

Falco Builders Letter



Devoe in d'Air

by Colonel John Brooks Devoe

The 22nd of June 1995 dawned clear and bright at 6B1 (Skyhaven Airport, Rochester, NH) and as I drove across the tarmac to my hangar, I noted the wind sock hung limp. Excuses for not doing it were exhausted; CAVU weather and a ready Falco. As a matter of fact, both the weather and the Falco had been conducive to flight since the 20th, flight plan prepared, tanks each half full, tow bar in place... but I remembered the words of our now departed friend, Karl Hansen, "John, once it is ready, take a few days off". I did that—cut the grass, weeded a few gardens, sat on the deck. Now I am ready.

I tried, unsuccessfully, to *saunter* into the FBO Airport Manager's office to advise him of my intentions. Although the sock was virtually limp, the indicator favored runway 15, not my choice for two reasons. First, it meant climbing into the sun (Army Air Corps tradition notwithstanding, after cataract surgery, not the way to go on a first flight), and second, my flight time in a Falco had been using runway 33 and familiar landmarks had been noted. Make it easy for yourself. I mentioned my preference to FBO Terk Williams and without hesitation he picked up the mike and announced

"Skyhaven traffic, the active runway is now 33, we have an experimental aircraft, Falco 644F, about to take off on its first flight." Terk now has a fuel customer for sure.

Preparation is everything, for the pilot as well as the machine. I had expected to fly the Falco last autumn and hence some ten months or so ago I chose mentors Karl and Tony Bingelis for guidance. We three shared a common background—aviation cadets, WWII, Army Air Corps, USAF, Falco builders, and we spoke a common language. Of no less significance was the generosity of another Falco friend (we have many, do we not?), Bob Bready, who gave most willingly of his time and wind

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machine by flying into 6B1 on three different occasions to give me both air time and some ten landings in the left seat. He said if I broke his, he would take mine. I have mine, he has his. Thanks, Bob.

The machine preparation really begins the day you first put glue to Sitka spruce. Establish a consistent standard in everything you do. My tolerance limit was one half millimeter, trying for those "31.327" was beyond my patience. Assemble no "that's good enough" solutions in construction, for as they accumulate, they will haunt you. If it's not right, take it apart and do it over. Nothing but the knowledge that you have done it right will give you more confidence in your machine on that first take-off roll.

The final preparation of the Falco after assembly is best done with the aid of the extensive and most comprehensive checklist provided by Sequoia. I followed it and had a friend, Tony Petruccio, repeat it. Tony had first come on my Falco scene a few years back, but in the past year has put many hours into the finishing process, from sanding to polishing to assembly ("where was he when I needed him?"—Bob Bready). Tony got into aviation through a route rather different than mine. He says he was eliminated from aviation cadets for flying the down-wind in a T33 inverted.



They said it was attitude, he said the blue was in the right place when he did it. He went on to fly cucumbers out of Cuba in B17s, flew air taxi, ferried new and derelict aircraft from coast to coast, was personal pilot to a number of prominent entertainers and finally got a respectable job as captain for US Air. Tony is now retired and since N644F is now completed, he was concerned about unemployment.

Have no fear, to rectify that and preclude withdrawal pains, his wife, Karen, gave him a set of Falco plans for his sixtieth birthday. He is now one of us, frustrations, joys and Falco friendships included.

Other inspectors were Bob Bready and that Italian baker turned artist, James Michael[De]Angelo. I also asked non-Falco builders to look—lots of eyes. The airworthiness inspection went off without

a gig. The inspector was impressed with the airplane, the first Falco he had seen.

I borrowed a known-to-be-good M.P. gauge from the FBO, bought a new one and replaced the original in short order. The 2750 RPM problem was corrected by taking a few turns on the prop governor adjustment screw. The CHT on #4 still is a bit high (#3, 2 and 1 are better). Jim DeAngelo is of the opinion that the mineral oils used for break-in do not cool as well as regular oils. Others I have talked to share this belief.

The landing was indeed a kisser, and I have the tape to prove it. Tony B. was right, I haven't had its equal... perhaps soon. Champagne in the hangar for our small audience completed the day at the airfield. I went home and took a nap.

The "Lady G" (a carefully selected name to honor my late wife, Genevieve, and my present bride) will soon fly off its 25 hours (Airstream vacations in the summer not withstanding). The basement is empty and filled with construction memories, the hangar filled with Falco and expectations. The over-ten-year experience, the frustrations, joys and friendships have been worth it. I know I shall never go to a fly-in, observe a homebuilt of different roots, and say, "I wish I had built that one". Thank you, Mr. Frati, and thank you, Alfred.

I also thank Falco builders for the willingness to provide any sort of help I needed or thought I needed. In the early stages it was Jim DeAngelo, middle stages Steve Wilkinson and in the latter stages, Bob Bready and Tony Bingelis. At times I am sure I tried their patience. I now stand willing to help those who come after us. And thank you, Gwen, for your willingness to support an old man's dream.



The Falco Builders Letter is published 4 times a year by Sequoia Aircraft Corporation, 2000 Tomlynn Street, Richmond, Virginia 23230. Telephone: (804) 353-1713. Fax: (804) 359-2618. Publication dates are the 10th of March, June, September and December.

Subscriptions: \$16.00 a year, \$20.00 overseas. Available only to Falco builders and Frati airplane owners.

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

First Flight: Howard & Marty Benham

by Howard & Marty Benham

Our fascination with the Falco began long before the decision to build one. I liked the design the first time I saw it advertised in an aviation magazine. I cut out the ad and carried it in my billfold until it literally fell apart. When we decided it was time to build, the Falco seemed unattainable so we purchased plans for one of the Rutan composite airplanes (shame! shame!). Building a lay-up table was as far as that project went. After several moves, including one to Reykjavik, Iceland, we decided that if we were going to build one airplane in our lifetime, it would have to be a Falco and not one of those plastic airplanes!

Right before we left Iceland in the fall of 1988, we called Sequoia Aircraft and made an appointment to visit on the way to Wichita, Kansas where I had a new job with Flight Safety International at the Beech Aircraft factory. After a day spent with Alfred Scott inspecting Falco kits, trying on seats, talking design, etc., the three of us ended up in a Chinese restaurant still talking Falco. It was during dinner that I brought up the subject of external tanks for the Falco. I had heard that Alfred was a stickler for following the plans to the letter, and I figured that I might as well get it out up front that my dream was to be able to fly the Falco around the world. Much to my surprise, he took the suggestion rather calmly and we discussed several ways that the modifications might be made. The next morning we showed up at Sequoia bright and early and then went to the airport where Alfred keeps the Corporate Disgrace. After crawling over, under and around the "CD", we returned to the shop and purchased the plans for Falco serial #1057.

While Marty drove to Wichita, I perused the blueprints and read the construction manual out loud. Our Falco has been a joint project from the start, although at times Marty admits that the blueprints are a bit daunting. We worked together from the start of construction in February 1989 to first flight, June 30, 1995. During that period, we took a break from aircraft construction to build a house so N11HM took five-and-a-half years of pretty concentrated effort to complete. We started keeping a time log but after a month decided that it was a waste of time. The construction would take as long as it would take. When someone would ask us when the plane would be finished,

we would say it was right on schedule and we should be finished Thursday. As it turned out, the final inspection by the FAA was on Thursday the 29th of June. After reviewing the many photos and visitors log, our best estimate for construction time is between 8000 and 9000 man/woman hours. We also determined that during construction we had over 240 individuals from 13 countries around the world and 22 states that wanted to see what a Falco looked like.

Construction was started in a heated 24 x 24 garage. We completed construction of the tail, wing and fuselage in that shop along with the wiring of the instrument panel. As with any project, we made several changes and additions to the aircraft as we went along but only after consulting with Alfred over possible effects. One of the most important additions was the hard points that had to be installed in the main wing spar and forward wing spar to support the external tanks. With the help of two talented engineers, one from Boeing and one from Beech, we were able to install the necessary attach points that would withstand an ultimate 9g vertical and 1g lateral load. With the addition of these tanks holding approximately 30 gallons, our friend from Beech calculates that our range at 45% power should be approximately 1500 nautical miles. It's funny how one change leads to another. After reviewing the figures for our extended range, my co-builder quietly informed me that the addition of a dual sex relief system, hereinafter known as the DSRS, would be mandatory. We have now designed a system which will be installed prior to the long range test flights. Fortunately, it will not be quite as difficult as the sticky plastic bags that Dick Rutan so eloquently describes in his talks about the Voyager

flight. Another change that I felt was necessary was the addition of an avionics master switch. This consisted of swapping locations with two of the circuit breakers, cutting the main power bus bar and adding a normally closed solenoid, on/off switch and circuit breaker. We can't claim authorship on this design as Beech has used it for years on all of their aircraft. Just goes to show that even the "Spam cans" have some good ideas.

At this point, we took a hiatus to build a new house, which is an entire story in itself. It was a lot of work, but like the Falco, it was worth it. We built the house around the plane. It is on a slight rise with the lower level opening onto a taxiway that leads to a 2500-foot grass runway. Once we finished the house, it was time to call upon a wonderful group of people from Flight Safety, the Kansas Aviation Museum and our local EAA chapter to help us move the Falco to its new home. Everyone had been following our progress with great interest and were more than happy to help. Also, they wanted to see how we would get the 9 foot wing/fuselage combination out through an 8 foot door. We didn't. Instead we took out a 10 foot section of the wall and moved it out through the opening and then reinstalled the wall. After that it was an hour and a half trip by back roads to the new hangar. We didn't realize it at the time, but once it was installed in the hangar it would be almost eight months before we finally started work again.

After almost a year of fitting the canopy, installing insulation, installing the beautiful interior that Marty had constructed and a myriad of other small projects that go into building an aircraft of this complexity, we were ready to call upon the



“Friends of Falco” once again to turn the wing/fuselage unit upside-down so that the final fuselage skins could be installed and gear doors manufactured. At this point, a change was made to delete the inboard gear doors. This was done after talking to several of the builders that had inboard gear doors. Due to the difficulty that several of the builders had in adjusting these doors, we felt that any speed penalty would be minor and not worth the extra time and work. After constructing and fitting the main gear leg doors, nose gear bay doors and control surface hinge fairings, it was time to think paint.

We had made the decision early on to do as much of the work as possible and in keeping with this we had decided to paint the aircraft ourselves using a new type of water-based polyurethane paint from Blue River Aircraft. This allowed us to construct a paint booth around the aircraft and paint it in the hangar using a low-pressure, low-volume paint gun. To decide on a paint scheme, we constructed a 1/10 scale model and tried about a dozen different designs before settling on the one we used. It is both patriotic and non-traditional. Following this, it was time to roll the Falco one more time to allow completion of the top side and complete final construction. During the next eight months, we installed a rebuilt 180 hp engine, fitted the cowling, painted the top half of the plane, balanced and installed the control surfaces and fitted the windshield.

During the construction, our goal had been to fly at the earliest possible date. However, in early 1994, a more definitive goal was set—Oshkosh '95. Our friends at Sequoia informed us that the first flight of the F.8L Falco was in June 1955 and in honor of that accomplishment it was decided to hold a birthday party at Oshkosh with as many Falcos present as possible. Now we really had a deadline to meet. Not only did we plan to go to Oshkosh with our own Falco, but we would also attempt to do our first flight during the first part of June, leaving us about a month and a half to finish up any last minute details. Enter the phenomena known as “the last week of construction takes a month.” With a lot of long hours and help from friends, we were able to complete all of the tasks required to fly, provided we could get the final inspection by the FAA out of the way. Enter the bureaucratic process. “All inspectors are busy but we might be able to do the inspection on the 29th of June.” With our fingers crossed, a call goes out once more to the “Friends of Falco” to assist in moving N11HM to the Augusta airport. We had decided to do the initial taxi and flight



tests from this airport because of the 5000 foot paved runway and availability of fuel. On June 25th, thirteen hardy individuals showed up at 5:30 a.m. in the rain, to move N11HM. We rolled the plane onto a borrowed hay trailer and with several cars in front and several bringing up the rear, plus two-way communication between the towing vehicle and the wing watchers, the trip was completed without a hitch. On the 29th, the FAA showed up (on time!) and after an hour of inspecting, gave it their blessing. The only thing questioned during the inspection was the placement of the word “experimental”.

Friday, June 30th dawned hot and hazy. We had decided that I would do the first flights, which is one of Alfred's pet peeves. His standard position is that the builder should not do his own first flights, however, because I train pilots at Beech in the 1900 Airliner and had a chance to fly

two other Falcos, I felt comfortable doing the first flights, although I'll admit there was a bit of adrenaline flowing during the first few minutes of the flight. Ed Merkel offered to fly chase in his Merkel Mark II biplane. Marty was in the front seat with the video camera and several instructors from Flight Safety showed up for the occasion. My parents had also arrived a couple of weeks earlier from Carlsbad, NM to help with the last minute details. My mother had decided that they would be here for the rollout but then they would have to leave. However, my dad was having none of that, as he had helped with some of the construction and wanted to see it fly. Ed and I planned and briefed all of the details of the flight ahead of time and everything went exactly as planned. The flight lasted about an hour and encompassed all the items recommended in the test guide, including a full stall series. If I had to describe the first flight in only a few words, I



guess they would be “Wow, it was great!”. The visibility is unbelievable, control response fabulous and acceleration great. Everything you could possibly want from the best designed airplane in the world.

During the first flight, we determined that we needed some trim on the right aileron and also a small amount of rudder trim. On the first of July, we completed the gear retraction tests and with Marty on board as necessary crew, we established the trim requirements for hands-off flight with two people and full fuel. This flight included landing at El Dorado airport for the EAA Chapter 88 annual fly-in, where we picked up the Ladies Choice award. Just goes to show that the women of Kansas have good taste when it comes to airplanes.

The next twenty-two days were rather hectic, but we managed to get all of the necessary flight testing completed and also get the

pitot/static system and transponder certified for IFR flight. During the final few hours of flight testing we moved the Falco back to home base, Brady Phippen field, so that we could pack for Oshkosh. The end result of all the hard work was Sequoia Falco number 48 weighing in at 1300 pounds with a 180 hp. engine, constant speed prop and a B & C Specialties lightweight starter and alternator. The avionics panel currently houses an Apollo 618 loran, King KX155 nav/com and King KT 76A transponder. Future changes will see the loran replaced by a GPS, installation of a second communications unit, and installation of an Insight Graphic Engine Monitor.

We departed Brady Phippen field on the 25th of July, spent the night at Casa de Aero in Illinois, and departed early Wednesday morning for Oshkosh. Arrival was uneventful, and we were directed to the area reserved for the Falcos. There



were 5 there when we arrived but by Thursday morning the number had grown to a grand total of 18 beautiful Falcos all lined up near show center and as icing on the cake, the designer of the Falco, Dr. Stelio Frati and his sales manager, Carla Bielli arrived from Italy to help celebrate the occasion. While Dr. Frati was inspecting all of the Falcos, we were able to have him autograph N11HM.

Several trips are already planned including the West Coast fly-in in Idaho. In the mean time, work will continue to get N11HM ready for the around-the-world flight. We have already lined up some sponsors, including the Kansas Aviation Museum, B & C Specialties, Sigma-Tek and Bevin Rabell Avionics. Much remains to be done, but with this wonderful aircraft and the great support of the aviation community, the goal of an around-the-world flight is very attainable. One word of caution to all our friends and fellow builders who have said from time to time that we should drop in and see you—the next time your phone rings, it may be Howard and Marty calling from the nearest airport.

Postscript: On Sunday, September 17, Howard Benham was taking a neighbor for a ride in the Falco. As he took off, he thinks the wind shifted. In any event, the right wing dropped. The Falco was not climbing, and it was clear that he was not going to clear the trees and power lines at the end of the runway, so he put it back on the ground. The airplane drove between two posts which buried themselves into the wing and then skidded another 40 feet or so before hitting a pair of large cedar trees. The airplane is completely destroyed. The harness held, and they stepped out of the plane unscathed.—*Alfred Scott*

Oshkosh via the Amazon

by Marcelo Bellodi

I think that man is driven to pursue the dreams he considers possible to achieve. The trip of the first Brazilian Falco to Oshkosh '95 was also possible because this was one of my dreams. I say "also" because it would not have happened without the help of other people such as Silvio and Izildo, who worked hard on the plane during the construction and in the preparation for the trip, and Paulo Franke who was more than my co-pilot and navigator, but my good friend during the adventure.

The trip was planned very carefully in each small detail. Route, dates, stops, flight times, limitations, precautions, bureaucracy—everything was intensively studied. The preparation took us six months and was as enjoyable as the trip. It was as if we had started to travel then.

Since we had flown a Seneca to St. Thomas in 1986, part of the route was not new for us. The new skies would be beyond Puerto Rico and mainly inside the U.S. territory where the flight traffic is so dense. We planned to fly only during daylight hours and to avoid entering IMC for long periods. We filed IFR flight plans and almost always flew on airways in order to stay under air-traffic and radar control, where available.

Over the Amazon, we avoided flying very far from cities or roads. We also avoided long distances over the Caribbean, so we followed the islands. Obviously, we had to travel a longer distance, and we made more stops, but it was safer in a single-engine airplane. We decided not to fly more than 600NM nonstop, and this was reduced to 400NM over the Amazon jungle.

Our nav/com equipment was 2 VHF (1 hand-held), 2 VOR (1 hand-held), 2 GPS (Garmin 100-AVD and Garmin 55), 1 XPDR mode C and 1 ELT. All flights were planned in advance with the routes and their waypoints entered into the GPS, followed up on ONC and sectional charts. For personal safety, we carried two life vests and a complete first aid kit.

We crossed almost all the Brazilian territory on the first day, landing in Macapa (on the Equator), our last Brazilian port, after 1336NM of good weather from Jaboticabal. On our way to Macapa, we followed the Tocantins river for a long distance, and we flew over an impressive sequence of falls in a river with a clear green water. After 200NM of



Marcelo Bellodi and Paulo Franke at Oshkosh.

this wonderful view, we reached the Tocantins Dam, which creates a huge lake full of islands covered by exuberant equatorial jungle trees. However, since it is almost impossible to fly so many miles in a single day with absolutely nothing to worry about, we had to cross the Marajo Island (a "little" island of more than 100NM in the estuary of the Amazon river) with both GPS in black-out status, no communication with ATC and nothing below but jungle and rivers.

The following day we flew over the Guyana's and reached St. Lucia, the first island in the Caribbean. From Macapa to Cayenne, French Guyana, we had to cope with a single weather report from the Amapa radio station (the last city we flew over the Brazilian territory). We were told we would encounter CAVOK weather, but just 15 minutes later, we flew over Amapa deviating around thunderstorms under overcast conditions!

But a long novel, called the General Declaration was ready from the beginning. Countless copies of this completely useless document were requested by all the countries where we landed, even if you just stop for refueling. During our trip to the Caribbean in 1986, we extensively employed Adam Smith's division-of-labor principle. Filling in and forwarding GenDecs during that trip was not my job, or Franke's, so we totally forgot about them. When we were almost lost about what to do, the skies sent us from nowhere a gentleman called Susqui who took us to the Guyana Air office where a specially modified GenDec was printed and given to us. That would be our original for the several dozen that would follow. Susqui is a Cessna C-180

bush pilot who delivers supplies to illegal gold washers deep in the Guyana jungle. He even showed us an envelope with a large gold nugget he had just received as payment—Indiana Jones would envy that job. Anyway, Cayenne is still a good place to stop with a good weather briefing due to its proximity to Kourou (the French Ariane rocket launching base).

Nine years ago, we had nicknamed Georgetown, Guyana, our next stop of the day, as "Georgedown" because of the extremely unfriendly and dire mood of the place and its people. But this time it was more comic than sad. We visited what must be the only airport stands in the world. Yes, covered football-stadium stands where hundreds of people sit and watch airplanes take off and land once every two hours. The man from the avgas service station calculated our service tax to be one tenth of a U.S. cent and gave us two non-alcoholic beers as change. To top it off, we received weather information of our next route from a telex machine with the print completely unreadable and a 'sorry, but it's all that we have' explanation.

After so many mishaps, we had a unforgettable final approach at Vigie, St. Lucia. Imagine a Falco on the short final of a Caribbean island runway, in a bay entry between hills, with the sun setting behind. Now put a beautiful sailing ship crossing the bay so close that we had to fly around its flagpole and a helicopter hovering on the right, waiting for its turn to land. At that moment, I would rather have been somewhere out of the Falco to take a photograph and then paint a picture to hang in my office.

Our forecast of good weather conditions for the rest of the trip started to be confirmed in the next day, with three smooth legs. We landed at Nassau-Bahamas a few minutes after the official sunset, after previous stops at St. Thomas and Grand Turk. In St. Thomas, we set the record for time-lost-to-refuel. The people from customs and immigration dealt with us as if we were unwanted illegal immigrants. It was easy to go from the Falco to the customs building, but almost impossible to come back, since we had to pass through the airline passenger gate that is open only when there is a flight boarding. After three hours of vacillating and a lot of disgust, we finally departed for Grand Turk, and we swore we would avoid St. Thomas on the way back. We should have avoided islands such as St. Thomas and Nassau. They seem to be friendly to people who arrive in an American Airlines jet, but not to homebuilts who suffer under excessive bureaucracy.

We had a very pleasant surprise the next day when we landed in Ft. Pierce, Florida, after a short hop from Nassau. The people at customs and immigration were very hospitable and the local "Air Center" FBO is fantastic with excellent service for small planes.

We had planned to fly to Oshkosh in two days from Ft. Pierce, but favorable winds and good weather took us there in just one day, with stops in Sylacauga, Alabama, and Paris, Illinois. We tried to avoid overflying Orlando, but we were vectored directly over Disney World and Epcot Center. I felt like a child again, flying over the Magic Kingdom in a real airplane and not in a toy as I had once done before. We had a little scare some miles from Orlando when we hit wake turbulence from a 727 that recorded 3g's on our accelerometer and threw my knee

against the instrument panel.

The landing on runway 27 in Oshkosh was really great—a landing to stay in my memory for the rest of my life—flying the Falco along the railroad tracks, the strobe light at Fisk landmark and the one-way 'rock your wings' radio transmissions.

The Falco builders dinner was the highlight of the trip. It was a tribute to Stelio Frati and everybody who loves his masterwork. It was a pleasure to share the company of friends like Howard and Marty Benham as well as new friends like Brian Nelson, Jack Amos, and John Shipler.

Our plan to take off from Oshkosh at sunrise on Sunday was blown due to a nitrogen leak in the right shock absorber, just after we started to taxi. After fixing it, we were ready to take off again, but now we had the company of more than 40 airplanes doing the same at eight o'clock. In any event, it was enjoyable to take off in a squadron-deployment style.

We chose almost the same route back to Ft. Pierce, and we could have gotten there with just one stop at Muscle Shoals, Alabama, if we hadn't encountered a strong headwind over Alabama and Florida. We diverted to Ocala, Florida, after twenty minutes of low flying over the alligators, deviating from bad weather.

The return trip to Brazil was planned to be more pleasant with longer stops in the Caribbean islands for rest, but hurricane Erin grounded us for four days in Ft. Pierce. Thirty-six hours after its landfall (almost exactly over Ft. Pierce), we were able to leave the U.S., bound for Providenciales in the Turks & Caicos islands. The flight



from Ft. Pierce to Provo was very tumultuous from the beginning. We departed to the east with a big cell on our right that was quickly approaching the Ft. Pierce area from the south. After a few miles over the Atlantic ocean, we couldn't believe it when we looked back. There was no way to go back if we had to, since a line of thunderstorms, remnants of Erin, now covered most of the Florida coast.

In the hurry to get out of Ft. Pierce, we left without 'draining' ourselves. We thought about stopping before Provo, if we couldn't handle it, but after almost four hours of flying we landed at our destination looking desperately for a restroom. In Providenciales, we finally could do what people usually do in the Caribbean: swim, snorkel, go diving, drink beer, and relax.

Since Beef Island, in the British Virgin Islands, didn't have avgas, we were forced to land again in St. Thomas. We thought that nothing could be worse than the first time, but even with all the precautions, they caught us again. We finished that day landing in Grenada, with a lot of rain from a tropical depression developing in the area. The next two days were spent flying almost all day in order to get home on Sunday afternoon, August 6.

On the next-to-last stop, we called our folks in Jaboticabal to announce our arrival. The reception of Falco PP-ZMB's arrival at home was great, with all my family at the airport, a low pass over the runway, and a lot of champagne. On Monday morning, I was interviewed by the local TV about the trip. I could then tell everybody how perfect the airplane was during the entire trip. The two-minute interview was aired nationwide two days later on the morning news program. Andy Warhol said everyone will enjoy five minutes of fame during his lifetime; we've had two already.

One more dream is now reality. What's next?



C'est la Vie

by Stuart Gane

The following paragraph appeared in a local Belgian newspaper the day after the crash of our Falco. 'Sunday, just before 1600 hours, an English aeroplane fell into a wood near the runway of St. Hubert aerodrome. The two occupants, Mr. Stuart Gane and his wife, were not seriously injured and were transported to the hospital at Libramont.'

So ended a most extraordinary week for Vivienne and me. To paraphrase Harold Wilson, a week is a long time in aviation, as Vivienne and I were soon to find to our cost. During a period of seven days, we experienced pride and pleasure in having our Falco awarded two prizes at the Popular Flying Association Rally at Cranfield, followed by what for us was unprecedented media interest, to surely what must be any pilot and their passenger's worst nightmare, a serious aeroplane crash.

The success at Cranfield brought with it a certain amount of media interest the following Monday. By then the local newspaper had heard about our awards and wanted to run an article on the building of the Falco. This interest was taken up by a regional newspaper who sent along a photographer to take the standard picture of the proud builder beside his aeroplane. There is a certain ironic touch to the article's headline—'Pilot's home-made plane hits heights'—in the light of subsequent events. The regional TV station was keen to have some film of the Falco flying for the network news, and they sent a cameraman to film the Falco doing a couple of touch-and-goes.

After all this media attention, Vivienne and I decided we had to leave the country to get some peace. We were becoming concerned that the Paparasi would be hanging around the entrance of our hangar with their telephoto lenses focused on every NACA inlet, waiting poised to set off a cacophony of clacking Nikon shutters and night-vision-shattering flash bulbs every time the control column moved. Actually, we had planned some time ago to go to Belgium, to their National Homebuilders Fly-In at St. Hubert near the Luxembourg border. I had met Francis Warlomont, a Belgian Falco builder who lives near to St. Hubert airfield during the 1994 Cranfield rally, and he invited us to stay with him if we came to the fly-in.

Friday was the day of departure. The weather forecast for the planned route



Stuart and Vivienne Gane had a bad air day in July.

and destination was clear. As soon as Vivienne was free from work we set off, and the countryside rolled away beneath us in what appeared to be an exquisitely detailed paper map. In two hours, we landed at St. Hubert. The touchdown was smooth but the Falco was reluctant to slow down on the rough, down-hill runway. We taxied to the parking space with the help of half a dozen marshalls, a bit excessive as there were only three other aircraft on the field at the time.

Each marshaller was not so much directing us along the correct route to the parking slot, but appeared to be trying to advertise his particular parking space for us through various gesticulations and vigorous body movements. It was very amusing to observe from the cockpit, if not a little

confusing, to become judges in a 'choose me' competition. I couldn't differentiate between the various Mr. Bendy men, who were gyrating in almost unbelievable contortions to gain our favour, so I decided to choose my own parking slot facing into the wind.

This left the marshalls a bit limp and deflated, or so I thought. Having lost the parking competition, there was a sudden rush to provide aircraft tie-downs. Marshalls in official-looking overalls and others dressed in more casual clothes moved as fast as decorum allowed to get to the tie-downs first. Old men, young men and some in between vied amongst themselves to get back to our aircraft with suitable tie-downs. Before you could say Sequoia Aircraft Corporation, we had an



Above: This is the opening that Stuart and Vivienne crawled through.

assortment of tie-downs to choose from, some so heavy they had to be wheeled by barrow to the parking lot that probably could have held a Boeing 747 down adequately in a hurricane.

After all that effort, I couldn't let them see we had, in fact, brought our own tie-downs so by sleight of hand Viv and I managed to unload the aircraft and keep our equipment out of sight. The task was made no easier by the spectators who were going over the Falco as though they had never seen an aircraft before.

I mention this episode because it typifies the whole weekend in St. Hubert. Everybody we met could not have been more helpful or shown more interest in the Falco. We had a very enjoyable time and

both of us were made to feel very welcome indeed. It was more than a pity it should end in such a disastrous way.

Viv and I spent Saturday visiting the towns of St. Hubert and Bastogne. Bastogne's principal claim to fame is that it was the centre for the Battle of the Bulge during the Second World War when the Germans made their last major offensive. Many Americans and Germans lost their lives during the battle. Every major road into the town has a gun turret from a Sherman tank placed in a commanding position as a memorial to that last great centerpiece battle.

Saturday evening Francis and his wife Francine invited us to a barbecue with the rest of their family to celebrate the graduation

of their son and daughter, Pierre and Veronique. Although we could not join in or understand all of the French conversation, we both enjoyed ourselves immensely and certainly felt part of the family. With the flight home the next day we decided to retire to bed before the end of the barbecue.

Sunday was another very hot day with the sun beating down relentlessly from the moment it appeared above the trees of the Ardennes forest. The Warlomont's house is built in a beautiful clearing deep in the forest with only the sound of a small river tumbling over rocks and fallen trees.

After breakfast we made our way to the airplane where we pattered around for an hour or two enjoying the superb weather, talked to various people and watched the gliders being towed skyward by a Maule. St. Hubert is the national residential training school for gliding in Belgium, and this ensured there was lots of activity with students and their instructors keen to make the most of such idyllic conditions. One glider made a high-speed pass along the runway about 200 feet before soaring back into the sky with a phenomenal rate of climb, such was the strength of the thermals.

By mid-afternoon it was time for us to leave. The weather back in the UK was good with nothing forecast en route that would cause a problem. I filed a flight plan for a 1600 departure and then used the next hour to load the aircraft with fuel and baggage. Because of the air temperature in the high eighties and the uphill slope of the runway, I was careful not to overload the aircraft with fuel.

I noticed the wing walk had become so soft from the high temperature that it had lost virtually all of its adhesion, which allowed the sheet to slide down the wing under the pressure of my feet. I lay a coat over the walkway to allow the temperature to drop sufficiently for the glue to stop turning itself into treacle.

We said our goodbyes and called for taxi clearance. The information-only tower could speak virtually no English and replied "runway 140". I set the altimeter to 1847 feet and taxied to the hold for 140. Everything was satisfactory on my run-up checks, and I called for permission to enter the active runway. There was no reply from the tower, so I reckoned they could not understand me. I checked for approaching aircraft, taxied onto the runway, and lined up in front of the gliders waiting for the return of their tow aircraft.

I was told later this was a mistake, but nobody, either the tower or the glider pilots, gave any sign that I should have continued to taxi past the gliders and line up adjacent to them. Nobody could have foreseen the possible effects of starting the takeoff run from that position since there was 1000m of runway ahead, certainly more than adequate. I made one final check for approaching aircraft and pushed the throttle forward. The Falco accelerated, but not as quickly as normal. I told myself this was due to the uphill slope and the reduced air density.

As the plane gathered speed, the unevenness of the surface became increasingly apparent. The wheels seemed to jump off the top of each ridge. Each bump became more pronounced, and I pulled back slightly on the stick to reduce the pressure on the nosewheel. At 60 kts, we ran over a really big bump which launched the Falco into the air. We climbed for about two or three seconds, but the controls felt sloppy. The engine was running at full throttle, but the ailerons were not giving the normal feedback from slight control inputs.

With nothing but clear sky over the nose, I glanced to my left and could see we had drifted off the runway. We were about 20 feet above some rough looking grass. The runway had disappeared. Right rudder made no difference. The aircraft was simply not responding in the normal way. I gently lowered the nose to gain speed. To my horror, ahead at our level a large wood spread its green arms on all sides of the cockpit and seemed ready to ungulp us. There was no way we were ever going to clear the tree tops. We still had about 100 yards or so before we entered the trees. Instinctively I pulled the throttle back. Goodness knows what went through Viv's mind, at that moment, for she said nothing.

Almost instantly the aircraft struck something—the ground, a tree, I don't know. There was a tremendous crunch of splitting plywood and the awful noise of the Falco breaking up. The bright sunlight had disappeared. Unfocused objects spun around our half-light world. The noise vibrated right through my body. I wondered if something was going to penetrate my body, but I wasn't frightened. It was all happening too quickly. As suddenly as the noise started, it stopped. There was total silence. Nothing moved.

A crowd of about 30 people had gathered to watch the Falco take off, and they watched as the plane wallowed in the air and then cartwheeled into the brush on the far side of the runway. Francine burst

into tears. A plane flying overhead radioed down, "Don't bother to call for medical services. They're dead."

I could smell grass and the faint disinfectant aroma when you break the bark on coniferous trees. I looked to my right. Where was Viv? I couldn't see her. I called out and asked if she was all right. To my relief she said very calmly, "I'm okay."

I was lying partly on the side of the cockpit wall with my head just touching the grass. Viv was somewhere underneath me, I later learned. My mind just went into auto mode. I turned off the master switch and the fuel cock. I began to smell avgas. We had to get out quickly.

I tried to slide out over the cockpit wall but my foot was held tight by a seat belt strap wrapped around my ankle. It would not loosen its grip just by being pulled. The more I pulled, the tighter it seemed to grip. I became really frightened and thought we might not get out alive. The smell of fuel was getting stronger. The straps would not let go. Any moment, I expected the 'whooph' as fuel tanks exploded. With a concerted effort, I managed to release my trapped foot. I squirmed my way out between the rear tank and the parcel shelf. Still lying on the ground, I rolled over, looked back for Vivienne, and for a few seconds wondered if I was going to watch my wife burn to death.

After what seemed like an eternity she appeared crawling on hands and knees, out through the same hole I had just evacuated, head down, doggedly padding her way to safety. We half-walked, half-stumbled to rest some 20 feet away from the aircraft. By then I was having difficulty breathing. I had to lie down. I looked up at Viv who was standing beside me. I asked her again if she was all right. "I'm fine, but what about you?"

Before I could reply a man came running through the scrub, and breathlessly asked if we were okay. After reassuring him, he suggested that we move further away from the scene because of the fire danger. We managed to stagger a few more yards, but my breathing was so difficult I could not go on. I slumped to the ground and looked back at the Falco. It was a terrible mess, but I was so relieved we were alive I didn't feel upset at the sight of the splintered, shattered aeroplane which only a very short time ago had been a very beautiful machine.

Francis, Francine and the others were pre-

vented by the authorities from going near the scene, but somebody returning from the accident site told them I had been very seriously injured and was dead, and Viv was hurt but not badly. We were both taken to the hospital by ambulance, and it was not until I was being wheeled into the hospital on a stretcher that they realized this was obviously not true.

Viv had a black eye and some internal bruising, which only became apparent some four days later. She was not kept in hospital. I had two broken ribs and some stitches to a couple of cuts on my face. We were very lucky.

In the days following the accident, our new friends in Belgium could not have done more to help us through the maze of bureaucratic problems that beset any aviator when dealing with authorities. Francis and Francine who originally were only expecting guests for two nights found themselves visiting the hospital, arranging storage for the damaged Falco, dealing with the Belgian authorities and coping with a whole host of other associated problems, all of which took about a week of their time and never once did Viv and I feel we had imposed on them.

At first it may appear that the first week in July ended in disaster, but that is not so. On reflection it was not only a memorable week but a terrific one at that, for we had found the value of friendship in a time of need, we had survived the potential tragedy virtually unscathed, and I can start repairing the Falco, a job I will really enjoy this winter. *C'est la Vie.*



Stelio Frati, Out in the Open

by Alfred Scott

In the mid-1950's, at a time when Paul Poberezny and a tiny band of Milwaukee homebuilders were starting the EAA, Eisenhower was in the White House. Detroit produced whale-cars with chromium baleen and enormous fins. Black-and-white television was just being introduced. Martin Luther King was in graduate school. Piper Aircraft was selling the Tri-Pacer. And amid the rubble of World War II, a little-known 35-year-old engineer bent over a drawing board in Milan, Italy, and designed an airplane for the ages.

The plane was built in a shop with few power tools and then hauled to the airport on a horse-drawn wagon. It was designed of readily available materials, native poplar and birch plywood. Italian labor was cheap then, but with 3,500 hours required for the production of each aircraft, the plane sold for \$6,000, three times the price of the Tri-Pacer. It flew perfectly on the first flight, but it was an impractical machine from the beginning, too labor-intensive to be competitive with American mass-produced designs, and after all it was made of wood—that stuff *rots!*—in a world falling in love with stamped metal.

So how could the designer have foreseen that 40 years later, he would travel to a Wisconsin airport and celebrate the birthday of the design amid 18 specimens of the airplane built by a couple of petroleum geologists, a flight instructor, mechanic, machinist, retiree, roofing contractor,

photographer, writer and others? Or that a Brazilian engineer, who already owned an airplane, would spend \$100 a *pound* to build the plane in his own shop, and then fly it across the Amazon guided by dual satellite navigation equipment, one hand-held, just for the pleasure of attending a birthday party without a cake?

Yet that's what happened. But what is more remarkable still is that this machine, 40 years after it was designed, is among the most modern airplanes on the field, the most gorgeous looking aircraft ever built and with handling so perfect that owners like to tantalize spectators by kicking the turf and saying in a down-trodden way, "It flies better'n it looks."

Stelio Frati. If you had said those words 20 years ago to a typical American pilot, you'd have received a blank stare. What's that, some kinda scouring pad? Even among the aviation press, there were less than a dozen writers who knew who Frati was. Nigel Moll, Budd Davisson, James Gilbert, Howard Levy, Jack Cox, Peter Garrison, Peter Lert, Steve Wilkinson, Robert Cumberland and Ed Tripp knew about Frati. They all revered him, yet none of them had ever seen the reclusive designer.

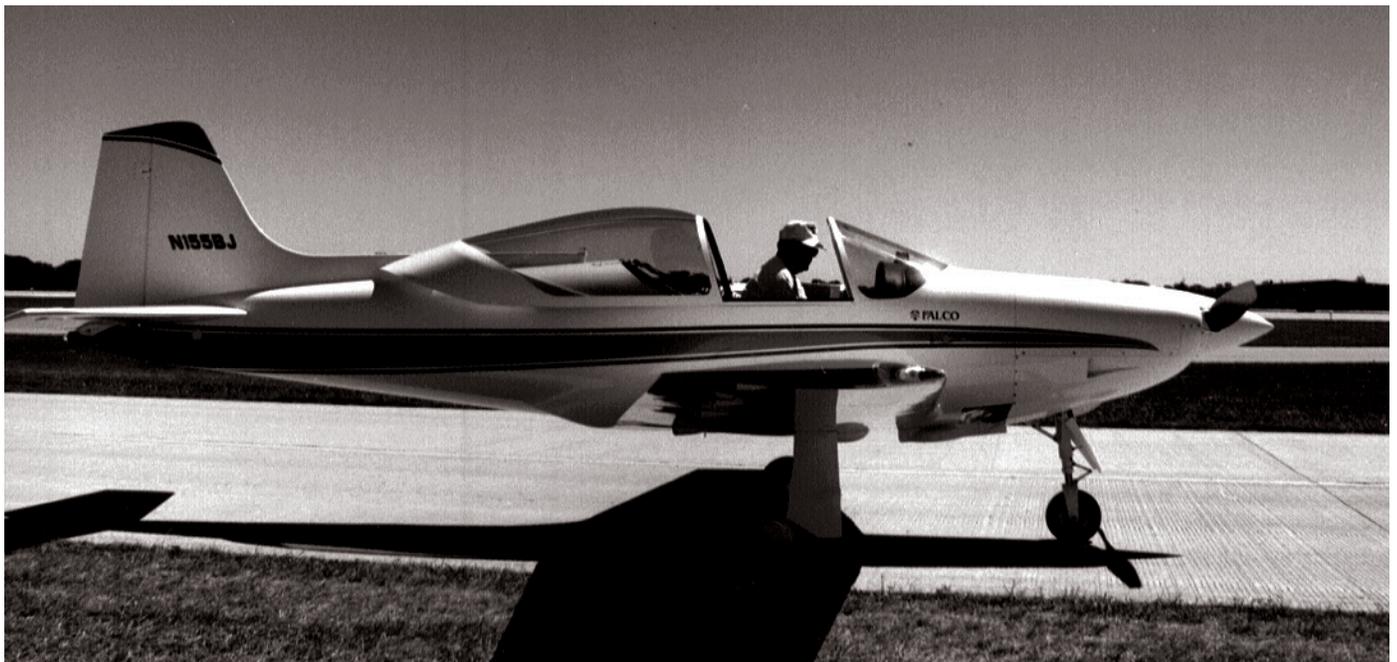
(Cumberland, then European editor for the old *Air Progress*, used to write Frati letters, but never got a reply. He concluded Frati was arrogant and aloof. Even James Gilbert, who wrote glowing articles about Frati and included an entire chapter on Frati in his book, *The Great Planes*, never got a letter back from Frati. In fact, we now know that Frati is an unfailingly polite man, who means to write you back, but he



is so busy working on the next design he just never gets around to it.)

The *cognoscenti* of aviation knew Frati, but the Gordon Baxters and good ol' pilots of the U.S. didn't have a clue. When we started selling the Falco, I thought a little mystique would be a good thing, so we included a brochure on Frati as part of our literature. When we first printed it, we sent a single copy to Frati. Everyone in his shop gathered around competing for the book until an excited Frati grabbed it and raced from the office so he could read it in peace.

As the Falco and SF.260, his best-known design, sold in greater numbers, their reputation spread and with it a growing awareness of Stelio Frati. Ten years ago, Frati



came to Oshkosh for the first time, and he was a bit overwhelmed by the reception he got from Falco and SF.260 pilots. Frati is a public-relations nightmare. He will wander among the lemme-tellya-about-me promoters of aviation and never say a word, and he will pass by the most important aviation editor and not even know who the man is.

But today, everyone knows who Stelio Frati is. It was fun to watch people who would see his name tag and then look up at his face in awe and not say a word. Others would shake his hand and ask for autographs. Frati signed everything from hats to Falcos. Even cynical journalists would say, "It's an honor to meet you," as they shook his hand. Frati was a bit stunned by it all, and seemed to have little idea of how revered he is in the U.S. Occasionally someone would ask him a design question. Frati would do a rough sketch on a piece of paper and explain it in a gravelly voice. Then came the embarrassing moment: "Can I have that?" they'd ask, pointing to the sketch, and Frati, unaccustomed to the role of a celebrity, was non-plussed and hardly knew how to react.

But the truth is that Stelio Frati had a wonderful time at Oshkosh. The EAA was great and really made him feel welcome. As he is wont to do, Frati wore a suit and tie on the first couple of days, and finally relaxed and wore an EAA hat and specially monogrammed knit shirt ("il Designere Frati") that Al and Nancy Aitken made for him.

Part of the reason Stelio Frati came to Oshkosh was to help promote the Pinguino and Sprint aircraft that the LoPresti are now selling in a marketing arrangement with General Avia. Frati and his long-time assistant, Carla Bielli, divided their time between the LoPresti display and the row of Falcos. While he did his duty with the Pinguino/Sprint, he tired of the jut-jawed, arrogant, what'll-she-do egos in Ray-Bans, and it was obvious that Frati was most at home among the Falco builders. He was amazed that anyone would spend five, ten or twelve years working on one of his designs, and he hung around the Falcos like a Border Collie with a flock of sheep.

He would peer into the engine compartment of Dave MacMurray's Falco, that looked exactly like an ice cream parlor, and ask "Does it use oil?" He autographed most of the Falcos there, and would spend hours going over the planes, all of which were more carefully finished than any production Falco. "Falco pilots walk like this," he would say, standing straight up, "and Nustrini pilots walk like *this*," cocking his



Top: Tom Poberezny welcomes Stelio Frati.
Center: Frati in his EAA hat and 'designer' shirt autographing a hat. Carla Bielli talks to SF.260 owner Bill Vitale.
Bottom: Two dirty old pilots: Cecil Rives and Perry Burholm with their Falco tee-shirts—"I came to Oshkosh with the sexiest 40-year-old on the planet."



*Top: Eighteen Falcos made it to Oshkosh. Dave MacMurray's won Reserve Grand Champion, that's second place. John Shipler's won an award for outstanding workmanship, and Dick Reichenbach's won a Bronze Lindy.
Center: Carla Bielli and Stelio Frati.
Bottom: Stelio Frati autographing Dave MacMurray's Falco.*

head to one side. He loved moving among the tight-knit group of builders and seemed to prefer the company of the quietest men like Rex Hume and John Shipler.

For a man who often seems humorless, Frati was happy around the Falco builders, and Steve Wilkinson said that when he taxied up after landing, one of the first people he saw was Frati. "He was smiling. I never saw him smile before."

All of us know what 'compulsive workaholic' means, but our normal understanding of the phrase comes nowhere near describing Stelio Frati. He works all the time. That is what he does. Friends say he works every day of the year, except for Christmas morning, when he goes to church, and *then* he goes to the office. "If you want to kill Stelio Frati, keep him from working," says his old friend Giancarlo Monti. Even on a supposed vacation, Carla Bielli would order breakfast sent to Mr. Frati's room because, if she didn't, he would forget to eat.

Machiavelli once wrote that a great man cannot be a good man. Inevitably, people who accomplish great things have a distortion of character and their single-minded focus on one thing comes at the expense of other traits we consider normal. Driven, highly intelligent people are often short-tempered, intolerant of lesser intellects and abrasive—the entire computer industry seems to be populated by these types. So it comes as a distinct pleasure to find that Frati is an unfailingly polite man, and quite formal. He's very quiet and many describe him as meek—a far cry from the image once conjured when he didn't respond to letters.

Even so, it is still possible to push even the most polite of men too far. Hoping to find some bizarre creations like the "briefcase ultralight" of a few years ago, Jack Amos and I took Frati down to the ultralight area. It was very hot, and Frati really didn't understand where we were going or why, but when we got there, he said with disgust, "We have these things in Italy" and turned on his heel and hurried back to the Falcos.

Without Carla Bielli around, Mr. Frati sometimes seemed almost lost, like a little boy, and his English was noticeably better when Carla was around. Carla came to work for Mr. Frati when she was 19 and has been with him for 25 years. She is a glamorous lady with unending enthusiasm for Frati's designs, and she tells tales on him with a tinge of tragedy in her Milanese accent. Like when they were proof-loading the Falco wing during certification and how the

Italian government inspector with a warped sense of humor snapped a stick of wood behind Frati. “Engineer Frati, he jumped like *this*.” Or how when the Falco first flew, it had a reputation as a hot ship, so to prove that anyone could fly in the plane, Stelio Frati took lessons in the Falco and learned to fly in the plane he had already designed. On one of his first landings, however, he hit the runway with an 8g impact, and the student pilot Frati had to inspect the airplane before it could be flown again.

Carla loves America and all things American. She takes her vacations traveling in the U.S, and she is proud of her role in the Falco. Years ago, when I wrote Mr. Frati and suggested we sell plans for the Falco to homebuilders, Frati thought it was impossible, that only a factory could build the Falco. “When Meester Scott first proposed to Engineer Frati that he should sell copies of the plans, Frati said no no no. I told Frati, you don’t know the Americans. They can do *anything*.”

In a quiet moment, Carla speculates what Frati might have done if he had lived in the U.S. instead, but I disagreed and argued that Frati has lived at precisely the right time and right place and has had more independence than he ever would in a large U.S. company. It is better that he crank out prototypes in Italy, only a few of which reach production, than to be lost in the power games and politics of a company like Beech or Cessna—and the mind recoils at the thought of Stelio Frati in the Wichita Bowling League.

On Friday night, we gathered in a restaurant for the official birthday party where in after-dinner speeches, we all took turns describing what this whole experience meant to us. Out of context and without the give-and-take banter, the comments seem a bit disjointed and don’t flow particularly well, but here is a sampling of that evening:

Cecil Rives: “I’m a low-time pilot—300 hours—so I was apprehensive about flying a Falco, but my fears were unfounded. I can’t say enough good things about the airplane. I don’t think it has a single bad habit. Building this airplane, I learned an awful lot about airplanes, but more importantly, I learned a lot about myself. Which is very important.”

Bob Bready: “My Falco has been flying since July 21, 1994. It took about 12 years to do it, and as Cecil said, you learn an awful lot about yourself and work habits and everything else. But I think Mr. Frati should be classified as kind of our father.



Top: Stelio Frati, Tony Bingelis and Tony’s Falco, now owned by Ray Coleman. Above: Alfred Scott, Stelio Frati and Carla Bielli.

Without him, none of us would be here. So it has been good working ‘with’ him. You never got to meet him, but you were able to see how he thought, the kind of work that he does. And here we see the kind of people he’s brought together. For that, I am grateful.”

Bob Bready



Jim DeAngelo: “Ten years ago, Mr. Frati flew in my airplane and put his signature on it by shaking a wingtip and cracking the nav-light lens. That crack is there to this day. Mr. Frati would go on to design all these other beautiful, wonderful airplanes, but this one was his Mona Lisa.”

Jonas Dovydenas: “I’d like to apologize to Mr. Frati, because I flew him here from the airport up in Appleton, and I was so intent on doing everything right and keep him comfortable that I forgot to give him the stick and offer him a chance to fly the Falco himself. But I made a good landing for him. After I finished my Falco and started flying it, I began to resent the time that I’d spent building it.”

Al Dubiak: “Six years ago, I came to Oshkosh and admired Pawel Kweicinski’s Falco, and late one afternoon, he took off, pulled up about six feet off the ground,



**Top: Steve Wilkinson—*luv those legs!*—and Stelio Frati.
Above: Rex Hume points to Frati's autograph on his Falco.**

pulled the gear up, and I was in love. I fought the urge for three years, now I've been building for three years. I'm about half done, I'm having a great time, and I'm looking forward to flying it someday."

Dave MacMurray: "I was up in bed about 10 years ago and turned the page of an aviation magazine and here was Karl Hansen's Falco, and I said 'Look at this beautiful little airplane, Barb'. She said 'What is it?', and I said it's all wood... 'Why don't you build it', she said, and I said 'I think I will.' And that's how it started—a picture of the aircraft and the ageless beauty of it. And that's the reason it's 40 years old and is still being praised."

Pierre Wildman: "I'm working on the elevator, so I've got a long, long way to go. I was counting on four years, and now I'm hearing stories about six years, eight years, ten years. I'll get it done before I retire."

I'm very much looking forward to creating something beautiful, and I'd like to thank Mr. Frati and Mr. Scott for providing me with the opportunity."

Dave Gibb: "I looked at everything out there, and nothing was quite right, nothing was me. The very first time I saw the Falco, I told my son *that's* what I'm gonna build. It took a little while to convince my wife. After seeing these beautiful airplanes at this show, I called my wife and said 'Get over here to Oshkosh. You've gotta see these things in person.'"

Mary Gibb: "It's been pure pleasure from day one. I enjoyed being in the shop with him until it was too long, so I'd go home and eventually he'd come home, so we moved the Falco home. That made it a little easier. We have enjoyed working together, encouraging him when he'd get discouraged. We're all crazy, aren't we?"

Dan Dorr: "My name is Dan Dorr, and I'm a Falcoholic... I'm an aeronautical engineer with NASA out at the Ames Research Center in California. I remember one day at work, another engineer and I were talking about various homebuilt designs. He looked at me and said, 'You're like me. You're not going to build any of those other airplanes, you're going to build a Falco.' And he was right."

Nigel Moll: "In the course of writing for *Flying* for 16 years, I've flown about 150 different kinds of airplanes, and the SF.260/Falco is still my benchmark for the way an airplane should fly."

Steve Bachnak: "I spent six years building a Falco, and I've been flying it for about six years. It is without a doubt the finest airplane I've ever flown."

Al Aitken: "I'm going for the award for whoever took the longest to build a Falco. I've been working on mine for eight years now and the tail section's done, so I think I'm right on schedule. But I've flown a number of Falcos, and they all fly exactly the same: they all fly perfectly. Because of that man [Frati] sitting right over there."

Jerry Walker: "I've built the Falco, and I'm flying it, yet I'm still involved in the experience, and it's not going to end. I have a difficult time explaining it to myself. I'm in the air, I'm flying, and I'm in this *thing* that I built with my own hands. I never built anything before."

In the middle of the speeches, a bunch of SF.260 pilots arrived. The doors crashed open and in they came, and in the best one-liner of the weekend, Susann Flowers instantly pegged them as "Harley guys with money." I later mentioned this to them, and it turns out all of them do, in fact, own motorcycles, mostly Harleys and one BMW.

Rex Hume: "I saw an ad in a magazine, and I said, 'Boy, that looks just like a two-place Navion.' I always loved the Navion. I said, 'This would be a good retirement project. I could probably knock one of these out in a year or so.' Well, it only took me 10 years to complete my airplane. I've been flying it six years now, and I'm just having more fun than one person ought to have, so I thank Mr. Frati for designing it and Alfred Scott for making it available to me."

John Shipler: "I want to thank Mr. Frati and Alfred Scott for making it possible for me to create something which I think is a masterpiece—the lines, the aerodynamics, it's a *great* airplane. I really feel thankful

that I was allowed the privilege of building it. I'm not an artist, but they set it up in a way that made it kind of like painting by the numbers, so you could build a masterpiece without being an artist yourself."

Marty Benham: "It's a good thing that Piper never got it together to produce their homebuilder Cub kits, because I was totally overwhelmed by the Falco plans, and the builder manual. I told Howard, 'We can't possibly build so complicated a project, I want something I can fly in the next year or so.' So we call Piper and said, 'We want to buy one of those Cub kits. When can you deliver it?' They said, 'Two years from today.' The next day, Howard started to build the Falco. We brought it here today. It's not even a month old, so thank God Piper didn't come through with that Cub kit."

Brian Nelson: "Pop songs come and go, and there are a lot of homebuilt designs that have come and gone, but the Falco is a piece of classical music. And it says a lot for the design that it brings together a group of people like this."

Paulo Franke: "In Brazil, I work for an airframe manufacturer, and I have a good idea of how hard it is to build and fly an airplane. This group, there is one striking thing to me. I have heard words such as 'classical music', 'sculpture', 'masterpiece', okay? And I've also heard words like 'years to build', 'ten years', 'before retirement', 'effort', 'sweat'. So there is a very unique thing about this adventure—getting these things together—this is not a very common thing, to unite art, grace, spirit, effort, strength.... We have to thank Mr. Frati for this. You are a very unique bunch."

Clive Garrard: "I'm a product designer by trade, so I really admire things with beautiful lines, especially Italian design, and I think it really is a classic. I've looked at lots of airplanes here over the last few days,

Robert Cumberland



Jonas Dovydenas hogs the controls as Jim DeAngelo off the right wing flies Susan Stinnett to Oshkosh, while Bob Brady follows with Carla Bielli.

and they certainly all get people into the sky. But there's not a one that I'd really want to own, apart from the Falco."

Marcelo Bellodi: "A lot of people ask me about the trip that we made from Brazil, and I answer them by telling them how beautiful it was. But more beautiful than that is to be with all of you, who are now part of my family."

Robert Cumberland: "I was a young car designer in Detroit in 1955. We had the virtue of getting every car and airplane magazine in the world in our library, and since there was nothing to do in Michigan except stay out of the snow and draw pictures of cars and airplanes and read about them, I read about them. And there was this most wonderful single-engine airplane I'd ever seen. It became my esthetic standard for airplanes. Alfred had a really good designer design an airplane for him, and he sent me drawings of it. I said, 'Okay, I'm sure it's strong, but it sure isn't very good-looking. It's too bad it's such an ugly thing when it could have been like a Falco.'"

Carla Bielli: "I work with Engineer Frati for 25 years, and we build in this time 10 prototypes. But honestly speaking, I never saw that somebody could build this beautiful Falco alone. We were 20 persons in the shop. Somebody ordered materials, some other did drawings, Engineer Frati did designs... I know there is something special, honestly, about you people. Now I see how to build aircraft."

Stelio Frati: "First, I would like to thank you for your cordial welcome and your belief in my knowledge. I wish to tell you a brief story. A request came from Mr. Scott for the the Falco plans. My response was that it was too difficult to construct. It cannot be done. I set the letter aside, but

Mr. Scott kept requesting the drawings. Eventually, the drawings were sent, and Mr. Scott started the project."

"Ten years ago I came to Oshkosh and found a large passionate family building the Falco. The reason I call you a family is because you act as though you are related to one another and because of the warm reception you have given me. You are not only people who build airplanes, but you are also kind and cordial to one another and everyone else. I know many homebuilders in Italy, but the builders of the Falco are astonishing. This is a credit to Mr. Scott.

"When I design a prototype, it takes about a year, but I notice it has taken some of you 10 years to build the Falco, and yet even after all this time you still have that passion to the very end. Your enthusiasm continues and has never left. This is a very important attitude to have, and it shows how professional you are! This is a virus that lingers on and has no cure. I hope we will see each other in ten years. Thank you all for your friendship! We hope to come back for the 50th anniversary."

Stelio Frati



Susan's Corner

I have one word to describe Oshkosh '95. Awesome! It was fantastic and wonderful (I guess, technically, that's three words), and I do believe a great time was had by all.

I've been to a lot of air shows, but I don't think I've ever seen that many planes all in one place. It was impressive.

It was truly wonderful to finally meet some of the builders whose names have become so familiar over the last year and a half. Some I would have known in an instant (they were exactly as I expected) and others were totally different than I imagined. Brian Nelson from South Africa and Marcelo Bellodi from Brazil were both much younger than I had imagined (figure that one out!), but I could have picked Cecil Rives out of a crowd. Strange the way your mind works sometimes.

Howard and Marty Benham were almost instant friends. I had imagined them to be much more reserved and 'proper', but in fact they are truly wonderful, down-to-earth folks. And if it wasn't for Marty's help on the night of the big dinner, I'm sure I never would have gotten all the credit cards straight. Thank you, Marty.

Jim DeAngelo flew me from Appleton to Oshkosh on Thursday morning, and what a flight it was. I must admit it was a little unnerving with so much traffic in the air, but I did just what everyone told me to do—"Keep your mouth shut and enjoy the view." It was a great flight. Thank you, Jim.

The weather was beautiful, although quite hot, and all the dinners we had planned were a huge success.

Al and Nancy Aitken presented Mr. Frati, Alfred and myself with personalized, designer Falco shirts, which was a very special and thoughtful gift. Thank you both.

Mr. Frati appeared to have a great time as well, and it was certainly an honor to meet him and Carla. Carla seemed to be a great companion for him—a real piece-of-work,

she was, but a nice balance for Mr. Frati.

I heard several comments about the number of Falcos that were there, and it really was impressive. They were all gorgeous, and it made for quite a beautiful display of artwork. Prior to Oshkosh, Alfred had mentioned to me that he'd heard that Dave and Barbara MacMurray's Falco was a real show stopper, and that it was—a real masterpiece. Good job, guys.

For an initiation to Oshkosh, this was certainly a great experience and one I shall never forget. It took a while to settle down from all the excitement, but things are now relatively back to normal (whatever normal is). I hope I see a lot of the same faces this year at the Oyster Fly-In.

In the past year, we have acquired many new builders who have become active very quickly, so I think this is as good a time as any to remind everyone that when I process a payment on your credit card with an amount over \$100, I must charge the 4% that the bank charges us. I really hate having to do this, but it's what the bank charges to use this service.

The next time any of you have a chance to come by the office, you'll probably notice quite a difference in the shop out back. We've given it a face lift. It's amazing what a difference a little paint and elbow-grease can make. I have to give most of the credit to my helper, Bill Motley, who I think has worked himself senseless. I know he goes home at night bone tired—but his effort and enthusiasm are what has made the project possible.

I was truly saddened to hear of the fate of the Spirit of Wichita, and my sincere condolences go out to Howard and Marty Benham. Although I'm sure they are grateful that there were no human casualties, their sense of loss must, nonetheless, be tremendous.

I guess that's all for this issue. Keep the projects rolling, send us progress reports and I hope to see many of you in November at the Oyster thingie.—Susan Stinnett

Goings On at Sequoia Aircraft

We've been quite busy here. In addition to all things related to Oshkosh, we've just had the busiest August in years. Susan and Bill Motley were almost working overtime getting the kits out the doors.

I've been quite busy lately working on the Falco Construction Manual which is due for a reprint shortly. As you may know, the Falco drawings have all been done by hand, with ink on mylar. This method produces a beautiful drawing, but it is tedious beyond description. I probably have 10,000 hours on the drawing board, working on the Falco drawings. The really hard part, however, comes when you have to make a minor revision to the drawings.

It finally just got the best of me, and for the past couple of years, I've been working on a side project of developing the software tools to do all of this on a computer. It's quite an extensive project, but it's now largely done. It means that I can now do all of our drawings on the computer and also incorporate the drawings into the construction manual.

Believe it or not, even the drawings in the construction manual, while done on a computer, have to be pasted onto the pages with rubber cement. That's no longer necessary, and I can now have the entire manual, drawings and all, on the computer. It means that I can now quickly revise and modify the manual. At this time, I have only two remaining chapters to integrate into the computer, and then I will be free to start improving on the manual. You will also be seeing some new construction drawings coming out as well.

Cecil Rives has prepared an extensive checklist for your annual inspection. It's about 8 pages long, and won't fit into this newsletter, but if you need a copy, please contact us. We will be adding it to the list of publications that we have available.

And our next major project around here is to produce another batch of wing spars. You'd be amazed at how much spruce is required for that.—Alfred Scott

Calendar of Events

The Great Oyster Fly-In and Gathering of Stelio Frati Airplanes. November 4 at Rosegill Airstrip, Urbanna. Our guest of honor, former Senator Bob Packwood, will be flying in direct from a goodwill tour of Chickoslovakia. Contact: Dr. Ing. Alfredo Scoti at Sequoia Aircraft.



Sawdust

• Now we are 50. The 50th Sequoia Falco flew on September 10 at the hands of owner/builder/pilot Richard Clements. The test pilot's verdict: "Magnificent".

• Just ease back on that stick. Stelio Wilkinson was in Florida recently and flew the Antonov AN-2, the huge Russian single-engine biplane 'airliner', which he says flies like a steamroller. The flight manual says that in the event of engine or instrument failure in IFR conditions, you are to drop full flaps, haul all the way back on the yoke and hold it there. It won't stall, ever, and it will descend at parachute speed and 20 knots. You're supposed to just wait for it to hit the ground.

• BD-10: 2, Presidents: 0. It's been tough sledding for Peregrine Flight International, of Minden, Nevada, which is developing the Peregrine PJ-2 based on the Bede BD-10. On August 1, a crash in the aircraft claimed the life of the company president, Joseph Henderson, an accident suspected to be caused by flap asymmetry. The previous company president, Michael Van Wagenen, was killed on December 30, 1994 in an accident caused by structural failure of the tail. This could get to be discouraging.

• Bozos without Limits. No one knows what really happened when Bob Herendeen was killed in his Christen Eagle aircraft. He was taking pictures of his home and crashed into a hillside. Friends speculate that the crash might have happened from 'momentary inattention.' The crash caused a brush fire, and a contractor who was building a house nearby jumped in his truck and headed for the crash site. On his way, he hit and killed a real estate broker who was nailing up a sign. The contractor was arrested and found guilty of vehicular manslaughter and other charges. But then Herendeen's widow and his estate were sued for the death of the real estate broker, because the complaint charged that the widow and the estate "did so negligently and carelessly own, occupy, operate, maintain, manage, control and entrust the [aircraft] so as to cause said aircraft to crash, creating an emergency to which [the contractor] was responding as rescuer. [The contractor's] vehicle left the roadway in the course of the rescue, striking decedent and thereby causing fatal injuries and damages to him." The case hinged on whether the harm to the real estate broker were reasonably foreseeable. The judge in the case dismissed the suit prior to trial.

• Media watch. Keep an eye out for the December issue of *Automobile* magazine for an article by Robert Cumberland on Stelio Frati.



Now flying in Germany, Hans Sonntag's Falco has a three-bladed prop in hopes of getting the noise level down, but it's not enough. The plane flew on August 14. Hans Sonntag is on the left in the bottom photo. We'll have a full report on this plane soon.

Mailbox

Thank you very much for your efforts and expense and the considerable contributions of Susan and Jack that made a wonderful Falco/Oshkosh experience! The Tee shirts, mugs and stickers are prized momentos.

While the gatherings Wednesday and Thursday were very enjoyable, the Friday 'Tribute to Stelio Frati' was just great! All of the testimonials were heartfelt but I was especially impressed by the eloquence of Marcelo Bellodi's companion. And seeing such people as Robert Cumberland was another unexpected pleasure.

And of course Mr. Frati and Carla Bielli were the hit of the show.

The Falco owners/builders are people I feel privileged to be associated with.

*Ray Coleman
Quincy, Illinois*

Before the Russian River flooded, I had just completed skinning the tail. After the flood waters subsided, I only found parts of the tail. I am in the process of building a new shop out of the flood plain and should be building again by November.

*Shawn Horvath
San Francisco, California*

We have just about finished the main wing spar. Talk about a project! When we need inspiration, we head over to Chino airport and look at John Shipler's Falco. It sure is a beauty.

*Doug Whittington
Yorba Linda, California*

I continue to make progress on my Falco and enjoy every chance I get to work on it. I am making fuselage rings, and I have finally developed a process that works for me. You once made the comment that many who make their own parts lose interest and give up. In my case, making parts has kept my interest in the Falco when the time and money to pursue the construction of a Falco as a 'major' effort was not possible. The last few years have been very busy for me as I have been involved with my children and their school programs. This period of my life is almost over, and I am glad I have not missed any of it. My son will be leaving for college next month and my daughter will graduate in two years.

During the time the kids have been growing, I have been making continual, if modest, progress on the Falco by making the wooden parts starting with the simplest tail



Dave and Barbara MacMurray, Reserve Grand Champion at Oshkosh '95.

ribs and progressing now to the rings. By having the smaller goals of building each part, I have had the satisfaction of seeing progress towards the ultimate goal without sacrificing the time and money I needed for my family. I expect over the next few years the amount of time I spend on the Falco will increase dramatically.

*R. Dean Malmstrom
Round Rock, TX*

You may recall that my wife Kristen and I came to see the operation there at Sequoia in July of '93. I had come because I wanted to build and was fairly sure it would be a Falco but wanted to visit Oshkosh to make sure there was nothing better. I visited Oshkosh (and the Falco Builders Banquet) and made my decision. There was nothing better. By the end of September, you had my check and the plans were on their way. For all practical purposes, I then fell off the face of the earth because you haven't heard from me since. A great writer I am not, but at least you don't have to worry about me wearing out your fax machine like that Wilkinson guy.

I was truly elated when I opened the Sept. '93 FBL and found that my suggestion to you to adapt a shaper into a horizontal saw actually became a reality, complete with splitter and everything. I started to learn on my trip to Sequoia when we talked to Joel Shankle and George Barrett that Falco builders often contribute ideas to the cause. I just had no idea it could happen so swiftly and before I was even a real builder.

I studied plans, studied catalogs, ordered tools, bought equipment, ordered a spruce kit, reorganized the garage, installed heat, set up equipment, built sturdy benches, built a shaper table and a sanding adapter for the radial arm saw among other things. Oh, and I also got a few pieces of the tail assembly completed.

You aired some correspondence about Timber-Tix adhesive. I received a sample with my spruce kit. I first tested Aerolite and got excellent results even on a sample of wood which was old and had a somewhat dirty surface and was intentionally left that way. I then tested Timber-Tix, using the proper joint techniques. First I found it to be very slippery and hard to hold pieces in position while clamping. Second, on destructive testing, I got about a 95% joint failure directly along the glue line. The glue looked like it might have tiny air bubbles in it, which may have caused this. Honest, I didn't mix it in the blender first. Anyway, I resolved that there would be no further testing and absolutely no Timber-Tix in this builder's Falco. I would personally feel safer with Elmer's Glue-All.

*William R. Davis
Martinsburg, PA*

Timber-Tix is a polyurethane adhesive that is cured by moisture in the wood or air, and apparently it is a characteristic of the glue that tiny air bubbles form in the glue line.

—Scoti



Oshkosh groupies. Back row: Dan Dorr, Karen Rives, Paulo Franke, Marcelo Bellodi, Cecil Rives, Brian Nelson, Perry and Leana Burholm, Marty Benham, John Shipler, Howard Benham, Tripp Jones, Jim DeAngelo, Carvian Brunfield, Quentin Rench, Bob Bready, Dick Reichenbach, Barbara and Dave MacMurray. Second row: Ray Coleman, Rex Hume, Steve Wilkinson, Pierre Wildman, Jack Amos, Susan Stinnett, Jerry Walker, Dan Carsten, Judy and Al Dubiak. Front row: Stelio Frati, Alfred Scott, Carla Bielli.

Impressions of Oshkosh '95

by Susann Flowers and Pierre Wildman

'Twas the first night of Oshkosh, we finally got in.
All met for dinner at the Road Kill Inn.

So, where's this guy Alfred? What's he like?
Does he dress real funny, or have hair in a spike?
Turns out he's normal, stands kind of tall,
wears glasses and talks with a bit of a drawl.

We met lots of people; ate, talked and had fun.
Each had a favorite: Falco's the one!
All owners agreed with a nod of their head,
"It flies better'n it looks" like Karl Hansen said.

The next morning arrived, up came the sun.
Once through the gate, we broke into a run.
There they all were, neat in a row:
eighteen wood Falcos stealing the show.

"The sexiest forty year old on the planet"
Except for my wife, it is, sure as dammit!
They're sexy all right and fast and sleek;
the effort to build one is not for the meek.

The builders told stories, gave tips and clues
about staples and hinges and plywood and glues,
and whether it's better to build it from scratch
or buy it from Sequoia batch by batch.

The novices listened and wrote it all down.
And then they took snapshots of how round is round.
They crawled under Falcos (relieved to find shade)
and looked at the details to see how they're made.

From watching the judges, a word to the wise:
Watch the Falcos—they'll win more than one prize!
At Martine's, a dinner emceed by Scoti
to honor the maestro Engineer Frati.

Before us a legend throughout the land.
An honor to meet him and shake his hand.
We offered our praise (via Carla Bielli);
the most common thoughts, "Magnifico!" "Tuto Bene!"

Four strangers burst in. "Who are they, Honey?"
"Marchetti drivers." "Oh, Harley guys with money!"
Alfred cracked a big smile. Could it be true?
He asked them outright, "Own Harleys? Sure do!"

Like all good things Oshkosh must end.
Off you all go, these wishes we send:
May your tanks stay full. May you fly with the wind.
Have a great time; We'll see you again.

Now Rives, now Wilkinson, Burholm and Coleman.
On Jones and Reichenbach, Bachnak and Benham.
Now Rench, now Dovydenas, DeAngelo and Bready.
On Shipler, on Walker, on Hume and MacMurray.

The longest trip home is for Marcelo Bellodi.
and last but not least, Pawel Kwiecinski.
Point the nose skyward; raise the gear.
Fly far and fast. We'll see you next year!

Many thanks to Susan who arranged all the parties.
(And next year, forget those darn porta-potties!)
Thanks one and all for bringing your planes.
Seeing still pictures just ain't the same!