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Dear Falco Builders:

By now you should have received the second shipment of large drawings. Simultaneously with this letter we will be sending out a box containing the construction manual, a list of revisions, and a large number of the smaller mechanical drawings. I have been concentrating much of my time this past month writing the construction manual and I hope you will all find it helpful. It is by no means complete, and I will be adding to it and re-writing sections of it for the next several years... hopefully to the end that all of your questions will be answered. It is very difficult to know what things will stump you, but we are finding out that in a hurry from your questions.

Be sure to note all of the changes given in the revision section on your drawings. We will be sending out revisions on a continuing basis, and in some cases we will be providing new drawings.

Most of you who are experienced only with wood work will be panicked at the sight of the mechanical parts, but we will be supplying almost all of these with the kits. Keep calm and keep your checkbooks at the ready!

Speaking of kits, I will be working on organizing the kits in the coming months. It may seem to be a simple matter to just make all the parts, but there is more to it than that. I have been working on arranging the kits so that you will be able to order a package of parts that you need at one stage of the construction. There are two critical kits that we will be offering first. The first of these is the "Tail Group Equipment" kit, with one for wood empennage and one for metal empennage. We have enclosed a list of the parts that we will be including in the "wood empennage" kit. The "metal" kit will differ only in the length of the bolts and some slightly differing hardware requirements. Originally, I had intended to only include the fabricated parts, but I have recently decided (after talking to a number of you) to also include the hardware as well. You will have to buy all of the nuts, bolts, and screws anyway, and all builders we have consulted were in favor of getting everything in a box so that they could concentrate on building the aircraft and not have to scrounge around for a missing bolt. There will be no additional cost in the aircraft, and I would think it would be a great convenience to all of you. You can see from the list of parts included the concept of the kits, and I would greatly appreciate any comments you might have on the form and make-up of the kits.

The second of the critical kits will be the "Wing and Fuselage Equipment" kit. This will include all of the things you have to hang on the airframe before you can complete it. Included in this kit will be all

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wing/flap/aileron hinges, the aileron bellcrank supports, the nose gear drag strut supports, the flap torque tube supports, the rudder pedal mounts, the control stick supports, the elevator bellcrank supports, the control cable pulleys, the seat belt mounts, the landing gear mounts, the side load strut mounts and the associated anchor plates, channel-nuts and hardware. There may be additions to this list as I spend more time analyzing the requirements.

The first of these kits will be finished this month with some things like the elevator balance weights following later. I hope to have the Wing and Fuselage Equipment kits done in two months. After that point you should be able to complete the entire wooden structure and hang all of the rest on the airframe although there are possible exceptions such as the flap control torsion tube, which is discussed in the construction manual.

Let me briefly review the other kits as I have them organized at this time (there will certainly be some changes). The Flap Controls Equipment kit will include the torsion tube, torsion tube coupling, pushrods, manual flap control lever and support, and associated hardware. The Control System Equipment kit will include the nose gear steering Arm, Control Stick Support, Control Sticks, Rudder Pedals, Aileron and Elevator Control Rods, Control Stick Connecting Rod, Aileron Bellcranks, Elevator Control Bellcrank, control cables and hardware. Feedback wanted: Do you want the control sticks in the design given or in the "alternative profile"? Do you want us to provide the control stick handle as drawn or do you want to use a pistol grip design? Do you want the right stick removable (perhaps \$50 in additional cost)? The Trim Tab Control Equipment kit will include the Elevator Trim Tab Arm, the Control Wheel, Channel, Sleeve, Screw, Angle Drive and Mount, Control Cable and Hardware. The Canopy Equipment will include the Windshield, Canopy, Canopy Frame, and all rollers and slides, hooks, latches, mounting brackets, tracks, and hardware. There will be two engine mount kits, one for the each of the engine mounts with the required hardware and Lord mounts. The Fuel Tanks & Equipment kits will include the two fuselage tanks with the mounting bands and associated fittings and hardware. I hope to include in time all of the required tubing, fuel lines, fuel caps, etc. for a complete installation of the fuel system. The Main Landing Gear & Equipment kit will include the Main Landing Gear Leg, the Lower Arm, the Oleo Struts, the required pins and hardware. We can provide wheels, brakes and tires if you wish... so let me know what you want. The Nose Gear Equipment Kit will include all of the parts for the nose gear strut including hardware, but again... do you want me to provide wheels and tires? The Landing Gear Retraction Equipment will be offered in two kits, one for manual operation and one for electric. This kit will include the gearbox with the crank, the universal joints, the screwjacks, the side load struts and pins, the drag struts and all hardware. Our gearbox will have ball bearings, but we could offer an economy version for manual operation with bronze bushings (the first Falcos were built this way). The savings would be minor, compared to the cost of the airplane, but it would be easier to build yourself. We could also offer a modified economy kit with the raw castings and components for those of you with welding and machining equipment and experience.

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These are the kits that I have spent all of my time working on at this time, but there will be others including the instrument panel, cowling, center console covers, metal empennage, seats, etc. which will be forthcoming. I am sorry that I cannot give you firm prices on all of these kits now, but I would be only guessing. My best guess is that the total might come to about \$6,000 for the kits (not including the metal empennage) with almost half of that being the landing gear system. The addition of wheel, brakes, and tires, etc. will add to the cost. I hope to have firm prices on most of these kits in about two months, and I hope to have the bulk of the parts available within six months. For the Tail Group Equipment and Wing and Fuselage Kits, I will be placing initial orders for 50 aircraft. Because of the nature of this work, I doubt that many of you will be able to purchase the material alone at a price less than the final price I will give you, largely due to the substantial price break we get on the volume orders we place... and the premium you will pay for small quantities of the material. I have not decided on the volume of the initial orders I will place for the other kits but I suspect that I will produce the requirements for 50 aircraft for any part that can be produced cheaply in such quantity (such as castings, and NC milling and lathe operations) and will produce quantities of 10 each for the larger components such as landing gear, cowlings, canopies, engine mounts, etc. until I have a good idea of how fast the parts will be moving. The experience of other kit suppliers is that about half of all plans buyers orders some parts soon after the purchase of plans so I would expect that about half of you would order the Tail Group Equipment and Wing and Fuselage Equipment Kits. Also experience shows that about half of all kit purchasers like to order everything at once.

I know how difficult it is for you to give me an accurate reading on your plans until you have a final price, but I would like to know your general plans. Please let me know what you think you will be buying and when. Many of you will be buying the initial kits and then the later kits as you need them for installation, while others have indicated an interest in everything-when-its-done. Also try to let me know the general time frame you think you will be purchasing the parts. Of one thing I can assure you, the prices will be commensurate with the work involved, and you will never be able to go to a local shop and have the work done for less on a one-off basis unless the work is done for free (we don't do that!) and I would think you will find that that would normally cost you three to five times as much as our kits. As any machinist will tell you, the "set up" is what kills you.

Now for some progress reports. Robert Esau seems to be the front runner, but then he is working on his Falco full time. Hopefully in a couple of months, he will have the airframe complete, having started in August. Since Robert wants all of the parts we can produce and because he is moving so rapidly, we will be making an all-out effort to get him finished in as soon as possible. We hope to have the plane finished in the Spring, but in any case, it should be flying by Oshkosh and will be there if it is. It is going to cost yours truly a lot of money, but we will be having one of everything produced on a custom basis, hopefully in the next two to three months. It will be something if we can get the first Falco flying in less than a year (there is yet to be a Christen Eagle finished -- no criticism intended), much less

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six to nine months. Another fast-track builder is Larry Wohlers who is also working on his Falco full time, and he is making excellent progress with his woodwork, but since he will be making most of the machined and welded parts, he will take longer and hopes to finish in a year. Both Larry and Robert are experienced builders as Robert has built a BD-4 along with a number of wooden boats and sundry other projects, and Larry has built two Skybolts, restored a Navy N3N and is an old A&P -- well, not that old! Tony Bingelis is third in the race, but Tony mills his own wood and that takes longer... not to mention the 40 hours a month he spends writing his excellent column for Sport Aviation. By the way, please don't call Tony just to chat -- he is far to polite to tell anyone that he would rather be working on his airplane, and much the advice he could give you is already transmitted to me and included in the construction manual. If you are going to bother him with questions, at least you can get his book and read that first, so he won't have to repeat all that is in it!

There are many others of you that are working away, and I'm always interested to hear from you on your progress. By the way, I keep a map with a little green pin representing each of you with the plans, and I replace it with a red pin when I know that you are under construction, and will use another pin (gold?) when you have one finished. So keep me posted. As you will find out, there is nothing that interests me more than hearing of your aircraft being built.

In writing the construction manual, it was painfully obvious to me that we needed a wing rib profile drawing. I have this underway now and this will be included in the plans, with trammel points to tell you if the paper has expanded or shrunk. We could offer this as a "camera mylar" at extra cost giving you a perfectly true reproduction of the original with no expansion or contraction due to moisture or the over-the-roller distortion present in all blue-printing operations. These mylars cost about \$3.00 a square foot so the mylar will likely be about \$36.00 (the drawing is approximately 2' by 6').

All of this, the kits and the plans, takes a lot of time. In the past year and a half I have spent an enormous amount of time working on the plans, the brochures, and the construction manuals. I have spent about four months of that time working in my office evenings until midnight and beyond, and I am, in fact, typing this at 11:35PM. For all of you frustrated that things are not moving faster, there are none more anxious than me, so please bear with me and give me the time to finish the remaining work.

If I have my way, in six months I will have for you a kit as complete as the Christen Eagle and will make the Falco one of the more popular homebuilt aircraft in the world. It is not the easiest aircraft to build, but with the kits offered by our company, Stan Weiss and others, it will be certainly as easy as any. Nor is it necessarily the cheapest if you go the full kit route, but it is certainly one of the best aircraft ever to wing the sky. Keep at it, and so will I, and one of these days you will have a Falco. What more could you want?

Sincerely,  
SEQUOIA AIRCRAFT CORPORATION

