

Falco Builders Letter



England's latest Falco is a beauty.

First Flight: G-OCAD

by Clive Garrard

Although the following article is about 4 people building a Falco, I apologize in advance if it reads somewhat personally, but I drew the short straw when it came to this particular job allocation!

I started flying in 1988, having overshot the 40 watershed by a couple of years. As long as I can remember, I have gazed up at passing aircraft and dreamed of flying. Some of my earliest memories are of Spitfires, Hurricanes and Lancasters—since I lived close to Martlesham Heath in Suffolk, a WW1, WW2 and post-war RAF testing station—and once, a B36.

However, the possibility of becoming a pilot myself had always seemed so remote that I had never considered it, until I had a major change of circumstance and became an employee instead of an employer. This left my ego dented but my finances healthier, together with the sudden realization that life is indeed not a rehearsal.

Why then, shouldn't I fly?

There was of course no reason, so it was straight into training with no trial lesson. Some time after gaining my licence and having flown a few times with a fellow club member, I joined him in the ownership of a Piper Warrior—albeit my share was small by comparison with his. He eventually traded up to a new and more sophisticated type, which left me grounded again but with my money back. But the bug had bitten, and I wanted my own aeroplane—or at least one I jointly owned. So, by talking to other friends and contacts in our flying club, the idea of our Falco was born.

The three original members were myself, David Nowill and Arthur Crabb. I am a product designer, (art college trained—not

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an engineer), David was a dentist, (now happily retired but working even harder in his own workshop and on our flying club airfield) and Arthur, who runs his own machine tool trading business. We all have manual skills which we enjoy using, but none of us are at all wealthy, so we took the early decision to build as much as we could from plans. Interestingly and very soberingly, our 1991 estimate of the costs was about half of the final total. The difference has been a combination of the effects of inflation over five years, the unknown costs of freighting those parts which we had to purchase from the USA, Value Added Tax (at 17.5% on all purchases!), avionics, paint and a host of other unforeseen things.

(For those UK builders who are not yet aware of this, we did not have to pay duty on our imports and nor should you. You have to register with Customs and Excise as an aeroplane builder, and you will be allocated an End Use Number—which makes your imports *duty free!*)

Almost inevitably over that period of time, the membership of the team changed and in our case, Arthur left, to be replaced by Gordon Blunt. Gordon is a planning manager for a major credit card company and is the only one amongst us who claims to enjoy acrobatic flying, or aerobatics as we know it. He is also a very keen cyclist and Morris dancer (it is said you should try anything once, except incest and Morris dancing)! Morris dancing is an ancient English custom intended to celebrate the fecundity of spring and summer. The dancers (usually a group of six menopausal men) dress all in white for purity, wear ribbons and flowers (even a Falco badge) for fertility, and clash stout ash sticks and sometimes each other, to frighten away evil spirits. This usually takes place outside a village hostelry and is very strenuous—requiring much refreshment. The prime requirement for a Morris dancer is the ability to assume a vertical attitude after the consumption of much ale, without the aid of an artificial horizon or safety net.

We decided to start building in David's workshop, which incidentally is only 3 miles from the airfield, even though we



knew it was not big enough for a complete Falco. We hoped that if we kept our heads down for long enough, something would turn up, so we laboured away for a year or so on fuselage frames, ribs, tail group spars etc, and then two things happened which finally required some decisions to be made. A pair of healthy engines turned up on the market from a severely bent twin Comanche which had been unintentionally reversed into a railway embankment, following a double engine failure (the result of having no fuel aboard), and we decided to knock down an intervening wall in the workshop and push another one further out.

In the case of the engine it meant a couple of long drives (by British standards), to near Stonehenge in order to first inspect one and then buy it. On the second trip, which was in our Aero Club pick-up, David demonstrated how to lose but immediately catch the tail of the pick-up on a wet bend. As he said, 'it is very gentle in the stall'—unlike the Falco, which to me seems very *positive!*

On the workshop front however, we knew we were rapidly making parts which when assembled together would be too big to fit in the current space. It was obvious we had to plan for the capability to make the wing spar and ultimately the aeroplane under one roof—hence the missing wall and ex-

tended length. Even then we knew we would not be able to do a complete assembly of the aeroplane until it was off-site and in a hangar. At times we had an engineless Falco and at others, we had one with the engine but no tail. Even when the tail was in place, there was no room for the rudder or elevators and there had to be a hole in the ceiling for the top of the fin.

We finally moved all the parts to the airfield on May 4, 1996 and assembled it completely for the first time—much to our delight. June 12 was our first engine run (lots of fingers crossed, fire extinguishers etc), and we had only two problems—a misfiring cylinder (caused by the inhibiting fluid), needing a new plug and a little bit of finger trouble with the oil filter ("I admit it"—David). A democratic decision was taken by David and me. We therefore gave Gordon the job of cleaning the oil off the engine, firewall and underside of G-OCAD, because he's the apprentice and needs the experience. He's also smaller than either of us, so quite (un)reasonably we boss him about!

Following painting and final hook-up of all control surfaces etc, we had our second engine run on 28 October. I happened to be in the driving seat, so once the engine checked out okay, I had the pleasure of being the first of us to release the brakes and let her roll. At the time, it seemed like

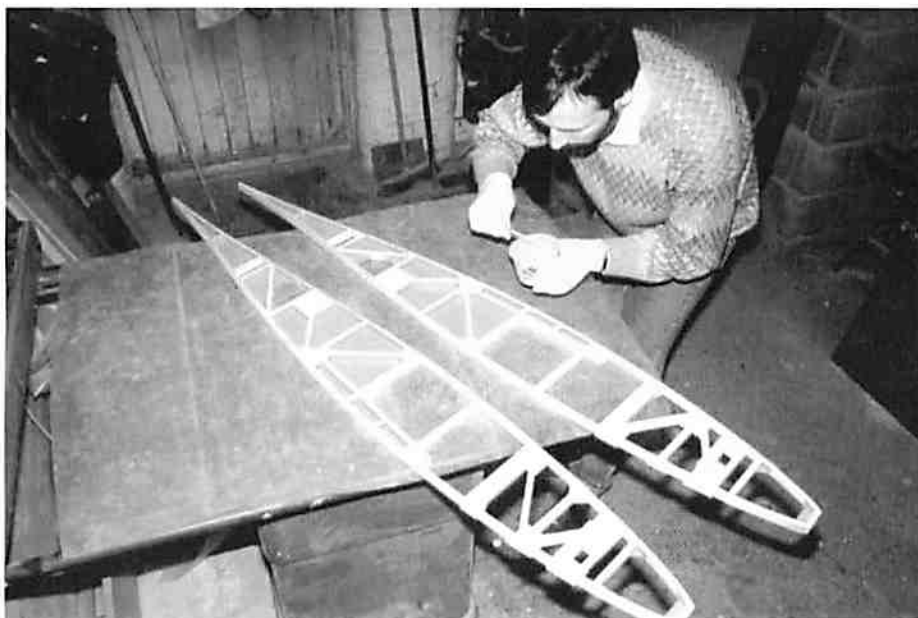
a real milestone—to control and feel the aeroplane that we had made with our own hands over more than 5 years—there was, I think, justifiable cause for a deep sense of satisfaction—and not a little celebration!

Through November we were engrossed in the upholstery, final checking, weighing and preparation of all the paperwork. I know it's been said many times before, but it is worth repeating—that an aeroplane is not ready to fly until the weight of paperwork equals that of the aeroplane itself. At the time, we thought we were in a race with Andy Hart, our chief flying instructor,

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Top: Clive making ribs five years ago. Center: David and Gordon fitting the canopy trim. Above: Engine on, tail off.

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who we had selected (or should I say, who had selected himself), to be the test pilot, because he was due to travel to Oklahoma in the U.S. and fly back a Cessna 182 RG. As the route he was going to fly was via Goose Bay, Greenland, Iceland and Scotland, we thought we would be ready before he was back. We were not! He arrived back safely, and we were still waiting for the Permit to Test to come through from the PFA (the British equivalent of the EAA).

Incidentally, while I was rummaging through some old photographs of mine in that loose-end period, I discovered that many years ago I had photographed a production Falco at Ipswich Airport, in Suffolk, England. I cannot accurately date this, or even remember doing it, but I do know that it was sometime in 1970, because I was completing my masters degree in design and had my first 35mm camera. On the same roll of film as that Falco, my fellow students and I appear in our graduation gowns. What a sight! Little did I know then, that 26 years later I would be involved in building one—perhaps there was something about the design that I was attracted to even then.

It took three weeks for the permit to arrive and as soon as it did, we were at the airfield itching to go—but of course, no matter how much we encouraged each other about the weather improving, it did not. Complete cloud cover at 1000 ft is definitely not first-test-flight weather, especially in the UK, where all homebuilt aircraft are restricted to daylight VFR only.

However, on December 21, while I was on a brief vacation in Germany, the weather conditions, David, Gordon and the availability of our test pilot Andy all came together, so with my previous blessing of “here’s my girlfriend, play with her if you can while I’m away”, G-OCAD flew for the first time.

The first flight was faultless, but the second one wasn’t! The engine had now been in our possession for 4 years—inhibited but not run until June. Although we had installed new hoses and lines elsewhere, we had not renewed any of the engine accessories or injector lines, but we had had the injectors and fuel distributor cleaned, and the engine had run on the ground for something like a total of 2 hours.

On the second flight Andy experienced an engine misfire and hastily beat it back to the field. David removed the injectors and sucked some debris from one of them

which seemed to cure the problem. Both he and Gordon had subsequent observation flights with Andy, and the engine seemed as smooth as a pint of Guinness, (do you think we could get some sponsorship from this?). I arrived home that night and had my first right-hand-seat ride on Sunday 22 Dec. After all those years of lovingly caressing spruce and sucking Aerolite off my fingers—one of which I nearly removed with a 1" chisel, (how could I do that, being a self-proclaimed wood craftsman?)—the experience of flying and feeling this aeroplane was magnificent. It's so responsive and although I've never flown a little jet fighter, that's how it feels to me. It does what you think and zooms effortlessly about the sky—and the visibility is so good! And so to the testing.

The Permit to Test stipulates a minimum of 5 hours testing, including a 2-hour cross country flight, before a Permit to Fly can be considered. All this has to take place within a 25-mile radius of the airfield. Can anyone other than a bureaucrat explain this? We had visions of going round and round like the proverbial bluebottle, but it works out at only two complete circuits plus the climb out and descent. However, when David began planning a route, he realised that the several blocks of controlled airspace and many cities that surround us, (another condition of a UK Permit to Fly is that we cannot overfly settlements), would leave us with very little reasonable space to fly in for that length of time. Luckily, we have an understanding and accommodating PFA, who allowed us to extend our limit to 40 miles. That made it possible to plan a larger and more sensible circuit.

The cross country went without hitch on Friday 27 December, which was a day that started poorly, but with high pressure over the UK, became wonderfully clear and cold. Andy taped up our Peugeot 106 air vents (I spotted them in my wife's car, but commonsense prevailed, and we installed new ones, rather than pinch hers), because even when closed, we are getting too much sub-zero air in! David also welcomed the tape, as he was the observer for that part of the test schedule.

Over a few coffees, we planned the next day's testing, which meant draining fuel from the rear tank so that Gordon could be on board for the aerobatic test—limited to 1650 lbs, to be followed by a fill-up, with me aboard for the flight test.

Saturday dawned even worse than Friday, with fog and a visibility of less than 3000 meters. Miraculously, by 11:30 the sky was



Top: Arrival at the hangar in May '96. Above: Note imitation of nose-wiping airport mechanic in "The Russians Are Coming! The Russians Are Coming!"

a clear, deep azure. We had moved the fuel by then, so off went Gordon and Andy. David and I were mooching about in our own worlds when the message came over the club's loudspeaker that they were on their way back with a misfiring engine! Much gloom and despondency, plus very keen attention on their return to the circuit. With the obvious diagnosis of more sh_t in the injectors, we removed them and did indeed find some. After a very thorough ground engine run, Andy and Gordon were back in the air to finish the test—which was completed without further hitch.

After lunch and a complete refuelling, it was my turn for an observation/record-taking ride in the maximum all-up-weight

flight test. The visibility was fabulous, and our home-made heat valve worked very well. While not feeling excessively hot or cold at any point, the OAT was -7°C at 4000 ft, the cabin was pullover-and-shirt comfortable—or was it that we were both sweating at the prospect of the Vne test?

It was a faultless test however. Andy said he had never flown an aircraft at Vne that felt so smooth, sound and comfortable. On the way back to the field, we caught up and formatted with a Piper Cherokee being flown by my first flying instructor, who had taken me through and a little beyond my first solo, 8 years ago. Andy seemed to be able to fly the Falco with great precision and confidence, and he said afterwards, "if



Top: Clive supervising the painting in September '96. Above: Clive is one happy bunny after his first flight in the Falco.

you had said to me before I flew this aeroplane, that in little over 5 hours time I would be flying precision formation in it, I would not have believed you".

(I must stress at this point that I was not handling the aeroplane. It was in Andy's very experienced hands—and the Cherokee was under equally capable control. No low-hours/new-to-Falco pilot should ever consider doing this).

However, that seems to sum up the flying qualities of the Falco. It responds immediately to every small, precise input, without hesitation or exaggeration and is therefore extremely rewarding to fly. Andy found that he very quickly became comfortable

in it and was most impressed not only by its acceleration, but also by the way it rapidly slows down for such a slippery ship—no doubt in part because of its low mass and inertia. I can see we are going to have to let Andy play with it at times in the future, partly because he has done a superb job of testing it for us so far, but also because he has waited a long time for this as well—in fact he bought a set of plans about ten years ago, but only needed an afternoon to realise that building one was out of his league.

During the tests, which by their nature are not envelope-pushers, we found the Falco needs no trimming at all—except that it does have a slightly heavy left wing. We

have decided to ignore this for the immediate future. She cruises at 150 kts at 65%, climbs from 500 ft to 1500 ft in 58 seconds at 25/25 and in 42 seconds at 25/28. The clean stall is at 55 kts.

So the PFA testing is complete and the reports sent off. Now we have to twiddle our thumbs again until we finally receive our full Permit to Fly. However, not all the time will be wasted because we unanimously decided to replace all the existing injector lines with new ones, which should clear up that little problem—we should have done it earlier. Our belief is that although the engine was inhibited, there was of course no treatment applied to the injector lines, and that these dried out leaving some sort of deposit on the inside walls. Once fuel flowed through them again, and they had been subjected to a period of engine vibrations, the scale started to shake loose and end up in the injectors.

The flight test results were sent off on 31 December with us eagerly expecting our full Permit To Fly to return in a couple of weeks. Inexplicably, it took a day over seven weeks for the document to appear. Inevitably, the weather had taken a turn for the worse again, but we Brits are made of stout stuff, so David and Gordon checked out with Andy on 20 and 21 February (while I was at work), with me completing mine on 1 March—all in winds of 20-30 kts and on a 490-meter runway. These might not seem like ideal conditions, but in this country, if you can't fly in such weather, you often don't fly at all. I also suspect that Andy was pushing our personal envelopes. For me, it was exactly 5 years 6 months from starting the Falco on 1 September 1991 to flying it for real.

Working on this project for over 5 years of weekends and evenings, has moulded us three individuals, with little previous social contact, into a team to be reckoned with—a team that often seems telepathic. Very often words were not needed during specific jobs. We each knew what was going on and the tools or components to hand to the principal worker without being asked for. It has been fun, a real labour of love, a learning experience about aeroplanes and colleagues, and life changing.

Would we do it again? No. (David says yes—but when he's retired—again!)

Have we enjoyed doing it? Most positively, yes!

Have we got the best Falco ever built? Of course we have. □

Guido Zuccoli

Dear Alfred,

It has fallen my sad lot to inform you that Guido Zuccoli was killed in an airplane accident in Australia on March 6. Wayne Milburn called me at 8:30 this morning which was 1:30 tomorrow morning there, and so the date of the incident may be recorded as today's date even though it happened yesterday on our time...

The airplane was a T-6. There was some kind of engine or mechanical failure on take-off. The passenger was not seriously injured.

Anyway, it is a terribly sad thing for me. The month that I spent in Australia in 1993, most of which was spent with Guido, Lynette and Wayne, was one of the most enjoyable and memorable experiences in my life. I had always thought that someday we would get together again either in Australia or here.

You will remember that I introduced you to Guido at Oshkosh '88. Guido and Dennis Sanders were rooming with me because they had shown up at Oshkosh without any room reservations, and I was glad to share with them. I had not met Guido before. The Sanders had restored a WWII Fiat fighter plane for Guido, and they won a major Warbird award with it.

Guido was a consummate flyer. His first airplane was a Chipmunk in which he first learned aerobatics. He had imported the first Pitts S-1 into Australia in 1976 and was on the Australian National Aerobatics Team. He competed at the World Aerobatics Championships in the Soviet Union in 1976 and in Czechoslovakia in 1978.

He has owned a number of Warbirds including a Sea Fury, a P-51, Fiat WWII fighter which he raced at Reno, a T-6, T-28 and others. He later had the only flying Boomerang in the world, and he had other airplanes such as Pitts, J-3 Cub, Tiger Moth and so on.

I asked him if he had any interest in homebuilts, and he said that he had not seen one that interested him. I said, "Well, I am going to show you one that you will be interested in because it is not only Italian but also the prettiest airplane ever designed". And so, I introduced him to you, and as they say, the rest is history.

His was the first Falco to be built in Australia. I was privileged to fly it the 2000-mile round trip to Mangalore in '93 where it



Top: Guido and Lynette in the Falco at Mangalore '93. Center: Guido's hangar and a few of his birds. Above: Lynette and a more affordable bird.

won an award. Guido flew the Sea Fury and Wayne flew the recently completed Boomerang to the show.

Because I was flying the only two-place plane of the lot, Lynette rode with me. I kidded Guido that he was a trusting soul. Not only did he let me fly his airplane, but he let his wife ride with me! He just smiled. He had checked me out with Frank Sanders, and he had also checked me out in the airplane. I was the pilot,

Lynette was the passenger, and we called ourselves "Driving Miss Daisy".

Guido was as accomplished a pilot as I have ever known. He seemed to be equally at home in any airplane from the Cub on up, or down, as the following story will illustrate. I am enclosing a picture of Guido in one of the most interesting airplanes I ever saw. He and Lynette drove me approximately 40 miles through rolling farm country to a village of ten houses or so where a



Top: Guido in the microlight. Center: Dean Hall and Wayne Milburn in the Falco. Above: Guido and Lynette Zuccoli, Wayne Milburn, and Dean Hall at Mangalore '93.

fellow had this homebuilt. The builder was an older man in a slouch hat. The airplane was tied to a tree out in a pasture as if it were a fractious horse.

It was the most rudimentary airplane that I had ever seen and my first impression was that you didn't want to stand too close to it. It was made entirely of .016 aluminum, with typical 'oil canning' plus the rash that you would expect from that environment. It had only one electrical wire with one

switch, the "kill" switch and only one instrument, the airspeed indicator. But at the same time, it was designed as a fairly high performance airplane. In talking to the builder, we found that he was really quite sophisticated, a retired engineer, very knowledgeable and quite impressive. He had designed and built the airplane on a minimal budget.

The point of this story is that Guido flew the airplane, gave us a high-speed pass and

a wing-over, and did his usual perfect landing. He could fly anything.

Guido had survived two incidents in the Pitts S-1. In one, he was doing an airshow and was making an inverted turn back to the runway when he realized he was low. He caught some wires with the wing and cartwheeled into an inverted crash. He was not injured and credited the structural integrity of the Pitts for saving his life. The other incident was the result of an engine out. He landed on the soft edges of a river dam and once again ended upside down, and again with no serious injuries. He also had an engine failure in a Sea Fury which resulted in an uneventful wheels-up landing, and an engine-out while racing a T-28, this time landing without any damage. He knew the risks.

Guido was a quiet man and a modest man. When the awards were presented at Mangalore '93, he stayed in the background. Lynette was given the Falco award because it was her airplane. Wayne accepted the Boomerang award.

His good friend Dr. Hilton Selvey, who first flew competition with Guido 25 years ago, tells me that he "never heard Guido use any dubious language, not even a 'damn'," and that "his outstanding characteristic was his generosity and kindness. I never heard anyone express anything but admiration for him". Having known Guido for a much shorter time, I would concur with all of this.

Hilton also said "he was very circumspect in his criticism of others, and the harshest word I ever heard him utter was to refer to someone as a 'nitwit'".

He also had other interests outside of flying. He loved to make Italian sausage, owned a share of a vineyard and traveled to Italy every year to visit his mother and brothers and to enjoy skiing. The world is a poorer place for his passing. There will never be another Guido.

My heart goes out to Lynette, their daughter AnnaMaria and her husband Matt, and to Wayne Millburn. Wayne was like family to them, and they were all like family to me.

We are all diminished by the loss of someone like Guido Zuccoli.

*Dean Hall
Ft. Collins, Colorado*

What terrible news, and what a loss. If you'd like to write Lynette Zuccoli, her address is: Gray Gums—MS 617, Toowoomba, Q. 4352, Australia.—Alfred Scott □

Vern Raburn's Connie

by Stephan Wilkinson

This article was originally printed in *Pilot magazine* in England. Our excuse for publishing it—other than that Steve wrote it—is because Vern is a Falco builder in the sense that he's got a set of plans, but he's been so busy starting or running companies that he just hasn't had time to get around to building one yet. Have patience.—Scoti

I have just returned from flying the world's biggest private plane. No arguments, now: Forget about the sheikhs' Jacuzzi'd 747s and the gold-fauceted Boeings of industry barons, for I'm not talking about professionally flown corporate aircraft. Consortium-owned bombers like the Confederate Air Force's B-29—or, for that matter, Kermit Weeks's privately owned but nonflying B-29—don't count. And you can't claim that the several B-17s and B-24s in private hands should be considered, for Vern Raburn's Lockheed 749A Constellation has got them beat on wingspan, weight and horsepower. To say nothing of sheer sex, exoticism and mystique.

Those who have flown to the rumbling beat of 72 pistons the size of garbage pails driving flailing propellers, back when air travel was an adventure for reasons that had nothing to do with Semtex, can't help but remember "the Connie." Legend has it that she—Queen of the Skies, always a she—was designed by Howard Hughes. Actually, the wacko in the sneakers simply set forth TWA's speed, range and passenger-capacity specifications for what it needed in a new transcontinental airliner and let irascible Kelly Johnson, creator of Lockheed's P-38 Lightning, design the bird. (In fact, the basic Constellation has P-38 wings scaled up roughly two and a half times, though the later Super Gs and other stretched models got a different wing.)

Legend also has it that the Connie's distinctive fuselage, a gleaming curve as erotic as Marlene Dietrich's outthrust leg, was airfoil-shaped "to provide extra lift." Also nonsense: the unique barracuda profile got the tail up out of the hammering propwash at one end of the airplane and put the stalky nosegear barely close enough to the ground at the other so that the huge props had adequate clearance. Of course, we'll never see its like again, for it's far more efficient to build beer cans with wings than to let the wind sculpt a shape.

One thing the legends did get right is that the Constellation's classic triple tail allowed the airplane to fit into TWA's exist-



Dottie Hall and Vern Raburn. Both are veterans from the early days of Microsoft, where Dottie was a graphic designer.

ing hangars. It also allowed several generations of Connie pilots to boast that, "It takes a helluva man to handle three pieces of tail at once."

I'm one of them now, for Vern let me fly his airplane.

"Half the fun of owning this thing," Raburn claims, "is watching other pilots fly it. I'm a really lucky guy, financially, and I've always enjoyed the opportunity to let other people experience some of what my good fortune has brought to me." Raburn's good fortune began when he got a case of entrepreneuritis and quit a good job with the huge American manufacturing company 3M. In 1976, he opened in Los Angeles one of the very first computer stores in the United States. "The idea that somebody could actually own their own computer was so amazing to me," he laughs. "About like somebody owning their own airliner, in fact."

Raburn went on to pioneer the concept of selling software individually rather than making buyers take whatever was bundled with the machine. As a result, a new company called Microsoft hired him as its eighteenth employee, to start its new retailing division. There he met Microsoft founder Bill Gates's partner, Paul Allen, and today Vern Raburn is president and CEO of the Paul Allen Group—owners of two major professional sports teams, largest outside shareholders in Steven Spielberg's DreamWorks studio, provider of a soon-to-be-lucrative ESPN content-based Internet site and investors in everything from software design to modem and wireless technology to near-zero-emissions vehicle research.

Raburn's Connie, a "short" Model 749, never served as an airliner. She was delivered to the U. S. Air Force on the last day of 1948 as a C-121A and immediately went to work shuttling across the Atlantic from Massachusetts to Frankfurt, carrying supplies that then went to Berlin as part of the famous Airlift. She was then fitted with a relatively plush (for the military) interior and used as a VIP transport for two decades before being sent to the boneyard in 1968—a time when riding in a Connie must have been regarded as punishment rather than reward for any "VIP."

In 1976, s/n 2601 came out of the boneyard to be refitted as a sprayplane, in which guise she served for eight years in Canada, dousing pine forests with spruce budworm poison. Her next moment in the sun came in 1984, when actor John Travolta bought the run-out hulk. Travolta was a boy when the Connie still ruled the skies in the mid- and late 1950s, but he vividly remembers them muttering westward out of New York's La Guardia Airport, clawing for altitude as they overflew his family's New Jersey home. Newly prosperous, Travolta was Saturday Night Feverish to restore the airplane, but that remained for Vern Raburn to do.

"To me, the interesting triad is technology, commerce and society," Raburn muses, "and the Connie is one of those fascinating loci where all three come together. This was the airplane that the airlines really started making money with. This is the aircraft that said, 'Here's what air travel is all about.' The DC-3 was the airplane that proved you could fly with speed and safety, but the Connie took it the next step: speed and safety plus comfort.

"It wasn't the jets that killed the ocean liners, it was the Connie. The Connie was the first airplane that could get above most of the weather, that eliminated those days when half the passengers were barfing, the days when the stewardesses passed out gum to chew so your ears wouldn't block up, the first one in which you could cross the country without stopping to refuel somewhere like Tulsa."

"She looked like an anteater on the ground, but she was so pretty in the air," recalls Helen Emberson, of Connecticut, a former TWA hostess who worked aboard transcontinental and transatlantic Connies in the 1950s. "Oh, it was the golden age. It was slower, so you had more time. The passengers weren't as rushed. You had a chance to talk to people. It was more genteel, and the appointments were just as comfortable as they could make them. For a long time, our Connies were all first class. The first time I saw a coach configuration, I thought my gosh, it looks like a theater. But it was nothing compared with what it is now."

"People dressed up to fly. At least they dressed as though they weren't going to the health club. I remember how horrified I was the first time I saw somebody come on wearing jeans. Noisy? Oh, no. If you sat right up over the wing it might be a little noisier, and there were a lot of deaf pilots, but it wasn't that bad."

TWA awarded its first-class Connie passengers colorful, hand-lettered "Transatlantic Flight" certificates, with space at the bottom for up to eight gold stars denoting repeat trips. Air France made its Connie ocean flights even more special. Each pair of the 18 seats reclined and flattened to become a double bed, giving new meaning to the luck of the draw in determining a seatmate.

Katie Morvay flew as a TWA hostess in the mid-'60s, when the Connies were aging stars upstaged by TWA's brand-new 707s and Convair 880s, but Morvay, who today lives in Maryland, still preferred the beat of the big pistons. "There was an impersonal feel about the jets," she recalls, "because you had two or three times as many people on board, and you couldn't give the kind of service you could on a 47-seat Connie. Yeah, they were one-class airplanes—all coach—but up at the very front, ahead of the galley, there was some sideways seating. The people who sat up there tried to sit in them all the time. I had one group of six businessmen who rode from Columbus to Washington in them every Friday afternoon."

"We served full meals on most legs, and you got to know some of the people. It was very special to fly back then, even for the short runs. You tried hard to make it really interesting for the children, because you wanted them to have an especially good experience."

But it wasn't all graciousness. Constellations, with their primitive pressurization, often flew at lightplane altitudes on shorter legs—10,000 to 18,000 feet, smack in the turbulent clouds. "I remember one lady who threw up eight times between Dayton and Columbus," Morvay muses, "and the circulation in those planes wasn't real good. So if somebody was sick, it permeated the cabin. We carried an awful lot of ammonia ampules."

Denver aerospace engineer Ralph Jones, a college student in Atlanta in the late 1950s, traveled home to Miami during school breaks and always chose TWA Connies. "First class was in the rear, where it was quietest, so I'd sit all the way forward. The nose taper gave a small amount of forward view, and I could see the glow of Miami on the horizon a half-hour out."

"I picked night flights so I could see the exhaust flames. On takeoff, they would bathe the nacelles in great, orange-red plumes that snapped from side to side like a flag in a gale. Then they'd go to a short blue flame on the first power reduction, and finally you could see them thin out when the flight engineer was refining the mixture one engine at a time."

"And the starting ritual was a show in itself. The first puffs of oily smoke would curl up in a confused ball, wondering where to go, until that monster prop whisked it out of existence. On takeoff, the noise was overwhelming, rich in specific sounds. Exhaust noise, prop vortices, clanks, pops and whines as the landing gear came up one leg at a time, all manner of throbbing frequencies. I guess you could say the character of an airplane depends heavily on its parts count."

In the case of a Connie, it also depends heavily on its flight engineer. "Hell, anybody knows the flight engineer ran the Connie," laughs Martin Hall, an Alaskan who spent 8,000 hours doing exactly that. "We just needed those other guys to put the gear up and down and answer the phone. Oh, they did steer the plane a little bit, but it never seemed to tire them out."

"It is a flight engineer's airplane," Vern Raburn indeed warns me when I arrive for

our mission. Raburn has a professional crew—two pilots and an engineer, plus four permanent maintenance technicians—that ferries and maintains the airplane for him. "The pilots just point it. Touch the throttles and you're in trouble." The flight engineer's position in most of today's jets, if it exists at all, is largely the bookkeeper's chair, from which a baby pilot can observe line operations without getting in the way (the Concorde and early 747s excepted). Back in the era of big reciprocating engines, flight engineers were professionals. "If you ever walked up to one of them and said, 'Congratulations, now you can be a pilot,' he'd punch you in the nose," Raburn points out.

N494TW's F/E is Tim Coons, a slight, semi-toothless young man with a balding head of shoulder-length hair that gives him an unfortunate resemblance to the destructive comedian Gallagher. Coons, with long heavy-airplane maintenance experience on the North Slope of Alaska, is the kind of guy who can change a 350-pound Connie wheel and tire singlehanded on an empty taxiway in less time than it takes me to jack up my Falco in a fully equipped hangar.

Coons leaves me in charge of the airplane, sitting nervously at his complex panel after he fires up the left inboard engine and scurries down the boarding ladder to check an oil leak that he hopes he's fixed. "Just pull the mixture if you hear me yell." All I can hear is #2 running at a loping 600-rpm idle, so slowly that it sounds like a pile of enormous tin buckets clattering round and round inside a clothesdryer, but eventually Coons returns.

"Yeah, it's running like that because I think we've got a bad mag at idle—see the differences in the CHTs there?—and we're only running on nine cylinders." Coons' workstation is a dark warren of gauges and levers, the power controls up inside a cubbyhole against the right wall of the aft cockpit. On the small linoleum desktop is the oscilloscope of an ignition analyzer. Its flickering, luminescent-green trace shows God knows what—the firing of the plugs?—and can be set to probe any engine, any cylinder, any point during the power cycle.

The L-749 Connie—the "Baby Constellation"—has 2,750-horsepower Wright R-3350 engines, but they aren't the infamous Turbo-compound Wrights of later Super Constellations. In an effort to squeeze ever more power out of the already-complex engines, Wright eventually added three

power-recovery turbines to each engine—essentially exhaust-driven turbines, like turbochargers, that fed their torque directly back to the crankshaft via quillshafts and gears. The earliest -3350s—particularly in Boeing B-29s—had incendiary proclivities, largely because they had hot-running cast rather than forged cylinder heads, carburetors that provided excessively lean mixtures to some cylinders, and a forward-mounted exhaust collector for the front bank of cylinders, which nicely superheated the cooling air as it entered the nacelle.

The Turbocompounds were torches as well, usually due to oil leaking onto the literally white-hot turbines through the power-recovery shaft seals. (“When they first put the PRT engines on the Connie, they melted some of the upper wing skins,” Raburn says. “They finally had to insulate them with metal jackets nearly an inch thick.”) But the interim R-3350s, by that time fuel-injected and with a revised exhaust system, were apparently good engines—never as popular as Pratt’s myriad R-2800s but hard to beat for torque: after all, each cylinder displaced just over three liters.

Preflighting, pulling remove-before-flight pins, attaching the nosegear-steering drag link, securing the doors, running pilot and engineer checklists and starting the four engines takes a good 45 minutes. Imagining throttle/mixture/spark/prime lever-wiggings appropriate to the engines’ complexity, I found to my surprise that the big Wrights start about as easily as my little Lycoming. It’s all in the shouting, and the routine goes like this:

Says the captain, who can see the left engines and reach their overhead-console starter-motor switches: “One is clear! One



Jim Koenig—EAA

to turn! One turning! One, two, three, four, five...” When the count reaches 12 silent blades swinging past the cockpit window, the copilot, who can’t see the left engines, is supposed to know enough to flip the magnetos on. There’s an explosion or two, brief silence again, a sudden roiling gout of what seems to be coal smoke, some wheezing, more cylinders joining in and finally the tin-cans-in-a-dryer loping idle. “One running!” the captain calls out for the engineer, who is assumedly also waiting for cries of “One a mass of flames!” or “One spitting out a whole lot of oily parts!”

For the right-side engines, the copilot assumes shouter and starter-motor duties, and the captain is consigned to the mags. It’s all quite glorious—far more exciting than the tik-tik-tik-hummmmmmmmm and lazy erecting of instruments that signifies a jet’s awakening.

It’s another 15 minutes worth of warmup, checklists and runup until we turn onto the runway, and the routine isn’t done yet. The Connie has “walking struts” on the main gear, to soften landings, and they must be positioned for takeoff. Follow me though, here: Descending to a landing, a Connie’s main-gear legs thrust appreciably forward, pulled into that position by 10,000-pound steel springs. At touchdown, those springs—plus the normal strut oleos, of course—help absorb the initial impact and wheel spinup by letting the wheels move aft about a foot, straightening the gear legs until they’re vertical. During the rollout, the airplane “falls off” the straight-up-and-down gear position and the main legs revert to a forward slant.

So before takeoff, the gear legs need to be straightened, the airplane like a sprinter going into the “set” position on the starting

blocks. The pilot does this by tapping the brakes as the flight engineer brings the engine up to 1,700 rpm, and how gently it is done is a mark of an experienced Connie captain. (How nicely he’s able to cushion the opposite motion of the gearlegs during rollout is another.)

Ready to go now, you intercom the flight engineer for max power—never “takeoff power,” which to a professional engineer means take off power. The PNF calls out “airspeed alive” and then 60 knots, which is your signal to let go of the nosegear-steering valve with your left hand and go to rudder control. Your mate calls V1, which comes up at about 100, depending on weight (we were at 78,500 pounds, with 2,100 gallons of the total 5,820-gallon capacity aboard and about a dozen people). Start to rotate—it doesn’t take an enormous pull—and you should be flying when he calls V2 (best engine-out climb speed).

Positive rate, go for 120 knots as the gear comes up, which I’m told can be an odd-looking procedure as seen from below. Whether it’s the result of misrigging or a heavily challenged hydraulic system, some Connies apparently bring their gear up one leg at a time, in fits and starts. Flaps up when the pumps are done with the gear, call Scottie in the engineroom and whistle up climb power, pick up 155 knots for the climb and you’re on your way to Paris, Cairo, Bombay....

Well, Rochester, New York, in my case—a 30-mile cross-country from the small airport where Raburn’s Connie had just appeared in an air show. En route, we climbed to 6,500 feet and did some airwork and stalls. The Constellation’s forward cockpit is no bigger than a midsize business jet’s, for it is at the very point of the arrow. Yet the deck space behind the engineer’s



Mike Stenke—EAA

seat was big enough to hold three or four gawkers standing around watching while I flew. (The area once held a navigator and a rack of radios the size of a small refrigerator. Both have been dispensed with in Raburn's airplane.)

As in a DC-3, your nose is only a foot or so from the windshield and the nosecone can't be seen, so the view is actually excellent. It's impossible to see the engines, but there's a small porthole with a lens on each side of the cockpit that provides an "objects in mirror are closer than they appear" view of the nacelles.

Raburn and his crew cruise N494TW gently, at about 40-percent power, burning about 85 gph per engine for a 200-knot cruise. Back when gasoline was the cheapest part of running an airline, operators would cruise their 749 Connies at 65-percent power, earning another 40 knots at the expense of vastly increased fuel flow.

Clean or dirty, the Connie stalls gently enough that passengers were standing around chatting in the cabin—largely a cargo area with a dozen seats forward—while I put them through half-G parabolas on the recoveries at about 75 knots gear and flaps down, 92 knots clean. "We could deep-stall it," Raburn's instructor-pilot Bill Dodds said, "but not at this altitude. Besides, it hammers too much." That's okay, Bill, straight-and-level pays better anyway.

Dodds has been flying Connies since the early 1950s and has 9,000 hours in them. "Get him to tell you about the time he was 26 years old, coming back from Korea with a Connie full of wounded, and he lost three engines 250 miles short of San Francisco," Raburn will later say. "He flew the last hour and a half in ground effect, went un-

der the Golden Gate Bridge and was barely able to turn right and land."

Okay, let's see how much of a man it takes to handle three pieces of tail with all four running, with Rochester's 8,000-foot Runway 22 as a playground. The controls are well-harmonized—heavy, heavy and heavy—yet they're no heavier than they have every right to be. The airplane is... let's call it "ponderously responsive." Since it's a big P-38 wing, the ailerons have the hydraulic boost that was originally developed for the Lightning as an anti-flutter mechanism.

Downwind at 130 knots with takeoff flaps and call for gear down, turn base at 130 and slow to 120, go to 110 on short final and 1.3 V_{SO} at 50 feet, then begin looking for the ground. As the airplane slows, it becomes increasingly important to lead corrections with firm rudder and crank in lots of aileron but roll it back out as soon as the airplane begins to respond, else you'll get into a wallowing series of overcorrections. But don't be shy with control inputs.

At 500 feet, the F/E reaches up and snaps on the emergency hydraulic pumps, which will at least give you rudder and elevator—but manual reversion on the ailerons—if anything goes awry.

Bill is calling for the power settings, since I'd have no idea what to ask. "Give me 25 inches, Tim... 20... 28, 28 [the bozo's too slow]...100 bmap [on the F/E's torque meters]... 20... ease it off..." Some pilots, including Raburn, take over the throttles themselves at 500 feet, but Dodds's technique is to leave it all the engineer, who can make or break a landing. "We could never see much out of any of the windows," ex-F/E Marty Hall recalls, "even that little lens-window. You could

see more in the reflection in the fuel-flow gauge faces. If you were turning base, you'd see the runway through the captain's window. Otherwise, all you saw was sky.

"As for how we knew when to roll off the power, you could feel her float and settle. The sound changed as she got close, and you'd just know. Then again, you could make her drop out of the air by opening the oil-cooler doors and cowl flaps too soon. Or just as the wheels were about to touch, suck them all back in. The drag just disappeared, and you'd need another 5,000 feet. We could almost land her ourselves from back there."

My first landing is adequate, though on the go I have my feet a bit too high on the rudder pedals and get to touching the brakes, establishing a weave that must have any passengers far aft whacking from wall to wall. The second touchdown is a perfect squeaker, earning me a congratulatory handshake from a fellow Connie first-timer, TV producer Ed Shipley, who usually flies his F4U Corsair, P-51 and T-6—his very own three pieces of tail.

Between my stints at the yoke, I wander the ancient cabin. Peering out at the seamed and jointed old nacelles that are thrumming us along, I can see what ex-passenger Ralph Jones meant about character depending on parts count. We've become accustomed to glancing out the window at the polished silver potatoes that encase a jet's engines, yet there is no drama, no movement, no sense of thrust. Press your nose against a Lockheed Constellation's porthole, however, and you're face to face with primordial power.

Black oil creeps and spiderwebs back along the battered aluminum, thankful to be free of the inferno inside, and a variety of flaps and louvers vibrate in the raging torrent of air thrown back by the massive, geared, slow-turning propellers. The nacelles are dented by nearly half a century of flung ice, runway rocks and mechanics' mallets, and exhaust pipes the size of household sewers are so hot they're white-orange at night. It's impossible not to sense the barely restrained mechanical hysteria being created a few feet from your face.

"The DC-3 you flew because you couldn't bear the thought of spending 10 hours on a bus," Vern Raburn says. "The Connie you flew because you wanted to. This airplane was the ultimate refinement of the piston airliner." And a reminder of the adventure, thrill and specialness of travel that has been swept away by efficiency and ubiquity. □

Construction Notes

by Al Dubiak

Here are a few pictures of the way we constructed the wheel well doors.

We made a belt out of 1/4" O-ring material and wrapped it around the tire and a small pulley driven by the electric drill. We used two-sided tape and attached 60-grit sandpaper in strips over the outer surface of the tire.

Then we cut a 2" thick foam board to the shape of the wheel well and stapled small stops on the sides of the wheel well so the foam board would only go down about 3/4". With the tire on the gear leg and retracted into the well, I marked the center of the tire location on the wing surface in both directions so that when the foam is inserted into the well without the tire, I could mark the center on the foam surface. We then cut out an 11" diameter section of the foam using the center marks from the tire reference marks.

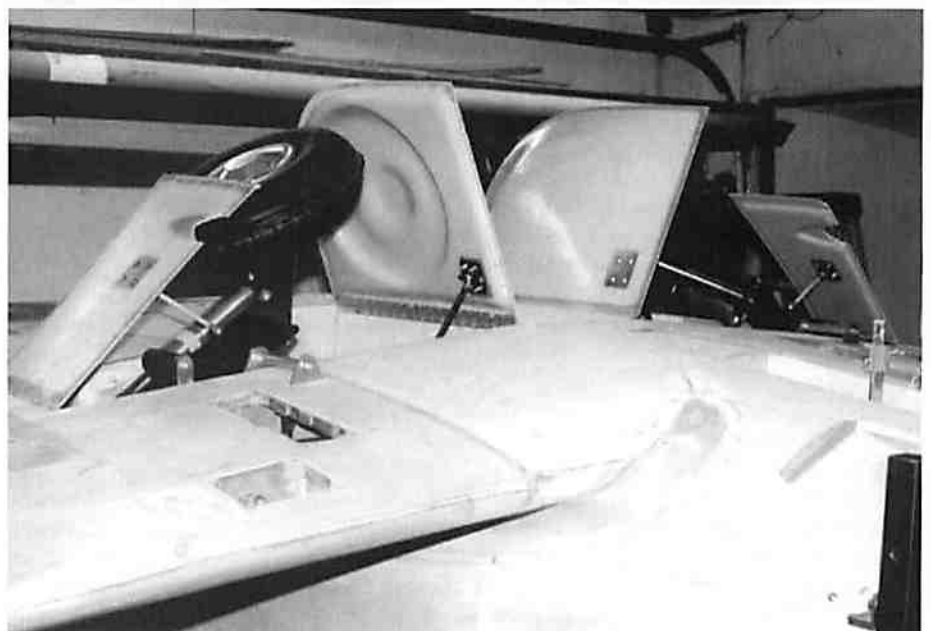
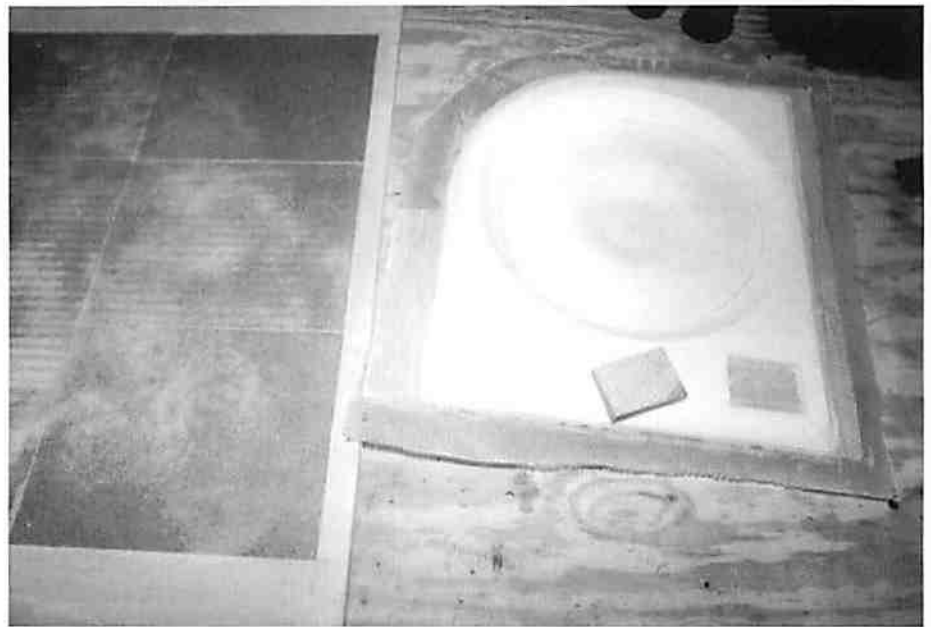
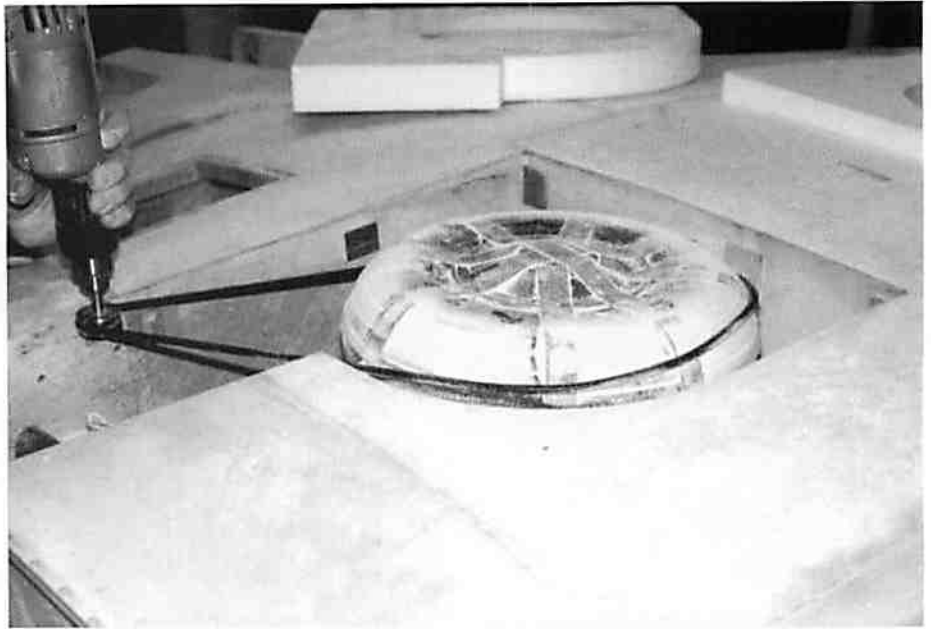
We then put the tire back into the wheel well with one of the axle spacer washers and pressed the foam board down while rotating the tire. We continued this until the tire cleared away the foam. This gave us the same shape as the tire. We did this same process three more times adding another washer spacer each time to give the proper clearance between the tire and the gear door.

Then we removed the tire, positioned the foam back into the well and pushed it down to the stops on the side walls. Then we made a platform out of plywood to hold the 11" diameter piece about 3/4" below the inside surface. I then used a can of spray foam to secure the 11" piece.

Next I shaped the outside surface to match the wing and fuselage surfaces. After this, we applied the fiberglass cloth and epoxy to the outside surface. When this hardened, we then removed the door and placed the tire back into the well. Then we did the same process again, rotating the tire to make the inside 11" piece take the shape of the wheel and hubcap. Then we applied the cloth and epoxy to the inside surface.

Please remember that when you use this method, the airplane is upside down and thus the landing gear legs have a tendency to rest in the wheel wells at a slightly 'higher' location than they will when right-side-up. In flight, the screwjacks will be under tension and this is not the case when the plane is upside down.

—Dr. Ing. Alfredo Scoti



Sawdust

- Almost in the air. Stan Harper in England is rapidly closing in on the first flight of his Falco, which, regrettably, must be done by someone other than Stan because he's developed a few health problems along the way. Willard Hofler in Elizabeth City, North Carolina, is similarly close to flying.

- Finally did fly. Butch Harbold's Sequoia 300 took to the air the other day. Butch reports it flies quite well and "handles like a Falco". The airplane was started in 1978, so that's about 19 years from start to finish—for an airplane that we once hoped would be quick to build, back when everyone thought that 'fiberglass' meant 'quick build'. When asked about this, Sequoia President Alfred Scott replied, "Well... er... um, I think... well... gee whiz... I didn't know that... oh, kiss off!"

Don't let anyone ever tell you that making a fiberglass fuselage shell mold is an easy thing. And actually there were a few extenuating circumstances, beyond our own tardiness. There were a number of people who 'worked' on the airplane along the way and who created more problems than anyone should be saddled with. It fell to Gar Williams and Charles Gutzman to fix these things, including a 10-inch engine mount stretch to compensate for an airplane that was unbelievably tail-heavy due to added gussets and the use of 1/4" steel in the tail when .063" was called for.

- Bad dog. The British Airways baggage handler was distressed to see, when he removed a dog carrier from the cargo hold of a 747 recently, that the dog had died. The resourceful man rushed to a nearby dog pound and found a mutt that looked to be identical, so he switched them and rushed back to the terminal. "That's not my dog!", the lady said when seeing it for the first time. "How can you tell?", he asked. "My dog's dead. I was shipping him back home to bury him."

- On heavily-borrowed words. *Oh, I have slipped the surly bonds of earth and danced the sky on laughter-silvered wings...* So begins one of aviation's most famous poems, *High Flight*, a sonnet by a young American pilot, John Magee, who was one of the first Americans to be killed in WW2. However, recent research by Englishman Tony French reveals that many of the words were borrowed, or have stunning similarities with words in other poems published in *Icarus—an anthology of the poetry of flight*, published by Macmillan in 1938. Magee wrote *High Flight* in 1941.



Top: Willard Hofler's Falco is ready to go. **Above:** Jim Petty's is doing just fine.

For example, in an earlier poem *New World*, G. W. M. Dunn wrote *With zest we soar on laughter-silvered wings/ From fevered ways, panic and petty deeds*. From the same poem, Dunn's *hushed limbs and the lifting mind becomes Magee's silent, lifting mind*. Dunn refers to *the shouting of the air*, while Magee has *chased the shouting wind*.

Magee's *surly bonds of earth* are close to Dunn's *earth fetters and the shackling sea*. Magee's next-to-last line talks of *high untrodden sanctity of space*, which bears close resemblance to the already published line *Across the unpierced sanctity of space*. Magee's *danced the skies* echoes another poem which contains *I have danced the streets of heaven*.

But the most strikingly similar line comes at the end. Magee's most memorable line was: *Put out my hand and touched the face of God*. Yet Cuthbert Hicks had already published *The Blind Man Flies*. Here it is:

I am blind: I have never seen/ Sun gold nor silver moon,/ Nor the radiant noon. They speak of the dawn and the dusk,/ And the smile of a child,/ Of the deep red heart of a rose,/ As of

God, undefiled. But I learnt from the air to-day/ (On a bird's wings I flew)/ That the earth could never contain/ All of the God I knew. I felt the blue mantle of space,/ And kissed the cloud's white hem,/ I heard the stars' majestic choir,/ And sang my praise with them. Now joy is mine through my long night,/ I do not feel the rod,/ For I have danced the streets of heaven,/ and touched the face of God.

But let us be kind. Magee died in a training accident shortly afterwards. He was 19 years old. All writers begin by imitating others and only find their own voice after years of writing, so it's only natural that a homesick boy suddenly off at war would try his hand at poetry by first borrowing and improving on the work of others. And there's no way the young pilot could ever have known what fame would attach to the poem.

Was it Edison who said, "Good designers borrow. Great designers steal.?" So it goes for words, when you are 19 and far from home. Besides, no matter who wrote the lines, what better words are there to end the poem but *Put out my hand and touched the face of God?*

Mailbox

I'm so proud of my little airplane that I just have to boast about it and at the same time use it as an excuse to see if we can find out exactly who has flown farthest in a standard-tanked Falco.

On 26 February, N747SW carried me non-stop from Duluth International Airport, in Minnesota, to Dutchess County Airport, south of Poughkeepsie, New York. That's an airways distance of 850 nm (978 statute), and I did it in exactly 4 hours and 30 minutes, block to block, IFR most of the way at an altitude of 17,000 feet, for an average ground speed of 188 knots (217 mph). Fuel burned was 33.1 gallons for a reserve of 6.9 gallons, or close to the IFR-required 45 minutes. (For once in my life, I was legal. Oh, I take that back; I wasn't IFR-current. I can never remember whether it's six hours, six approaches or six scotches.)

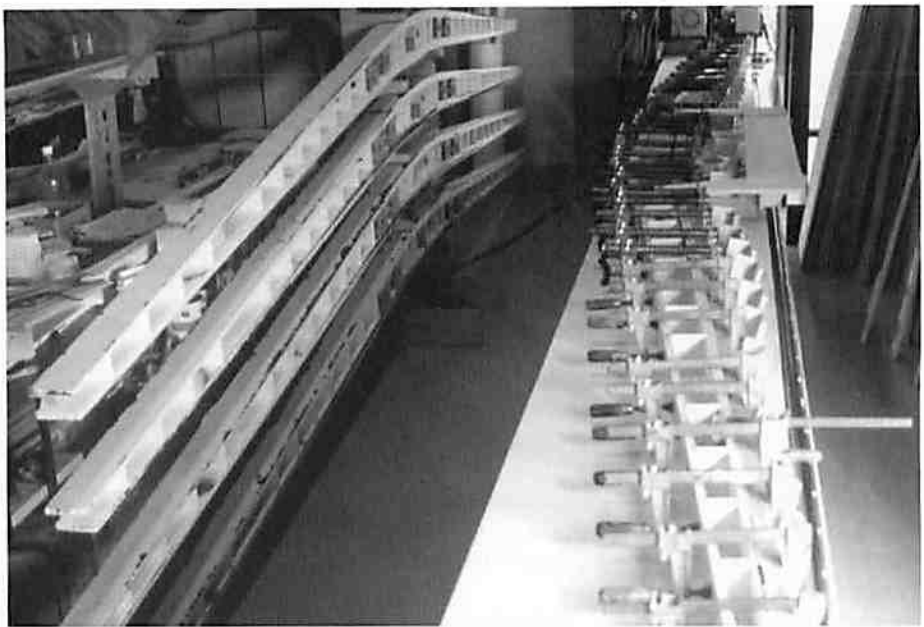
Tailwind component was about 40 knots, the fuel burn way up there was about 7.3 gph, and at one point, the Shadin Microflo was showing me getting an econocar 31 mpg. It bears mentioning that I have the less efficient 180-hp engine, but then if I didn't, I'd never have gotten that high. (Highest I've had the Falco has been Flight Level 190, where Center thought the type identifier F8L meant I was a Vought F-8 Crusader.)

Who can beat that? I'm sure there are some of you out there who have done better. Remember, ferry tanks don't count.

Also, you might want to inform other Falco builders that your suggested fix for my oil-pressure problem worked just fine, in case anybody else is having similar problems.

As you may remember, my problem was that the oil-pressure gauge would frequently go to the extreme, pegged, full-pressure position. When everything was seemingly "normal," the indication was at the top of the green, but frequently in cruise it would go full-scale to the right. Seemed to indicate just fine on the ground, and usually in flight—if I cared—I could get the indication to at least temporarily return to "normal" by throttling full back to flight idle briefly, at which time the needle would drop back into the green for a while.

My fix was an 18-gauge ground wire attached physically between the oil-pressure transducer body and the engine block. I simply trapped one end of the wire (stripped, of course) tightly under the rubber-insulated clamp that holds the transducer in place on



Spar-making time at Sequoia Aircraft.

one of the engine-mount tubes, and put a lug on the other end of the wire and attached it to one of the sump bolts.

Without such a ground in place, the transducer is grounded solely by the braided-steel-jacketed hose that connects it to the block, since the transducer is mounted (I assume, in most cases) by standard rubber-lined DG clamps, or whatever those things are called. It's therefore sitting in space, grandly insulated, if for whatever reason (a film of sealant or oil at the threaded fittings?) the hose doesn't make the ground.

My oil-pressure indication is now solid and is middle of the green rather than the previous "normal" top-of-green indication.

*Stephan Wilkinson
Cornwall-on-Hudson
New York*

After a hiatus of about 5 years when time, energy and interests were necessarily directed away from Falco construction, I have resumed building. The past 4 or 5 months have been taken up with reacquainting myself with all of the constructed pieces of the Falco. Reworking some pieces that didn't meet my standards, and just getting a feel for continuity.

Since I have no hands-on help, work progresses at a very slow rate. Innovative methods for "holding the other end" take up a lot of time, but I am still shooting for the longest building time record, and that is some consolation.

Currently the wing is beginning to come together. Ailerons and flaps are completed, except for skinning, wheel well forms completed, all ribs and spars com-

plete, wing jig complete and spars installed. All of the fuselage frames and all the tail feathers were completed before the hiatus and only await the fuselage jig.

Also, I am thoroughly confused by all of the arguments, pro and con, pertaining to Aerolite. Is it safe to use or not? Is there something better? What do you recommend now?

Dan Martinelli
Montrose, B.C.
Canada

I thought I was fairly clear about Aerolite. Yes, we still like it, and we use it here, however all glues have limitations and there are no perfect glues. That's just the way it is.—Scott

As of Christmas eve, Australia's second Falco has a 'C of A'. It took only 20 months and has an 8-page weight-and-balance entry in the flight manual.

When I fitted a King KR87 ADF, I installed the antenna in the fuselage under the rear tank. With and without a brass wire screen ground plane, it works only with the engine stopped. Next I mounted the antenna on an external bracket between the main gear, with the same result—it is aware of an NDB at about 2 miles even with the alternator switched off. Switching magnetos makes no difference.

Could I ask through the newsletter if anyone has satisfactorily installed a KR87 in a Falco?

Stephen Friend
Gurrundah, NSW
Australia

This year we thought we would move inland just a tad from Mendocino to Napa Valley for the 1997 Falco Fly-In. Late September/early October is time for the "crush" in Napa Valley. Just follow the smell of fermenting wine to the Angwin Airport, located on the campus of Pacific Union College. The vineyards will be in their fall colors and should be spectacular from the air. The Angwin Airport is a 3200-ft. uncontrolled airstrip located in the hills due east of St. Helena. (Napa Airport is a controlled airport and therefore less desirable...) The college cannot refuel on Saturdays until after sundown (Seventh Day Adventists). They are willing to accommodate us on anything else and are eager to see the Falcos.

Incidentally, Calistoga was chosen over St. Helena as Calistoga has much more to offer for food, hotels, glider rides, spa's, etc. Confused? We'll be staying in Calistoga but using the Angwin Airport east of St. Helena.

March 1997



Dave McMurray is ready to challenge all comers at the West Coast Falco Fly-In.

The Calistoga gliderport is pretty much shut down now, and we won't be using it.

The dates for the 1997 fly-in will be Thursday, Sept. 18 to Sunday, Sept. 21. Mark it on your calendars.

Unfortunately "crush" time in Napa Valley is also peak tourist season. We have found a great hotel which will accommodate Falco Flyers, but we need to make reservations *as soon as possible* (before the end of April). The hotel is the Silver Rose Inn and Spa ('the Inn at the Knoll') located at 351 Rosedale Road, Calistoga, California 94515. (800) 955-9381. Room rates range between 175 and 200 dollars. A less expensive option is the Comfort Inn located in Calistoga (800) 221-2222. In addition, a wide variety of B&B's are available in the area, but remember to book *at least 2 months* in advance. To locate some of these go to www.napa.com and go to lodging for Calistoga.

The mailer with all information will be coming soon. Contact Blake Jessen for information at Fax (916) 795-0943, Compuserve 102670,2246, telephone (916) 795-0943 or at the address below.

Blake Jessen
323 Hillview Lane
Winters, CA 95694-2315

Calendar of Events

Annual Old-Timers Fly-In and International Gathering of Stelio Frati designs is on August 15-17 at Schaffen-Diest, Belgium. Contact Guy Valvekens, telephone (32) 13311496/335581, or fax (32) 13 315060.

West Coast Falco Fly-In. September 18-21 at Angwin Airport, St. Helena, California. Contact: Blake Jessen, 323 Hillview Lane, Winters, CA 95694-2315. Telephone: (916) 795-0943, fax (916) 795-0943 or Compuserve 102670,2246.

Susan's Corner

It's that time of year again—time to start thinking about Oshkosh '97 (July 30th through August 5th). As in the past, if you want rooms, let me know as early as possible. I'll need your arrival and departure dates and a credit card number to hold the room (\$92.00 single/\$99.00 double). This year the Paper Valley has a 14-day cancellation policy, so if you do need to cancel, do it at least 2 weeks ahead of time, or you will be charged for the room.

I've had some requests recently for pictures of the different Falco paint schemes, which, up until now, I haven't had in a size that I could send out. I've taken the artwork, had it reduced and copied onto 8-1/2 x 11 sheets. So if anyone is nearing completion and needs to see the paint schemes to help them choose the right one for their Falco, let me know, and I'll drop one in the mail to you.

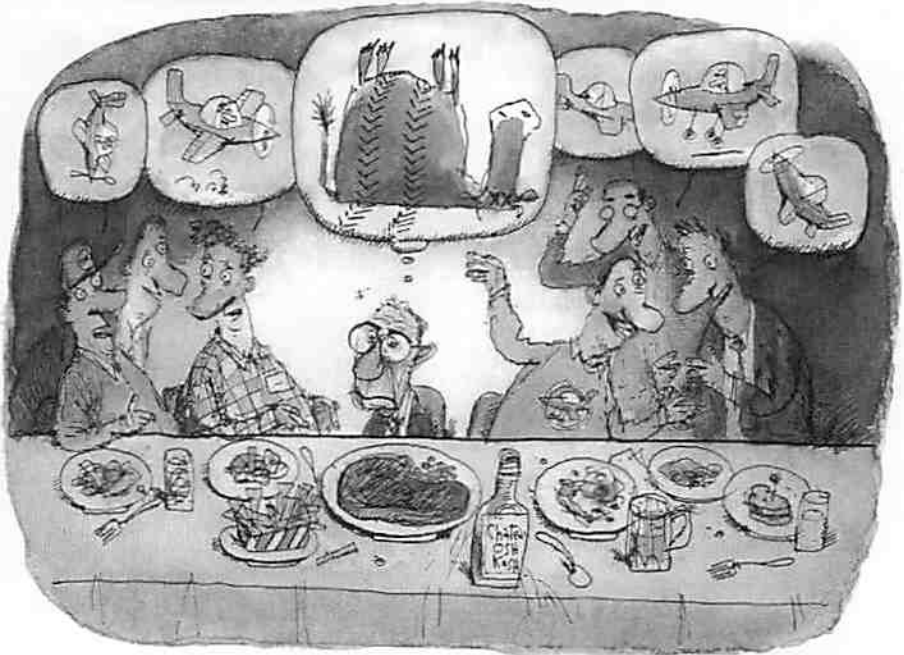
And speaking of art work—we have purchased the original art work of Richard Thompson's cartoons of Mr. Frati that he did for the article in last summer's issue of *Air & Space* on the Falco's 40th birthday party at Oshkosh. They are quite wonderful.

There are four prints to a set—one depicts Mr. Frati at the Falco Builder Dinner looking at a huge slab of beef and imagining it to be 'road kill'. Another has Mr. Frati sitting in a Falco on top of a birthday cake. There's one of Ing. Frati sitting at his drawing board. The last one has Mr. Frati sitting on the nose of his Falco, which is on top of a horse-drawn cart, headed for the *aeroporto*.

I've had some color copies made and have even framed a set to hang in the office. The prints are really very good and impossible to tell from the originals. If anyone would like a set, drop me a note or give me a call, and I'll send you one.

Instruments and Flight Research has stopped manufacturing gyros, so we'll have to look elsewhere for a source of these instruments. We have a choice of letting everyone shop at Aircraft Spruce, Wicks Aircraft, or your favorite instrument shop—or we can try to set something up for Falco builders if you prefer. If you have a favorite and recommended supplier, please let us know.

Spring has finally arrived in Virginia, but we sure have had more than our share of rain—the ground is like a big sponge full of water. It squishes when you walk on it! Oh



well, I suppose I'll be complaining about the heat of summer before you know it.

Keep the progress reports coming guys—I know we have some very active builders

out there, and we do enjoy hearing about your projects.

All for now, see you again in June.

—Susan Stinnett