


Express

LINK

NEWSLETTER



February, 2001 - No.24

Ed note: The editors have agreed to act as an "unofficial" factory newsletter until such time as there is sufficient staff time available to allow factory staff production. Articles submitted from factory sources will be identified with an "EXPRESS factory" byline.

Butler's EXPRESS Arrives Home

IFR Panel, Long Range Factors In Flight To IN

Via E-Mail

Jim and Kay Butler took final delivery of their Builder Assist *EXPRESS* Millennium N-174JK on November 24, 2000 following 18 months of work characterized by usual prototyping delays and changes to systems components, paint and upholstery. According to Factory Operations Manager Larry Olsen, "The Butler's project took longer than we all wanted, but provided us with valuable information and tooling with which to deliver future projects in the predicted time, and produced a superior result. The pictures on the Factory Web Page do not do it justice."

Jim and Kay flew it to their home airport of Kentland, Indiana, arriving at 5:30 P.M. on November 26th. With stops at Redding, CA, overnight (to avoid weather developing in Oregon and Idaho) and Salt Lake City, overnight, they headed for Moline IL. (after diverting en route from the flight planned Red Oak, IA) With VFR reported at the possible alternate of Moline, IL, they pressed on to Kentland where the weather was reported to be "terrible". After flying most of the last 60 miles into Kentland in hard IFR, below the freezing level, sometimes being unable to see the wingtips, they broke out at about 800 feet with the airport in sight.

In Jim's words, "The airplane performed flawlessly throughout the trip. We flew 2081.9 nautical miles, not counting approaches, with an average ground speed of 191.5 knots. I am very grateful for the long range capability of the *EXPRESS*."

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So, You Want To Build A Kit Plane?

Here are some things to think about as you proceed with, or approach, the construction of most any kit plane, but the EXPRESS in particular.

There are at least three "truisms" that you may as well understand at the beginning:

- It will invariably take you twice as long as you think it will.
- It will not always pay to try to save money as it's going to cost a lot more than you think in the end anyway and;
- You will make every new part three times before you're satisfied.

Sad, but true. But you can improve your chances of success by doing some or all of the following:

A) Resist the temptation to customize.

I know, I know, you just saw the latest magazine or newsletter describing some really interesting innovation that would work in your plane. The surest way to extend your building time is to add "neat" things that appear as you proceed. I'm not saying that you shouldn't, just do it when you are convinced that any addition is *NECESSARY* for the safety, reliability or comfort of your airplane - in that order. Remember, as above, you will probably have to fabricate any gadget three times before you are satisfied enough to bolt it on.

B) Don't buy anything until you actually need it and don't cut to the edge of part line until there is nothing else left to do. There

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VISIT THE *EXPRESS* FACTORY WEB SITE: WWW.express-aircraft.com



Factory Telephone And Fax Numbers

The current factory mailing address, shipping address, telephone and fax numbers are:

Mail: P.O. Box 236,

Olympia, WA 98507-0236

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Web page: www.express-aircraft.com

Larry Olson - Operations Manager

Chris Michalak - Director of Marketing/ Avionics

Frank Martin - Mechanical

Strings Too Short To Save!

...real and unconfirmed news and rumors which may possibly be of interest to **EXPRESS**

... Builder **Werner Maag** and his son visited the CBROS hangar at LVK the middle of September. Werner hangs out in Switzerland and is an MD-11 Captain. Jerry Sjostrand scheduled time to fly to LVK and take the Maags for an orientation flight in his **EXPRESS**. Werner expressed his great pleasure with the experience and went home with renewed dedication to complete his project. He has subsequently offered to help **Benny Thordarson** close his wings if they can make the schedule work.



... **Irita and Dennis Warner** have decided to sell their **EXPRESS CT**, which was completed by husband/father **Jim** before his untimely passing several years ago. Their **EXPRESS** is the first builder completed example which was followed shortly by **Ed Bernard** and **Hardy Huber**. Before his death **Jim** flew the plane to Sun 'N Fun and Oshkosh several times. **Jim** and family are particularly known for their **NONSTOP** trips from California to Oshkosh. **Dennis** and **Irita** have continued to fly their **EXPRESS** to various events, particularly around Northern California, and **Dennis** recently flew it solo to AirVenture 2000. **Irita** and **Dennis** report that they feel that they are not able to fly the plane enough to keep it in good shape so they have reluctantly decided to part with it - hopefully to a good home. (see ad on page 7)



... Factory Operations Manager **Larry Olson** recently traveled to LVK, which he used as a base for a Demo flight scheduled for November 18th, and to inspect, first hand, the S-90 project of **Shawn** and **Nadine Kelly**. Since the CBROS project was then in Olympia having additional instrumentation in-

stalled, there was space in our hangar for **Larry's EXPRESS** to spend the night. No word on the result of the demo, but **Larry** did spend some time going over the **Kelly's Series 90** example which is being constructed at the CBROS facility. **Shawn** and **Nadine** had recently shipped their kit (along with that of **Jim Ward**) to the factory for some "Builder Assist." The **Kelly's** had some questions about the results of the builder assist work and, according to **Shawn**, he and **Larry** reached a "meeting of the minds" regarding a solution to the problems that had presented themselves. Sounds like "customer service" taken to the upper limit when the factory head man makes the effort to personally solve a customer relations problem at such a distance from home base.



... in your wildest dreams. For those of you who have yet to complete your **EXPRESS**, try this mental picture - the elder **Copeland** brother and **Jerry Sjostrand** playing golf???

Yes, during a recent vacation jaunt (can you call it a vacation when you're retired?) your editor and **Jerry** hooked up for 9 holes with **Jerry's** brother in Green Valley AZ. I have sworn to not divulge the score(s) but I have several really good excuses for playing the way I did. Neither of us is ready for the tour. Needless to say, the years have taken something away from the timing and eyesight. I will leave the costumes and equipment to your further imagination.



... Builder **Henry Walser** (our French Connection) sent along news of successfully closing his wings. **Henry** noted that he recently has spent time restoring a **Stampe SV-4A** biplane but has since returned to his routine of spending 2 - 3 days per week on his **EXPRESS**.



The "EXPRESS BUILDERS HELP PAGE"

on the internet visit the URL:

<http://www.sierratel.com/jerico>

Jerry Sjostrand maintains this web page specifically for **EXPRESS** builders. A good place to find completed aircraft and major kit parts for sale, as well as some detailed technical building tips.

The "EXPRESS BUILDERS FORUM"

the web site maintained by **Tom Hutchison** can be found at:

<http://www.express-builder.com>

This page is particularly useful for builders who have specific questions or needs. Not as much general technical information or detailed building tips as the "Help Page".

VISIT THE **EXPRESS** FACTORY WEB SITE: WWW.express-aircraft.com

N-404CB Test Flights Continue

Current Status:

As this is written February 15, 2001, N-404CB has returned to its home hangar and test flying has resumed.

During the period November 3rd to January 7th it had been "resting" in the factory avionics shop. Including the flight from Livermore to Olympia, which added 4 hours and 1 hour of ground test time to the Hobbs, 404-CB had accumulated about 35 hours total flight time. The flight to Olympia went without a problem according to partner/pilot Peter Becker and was very close to four hours, block to block.

Subsequently, Ted Gaston, the factory avionics expert has successfully installed a Sandel HSI, and a certified Apollo GX-50 GPS and tied the whole package together to work with our S-Tec 50 auto pilot.

Several problems were encountered; not the least of which was significant interference between the remote compass and the transponder antenna. The solution to this dilemma was to relocate the transponder antenna to the bottom of the fuselage. We expect to have to do some re-routing of some major battery leads to do, based on Ted's recommendations, when we get the airplane back at LVK.

Official Christening:

CBROS finally got up the courage to invite family, other builders, close friends and the curious to an open house at our hangar. About 80 people showed up and had a fine afternoon of BBQ and visiting topped off by a short test flight by John. The flight was designed to "evaluate the slow and high speed handling of the EXPRESS when relatively close to the ground". The picture, right, shows the result of "whacking" the nose gear spindle with a

champagne bottle (took the old guy two tries) christening N-404CB.

Magneto Problem(s)

The day after the party we accidentally discovered that somehow the left mag had lost the two top screws on the distributor cap, and the cap was being held on by the bottom two screws - which were both loose. This explained the excessive amount of "noise" in the comm system that we hadn't heard before. When trying to replace and tighten the screws we found one of the tapped holes in the mag body was stripped. After having heli coils inserted in all four holes, the cap was replaced without incident.

Further Fuel System Anomalies:

Another problem, which continues to nag us, revolves around the tendency of the fuel system to continue to burn fuel from

they are Tee'd together before being attached to the shut off valves. We expected the check valves to: 1) prevent fuel from draining from one side to the other and; 2) allow the fullest tank to "unload" when the head in the most full tank gained sufficient head pressure over the less full tank. We have found that this does not work in practice and, in fact, set up in this manner will actually allow fuel to establish a siphon from one side to another and overboard, and will need to exercise one of two obvious options which would be to: 1) add two more shut off valves, or one 4-way valve so that each of the four tanks can be controlled individually or possibly; 2) move the check valves to the wing tip tank vent lines where their only function would be to stop any unwanted

"overboard" fuel overflow, and let each set of inboard and outboard tanks seek their unrestricted common level. We will work out this problem right away as a recent flight, ending with an exaggerated asymmetrical fuel load and an unexpected crosswind, made for an "interesting" landing. Don't ever think that you will not need "stop to stop" control movement some time, and short change yourself in the name of "ease".

After further discussion, we have ordered two Andair three position fuel control valves. We will use one to control selection of the inboard and outboard tanks on one side and the other to do the same thing on the opposite side. This will increase

the fuel management requirement somewhat, but will be flexible, reliable and will prevent the tanks on one side from "unloading" to the other side. We expect to "break" the existing system at the check valves, which reside just in front of the



whatever side starts first. Recall that we have both outboard tanks tied together with an on/off control valve and the inboard tanks are similarly plumbed together. Both "systems" have a check valve at the inboard ends of all four lines, before

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N-404CB Test Flights Continue

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forward shear tie, remove the check valves and make up flexible lines from there to the control valves, which will be located in the existing center console which is located between the forward shear tie and the nose gear support.

Nagging Oil Leak:

After reducing the rather obvious oil leak from the engine by: 1) replacing the (improperly installed original) engine driven fuel pump and left magneto and; 2) going over every bolt, nut and screw forward of the firewall at least three times, we still have a messy, but harmless, source of oil leaving the engine somewhere. At this juncture the leak seems to be coming from the oil sump (pan) gasket. We have applied all sorts of exotic sealers to no avail. We asked Larry Olson to have a look while the airplane is in his shop. As this was a zero time overhaul, we hope Larry can come up with an answer.

Exhaust System Warning!:

We have also found that our exhaust system will need to be modified. As furnished for our IO-540 the exhaust stacks on either side end just forward of the firewall. As a result, the hot exhaust has been discoloring the inside of the fairings on the cowlings which house them. We plan, early on, to have at least 6 inch extensions welded to each tail pipe and check carefully for several hours later, for any cracks which might develop from resonant vibration set up by the longer tailpipes.

Which brings us to the story of the less than adequate Wheeler furnished exhaust systems. If you are installing or have installed an IO-360 Lycoming, pay close attention. Several builders, including Reinhart Metz have had nagging problems with these exhaust systems, but

Russ Porterfield has had almost the ultimate experience. With about 10 hours of time on his new *EXPRESS*, about an hour into a test flight Russ decided to stop for lunch at an airport some distance from his home field at Clear Lake, CA. Finishing his \$200 hamburger he took off for home. Shortly after lift off he noticed a "different" sound coming from the engine compartment. Checking all engine monitoring instruments confirmed that all seemed to be well, but he did notice that the friction lock on his throttle was loose enough to allow the throttle to back off from the full position. Pushing back to full throttle and checking the instruments again he noted that everything still seemed OK so he headed home. After a few minutes enroute Russ noticed that his feet were getting warm and became puzzled, but not concerned, and continued, to land safely at his home field. After shutting down he carefully inspected the engine compartment and found, to his great surprise, that a major portion of his stainless steel, last forever, exhaust system was GONE. Needless to say he also SERIOUSLY charred and speculated that only luck prevented the cowl from catching fire. It is recommended that ALL IO-360 Lycoming installations pay CLOSE attention to the condition of their exhaust system before each flight, at least initially. Solutions to this problem vary based on who manufactured the system and when, but include dynamic balancing of the engine/prop and extra flexible joints and hangers. This same problem came up in a very early issue of the *EXPRESS* Link as a warning from Ralph Kenner, who advised that carbon steel exhaust systems be avoided in favor of stainless steel. From the experiences of our "Brand X" builder with his 360 Lancair exhaust system, and

Reinhart Metz's exhaust system vibration problems, we know that the problem is not unique to *EXPRESS* installations, but is inherent to IO-360, "crossover" style Lycoming systems.

S-Tec 50 Auto Pilot System:

At the suggestion of the factory Guru, Ted, we have made a major change in the configuration of the pitch servo installation. We had previously set up an idler pulley system to cleanly separate the rudder and elevator control cables aft of the pitch serve. Ted observed that the pulleys, which each had an elevator and rudder cable on opposite sides, did not work "in concert" as the elevator and rudder cables don't necessarily move in the same direction at the same time. Over an extended use period, the slight drag on the pulley, from one cable or the other, would eventually wear out the pulley. After spending a lot of time sitting in the baggage compartment, with its well known, comfortable accommodations, we divined that removing the pulley system entirely, and re-routing of a rudder cable and an elevator cable would do the trick of separating the cables and lining the elevator cable up with the pitch servo cable drum. Hard to understand why we didn't see this in the initial set up, but the fix turned out to be rather simple - if you don't count the time spent in the baggage compartment. A subsequent flight to visit builders Russ and Joyce Porterfield in Clear Lake, CA, (about a 40 minute flight) confirmed that the two axis system and the altitude hold feature is working flawlessly.

More test reports in future issues as we move toward "zero defects".

ED NOTE:

If you are looking for the second installment of the series on the fabrication of the Wing/ Landing gear intersection fairings, look no further - it's not in this issue. We have been concentrating on completing things required for test flights and the fairings are not on the critical path. Don't despair however, we will include the completion of the fairings in the issue which follows our completion of this procedure.

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So, You Want To Build A Kit Plane?

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are some system components, such as gyros, which don't like to sit on the shelf for extended periods of time without exercise. We were forced to spend several hundred dollars to have our electric gyro overhauled because we didn't know that it had a "shelf life". Do not leave normally lubricated components in place for months without proper treatment. This certainly includes your engine. If it is not "pickled" for storage, continuously lube it, or see that it is treated for storage.

C) Copy other builders success.

Almost without exception we have found the EXPRESS community to be extremely generous in sharing details of what or why they did this or that and then document the result(s) so that you can enjoy the fruits of THEIR labor. I think the attitude comes from the old statement that, paraphrased, says that "copying" is the sincerest form of flattery. We all like to think that our ideas are worth being copied by others. Don't forget that someone has already done almost anything you can think of and maybe several some ones. So, unless you can afford the time or money to break some ground or you are fiercely stubborn, check what's out there that might be just the thing you want to "invent".

D) Don't be afraid to ask for help.

As with the above paragraph on copying, you will also find most EXPRESS builders very generous with their time, patience, resources and teaching skills. Such sharing, we find, comes easier once you have flown your project- *because what else do you have to do?* There are many obvious examples to choose from, such as Jerry Sjostrand, Ed Bernard, Reinhart Metz, Dick Lind, and even Sven Eriksson in Sweden will provide excellent engineer qualified advice, to name just a few. Asking for help is a lot like shopping for samples, which we will cover shortly, the worst thing that can happen to you is that you will get a no. The best thing that will happen, and it happens more often than not, is that you will make a friend. Don't forget for a minute that regardless of your level of skill or area of expertise, you can almost

bet that you will eventually end up helping someone else. Additional exceptional resources include Jerry Sjostrand's EXPRESS Builders Help page at:

WWW.sierratel.com/jerico and Tom Hutchinson's Express-builders forum at: WWW.express-builder.com and, of course the publication which you are currently reading, and the guys who publish it!

E) Get the right tools (see C above)

If you are into working with your hands (if you're reading this it is a fair assumption that you are), it is easy to spend almost as much money on tools as you do on your airplane. Our advice on temptation above applies to tools also. The most efficient way to fill out your tool box is to find out what works best for some one else. Why pay \$60 for a die grinder when one can be had for \$15. Sure, the cheap one will wear out faster, but our cheap one has lasted through our whole project and is still going strong. Why buy a 1/2 inch angle drill when you can rent one when you need it (very seldom). You are encouraged to purchase a reasonable selection of power tools, not because the work cannot be done manually, but because the work will proceed much faster and your accuracy will improve. Useful tools will include a good band saw, an accurate drill press (with vise), an air compressor strong enough to run a die grinder, a combination belt and disc bench sanding machine, a bench grinder, a strong shop vac, a substantial bench vice, a small right angle drill adapter, lots of spring and other type clamps (can't have too many of these), three sizes of Cleco's and cleco pliers, orbital palm sander, hand grinder, set of sockets, 1/4 and 3/8 drive, with ratchets and some extensions, end wrenches, 1/4 to 1 1/8, stubby open/box end wrenches 7/16 to 1 inch, boxes of 40, 60, 80 and 240 sticky backed sand paper, and a long board. You will need a variety of special tools depending on what systems you plan to install. Don't try to guess what you will need, you'll find out soon enough. Again, other builders are a good source from which to borrow expensive, specialized tools. We installed our wing pins using a rented 1/2 inch angle drill and drills and reamers borrowed from John Kee. Worked

great and John generously offers the drill/reamers to any builder who needs to pin his/her wings. The most recent builder to use them is Jack Volkamer. After all, what are you going to do with such specialized items after you finish with them?

F) Learn when to pay and when to "scrounge" samples. There are builders who pay for everything they think they need and don't look for bargains, and there are builders who try to avoid paying for anything, especially if it's not on sale, free or which can be "manufactured". Both ends of this scale can get you into trouble. Scrounging for parts and manufacturing parts, which are reasonable, available can consume amazing amounts of time. Examples include making your own cover plates for firewall penetrations and adapting regular castellated nuts to accept a bolt through the main wheel fairings. While making cover plates may be educational, there are a great variety of commercial examples available at reasonable prices - so why would you? In the case of main gear axle nuts, Cessna (and I suppose others) axle nuts can be obtained at many aircraft salvage yards, but here the line is not so clear. If you don't shop around, or buy new items, it could be very expensive when compared to simply welding together a U shaped piece of 4130, tapped for the appropriate bolt.

Then there is the whole world of "samples". One of the problems we face as individual builders is that we usually only need three of these and four of those, or a little bit of this or that and then we're not sure if what we see in the catalog is actually what we want. Don't be bashful about calling manufacturers and asking for samples. You will be amazed what you can get as samples - many times enough to complete the fabrication of a particular part or system. When talking to manufacturers, don't be afraid to ask for what you want, and present yourself as an aircraft manufacturer. It's not a lie - that's what you're doing - it's just that you are only manufacturing one. Examples are switches, sealants, adhesives, bolts, nuts, screws, special fasteners, paint, fiberglass, carbon fiber, bagging film, valves, etc., etc.

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So, You Want To Build A Kit Plane?

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G) Document what you complete.

I'm not suggesting here that you do this for the FAA, that is between you and your FSDO, but anytime you complete something that will be covered up or even hard to see, take pictures, make notes, draw sketches, whatever will help you to remember why and how you did something. When taking pictures, try to include something that will let you establish scale dimensions. When you have your pics developed, catalog or label them right away. A month from now you will be scratching your head wondering if this is the left one or the right one, etc. You will be surprised at how many times this will save you time and money. For example, do you have a clear understanding of how you installed the inboard fuel pickup plate? Once you get the landing gear in, you will not be able to see it clearly. How about the brake lines in the area behind the panel and inside the nose gear support? Do you want to remove your instrument panel every time you need to get to something behind it?

Also, it is good practice to completely finish and test each system as it is completed and, unless using proof nuts, tighten all bolts and nuts as if you will not see them again - because maybe you won't!

H) Work on your project at **EVERY available opportunity** - every day if possible - even if for only a few minutes. You will find it very easy to come by excuses to avoid working on your project. It's too cold, it's too hot, I should have ordered more (resin- glass- parts-hardware-Q cell-milled fiber etc. -take your choice) last week. Suck it up! And if you only make one nut plate or sand one joint, or read the construction docs, do it! Because even the smallest step is a step that you will need to take and if you do it now, you won't have it to do later. I will be one of the first to admit that I thought the "light at the end of the tunnel" had burned out more than once but, lo and behold, it still burned brightly, it was just around a bend that I couldn't see from where I stood.

D) At the same time, remember that **your project is not your life**, and it is certainly not your family's life. You are doing this **for Recreation and Education**. (according to the FAA) But if you persist, it

will provide you with satisfaction and convenience that has to be experienced to be appreciated, and you will **still have a family** to join you in the celebration.

J) **Volunteer** to work on other projects. You will be surprised at the knowledge and experience you can get by simply helping another builder with their project(s). Even if your neighbor is not building an *EXPRESS*, it never hurts to see how other folks do it. You may stumble across methods and systems that can be adapted to your project, and don't forget - it's easy to practice on someone else's project, especially when you don't have to pay for materials.

K) "**Simplify, and add lightness.**" This quote is attributed to Pug Piper and says a lot, but I would add, "think maintenance." Former United mechanic, Russ Porterfield, who worked with us for a brief period, tried to pound into our heads that sooner, or later, we would have to R and R (remove and re-frame) every part we attached to our airframe. Russ was right! We have not yet had to R and R all of our parts since the first flight, but we are well on the way and some of them have been nearly impossible. Prolific local scratch builder Walter Treadwell, says this about adding lightness, "save an ounce a day." When you think about that, you will be amazed at the result which can be obtained. We have often told ourselves during the building process "why worry about the extra layer of glass or gob of milled fiber mixture, the *EXPRESS* will carry all the weight we can get through the door and, if necessary, we will leave out some fuel." While that is certainly true, every ounce we added detracted from the performance we bought the *EXPRESS* to give us in the first place. With tongue firmly in cheek, let me add, "never mind, we can always add horsepower." Generally speaking, the more simple and light you can keep it, the better it will perform and the easier it will be to maintain.

L) **Use all the eyes** you can find. During the construction process invite and encourage knowledgeable visitors

to inspect your work. It's not always good for your ego, but may save you embarrassment, time and money and possibly an accident in the long run. You will be surprised (read embarrassed) at some of the things that will be discovered.

M) **Do not get caught up** in the construction manual procedures. You probably won't believe this, but all manuals are not created equal. When starting a new procedure, read through it first, think through it second, and third, ask yourself if the procedure is being undertaken in the most appropriate order, or if there may be a better way or time to achieve the result proposed. If you are not clear on where you are going, see (D) above. An example of this is the small cover to be constructed over the pulleys at the base of the nose gear support. In about 90% of the examples I've seen, this cover is, or will become, unnecessary. Don't build it just because the manual says it needs to be done, and it's next in order.

N) **About bolts and nuts.** Even if you acquired your kit from another builder you will probably have enough bolts, nuts and washers to get you started. Our advice is to "unpackage" all the baggies and sort the contents into one of those multiple drawer units. Obviously, you will refer to the construction manual for the correct diameter of the bolts to be used for the procedure being completed. On the other hand, we have found that often the length of the bolt required will vary from the called out item because of variations in construction technique and desired changes. You will invariably not have the correct diameter/length that you need and will unfortunately end up ordering hardware to fill out your inventory. The problem here is that you will end up with a "wall of bolts", many extras of the common sizes and some of odd sizes. Cheer up, here is where you will come in handy to other builders.

O) **Maintenance, maintenance, maintenance!** Do not ever lose sight of the fact that you will have to repair, adjust or perform maintenance on most all the systems you have so carefully installed. Do your best to place components where you not only see them, but get at them.

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EXPRESS STUFF FOR SALE:

COMPLETE WHEELER EXPRESS CT KIT FEATURING TIO-540 LYCOMING WITH 3HRS SMOH ON A TEST STAND - MAJOR PART OF FIBERGLASS WORK COMPLETED

Doug McMillan's partially complete CT EXPRESS is being offered for sale by his estate.

CBROS is familiar with this particular example, as we worked with Doug on the completion and installation of the empennage. We have made a short video tape of the aircraft in Doug's workshop and will loan either an 8mm or VHS copy to anyone seriously interested in purchasing this project.

One of the most unique features of this project is the adaptation of a turbo charged Lycoming 540 C1A, which was overhauled and test run by Larry Olson at EXPRESS Aircraft Technology. The engine is available separately, including engine mount, log books and all accessories.

For details contact CBROS Inc, directly at:

(925)455-1036

E-mail: bnbent@pacbell.net

Fax: 925-606-7534

FOR SALE:

IO-540 Engine mount. Manufactured by EDI. Will not fit certain IO-540 models. Call to find out if yours will fit.

John Kee (803)328-3286

EXPRESS PARTS FOR SALE:

Wheeler EXPRESS lower fuselage kit, complete and still in the original crate. This kit component, at the bargain price of \$3,500 F.O.B. Bentonville, AR can easily be combined with other kits to complete acquisition of all five component kits.

Talk to: Charlie Scott

Days: (501)273-2471

Eves: (501)273-1232

E-mail: exp159cs@nwa.quik.com

FOR SALE:

Two each, Wheeler IO-360 (Lycoming) engine mounts. One is fabricated for use with the larger diameter pucks and one requires the use of the smaller pucks.

Wanted:

Engine mount to fit a Lycoming IO-540-C4B5

Call Ralph Kenner at (509)838-6807

FOR SALE

Matched set of original Wheeler EXPRESS wings. The left is closed out, with complete documentation. The right is still in the crate.

I am unable to complete the project due to financial limitations. Asking \$7,500. Contact Jim Phelps (volunteer builder on Factory No. 3) 12015 246th Street N.E., Arlington, WA 98223. Call (360)435-6845

WANTED:

EXPRESS builder Don Adamson needs an engine mount and exhaust system for an IO-360 CONTINENTAL. He is also looking for a set of windows for his EXPRESS CT.

If you have what he needs, call Don direct at: (501)676-7529

FOR SALE

Two wings. For details contact Alan Cranmer, 525 El Camino, White Salmon, WA 98672, or E-mail to: cranmer@george.net

FOR SALE

1995 S-90 EDI EXPRESS

320TT

290hp IO540 Lycoming

Complete, certified IFR panel

Leather/wool interior

Damage history due to failed inboard gear bracket.

Professionally repaired!

Recently painted in Malibu/Mirage paint scheme white over blue with red stripes.

Previously known in EXPRESS circles as "Desert Storm"

Contact Bob Gisburne for complete details and digital pictures or see message in the EXPRESS Builders Forum at: <http://www.express-builder.com>

FOR SALE:

All parts for CT kits 1 to 5. Wings 85% complete in the 92 gal configuration fitted with SkySport fuel monitoring system. Additional parts include Whelen Strobe kit, dual power supply, Nav/Com with Glide slope, marker beacon antenna kit. All manuals are up to date.

Asking \$25,000

Bob Rusteberg

153 Algonquin Road

Barrington Hills, IL 60010

Phone: (847)428-3630

Fax: (847)427-3677

WANTED:

Need an exhaust system for a Lycoming, IO-360. Stainless steel preferred. Call Jack Volkamer at:

FOR SALE

Matched set of original Wheeler EXPRESS wings. Almost no work has been completed (less than 5%) on either wing. Asking \$5,000. Located in Edinburg, Indiana.

Contact Dick Burton at: dolphus@compugame.com
Rt. 1, P.O. Box 210.A
Edinburg, IN 46124

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Further, we reserve the right to print, or not print, and to edit submissions as we deem fit.

FOR SALE

Two wings. For Details call Dawson Burton @ 812-358-2453 or 812-523-2133

VISIT THE EXPRESS Builders Forum At: WWW.express-builder.com

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EXPRESS LINK
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