

FLY BABY RUDDER TRIM

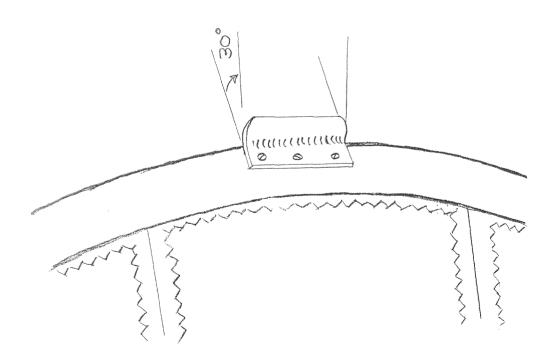
CLARENCE MULTOG'S letter in the December Bulletin indicates that some people are going to take action on the suggestion of offsetting the vertical fin to counteract the tendency of the plane (any plane with a right-hand turning engine) to turn left in flight.

After Pete saw this item, he wrote in to say that there are much easier ways of solving the problem than building in a major fixed component with deliberate misalignment. Besides, what do you do if you find you have put in too much offset or not enough?

The answer is a simple fixed taboon the trailing edge of the rudder. Take a piece of .020 to .032 sheet aluminum about 2 by 4 inches. Drill three 1/8" holes along one edge as shown, and use wood screws to fasten this tab to the LEFT SIDE of the rudder bow at the farthest-aft point on the bow. This should be midway between the second and third ribs. Have at least 3/4" of the metal against the bow.

With your fingers, bend the projecting portion of the tab to the left about 30 degrees and make a test flight. This much offset should be about right for cruising flight. You can't get a fixed tab like this (or an offset fin either) to trim your ship for all flight conditions, so cruising is the most desirable. Tabs of the same size can also be used on one elevator to make minor adjustments to overall trim that aren't worth the trouble of resetting the horizontal stabilizer.

Many pilots like to trim out to zero stick (or rudder) forces for every flight condition. Pete doesn't, which is why he hasn't bothered with trim on his own ship. The corrective forces are not big enough to bother and he likes to have the "feel" of the ship. After seeing the item in the december Bulletin, he made and tested a tab and sent in the accompanying drawing with word that this is the easy "fix" for those who feel that they have a problem.



A FEW MORE WORDS ON "FLUTTER"

Our good friend JOE POPE over in Lynchburg, Va., had an experience with flutter and did a little boning up on it, and passed along a "nutshell" description of what it's all about and what to do when it occurs.

"Flutter is a mechanical resonance which occurs at a certain velocity determined by the weight and area of the hinged surface and the amount of play in the controlling linkage."

The best way to keep from having it in a proven design like Fly Baby is to stick as close as possible to the plans for the control surfaces to insure that they are no HEAVIER than the originals. Also, be very careful in building the hinges and control surfaces so that there is <u>no</u> play in the system. For instance, if one aileron is clamped in position, it should be impossible to move the other aileron, or get any lateral movement of the stick. Anything more than a tiny bit of movement of the control surface or stick under such conditions should not be tolerated.

If flutter should occur in flight, reduce power immediately and "back out" of the flutter range, like right now! Also keep a <u>firm</u> grip on the stick, as this will not only help damp out the flutter, but keep the stick from beating you black & blue before you can slow down out of flutter range. The principal thing to remember though is to SLOW DOWN. That is the only way to stop it.

I have only encountered flutter in flight once and that was in a J-3 Cub as I was recovering from a spin. I got flutter in the elevator and it scared me pretty good! I had to hang on to the stick pretty tight and continued to pull up as fast as I dared and was well down in the seat. The only way I could wash off the extra speed was to get the nose up, and the flutter dissapeared as the speed dropped. This occurred at about 85 mph. I had done about &ix turns of spin and hadn't been hurrying the recovery as I had plenty of air under me.

It seems that the bolt holes in the elevators where they join were elongated and the cables had stretched too so that there was a good 1/2 to 3/4 of an inch play in the elevators at the trailing edge with the stick held firm. The hinge pins were a little worn too. You can bet that I check for play in the controls every preflight now.

NEWS FROM "DOWN UNDER"

The Ultra Light Aircraft Association of Australia is trying to get Fly Baby approved for home-building by our Australian counterparts. We can help them. That is, those who have built and flown their ships can help them. Within the next few days we will be mailing some forms to those we know have their ships finished and flying. You are requested to fill out the form and get it back to Pete as soon as possible. The form amounts to a brief resume' of your experience with the ship and the operating statistics of same. If you should get a form from both Pete and Hayden, just disregard one of them. We are trying to cover all bases and may duplicate some pilots. At any rate, the form should be sent to Pete direct so that he can in turn get them back to the proper people as soon as possible. Those fellows are as anxious to get started as we all were at one time. They are not as fortunate as we on regulations, and their designs have to pass full C.A.R. 23 ratings or show evidence of a sufficient number of the design operating safely for a good period of time in the country of origin.

MORE ON FLY BABY LANDING CAPABILITIES

GEORGE WELSH has pretty well settled the doubts that anyone may have had concerning the durability of the wooden landing gear on FLY BABY. Actually, it's more the thought of wood in this age of "iron birds" than any serious study of the problem that bothers the doubters. Check the cross-section of that gear, and you'll find that FLY BABY has MORE than such famous old timers as the Curtiss "Jenny", and it sure took a beating! Fly Babys gear design, particularly the cross lamination feature, was directly inspired by the famous French SPAD fighter of WW-I. Pete got a good chance to study one in his shop, having borrowed a non-flyable one from a friend and brought it into his shop to paint it up for a museum display.

A few other would-be builders have written in to ask if the narrowness of the gear wouldn't be expected to complicate the ground-handling problems and lead to ground-loops, etc. Far from it! Wide gears can be more trouble on the ground than narrow ones if a wheel is a little out of line or if a brake is dragging. The farther out the wheel is from the centerline, the greater the multiplication of any such problem. Look at gliders - they have the best ground handling characteristics of all, and they roll on ONE wheel! Fly Babys gear is relatively narrow, but Pete will stick by his statement that it has the most docile ground-handling characteristics of any homebuilt. Some examples:

A lightplane pilot flying the original Fly Baby for the first time set it down on a paved runway and immediately noticed a tendency to turn left that kept increasing. Turned out the tire was flat. All it took to keep it rolling straight was some right rudder. Try that with one of the hot jobs!

FRANCIS LONDO had a similar experience with his ship, and he wasn't nearly as experienced a pilot. In fact, he was flying on a student permit. He didn't have just a flat, it turned out - he had a broken wheel. Again the tendency to turn could be corrected with rudder.

Now, before anyone tries to blame that one on the no-shocks landing gear, it should be pointed out that Francis' wheels came from an airplane that had been crashed, and that old cracks were found in the wheel after his accident.

Pete also has movies of a 50-hour pilot, who had never flown anything livlier than a J-3 Cub, making his first landing in the original Fly Baby. You have to see that bounce to believe it. Something over 800 hours on Pete's ship now, still with the original axles, and they aren't bent enough to be worth the effort of straightening.

MORE PRAISE FOR WEEDENS' FITTINGS

There must be a lot of builders around that don't relish the idea of the long hard hours spent over the fittings with hacksaw and file. This observation is based on the unusually large number of letters praising Dick Weedens' fittings. We have several of Dick's fittings ourself and without lapsing into a lot of lavish "hollywood" type adjectives, the only way we can describe them is "Perfect". There is not the slightest flaw anywhere and the workmanship is the best we have seen. Dick obviously takes a great deal of pride in his work and it has resulted in a large number of satisfied customers. The fittings are already chromated and shipped well packed, individually wrapped in newspaper in a sturdy carton. If you have the slightest doubt about whether to make your own, we strongly suggest you check Dick's prices. You will find them quite reasonable for the quality of work.

ADDITIONAL COCKPIT ROOM

Although FLY BABY has about the roomiest cockpit of any single-seat homebuilt going, there are still a few guys in the six-foot-plus category that have their problems in it. Pete made sure that he could be comfortable, and he's $6'-1\frac{1}{2}$ " and weighs 200.

The tallest person to fly Pete's ship was 6'-6". This was at Rockford, and with the lineup of guys waiting to fly, Pete didn't want to take time to reset the rudder pedals from the middle position. The giant, Pete Peterson, merely took off his gunboat-size shoes and away he went with no problems.

The problem with other tall guys isn't so much their actual height, it's where they are jointed. Some have shorter trunks and longer legs, which puts their knees up into the instruments when they are seated in Fly Baby. BERT COPP solved the problem neatly on his - he lowered the forward floor boards a couple of inches. It's fairly easy to lower the bottom of the seat itself, too. It can actually go below the level of Stations 5 and 6. The occasional short pilot flying the giant's ship can be raised with cushions.

Woody Bond plans to lower his floor and will give us some tips on how its done later on. Shouldn't be too much of a problem.

STATUS OF FLY BABY PLANS

As of February 20, 1968, 327 serial numbers have been issued to Fly Baby builders who wrote in to Pete Bowers requesting them. The reason that Pete asked the builders to get their serials from him was twofold; to serve as a rough guide to the number of ships under construction and to avoid a duplication of serials that would complicate FAA's bookkeeping. Imagine if five builders named Smith all applied for registrations of Smith-Bowers Fly Baby Model 1A's, all with the Serial Number 1!

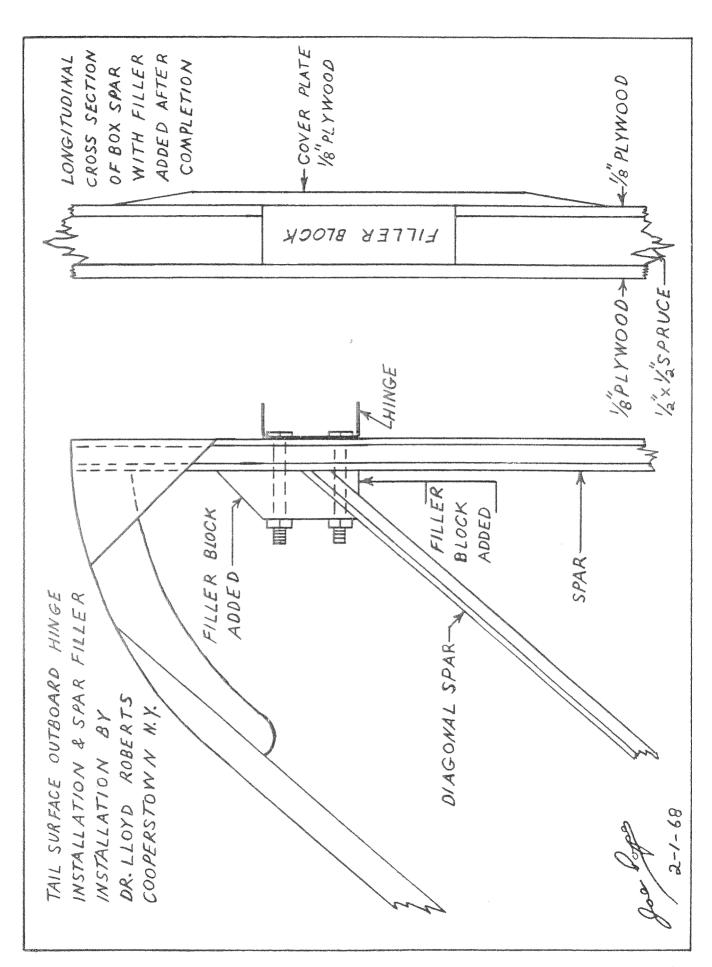
The way Pete handled the problem was to go at it in the Air Force manner and assign the numbers sequentially within a calendar year (Air Force uses a fiscal year, July 1 thru June 30). Serial 66-1 is the first one issued in 1966 and so on. These break down by yearly totals as follows:

1962 - 1 1963 - 79 1964 - 50 1965 - 56 1966 - 75 1967 - 55 (less one) 1968 - 12

Serial 67-1 was reserved for a Northwestern builder who never picked it up, so that one is blank on the books. It's open to the first person who gets through to Pete and asks for it, preferably someone who started a Fly Baby in 1967 but who hasn't picked up a serial for it.

NEW EAA CHAPTER BEING ORGANIZED

Anyone in the Lynchburg, Va. area who is interested in an EAA Chapter, can contact Joe Pope for details. The first organizational meeting is set for March 13. It was planned for the 20th but the FAA representative couldn't make it and the date was moved up. You can contact Joe at 109 Briarcliff Circle in Lynchburg, zip 24502. We don't have the phone number handy, but sure you could reach him through "information". They have several people already involved but can use all the help they can get. We want to wish them the best of luck in this undertaking. Just wish we had a chapter around here.



ATTENTION ALL PILOTS - ATTENTION ALL PILOTS - NOW HEAR THIS - NOW HEAR THIS

Sounds like "Victory at Sea" on the late-late show, but read on anyway.

Here is a sporting proposition from Pete Bowers to all pilots who are already flying their ship or expect to be by Rockford time.

We will call it "THE FLY BABY ROCKFORD POOL". Anyone who brings his ship to Rockford in 1968 is eligible. Here's the deal - - - Send in to Hayden your guess of how many Fly Babies will be there. To the one who guesses closest, Pete Bowers will pay out that many <u>CASH DOLLARS</u>. In case of a tie, split the prize, or if too many ties work out something else.

You don't have to stay the full week to be eligible, but your ship must be registered, so we get an accurate count. If you have to leave, and win the prize, it will be sent.

Pete's ship can be counted in the total, but don't cout it as l_2^1 if he shows up with the biplane wings by then.

There were eight last year and we hope to see more this year. Start laying your plans now to reserve Fly-In Week for the big show. Wouldn't it be a blast if Fly Babies outnumbered any other homebuilt there. It is a distinct possibility, but it will take just about every Fly Baby in the air to pull it off.

HAPPINESS IS

Lets wrap it up this time with a "happiness is" that is more of a rambling on of thoughts than anything else.

"Happiness is", getting away from the office the moment the clock permits, skipping supper, and driving out to the strip instead. Roll out a venerable old J-3 and climb leisurely to three thousand and "park" there to watch the sun go down over the Blue Ridge Mountains. You linger a few minutes, then slip quietly in over the underbrush and plant her firmly on the numbers. You are just a wee bit illegal, as the old "J" was never blessed with an electrical system, but no one is around except the FBO, and anyhow you can still see pretty good. After securing the old girl for the night, you start home, and as you pass the rows of houses in your suburb, you see the pale white glow of the TV sets through the windows. It isn't difficult to imagine the den scene in these houses, nor is it difficult to guess the opinion of the occupants. "Anyone that would miss the first hour of the "early movie" to go flying around just before dark in an old fashioned airplane must be some kind of a nut", If they knew you were on your way home to work on a "homemade" airplane, they would really flip. Especially if they knew you were living for the day you could watch the sunset from your "homemade" airplane. There is a tinge of guilt to your feeling of smug satisfaction as you turn into your drive. Some guys have it, some don't. You're lucky, you have. You feel good.

Thats it for this month gang. See you next time. If you like what you read, let us know. If you don't, still let us know. The mailbox has been looking like Carlsbad Cavern lately, so drop us a line. O.K.?

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THE FLY BABY BULLETIN

Issue No. 8

February, 1968

PETE BOWERS UP FOR AWARD

What better way to start this issue than to share with you the news that EAA Fresident, PAUL POBERZNY is going to recommend PETE BOWERS for the DR. AUGUST RASPET Award.

This welcome new came to us in the form of a letter from Paul, dated March 26th, a copy of which you will find in this issue. As you will note, he also had some kind words for the Bulletin, by which we were flattered, coming as they do from the "Big Chief" himself.

We are of course in complete agreement with Paul's recommendation of Pete for the award and plan to give him all the support possible. In the letter, Paul has asked for and needs all the support he can get. Right now we don't know exactly how to go about it, but you can bet that by next issue we will have the information and pass it along.

We are all grateful to Pete for giving us a common bond in "Fly Baby", and this is our chance to help him get some of the recognition that he has, so many times over, earned. So, as soon as we find out how, let's all get behind Paul and see what can be done.

WOODY BOND SCORES WITH "GUEST EDITORIAL"

The response to Wood's letter in last month's issue was, to say the least, gratifying. We heard from everyone from Paul Poberzny, EAA President, to some that we hadn't heard from since last June when they "joined up". Better than 95% of the replies were enthusiastic endorsements of Woody's opinions. Only a couple dissented and they were not really dissenters. They just said let everyone choose his own level of proficiency, and build to suit his own desires.

To Woody, on behalf of those who took time to write, our sincere thanks for a fine contribution. Maybe this will inspire others to "speak their piece." We hope so, and invite them to do so. As we said before, we offer equal space to anyone and everyone who wants to disagree or elaborate on the same theme.

ANOTHER FIRST FLIGHT REPORT

Just learned of another Fly Baby that has been flying almost a year, but is news to us. This one belongs to ANGELO SILVAGGIO of Ashtabula, Ohio and his first flight was on May 30, 1967. The owner had logged over 130 hours in it, on a student ticket, last we heard.

This report came to us from JOHN MILLER of Geneva, Ohio, who has flown the ship and loves it. His first flight in the Fly Baby was also his first open cockpit ride and although he isn't himself building at the moment, it shouldn't take much to get him started. From his description of the flight, he has what it takes to become a "Fly Baby Type".

MARINE PLYWOOD SOURCE

In addition to the first flight report, John Miller also sent us the name of a supplier where you can get marine grade plywood at a reasonable price. The name and address of the outfit is:

Harbor Sales Co. 1401 Russell St. Baltimore, Md. 21230

JOE POPE, who is a familiar name on the pages of the Bulletin, also bought some plywood from Harbor Sales and is well pleased with the quality. One thing though, you might have to go through a local dealer to get the wood. Some of these places are wholesale only and won't sell to an individual. Joe purchased his thru a local dealer, but he wasn't aware of the supplier at the time. It just so happened that the dealer bought from Harbor Sales and that is how Joe found out about them. We will write and find out if they will sell direct and let you know. In the meantime, if you're in a hurry, write them and find out. Any reports on your dealings will be appreciated.

ANOTHER WOOD WORKING TOOL

While on the subject of wood, Joe Pope also sent us the name of a new tool he is using that works real well on plywood. It is a Stanley brand tool, and they call it "Surform". It can be found in most quality hardware stores and the name Stanley indicates that it is a pretty good brand. Joe says that once you get the hang of using it, the results are better than the old standard block plane that most of us use. Plan to get one for our own shop and trylit.

SAFETY FEATURE ON THE FORWARD TURTLEDECK

BOB CLOW, of Inglewood Calif., who a while back gave us a tip on a Nicopress tool, also sent us an idea for the cockpit area. Bob wanted a continuous curve on the forward turtledeck edge that is exposed in the cockpit. This however, leaves a sharp edge exposed unless you cover it in some manner. His solution was a piece of soft aluminum tubing about 40" long, split down one side and slipped over the edge. The ends are crimped to hold it on and he used APOXY, a brand of epoxy to secure it. Bob says to work it on slowly to get a good clean curve and it will result in a neat job. It might also prevent a neat clean slice in your skull in the event of a sudden, unexpected stop. (This is not in lieu of a shoulder harness which everyone should have and use.)

"DO IT YOURSELF" STRESS ANALYSIS DELAYED

A couple months back we promised a "do it yourself" stress analysis, but since have had someucorrections from DAVID PAULE, the author and before we run it, we want to be sure what is correcting what. As we said before, our Algebra is rather stale and it would be easy to goof up the whole bit. Soon as we have time to sit down and do a little meditating, will let you know. If it gets too deep, we may have to go back to Dave for clarification.

The item hasn't been given much priority since it isn't essential if you follow Petes plans when building, but it is interesting to know how it's done.

BUY SWAP & SELL

Grade "A" Cotton: SSgt. JTM STURGILL, 400 Choctaw Rd., Clinton Sherman AFB, Qkla. 73632 says that he has some grade A available that he will swap for almost anything that will go on Fly Baby, he will sell it outright. Jim also picked up the remains of an old "Bamboo Bomber" from which he is salvaging some material. If you are familiar with this old crate and can use some of it, you might be able to talk Jim out of part of his loot.

Wheels & Parts: TOM WILEY, 10 Main St., Hagaman, N.Y. 12086 has a few items to pass along. He writes; "To give you a few items for the Bulletin; 1 pair of Schinn wheels with 3 bearings, backing plates and shoes, no tire or lining on these wheels, "T-Craft". Will trade for a good pair of 800 x 4 Cub tires or sell out-right. Also have Cub backing plates with bladders and some blocks, make an offer. (Tom also sent along a couple of tips we will use elsewhere.)

Propellor Blade Needed: TOM ABLE, Stanfield Oregon, (Route 1, zip 97875), is looking for a blade for a ground-adjustable Hartzell, Model HA-12UO-2. This is the prop for a 65 hp. Continental and if anyone can put his hands on one, Tom would sure appreciate it.

Compression Strut Jig: Tom Able also says he has a jig made up that is just perfect for the compression struts and will be glad to loan it out for the cost of the postage. (how's that for the Fly Baby "help & be helped" spirit.) Sure hope someone can help Tom come up with that Hartzell blade.

Thats all the items for this section to date, but if any more come in before mailing time, will add them onto the tail-end of the issue.

SOURCE OF CABLES, FITTINGS, ETC.

Credit for this one goes to both LLOYD ROBERTS, Cooperstown, N.Y. and also C.E. MULTOG, McMinnville, Tenn.

Both these builders sent us the following address which should be able to supply the stainless wing wires, turnbuckles, thimbles, shackles, etc.

Hoboken Bolt & Screw Co. Aircraft Division Willow Ave. at 17th St. Hoboken, New Jersey. 07030

Clarence Multog went on to add that the minimum order to escape a service charge is \$10.00, but most orders will probably go over that anyway. When you order something from a place that has been mentioned in the Bulletin, be sure to give it a plug, and it might be that we can get them to go along on some "specials" for us if they realize it means more business for them.

Speaking of "specials", we haven!t been too successful in persuading any suppliers to go along with "Fly Baby Specials" as we had hoped. Possibly however, after the Bulletin has been around a few more months, they will realize that it isn't a temporary ! brainstorm of some idiot homebuilder and will give our requests more consideration. One thing for sure, we will keep trying.

CANADIAN REQUIREMENTS

ROY ORVIS, Dryden Ontario, was kind enough to send us a set of the DOT, (Department of Transport), requirements for Canadian homebuilts. Our first thought was to copy them in the Bulletin, but there are several pages and your best bet is to send for a set. Write the DOT at 601, General Post Office Bldg., Winnipeg 1, Manitoba. That way you will have an official set yourself and at the same time establish contact with the Canadian "powers that be".

Since we have several Canadian readers who have joined the "movement" as newcomers, this maybe will be of some help and our thanks to Roy for securing a set for the Bulletin files. Also hope that Roy has recovered completely from a torn cartilege in his knee that developed complications. (not done in an aircraft accident.)

ANOTHER CATALOG FOR HOMEBUILDERS

Here is another source for a catalog of various and miscellaneous parts, many of which can be incorporated into Fly Baby. They carry both new and used parts and equipment and the prices seem to be about equal to and in some instances less than other supply houses. Name and address is:

WAG-AERO Box 181, Lyons, Wisc. 53148

We purchased a parachute from this outfit sometime back and their service was prompt and courteous. The chute was exactly as advertised and had a fresh pack certificate by a licensed rigger. If nothing else, the 32 page catalog makes a good reference for cross checking prices.

ADJUSTABLE TRIM TAB

GEORGE NOBLE, who usually hails from Richmond, B.C. Canada, sent us a neat idea for an adjustble trim tab hook-up. We say "usually", because at the time of writing he was up near Hyder Alaska on a job, bemoaning the lost building time on his ship. Because he is going with the 125 hp. model, he has had to increase the tail surface and also wanted the adjustable tab. The idea for it came from his Maranda AMFS-14, which uses the same basic setup. The use of the Bowden cable, as shown in a Joe Pope drawing elsewhere in the issue, permits departure from the straight line linkage usually associated with adjustable tabs and permits the cockpit control to be put almost anywhere you wish.

PLYWOOD LEADING EDGE GAINING FAVOR

In the letter from George concerning the tab, he mentioned that he is using 1.5 m.m. birch plywood on the leading edges of stab and wing. He is one of many going this route, and while it seems to take a little more time and effort, the ply should resist nicks, bruises and dents better than aluminum. This however remains to be seen, since we don't know of one flying with it. If we're wrong on that score, correct us someone and let us know how it is working out.

BULLETIN REACHES TWO-THIRDS MARK

With this issue, we complete two-thirds of our first year. Back at the beginning, there were many who were doubtful that we would survive the first six months, much less a year. Well, survive we did, and now we are proud to say that some of those same people are our staunchest supporters. Don't think however, that we are going to sit back with a smug, self-satis fied look on our face just because we have made it this far. Far from it, as we have just begun to learn some of the basics of presenting what you want and in a manner that can be understood. So, don't class us with the 100 hour pilot who knows all there is to know, but with the solo club, since we are still flexing our wings and anticipating the future.

ANYONE FOR ANOTHER YEAR?

Even though we are only two-thirds of the way home, several guys have been inquiring when to send in their new subscriptions so as not to miss an issue. A few have taken the bull by the horns and sent it in. Wish we had their confidence in us! No kidding, that makes us feel like a million bucks, to know that what we are doing is that much appreciated.

The main reason we got off on this theme to begin with was to let everyone know that we had received quite a bit of encouragement to continue, and had decided to do so. We have less than 90 days to catch up to our mailing schedule and there is an outside chance we will make it.

One of the principal reasons for the erratic issue dates of the Bulletin has been the neccessity of relying on being able to borrow the correct kind of typewriter on which to type the masters for the Bulletin. That coupled with our heat-pain-laziness threshold has resulted in schedules not unlike those of the early air-mail pilots.

To cure the first of the problems, (there is no cure for the second) we went in search of a typewriter to call our own that would do the job and do it well. We found such a machine and after testing it thoroughly, struck a deal for it. Only one hitch, the man wanted cash on the barrelhead. Since it was a "now or never" proposition, we grabbed the "D" ring and jumped. As a result, we are the proud new owners of a slightly used IBM standard office model electric typewriter, complete with carbon tape ribbon for master typing.

Needless to say, the tab of \$300.00 put quite a crimp in the budget and our "beer money" Fly Baby fund suffered considerably also.

We had planned to make this move when the new subscriptions were due, but had we waited, the "deal" we made would have been gone, so we went ahead anyway. Our reason for going into all the detail is to ask anyone that can spare the coins to send in their subscriptions a couple months early. This is not a request for extra funds but just some interim financing till the time rolls around. Theorate will be \$5.00, the same as it was this first year.

Before you grab your checkbook however, read a little further on a couple of minor changes we are planning.

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"NEXT YEAR" Con't.

Several people, including Pete Bowers, have suggested that we reduce the number of copies per year to 10 instead of 12 to give us a little more time between issues and give us a chance for more quality in lieu of the present quantity. That may have been a camoflaged slam at our quality, but we don't think so. Not in Pete's case anyway, because when he says something, it is straight-forward and usually blunt and to the point.

We are going to try the 10 issue schedule and see if it helps, but at the same time try to add something that we have been asked for several times.

This year we are going to attempt to get out a special Rockford issue, either as a separate issue or as part of a regular one. It will be a pictorial mostly of Fly Babies at Rockford with any interesting sidelights that develop. This is not a firm promise, since it will require the help of some of our readers who are adept with a camera. We will, lof course, do our own share of shutter-snapping, but will need help. Last year was a fiasco as far as our own camera work went. We shot seven rolls of 36 exposure film and didn't get the first photo. Camera shutter was stuck in the "open" position all week long. If we can get enough help with the camera work though, we will put out a pictorial.

Now, if you are still interested in going for another year and can help by subscribing a little early, we'll appreciate it. (If something should torpedo our plans for another year within the next couple of months, any new subscriptions would be returned.)

WOODY GETS HIS TICKET

A note just in from WOODY THOMPSON, Eureka Calif., tells us that he has his private ticket now. Maybe that doesn't mean much to the old timers with a pocket full of ratings, but to those of us who have been flying on a student ticket for longer than we can remember, it means a lot.

Woody also "rushed right out" and bought a set of Deck Weedens fittings after reading about them in the Bulletin. Like the others, he is very much impressed with them. We also got a couple shots of his ship in color but unfortunately, we can't reproduce them.

ANOTHER PLUG FOR HOBOKEN BOLT & SCREW

We mentioned on page 3 that this outfit could supply the 1 x 19 1/8" stainless cable for the wing wires. Just turned up another note from GHARLES HONER, of Newton Square, Penna. telling us that he got his wire from them also and added that they give discounts on quantity orders.

This raises the possibility of several guys going in together to buy at one time and getting a good price. We for one would be interested. If you are, drop us a line and if we can get several lined up, we will write these people and see what can be done. They will probably drop-ship each individual order and still allow the discount. Most of these suppliers will. Since this cable is relatively difficult to locate, give this idea some serious thought.

We had the pleasure of meeting Charlie at Rockford last year and look forward to seeing him again in July.

AILERON SWING LINK "FIX"

AILERON STOPS AT THE "START"

AXLE BEEFED UP

ALUMINUM AND A COLD GARAGE

The multiple heading is to cover several subjects in one letter that we don't want to break up. This letter from DON HOOVER of Hunlock Creek, Penna. is entertaining reading as well as giving some valuable information and building tips. Read it and you will see what we mean.

"Dear Hayden, I hope someplace in this letter one might find a word or two that could help them along on the road to completion of a Fly Baby, but then again one might find some words that would cause them complete failure and grief. I don't know anything about building airplanes, (I'm amazed that I made it through Fly Baby as well as I did,) so I hope nobody takes as gospel any ideas they might get from this, (should you print it in the Bulletin). If you do, then you are at the bottom of the barrel. (Ed. note: We should get to the bottom more often.)

The ones that have completed a Fly Baby will say that this is old stuff and that to them of course is true, but for the ones that are just getting started, some of the simple little problems are very big, very real and sometimes very exasperating and it is only AFTER they are solved that you can honestly say, "Why man, that was simple, nothing to it". I found that as you go along building a Fly Baby you are continually licking small problems and it gets to be part of the whole project. And because we have in mind that this is very likely a one-time deal, we tend to dismiss the problems and the way they were solved and start getting ready for the next one. Well, here are just a few that I came up against mostly because of being a little broad between the ears.

The best way to get this one across is to ask you to turn to page 6-2 of the plans and take a look at station #3 with it's micarta bearing block in place and the little diagram of the front spar with the swing link in place which is next to it. Now you can see how a few knotty little problems become simple if you picture the spar in line with station #3 (like it will be) and picture the swing link on the back side of it's support instead of between the support and the spar. For me this answered the following questions.

- 1. Where do I make the hole in the fuselage for the aileron control rod?
- 2. Where do I make the holes in the wing ribs for the aileron control rod?
- 3. How in the heck will the aileron control rod line up with the aileron link?
- 4. Won't the aileron control rod rub on the spar fittings or the bolts that hold them or the spar pins?

I had the swing link support already made when I got to this so fixed it by using a bolt long enough to go through the spar and far enough out the back of the support to hang the swing link in a cantilever fashion. This is working O.K. but maybe a different support would be better. Was wondering how some of the other fellows (and ladies) dealt with this.

DID YOU KNOW!

That my wife got real miserable just because I forgot to wash out her little old cake decorator after using it to put glue in the slots of the cap strips? (Con't. next page)

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DON HOOVER (Con't.)

I like this one because I think I found a way to save some wear and tear on the aileron control system. I think Pete says in the plans that aileron stops are not necessary because the aileron itself makes contact with the aileron mounting spar for its full length and makes for a very good stop of it's own. Good! and I agree, but I have looked at a couple of Fly Baby planes besides my own and found that although the ailerons are tight against the aileron mounting spar, the control stick can continue to move past the position where the ailerons are no longer traveling. This means at least on my own Fly Baby, that there is a lot of flexing of the aileron control rod especially in the area of the swing link and the junction of the control rod and the aileron link from the yoke on the torque tube assemble. '(whew!) A-n-y-w-a-y, I made a right angle bracket from a piece of .065 4130 and bolted it to the rear of station #3 below the bearing block so that it would contact the aileron yoke on the torque tube at the same the ailerons reached their normal stops. Maybe this doesn't sound like it is worth bothering with, but at least I don't hold my breath anymore when someone climbs into the seat and starts banging the stick from one side of the cockpit to the other.

DID YOU KNOW!

That the only mail I get that comes already opened and read is the FLY BABY BULLETIN? The wife always beats me to the mail box.

Here is something to consider, (builders suit yourself). If the landing gear axle is made from tubing with a wall thickness of .125 instead of .093 then a 1" wide strip of 4130 would just fit inside of the axle for the flying wire anchors. This would save the job of cutting a special size to fit the inside of the .093 tubing. Also while adjusting up the stabilizing wires to the center of the axle by turning the turnbuckles with my fingers, I was wondering why in the heck the wires were not getting tight when my buddy walked in and said, "take a look at the axle STUPID, you're pulling it up in the middle." He was right you know, the darn thing was bowed like WOW! Of course, the flying wires were not attached to the end of the axles to help keep the axle from bowing up the way it did but it got me to thinking just how flexible the axle was. I am not saying that .093 is not strong enough, because I have made some landings that would have made a Dodo bird hold it's head high with pride. Never-the-less, if I was doing this job over again, it would be with .125 wall thickness. Like I said, suit yourself.

DID YOU KNOW!

That spilling nitrate dope on a kitchen tile floor can get you in a peck of trouble? So can a reddish-brown spot on a green living-room rug when it looks just like resorcinal glue!

I'm not alone on this one because I know another Fly Baby builder that solved this little deal the same as I did. It seems somehow or somewhere along the way, I became brain-washed to the idea that nicopress sleeves and thimbles went hand-in-hand. It goes something like this --- Run the wire through the eyes, thimbles and nicopress sleeves etc.--- Well, came the day I tried getting four of those wires, thimbles and nicopress sleeves on the clevis shackle that fits on the anchor at the end of the axle --- Ha! --- I ended up like the other builder and made a shackle of my own big enough to hold 4 wires, 4 sleeves, and 4 of those #@&*%\$# thimbles. It came out O.K. and my airplane has not fallen out of the sky but it kinda got under my skin because I couldn't figure out how Pete done it. Well one day I found myself staring at old 500F and I took a peek to see how Pete got four of everything on that shackle. Do you know what?--- That doggone Pete didn't use any thimbles! (Con't.)

DON HOOVER (Con't.)

So, he got 4 wires on that shackle --- no trouble. Later on I pitched him a curve on this deal and he belted it right back to me by asking if I found anyplace in the plans where it said to use thimbles at this location? Well I gave him my best sheepish grin and walked off muttering something about taking another look at 500F. Boy! did I feel stupid.

DID YOU KNOW!

That if I had all the money I lost from taking days off from work to build a Fly Baby, I could have bought a good used Boeing 707?

While on the subject of being stupid maybe some of the other builders of Fly Raby might give a little thought to the temperature of their workshop when they put the aluminum leading edge on the wings. I put mine on out in the garage when the temperature was down near freezing. Now I'm not saying this was the reason but when my Fly Baby sits out in the hot sun, the leading edge gets full of humps and bumps. I thought that maybe the cold temperature had the aluminum in a contracted state and now when the hot sun hits it and it tries to expand, it can't move because it is nailed down so it does the only thing left --- it bulges up and down between the nose ribs. Yes ?????????

DID YOU KNOW!

That the roof on our house leaks, the house needs painting, the drive-way is all washed out, the car is worn out, and I got holes in my shoes, but, I've got a brand new Fly Baby?

I didn't think too much of the idea of using wood blocks for the bearings for the torque tube assembly on stations 3 & 4 until someone said, "What do you think the bearings are made out of for that old wringer washing machine over there in the corner." (the wringer bearings). Well I made mine from Oak and it works!

Look for N608X at Rockford in '68 and if I ever build another home-made airplane, it will be a FLY BABY again. "Sincerely, Don Hoover. (end)

On the next two sheets you will find "Pope-made" drawings of Don's aileronstop fitting and the aileron linkage.

Many thanks to Don for taking the time to pass on some of his experiences. This is a case of where a builder has finished and is flying his ship, and could take the attitude, "every man for himself" and let it go at that. Like most "Fly Baby Types" though, he isn't that type individual and is just one more example of the comradeship that exists among us.

(The next two pages of Don's drawings constitute pages Eleven thru Fourteen.)

On the back of this sheet you will find some so-called, "trivia" or "filler" as some magazines and papers call it. We however find it to be delightful reading and hope the author will favor us with more. It was signed "A Believer" and we will honor the "signature" by not publishing the name. Our original thought was to ration it out over a period of several issues, but we will "shoot the works" and hope for more. Please!

HAPPINESS IS:

The lead-in runs something like this.... "In this day of fast living, obscene literature, and risque behavior, I feel I should check all reading material coming into this house! I did check --- The Fly Baby Bulletin, and find there are different degrees of Happiness. Happiness in our house, (what's left of it) shapes up something like this:

HAPPINESS IS

Happiness is a bundle of sticks Grooved and lovingly stacked, And grotesque shapes of metal Hammered and laboriously "hacked".

Happiness is:
A copious covey of cupcake tins
Alined in fingertip array ---Strange things fill their cavities now,
(They were mine just yesterday!)

Happiness is:
A multitude mass of S.A. monthlies,
A "glue caked" tongue depressor
Adorning that "thing" in the corner
That once was called a dresser!

Happiness is:
A pail of peat and potting soil
to bed down the Heliotrope
Lies hopelessly now in a hideous heap -And the pail? It's full of dope!

Happiness is:
The topmost shelf of the closet
(My Chapeau from Paris, France)
Has lost it's long priority
To a pair of lacquered wheel pants!

Happiness is:
Lots of love and understanding
No matter what that entails,
Though a blissful kiss becomes a hiss
From a mouthful of cemented nails.

A Believer

Welcome Believer! You're among friends. The ability to turn a neat phrase to express ourself is not among our limited literary attributes. You're needed here to pinch hit, so consider this your invitation to do just that. O.K.? Thanks.

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