a hundred kilometers away, where the he did all the flight tests during the following weeks. He reports that he was so positively impressed by the plane because of its stability and speed. This is why all the tests, also the acrobatic ones, were excellent. He says that it is the best Falco he has ever flown. And he had piloted many other Falcos during the last thirty years!

There was so much enthusiasm in his words every time he talked about the Falco that one day I asked to fly. It was such a great experience having an acrobatic flight!



We talked many times about the first flight and we watched the video again and again. But Giovanni had never talked about what he really felt on that day until tonight. Perhaps I had never asked before. I knew he would have been reluctant to talk about it.

“Well,” Giovanni said, “I knew it could fly. It had to fly! I had checked everything, it had passed all the tests! In spite of this, until the Falco took off, there was a slight sense of fear in me. Then, I saw it taking off, and I felt suddenly a strong emotion.”

These are just a few words, and I can easily suppose this is what almost every builder thinks and feels at the first flight. I believe that the most beautiful words are those he didn't say openly, but which I could read on his face, as if it were transparent, and I could read through it.

Probably things didn't go exactly as he had planned more than twenty years ago. Because of health problems he can't fly any more. But things go rarely as we plan. The fact is that he built a fantastic plane all alone, he greatly succeeded, and he must be as proud of it as his family is.

Now it's someone else's turn. Someone who can love and appreciate the Falco as her builder does and who can enjoy a great time in it.



Out of the Woods

The latest news of N660RH is that during the winter, Roy Luenberger's Recon Air has got the plane off the Falco Lake shore and onto a logging road.

They were able to extract the plane without cutting the wing off; instead they unbolted the tail cone and brought both pieces of the plane out by toboggans towed by a small army of snowmobiles.

Now they are waiting for the snow to clear so they can get the plane out by truck.

Water, ice and snow have certainly played a major role in the fate of this Falco.



Sequoia 300 N48BL Returns to the Air

by John G. Burr

After more than 10 years and overcoming numerous financial, physical, and personal obstacles, Sequoia 300 N48BL returned to the skies and the sport aviation fleet.

The original builder and owner, Jim Baugh from Spokane WA, was involved in an off-airport landing on a dirt road in 1995 in an attempt to escape unforeseen IFR flight conditions. Unfortunately the airplane suffered significant damage to the propeller, landing gear, left wing, and fuselage. The aircraft was disassembled, and Jim put a plan together to repair N48BL and return it back to airworthy condition. Repair parts were obtained from Sequoia Aircraft and other sources, the engine was disassembled/reassembled, a three-bladed Hartzell constant speed propeller was purchased, and some progress was made in restoring the aircraft. Unfortunately, before completing the project, Jim died and the aircraft became part of his estate.

After emerging finally from probate, the aircraft passed through several hands before being sold to Dennis Alderman in Las Vegas NV, who intended to use it for the completion of his flight training and for business purposes. Dennis secured the help of several local aircraft builders and began the reassembly of the plane. He made good progress during 2007, however, in 2008 his business suffered a significant case of employee fraud. My wife and I provided some financial support to Dennis using N48BL as the collateral in an attempt to complete and sell the project. Unfortunately, Dennis was not able to recover financially and the title for the aircraft was transferred to us. We then proceeded on a path to return the plane to airworthy status.

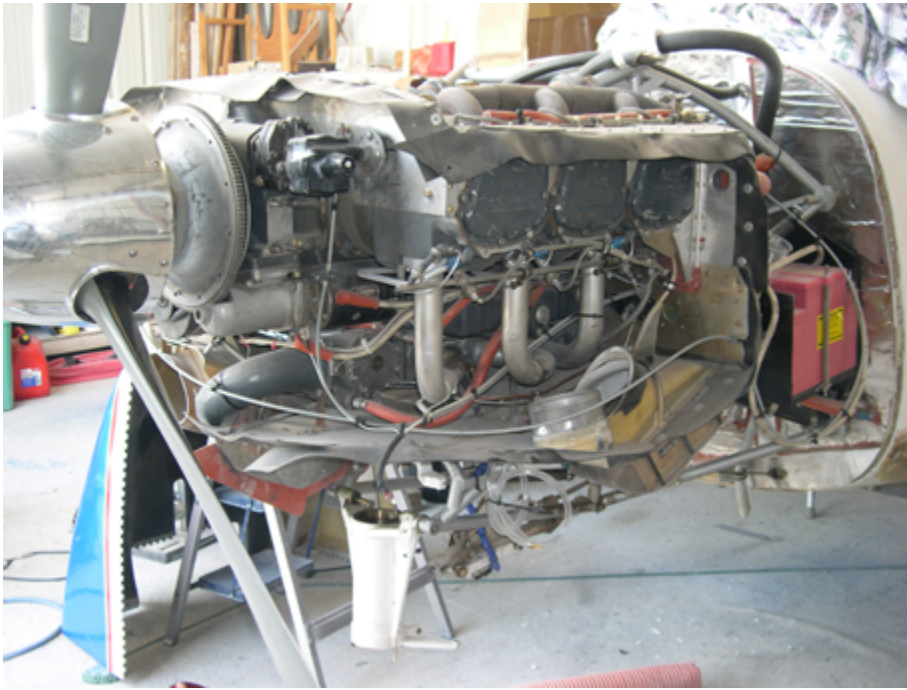
The first order of business was to review the status of the rebuild project, inspection of the components available and required, review and status of documentation, and determining the personnel, equipment and staff needed to return 48BL to the air. We found that: 1) There was extensive documentation available on 48BL that included a full set of detailed engineering drawings, complete builders log, engine / prop / airframe logbooks, and flight test report. 2) All major components needed to return to flight were either present or were readily available for purchase. 3) Complete FAA documentation was available except the original Airworthiness Certificate. Contact with the Las Vegas FSDO indicated



that all we needed were logbooks and a fresh annual by a certified A&P and they would re-issue the Airworthiness Certificate (more on this later unfortunately). 4) Hangar space, equipment and personnel were available. 5) The aircraft was partially assembled, sitting on its gear and was moveable. 6) Comparison of the current status of 48BL with the original flight test results revealed that several flight test issues had not been resolved and needed to be addressed before returning the aircraft to airworthy condition. 7) The aircraft airframe had 80 hrs total time since new, engine 80 hrs since major overhaul, and the prop 240 hrs since new. All very low time and in quite good condition even

though the stuff had been sitting for some 10 years.

There appeared to be no mechanical or document-related reasons that 48BL could not be returned to flight status so a plan was developed for the return of 48BL to airworthy condition. This plan focused on correction of all major safety of flight issues identified in the original flight test report, correction of additional safety issues identified during the review process, and general refurbishing of the interior and exterior. This "Return to the Air Plan" was limited to those things needed to make the aircraft airworthy and not necessarily "show quality" or "aerodynamically opti-



mized.” These “nice to have” items would be reserved for a later date or possible new owner.

The following is a list of the major actions taken during the rebuilding effort.

The engine cooling issue (high oil temperatures) was addressed through careful attention to the integrity of the engine baffling, fitment of the cowling, and oil cooler air intake. The TSIO-540 S1AD is somewhat unique in that cooling air enters below the engine and passes upward through the cylinders. All sources of by-pass air were addressed and the cowling was modified internally to provide a tighter fit on the baffling.

The brakes and brake plumbing were substantially modified. The single-puck Cleveland brake cylinders (designed for the Cessna 150/172 weight aircraft) were upgraded to double-puck Cleveland. The reservoir-style brake cylinders on the pilot side rudder/brake pedals were replaced with standard cylinders, a hydraulic fluid reservoir was installed in an accessible location behind the panel, and the pedal brake lines were re-routed to have fluid flow from reservoir to co-pilot to pilot to parking brake valve to wheels. These modifications eliminated the issues with air entrapment, brake bleeding and braking performance.

The parking brake actuator control cable was relocated from the far right side of the cockpit to the center console to make it accessible to the pilot without removal of the seatbelt and harness.

The old, crumbling, cowling insulation was replaced with self-adhesive thermal insulation to improve the thermal protection of the cowling and clean up the engine compartment.

The prop and mixture control positions were swapped to place them in conventional throttle-prop-mixture arrangement.

A landing gear and flap hydraulic pressure gauge was installed on the center console. Hydraulic system leaks were repaired, hydraulic accumulator tank was removed, and the hydraulic pump check valves repaired.

The seats and seat backs were updated for comfort and viewing. The interior was professionally redone in simulated leather and carpeting.

The nav radio (Narco 824) was relocated to the center stack under the com radio and the CDI was relocated to the main flight instrument cluster under the directional gyro to comply with FAA requirements for IFR flight.

A Hartzell 3-bladed, constant-speed propeller was installed that added weight and extended the propeller further forward, eliminating the need for 25 lbs of ballast previously installed. New weight and balance was performed and verified that it was on the specifications.

All landing gear struts were removed and rebuilt with new seals, hydraulic fluids, and nitrogen.

The canopy latches and seals were upgraded. Two additional latches were added on the front of the canopy on either side to compliment the overhead center latch. The windshield to canopy intersection fairing was modified to provide improved air sealing. Foam seals were added around the rear of the canopy to provide a draft-free cabin environment.

Nose wheel steering springs were replaced with stiffer units to improve the ground handling.

The left elevator trim motor was upgraded, a new trim indicator was installed in the center console, and a trim speed control

and selector switch (fast/slow) was installed adjacent to the elevator trim position switch. This eliminated the previous issue with trim sensitivity and the lack of knowledge of trim position (it only had center and maximum indication).

The heavy right wing (at high speed flight conditions) was corrected with a simple trim tab on the aileron.

A new electric fuel boost pump and engine vacuum pump were installed.

The outdated Apollo FlyBuddy GPS was removed and replaced with a GIZMO Airdock and Garmin 496 Portable GPS in the panel directly above the com radio.

The exterior was partially repainted where needed to make the aircraft presentable.

The pitot-static and transponder were certified, and a new battery installed in the ELT.

An annual inspection was performed by an A&P and the logbooks updated.

Extensive engine and ground testing was performed in preparation for the return to flight.

An application for a replacement Airworthiness Certificate prepared for submittal to FAA.

All of these preparations were conducted at North Las Vegas Airport—KVG T. 48BL was ready for return to flight. Only one obstacle was yet to be overcome. Unfortunately this turned out to be the “tall pole in the tent.”

We contacted the FAA Inspector at the Las Vegas FSDO again and made an appointment to visit the office to review the logbooks and sign the paperwork. And this set off a chain of events... it's a long story, but ended up that we could not do the flight tests at the North Las Vegas Airport.

Needless to say we were not happy with the prospects of moving the aircraft to Boulder Airport which is 20 miles from KVG T especially since the aircraft was completely assembled and ready for flight. We determined early on that we would not “transport” the aircraft to Boulder over the “night time express route” due to the intense local scrutiny and our desire to be fully law-abiding citizens. So we opted to transport to Boulder via trailer and roadways. An analysis of the size and



configuration of the aircraft indicated that it could not be transported intact and would require disassembly. Fortunately we had a friend who owned a suitable trailer and another friend at Boulder Airport who owned a hangar that was “between leases” and would be available for two weeks. We fabricated an under-fuselage cradle on Day 1, disconnected everything but the wing main bolts on Day 2, removed the wings and trailered them to Boulder on Day 3, loaded and trailered the fuselage to Boulder on Day 4, hosted the FAA Inspector on Day 5 to verify that we actually moved it, reassembled on Day 6-8, conducted ground engine runs and taxi testing on Day 7-9, conducted first flight plus 5 hrs flight test-

ing in Boulder airspace, and returned by air to KVG T on Day 10.

The first flight was exciting but uneventful. Acceleration, lift-off, climb, cruise, descent, stall, slow flight, and landing were as described in the flight testing. All operating temperatures were within limits. The most remarkable thing about the handling was the smoothness of the flight controls, precision of pitch control, rate and responsiveness in roll and roll, and finally low speed and landing configuration handling. The aircraft is an absolute thrill to fly and any pilot who is proficient in high-performance aircraft will just love this aircraft. It is fast, goes exactly where



you point it, is responsive and solid. The aircraft now has approximately 95 hrs total time and has temporarily been relocated to Redlands, CA. Final destination is Clarksville, TN.

This is a 250 mph plus aircraft that can fly at 25,000 feet on 18 gal/hr. It climbs at 2500 feet/min at 125 mph and has wonderful low-speed handling with landing at 80 mph. It is fully aerobatic (+6g and -3g) with an incredible roll rate and responsive pitch. A friend who flew it said it is as responsive as a Pitts. It has unbelievable visibility through the large canopy and is extremely comfortable even for large people.

About John Burr

John Burr has a BS degree in mechanical engineering, a masters degrees in civil engineering and both a masters and doctoral degree in radiation physics. He retired from the USAF in 1988 and since then has worked at Los Alamos, Oak Ridge and other similar facilities in a variety of managerial positions. He has over 35 years experience in the field of environment, safety, health and quality management. He spent 20 years on active duty with the USAF as a Bioenvironmental Engineer and Health Physicist and 15 years supporting the Department of Energy National Laboratories with Battelle Memorial Institute OH. He and his wife are currently retired, living

in a motor coach, and building a home in Dover TN on Kentucky Lake with aircraft based at Outlaw Field, Clarksville TN.

His interest in aviation began at an early age and was a large part of his decision to join the USAF. Although not an AF pilot due to "bad eyes" he was involved in support of aviation his entire military career. Upon retirement from active duty and getting his kids through college, he became much more active in aviation and purchased a Piper Arrow and obtained his private pilot license in 1994 and his IFR ticket in 1995.

Upon moving to Richland WA late 1995 he purchased an Van's RV-6A kit and completed it in 1996. After completion of the RV-6A and selling the Arrow he restored a 1946 Piper Cub (total restoration), partially restored a 1946 Beech 18, restored a Beech J35. After moving to Knoxville TN in 2001 he purchased an PT-6A Turbine Express 2000RG kit. This kit followed him to Las Vegas NV where he completed and test flew it in 2008. While in Las Vegas he restored another RV-6A and the Sequoia 300.

John restores automobiles as well: 1963 Porsche 356, 1967 Porsche 911T, 1974 Porsche 911, 1980 Porsche 911SC, 1996 Porsche 911 C4, 1972 Volkswagen Bug, 1961 Volkswagen Bug. Your basic lazy, inactive retiree.



John Burr

Marcel Morriën

A number of years ago I decided that it would be nice to stop running pharmacies at the age of 55 and started preparing things.

Certain developments, political and businesslike made me decide to sell at an earlier stage. That proved to be a wise decision, not long after selling world economics changed dramatically.

I started as a pharmacist in 1981 and stopped 27 years later. During that period I was an active member of our pharmaceutical community, did my work in different boards, set up a new pharmacies and so on. Shortly, did what you might expect from an active member of society.

The last bits and pieces of the selling process take a little of my time at this moment, as does maintenance of real estate. I definitely started a new phase of my life and it feels good!

I started working on the Falco nearly twenty years ago, originally planning to be in the air within 5 years. That proved to be a dream, reality means that family and business come first. I have to admit that sometimes a certain, to my opinion, difficult building item withheld me from progressing more rapidly, postponing the problem doesn't help.

What did help was the offer of a friend to assist me on a regular basis. That kind of gives a stimulus to advance.

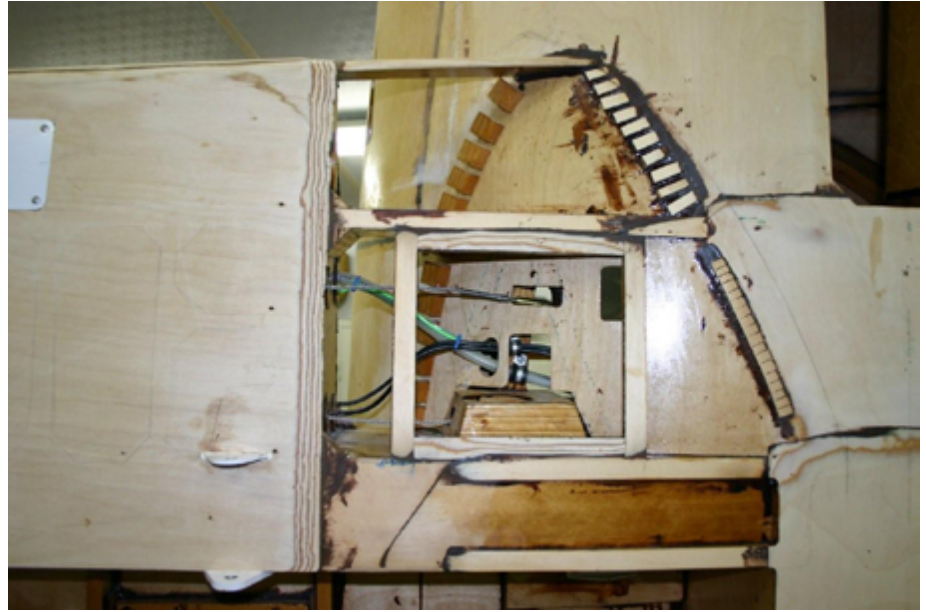
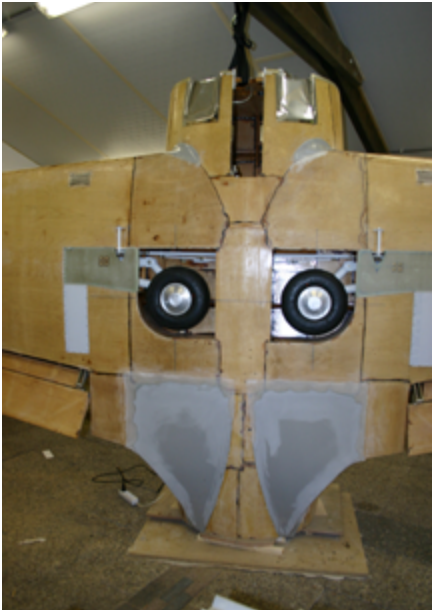
Originally building of the fuselage was started in a 10 x 30 foot garage, a few years later an old garage next door became available so I kicked out the dividing walls and renewed the floor. To be able to build the wing I had to lower a part of the floor because the height of this garage was not enough. A secondary advantage of this construction was that most of the work on the wing was within reach of hands.

When we moved the family to a another house we could also move the Falco project to a much larger workspace.

At this moment woodwork is done, small main gear doors are installed, wing fairings made and will be installed after the wing has been prepared with micro-balloon epoxy. Firewall installed, etc.

I feel like I'm postponing the work on the main gear doors, I have not yet quite figured out what should be the easiest way, but will decide on that pretty soon.





One advantage of taking time to build is that I will now be able to install a nice set on the instrument panel. Old steam gauges as a backup for a nice electronic flight display.

I'm thinking about the Garmin 600 in combination with a G530 and or G430. As an alternative for the G600 the Evolution Flight Display (2) is considered. Is there perhaps any experience with these?

*Marcel Morriën
MB Leersum
Netherlands*

First Flight: Harold Thompson

by Alfred Scott

Many, many years ago, in the age of Brenda Avery and the early days of Sequoia Aircraft, we had a Falco builder by the name of Bill Wink. He was a gregarious guy and a wonderful man. He would show up at our booth, take one look at Brenda and say "I promised my wife I wouldn't fall in love with anyone today, but now I've met you!"

He owned Bill Wink Chevrolet on Ford Road in Dearborn, Michigan. He was, in fact, the world largest car dealer at that time by virtue of specializing on fleet sales. He sold something like 35,000 cars a year, and they took the order and then the cars were delivered throughout the dealer networks to the companies that had ordered them.

He had flown a Bonanza for years, and around the time he started work on the Falco he also bought a CAP 10. He didn't have any taildragger time, and he needed some instruction to get checked out in the CAP 10. So he turned to Harold Thompson, in Troy, Michigan for some flight instruction.

Harold was born in Portland, Oregon, and moved to Michigan in 1939, then went into the military in 1940. He flew 35 missions over Germany as a bomber pilot, with 12 missions in the B17 and the rest in the B24. After that, he instructed for a couple of years in the B24 and after getting out of the military, he ran a flight school at Pontiac Airport.

Bill Wink was never very comfortable in the CAP 10, principally because of land-



Bill Wink



ing and ground handling in a taildragger, so Harold flew with him to Palm Springs a couple of times in the CAP 10.

In 1995, Bill wrote us a letter, and it gives you some inkling of his personality.

“To refresh your memory (and it has been a couple of years) since you heard from me last, I still harbor a great love affair with the Falco. I took on two ‘partners’ to the project, retired auto engineer/pattern makers; one has since died, the other is going to give it a go.

“We’re all ‘older fellas’—Thompson was a WWII B17/B24 driver. My health is dim—cardiac June 93. Arrested cancer at the moment. These are the Golden Years. Sam took my physical, so I sold the CAP 10 here in Cal; flew that lovely thing a little over 600 hrs and enjoyed every minute. All this is to ask that you consider Thompson as a builder—you can leave my name attached because I’ll still buy some additional parts for the plane—I just want to see it completed!”

Since then Harold has continued to work on the plane joined by Phil Sumey. They completed the Falco with a 180 hp engine and flew it in August 2006. We finally persuaded Harold to get us some photographs, so it’s time to tell the rest of the Falco world about this plane.

Harold now has 160 hours on the Falco and has a combination of an electronic-ignition and a standard magneto. He had some problems with the combination until he put in two switches. While he has rolled the plane a couple of times, he’s really not into acrobatics and just enjoys flying the plane. The CAP 10, he says, is a nice plane but the Falco is better. And it’s hard to get a guy who has been flying for 70 years to go on much more than that.



Harold Thompson



Coast to Coast with Susan

This month, March, marks the one-year anniversary of Alfred approaching me with the idea of coming to work at Sequoia Aircraft. Time has gone by way too quickly. It has been a truly wonderful year with my new family. It has been fun, always more than interesting and on occasions just a little trying. But, as each day passes I feel more confident about having conversations with Falco builders about their projects and the parts they need. I look forward to coming to the office and seeing what is new for the day. Working with Alfred is an education in itself! He is more than encouraging and always supportive.

All of us are feeling the effects of the poor economy and spend so much time talking about the future. It appears to be like a black cloud looming over us. Everyone is anxious and not sure what to do or what to expect up the road. When I think about it as a great black cloud I also associate it with a magical event I experienced when I was about 10 years old.

As you can guess, as a kid growing up in Miami, Florida, I had the glory of the Atlantic Ocean at my back door. To my dad, however, it meant nothing more than a port for the sport of fishing. I would find any excuse to hang out with him on his fishing excursions in his tiny 16 foot boat. I would often go with him and the boat to Marathon in the Florida Keys. From there we would venture out into the ocean and patiently sit for hours in the skirts of the gulfstream and wait for the next fish to take our bait. My dad was never after the “big guys,” just something to bring home for Mom to cook. He took it very seriously, which meant I could not just go and watch. I had to become skilled early on how to bait my hook, reel in my catch and to remove the hook.

On one particular afternoon, while sitting there in the blazing sun and undaunting heat, my dad noticed something very dark and large beneath the water not far from our boat. It was moving toward us with great speed. Within seconds, he grabbed my arm and yelled for me to “duck!” We were suddenly beneath a giant black umbrella of flesh. It was so large it literally blocked the sun and covered the size of our boat. Just as quickly, there was a resounding thump and splash and it was gone. We had had the once-in-a-lifetime experience of being in the presence of a majestic Manta Ray. It had apparently been schooling, our boat was in the way and so it literally just flew over us in order to miss us.

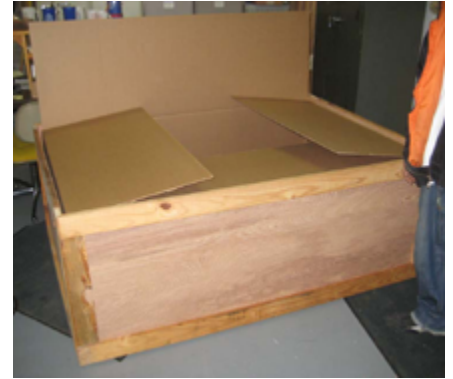
It could have been a tragedy. It could have hit our boat or landed on us and killed us as it attempted to avoid our tiny boat. My dad just stood there in awe watching it disappear beneath the waves. I was trying to understand what had happened. He calmly reflected that it was indeed something neither of us would ever see again, that few people had ever experienced, but like all scary things, it had passed. We were fine and blessed. This from a man who had persevered the Great Depression and knew well what darkness could mean. I then grew up believing that dark clouds pass, and we grow from the experience of them. There have been lots of dark clouds since that day. They have passed but I have never seen another Manta Ray.

I know some of you are waiting until this cloud passes, and the economy looks a little better to get back to work on your Falco. Do not worry, we will be right here when you are ready to get going again. I will continue to try to find ways to make your endeavors as economical for you as possible. As always, overseas shipping is an expensive challenge, but I keep trying to find the best ways for you.



These pictures with the boxes are just an example of how it works here—you order and we work at getting it to you! This time all this went to a builder, Niels Kinneging, in the Netherlands. It took Shawn and me two weeks to pull all the items, box them and then build three large wooden crates for shipment. Everything arrived there in great shape. But, there is always a story within a story. A very small bag of items had to be mailed to Niels at a later date. That too arrived, and he placed it on the seat of his automobile. But then the automobile was stolen and the bag disappeared along with it. Happily his car was returned, but minus the small bag. Bag number two arrived and found its way home safely.

Thank you for the terrific response to our subscription renewal requests. As I ex-



pected, the majority of you have elected to “save a tree” and joined the electronic world of email subscription. If you forgot or misplaced the notice, it is not too late. Just email me how you would like to subscribe.



I wanted to share this beautiful picture of our beloved greyhound, Joshua, with you. Much to our dismay, we lost him in January to a serious illness. He was 14 years old (quite elderly for his breed). We had the wonder of loving and caring for him for 12 years. He was quite an ambassador for greyhound rescue—he even appeared on a local TV pet program. Hundreds of people were able to meet him through the years. His memory was honored the week after his death in that I had the joy of helping five more greyhounds retired from racing find loving homes. I hope their new families will love them as much as we loved Joshua.

I am looking forward to my second year with you all and thank you for a great first one!—Susan Arruda

Mailbox

Last November I received the information-package in excellent condition. It was a pleasure to receive so much information. Next to that, it's a beautiful brochure you can really show friends and family. If I want them to support me, it's nice to let them know what they are supporting, and what it will look like after it's finished! No need to explain them that the brochure is a do-it-yourself black & white copy, homemade like the airplane itself.

Klaas de Bruijn
Berlin
Germany

I am constantly amazed at the things one has to learn to fabricate an aircraft. It is like a journey that never ends because of the little side trips.

I am up to the install on the front gear door. I just found the information on the web on page 61005-1 on how to fabricate the spring. Imagine that! I thought I had read it all. This is, of course, after I have spent much time trying to figure out how to bend this little jewel myself after you told me you don't sell them. Your information seems in context with what I came up with independently for a possible jig. Except I used steel to make the jig, and I think it would work better if the two additional 1/4" holes are closer to the dowels so there is little or no flex in the wire before the bend is started.

One gentleman suggested that you need to over-bend the spring about 5% in order to get it to flex back to what you want when you relax the bend. The 5/8 dowel size is right on.

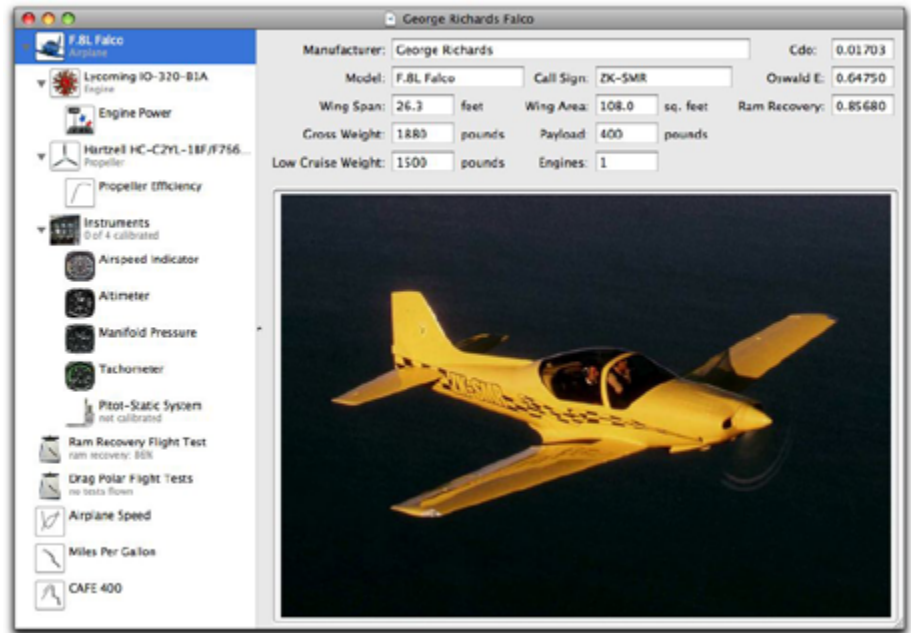
I had also done some research on how to temper this jewel after it was bent.

Because that information did not appear to be in the article I thought I would suggest you add it to the web site.

The music wire recommended should be heat treated after has been formed in the cold state. The temperature should be 500 degrees for one hour. This will neutralize the stress created in the bending process making for a better part and longer life expectancy.

Steve Crisp
Chewelah
Washington

I have never heard of heat-treating music wire before and I'm not sure it's needed in this case.



All times are good times if you know what to do with them. While the economy is slow, we've finally reached a goal that I set out for us nearly 20 years ago. Benchmark is now to the point that anyone with any airplane can use it to model the performance of the plane.

This is particularly easy for any Falco pilot. Just enter the information shown above. Karl Hansen has already done the hard work for you so the Oswald E and Ram Recovery figures are probably good for any Falco pilot.

Drag and drop the right engine and propeller into the airplane, then go to the Airplane Speed Calculator and change the drag so the performance matches your plane. Then print out your miles per gallon charts for your flight manual.

We are working on getting this into an iPhone app so you can have a performance calculator for your airplane at your fingertips, and also the ability to brag and compare your airplane to others that have also been modeled in Benchmark.



Shameless promotion: Check out the iTunes music store for The Essential Peter Stanley, Vol. 1, 2, & 3, Love for the Land, Christopher Stanley and Lord Franklin, Libby Dunton & Jimmy Payne. Peter is my brother-in-law. Christopher is his son and inherited the musical genes. And Libby Dunton is an unbelievably talented singer—many people think she's a better singer than Joan Baez. These are all offerings from our Talkeetna Records, www.talkeetna.com. And you can even hear me sing, Sioux City Sue, and others! And in a few weeks, search YouTube for these same names—Alfred Scott



Not every Falco is a show plane. Mike Weibe reports "It had a full Apache nose landing gear system in it, and the main gear was scratch built with tube so heavy it was never destined to fly. The guy was on a grass strip near Windsor/Detroit and as I recall, his first takeoff attempt resulted in a run off the end of the runway through a plowed field. Bad news was that weight of the gear (and lousy output from the Subaru) caused it to never leave ground effect. Good news was that it survived because of that heavy gear! The wood work was actually pretty good!" The plane now has a 150 hp engine and CS prop.



Jim Shaw and Falco Red 2008. Jim Shaw was the third Falco builder to fly his plane back in 1985. Since then he's finished his tour in the Air Force, flew for years with one of the airlines, and now operates the Soaring Wings Vineyard. And he has just introduced Falco Red, Nebraska Table Wine 2008. And, like the Falco, this is no ordinary wine. It recently won a Gold Medal at the prestigious Finger Lakes International Wine Competition.

If you would like to order the wine email the winery at info@soaringwingswine.com with your contact info and shipping address. There are many restrictions on shipping wine. There are more states that they cannot ship to than there are ones that they can. California, Colorado are fine. Contact Soaring Wings Vineyard, 17111 S 138th St, Springfield, NE 68059 (402) 253-2479 www.soaringwingswine.com

Music wire is an unusual material in that it is just plain carbon steel but it gets its properties by being rolled into a wire and the result is that the grain of the metal is exceptionally long. While the wire is very strong because of this, music wire has the property of being able to be wrapped around itself without breaking.

There are all sorts of springs that are made from music wire and these are bent cold and are not heat-treated at all. Yes, you definitely need to over-bend the wire to get the shape you are after.

However if you want to heat-treat the spring after you've bent the wire, go for it. Do a Google search for heat treating music wire to find an article on the subject.—Alfred Scott

Thanks for the update and pictures of the recovery of Falco RH. It was a great aircraft and I enjoyed flying it for eighteen years and acquiring thirty awards. Interested in seeing what happens to it.

I have been restoring a 1934 Stinson SR-5E for the past fifteen years, and it is now ready to fly. We have a ferry permit to fly it to Oregon Aero for upholstery. Insurance company says I am too old to fly it.

Hope all is going well with you and Sequoia.

Rex Hume
Williams
Oregon