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Dear Falco Builders:

This past month has been a busy month for me, so busy that I did not get a builder letter out last month. This will happen from time to time, and you needn't be concerned when it happens. I may change the builder letter to bi-monthly or quarterly in the future. Once the kits are finalized, there will be less late-breaking news.

I have enclosed a list of the kits which I am working on. You will find a number of prices given there that you have not previously seen. It might help to have a small glass of whisky nearby. We have shipped some of the Tail Group Equipment Kits and should have eleven more on the shelf by the time you get this. The remainder of the first fifty kits will be finished in another two weeks, so we should experience no further delays in that kit. The Fuselage Equipment Kit and the Wing Equipment Kit should be ready in a couple of months, hopefully in June or July. We have the main landing gear mount fittings available now, and we can sell these as a group for \$230.40 for those of you who do not plan to purchase the complete kit. I would ask that you order these only if you are not going to get the complete kit, as sending the rest of the kit later would confuse things at this end.

Most of my work so far has been with the machined components. Lately, I have been working on the fabricated steel components, and there are many instances where it makes sense to have the odd shapes of steel stamped out in very large quantities, usually enough for 500 aircraft. For those of you who plan to do your own welding, we will be offering these parts in a semi-finished kit. For example, the main landing gear arm and axle is about \$65.00 each semi-finished. The tabs, washers, disks, end plates, and brake plates are all stamped, the axle turned, and the main tube machined completely so that the axle and upper weld bushing need only be put in place and welded. This would require only welding and reaming for completion. The main landing gear leg is partially complete due to the requirement for some machining after welding, but this will still be attractive to those of you who will want to do your own welding. We will be producing these semi-finished kits in quantities for 100 aircraft at a time and so can accommodate orders for the individual assemblies without difficulty, and we will assemble the landing gear in 50 ship-set quantities.

During this past month we finished the canopy mold, and it was delivered to the supplier. It will be perhaps two months before we make the first canopy. The final windshield and canopy shape came out very

nicely, with a slight curvature to the windshield and a much less sharp break at the windshield bow. Those of you who want to do a Nustrini-style canopy can use this canopy and flat-wrap your own windshield. We still do not have the drawings from Luciano Nustrini on his canopy modifications.

The cowling mold is being made this month. We are be working from the cowling off Charlie Yates' Falco. The plug is made now, and this month it will be smoothed up. Hopefully we can have a final cowling in two months.

John Harns reports that when he assembled his tail group with our Tail Group Equipment Kit, he found the bolts about 1/8" long, and used washers to compensate. You will find that the bolts will appear a little long because of the short reduced-dimension nuts that we use for lighter weight. When the bolt is the correct length, the shank of the bolt stops at the top of the part it is holding, any shorter and the part will be bearing on threads. I would suggest that you add a layer of plywood under the channel-nut rather than using only washers if you find the bolts a little too long.

Concerning the epoxy glues. Two builders have tested T-88 with spruce and were not able to duplicate the failure from water; however, one builder used T-88 using maple and birch test blocks and did have the tests fail after soaking in water. I have been curious from the beginning if the water problem would be the same with spruce. Some of you have been very defensive about your beloved epoxy glues, and my only interest is in having you understand the problem that has only recently come to light.

For those of you who want my opinion, I am not afraid of the epoxies, although the problems from heat and water are enough reason to make me look elsewhere for better glues. Recorcinol seems to be the best glue, properly used, and it is completely unaffected by heat or water. It is the outstanding glue, but if your joints and glue pressures are not up to snuff, you will have almost nothing. Walt Weiss had a wood aircraft in his shop that some clod built with recorcinol. The glue lines were 1/16" thick! His shoulder brushed one of the fuselage bulkheads, and it broke. Bellanca has used only recorcinol on their Vikings, and they have never had a glue failure. There have been broken wings, but it has always been the wood that failed, and not the glue.

If it is the relative insensitivity to glue pressures and good gap-filling characteristics of epoxies that make them attractive, then you should take another look at Aerolite, which is much the same. A number of Falco builders are using Aerolite, and they swear by it. The problem of not knowing if you used the hardener can be eliminated by adding a dye to the hardener. This way you can see if you forgot. The production Falcos were all built with Aerolite.

As for Weldwood plastic resin glue, the drawback seems to be that the glue has a definite life. After a length of time it turns to powder, and this is the reason for the problems with the wood Mooneys.

The Pitts and the Christen Eagle use this glue, which is certainly a good glue, but I think I would want my Falco to last forever.


We now stand at 120 builders. Our latest builder is a lady, our first such to fall into what is usually a male pursuit, like chewing tobacco. We have about 10 builders in England and Ireland, slightly more than that in Canada, and builders in South Africa, New Zealand, France, Sweden, Switzerland, and Norway. Our New Zealand builder, Syd Jensen, is an old hand at homebuilding and is building two Falcos. Robert Esau is starting his second aircraft to have something to do while waiting for the glue to set. Bob will be selling one of these and he has been talking about a price of about \$43,500.00 with new engine and prop but without radios. Another builder, Bill O'Brien, has three men working full time building him a Falco, and there is a possibility they might build several. If so, these would be sold and Bill has a price of \$45,000.00 to \$50,000.00 in mind. I don't think these prices are at all unreasonable, but I'll caution you that the market for homebuilt aircraft has something in common with the way Spanish men think of women -- they are either ladies or whores, and nothing in between. So it is with homebuilt aircraft, the people who will pay this sort of price want only the very best and if the airplane has a second-rate appearance, they will wonder about the workmanship and have nothing to do with it.

It is not too soon to make your plans for the Oshkosh show, in fact, it is a little late. We will plan to have a dinner of Falco builders on the night of Tuesday, August 5, at 8:00 at the Midway Motor Lodge in Appleton. We will need to make reservations so please stop by our Falco booth and let us know if you are coming. We will be staying at the QA Inn in Appleton (414 734-9872), and they still have a few rooms left. Unless there is a change, we expect to have our booth at the same place as last year. We should have a goodly number of parts there for you to see. There is a chance that Robert Esau will have his Falco there, although possibly with the gear not retracting. It is too early to tell if he will make it for this, but even if he does not make it, he will clearly finish the aircraft soon afterward.

Please note the revisions which are enclosed. In particular, note that Revision No. GG29a was incorrect and the proper hole diameter should be ".188"±.001", and not the ".375" previously given. Also, as many of you have discovered, the Revision formerly given for GG22a was a typing error, and it is now given correctly for GG39.

I have something like 40 additional small drawings which I have nearly finished which I hope to print and ship sometime in the next month or two. Most of them are for parts which we are making already, and you will not be held up by the drawings arriving late. I would have finished the drawings long ago but for the telephone and for the work I have had to do on putting the kits together. I, for one, will find life more relaxing when I have all of these kits on the shelf!

Sincerely,
SEQUOIA AIRCRAFT CORPORATION


Alfred P. Scott
President