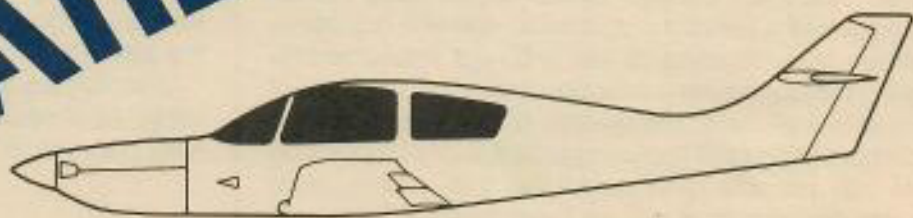


EXPRESS MAIL



Wheeler Aircraft Expands

With Less Than Two Years Exposure, Market Interest In Express Verifies Company Direction

Before we flew the EXPRESS almost two years ago, more than a few folks advised us that there was no market for a four place kit plane since not many people were building them. Huh? We didn't understand the logic either and we're glad that we didn't. In fact, this all sounded a bit like the "If man were meant to fly..." reasoning to us.

It now is apparent that the reason folks weren't building more four place kit planes was because there weren't any that appealed to the general flying public. Sure, there were pushers and canards and other designs which appealed to a sturdy few, but nowhere was there a traditional, no-new-wheels-reinvented, four place that incorporated modern technology in a way that the general consumer could turn into a practical airplane.

This realization became the fundamental motivation to start Wheeler Aircraft and the ultimate result is the EXPRESS. The EXPRESS represents, above all, a practical alternative to very expensive four place cross country travel. Not only did the new composite materials allow us to provide a much less expensive solution, but along the way we were able to go faster, provide more comfort, better economy and better utility than anything else available.

It seems like magic, but it isn't. It's just been a matter of doing our homework, working toward practical solutions, placing the customer's requirements first and working our tails off. And, yes, composites are wonderful and have played an important role in all this also.

We've carefully followed in the successful footsteps of those that have gone before us. Our selection of



No other aircraft offers such a practical path to four passenger comfort, performance and economy.

materials, platform, powerplant, and construction procedures have all been proven before, many times over. At the same time, we took all precautions to avoid following the footsteps of those who are exploring the unknown frontiers...not because we think these people are wrong...they're the ones who discover all the neat new stuff...but because we didn't want to be proving any new theories of physics or chemistry or whatever in your new airplane.

The result of our philosophy of design...and business...is that we now provide an airplane that can be counted on to perform, day in and day out, under most conditions, in a safe and effective manner. You don't have to be concerned about what rain does to your canard or about debris going through your prop

Wheeler Expands (cont.)

on take-off because it's on the back of the airplane. Likewise, loading and CG considerations are predictable as is the performance of the airplane under a wide variety of conditions. No re-invention of the wheel. Just solid, proven aircraft engineering fundamentals combined in a way that no one else has done.

When you combine all this with our total commitment to our customers, as demonstrated by the level of support we provide, the quality of our materials, our documentation and the completeness of our kits, you have the reliable avenue to the four place, cross country airplane that you've been waiting for.



Material sample testing is conducted on a continuing basis by the Wheeler Research and Development Group.

Without any doubt we believe that the approach that we have selected and the airplane that we offer, the EXPRESS, are just what the market has wanted. It's possible for us to be this positive only because time and time again you've told us we are right at the airshows, during visits to our factory and on the phone.

The Wheeler company now employs 38 dedicated people and we're growing every day. Thanks to your support and the tremendous response that we've had to the EXPRESS, we are well ahead of our growth plan. We have every intention of becoming the next generation leader in general aviation aircraft and recognize that our commitment to you, our customers, is what is making this dream possible.

For those of you who are already happy EXPRESS owners, we say thanks for being part of our family...for those who are considering the purchase of an EXPRESS, all we can say is, "Come on in! The party has already started!"

Customer Hospitality Area Planned For OshKosh

We plan to have a separate area in our booth at Oshkosh this year just for EXPRESS owners to relax and EXPRESS themselves with others of like mind. Please plan to spend time with us if you can. We always enjoy talking about your building experiences and learning whatever we can to improve our service and the EXPRESS.

Also, we have a forum session scheduled during the show. At 10 am on Saturday, July 29, Ken Wheeler will hold a forum in Tent #3 on the Wheeler EXPRESS.

Wheeler Offers Free Travel To The Northwest

O.K., We're ready to admit that Gig Harbor, WA is not the most centrally located city in the United States. And, we're willing to admit that it might be slightly inconvenient for those of you on the East coast, in the Southeast, in the South...well, you get the idea...to visit us at the factory.

What we do firmly believe is that we have the best run factory in the business and that, for any who might doubt this, once you've seen it and the EXPRESS, you'll be convinced that owning an EXPRESS is a sound investment. We also think that it would be hard to imagine a more beautiful place to spend a few days than in the great Northwest.

Therefore, let it be known that to help those of you who need help in deciding that the EXPRESS is the only way to fly, Wheeler will discount up to \$500 in travel expenses off the price of your EXPRESS purchase. This offer is good when you order within one week of your visit. At the time you order, all you'll need to do is show relevant travel receipts to receive the discount.

We're excited about this offer and hope that you'll all consider taking advantage of it. We always enjoy seeing folks who like aviation and we really enjoy showing our facility to those who are interested in owning an EXPRESS.

As always, call ahead with your plans to visit so we can be sure to have someone available to show you around. It gets pretty busy around here and we don't want to lose you in the crowd.

Director Of Sales And Marketing Added To The Wheeler Staff



Jim Cooper

We are delighted to announce the addition of a new member to our growing family here at Wheeler Aircraft. Jim Cooper joined us in April to take on the sales and marketing responsibilities for the company. One of Jim's strong attributes is that he shares the same high level of commitment to the standards of quality and service that Wheeler has become known for.

His background includes two degrees in aeronautical engineering, the first from the Air Force Academy and the second from Purdue. While at the Academy Jim earned a position on the Academic All American Basketball Team as well as an NCAA scholarship to attend Purdue for his postgraduate work. His early career focused on high speed airflow research at Wright-Patterson Air Force Base in Ohio. A change to civilian threads eleven years ago brought him to Oregon to work in marketing and sales positions for Tektronix and, most recently, Test Systems Strategies; both companies involved in the high technology semiconductor industry.

Flying has been an important part of Jim's activities throughout his career. He's designed and flown radio control pattern airplanes for the past fifteen years and has had plans published in RC Modeler. He also owns an award winning Cessna 170 which he now ties down just outside his office. Jim likes to point out to our factory visitors that his 170 is a good example of how most factory airplanes are built today...yet his 170 was built in 1949.

In addition to Jim, the Cooper family consists of his wife, Jane, two daughters, Anne who is 15 and Amy who is 13, two cats and a hamster. Jane earned her pilots license in the family 170, Anne is ready to solo on her 16th birthday and Amy wants to go to the Air Force Academy like her Dad. The whole family is looking forward to building their own EXPRESS. Maybe an interest in aviation is genetic.

We hope that you'll welcome Jim to our family as we have. He loves to talk EXPRESS and looks forward to meeting as many of our current customers and soon-to-be customers as possible. Give him a call with your questions and he, of course, will always be glad to add you to our growing family of happy builders.

Retracts On Track

The retractable gear design is moving ahead, if not on schedule, with purpose and determination. We had a wing at Sun-and-Fun with the prototype installed, receiving a host of positive comments about the design...as well as a number of orders for the retractable version of the EXPRESS.

The design is sturdy, reliable and easy to maintain. A dual cylinder eliminates side loads on the oleo strut and thereby eliminates the primary cause for leaks and failure with this component. The gear is held in the up position using positive hydraulic pressure. Should the electrical hydraulic pump, the hydraulic actuator or the mechanical linkage fail, the gear automatically drops and locks down.

In spite of our efforts, delivery of the gear is behind our initial schedule estimates. Since the gear is still in development it is difficult to say when shipments will begin with 100 percent confidence. Our current estimate is that we should begin filling back orders for the retractable wings in the August-September time frame.

As always, these kits will be documented and prepared with the same level of care and completeness that our fixed gear kits are known for. The extra time that we use getting everything just right pays off in shorter assembly time and a finished product that you can be proud of.

For those of you who have already ordered the retracts and those who plan to, your orders establish a position in the queue for delivery and lock-in the price at the time of your order. If any of you who have placed an order for the retractable gear would rather get started sooner with the fixed gear EXPRESS, please call us and ask about delivery.



The retractable gear assembly is simple, reliable and easy to maintain.

News From The Factory

Wheeler Tooling - Each Piece A Masterpiece

Among the many things that we are particularly proud of here at Wheeler is the superb craftsmanship that is resident in our tooling department. Recently the folks in that department out did themselves with the unveiling of the master plug for kit number 5 - the fuselage top.



This magnificent tool reflects the quality of the fuselage you receive as kit no. 5.

At Lakeland Sun-and-Fun in April we were delighted with the very positive comments that we received over the quality and workmanship of our parts. Well, stand back, because this new fuselage has set a new standard even for the folks here at Wheeler. The top, along with the bottom kit (number 3), complete the improved fuselage design, providing 3 inches more width and nearly 2 inches more head room.

With the new tooling complete, we've discovered that a single door on the right, with the added size offered by the new fuselage, will provide much improved exit and entry and eliminate the need for a second door.

Also, our engineering group tells us that improved fairings on the landing gear legs, reduced cooling drag and improved wing fairings offset the increased drag caused by the fuselage size increase so that the performance numbers that we've measured with our first airplane should remain intact.

Stay tuned - it just keeps getting better.

New Wing Carrythrough Structure Exceeds Expectations

Recent test of the new composite carrythrough box...the piece into which the wing spars plug...has been completed with better than expected results. As of this writing the carrythrough has been loaded to 9.5 Gs without a hint of protest. This composite part replaces the aluminum carrythrough that we originally designed for the EXPRESS.

A special center section of the fuselage was built with the composite carrythrough bonded in. Spars were installed and hydraulic jacks used to stress the part. Tests will continue to destruction.

In addition to being stronger, the new composite part is lighter and more durable than the metal version. This doesn't come as a surprise since composites have provided the same advantages everywhere else in the airplane. Besides, we didn't like the big piece of riveted aluminum in the middle of the EXPRESS anyway. Sort of goes against our principles.



We try to break things at the Factory to be sure they won't be a problem for you.

The new carrythrough is bonded to the fuselage bottom while the fuselage bottom is still in the master tool, thus assuring perfect alignment. The wing mounting bolt holes are also drilled at this point so that the wing angle of attack and dihedral are perfect when you set the wing.

Our first fuselage bottom kit went out in late April with the new carrythrough and it looks great. Bonding the carrythrough at the factory saves considerable assembly time for you and virtually assures you of a straight airplane when you're finished.

Fax Machine Now Installed At Wheeler

We now have our very own FAX machine. The machine will make life easier for all of us. We've been using one down the street and haven't been able to provide the instantaneous response that we'd like...and that FAX machines are known for.

So, for your next rush transmission, send the data to our machine at - (206) 851-5916. We're looking forward to hearing from you.

Show Season Begins With An Avalanche Of Interest...

The show season got off to a great start for the EXPRESS at Lakeland in early April. The level of interest that the airplane attracts as it sits on the flight line is truly amazing. Most of the time there were so many people around the airplane that it was hard to find. We even had one fellow who found the crowds so thick that he drove home (he lived near Lakeland) to call the factory to order his EXPRESS.

We had a great location for both the airplane and the booth. Visitors to our booth could easily get to the airplane and the airplane could easily get to the runway for demo flights. As usual, the people running the show were great and we enjoyed ourselves greatly.

Our display included a new set of signboards at Lakeland which outline in some detail how the kits are packaged and assembled. The information related how the assembly process follows simple step-by-step construction procedures each support with a specially packaged set of parts. We also showed an open wing with retractable prototype gear installed, many of the kit components and copies of the manual for all to see. From the response of those in attendance and from the feedback we receive from our customers, it seems clear that we have achieved the new standard in aircraft kits that we were aiming for.



The Wheeler booth was stage center for builders and would-be builders at Lakeland Sun and Fun in April.

Next to the EXPRESS itself, the prototype retractable gear display drew the most attention. The booth was never without animated discussions reviewing the relative merits of retracts versus fixed gear. As one customer pointed out, "If every decision were black and white, life in general, and deciding on which EXPRESS kit to buy in particular, wouldn't be nearly as much fun." That is exactly why we're offering both.

The weather was generally agreeable, although scheduling demonstration flights proved to be a challenge. A few of the mornings were beautiful, but several remained foggy until nearly lunch. We seemed to be just out of sync as we tried to anticipate what the next morning would hold. We continue to be impressed with how good natured our customers are and

thank those of you who got shuffled one or more times as you waited for a ride.

Ken held a forum on the EXPRESS which was well attended, fielding questions from many folks who became customers by the end of the show. Questions most often asked revolved around the choice of a power plant and the possibility of an automobile engine conversion for the EXPRESS in the future.

Even though the EXPRESS team is currently in close contact with the leading individuals involved in auto engine conversion efforts, Ken advised those in attendance that our position on powerplant selection is to go with a good mid-time Lycoming IO-360. We've had excellent results with this engine and the performance and economy are good. Until extensive testing is done on any other engine, our position will be to recommend and support the IO-360 for installation in your EXPRESS.

In a surprise forum...to Ken anyway..., Ken gave a presentation on composites as a fill-in for another presenter that couldn't get to the show. There was such a high level of interest in the subject and the session went so well that we've decided to give a similar forum at Oshkosh on Thursday, August 3rd, at 1pm in Tent #3. Our head Engineer, Larry Godt, is busy gearing up for this forum. We'll likely make it a regular part of our road show.

Another heavily discussed topic at Lakeland was the new Primary Certification Category proposed by the FAA. Under the FAA proposal a new class of certified aircraft would be defined directed at providing a less expensive certification process for aircraft such as the EXPRESS. Ken attended the FAA forum on this subject. We are very interested in the outcome of this proposal and have designed the EXPRESS to meet current Part 23 requirements in anticipation of just such a new category. The Wheeler Company's position will be to push for less costly certification as long as the safety of the category is not compromised. In any event, any changes in the way aircraft are certified as a result of this proposal will probably not occur for two to three years.

In general, the Lakeland show indicated a maturing in the kit plane industry. Customers are tending to be much more sophisticated with their questions and their expectations. They are more oriented toward acquiring a state-of-the-art airplane than they are toward acquiring a hobby project. They recognize that the company behind the kit that they build is as important as the kit itself. And, maybe most importantly, they appreciate that the company's concern for the customer and his successful completion of the kit is everything. Without a doubt, this was a great show for Wheeler Aircraft.

The New Guys Impression Of Flying The Express Cross Country

As one of the newest members of the Wheeler family and the fellow who will be responsible for relating the attributes of the EXPRESS to all you folks, I thought it might be interesting to relate my impression of the EXPRESS during my first cross country flight. Keeping in mind that I **am** responsible for selling the EXPRESS and that most of my prior time has been in the trustworthy but not-too-exciting family C-170, I'll try to proceed without getting too enthusiastic.

Some of our customers have said after their first rides, that "...the EXPRESS flies better than it looks...if that's possible." It turns out that it **is** possible. Although not my first ride in the EXPRESS, the journey back from Sun-and-Fun in Lakeland to Seattle was my first serious cross country trip in the airplane. In many ways a trip like this is a much more important test of the airplane than a short flight around the local field can be. The EXPRESS has been designed primarily to be a fun cross country machine. The only real way to find out if that's what it's turned out to be is to plop your backside into the seat for several hours at a time and fly...which is just what Gary Mavrovic, our company pilot, and I did.

I'm not an easy body to make comfortable. I'm a bit more than four inches over six feet and I get claustrophobic in telephone booths...but didn't in the EXPRESS. Frankly, I was a bit surprised. Even though the pilot's seat is snug (our airplane is not as wide and tall as the kit version that we're shipping), I have room for my knees and my Dave Clarks. I think a lot of the feeling of roominess comes from the exceptional visibility - the thought of sitting on a magic carpet comes to mind.



Jim and Gary having more fun than anyone deserves while working...the return from Florida.

Flying the EXPRESS was also as advertised. My many previous hours in my C-170 were well spent. I was to find, in establishing a solid base line from which to compare control response. The C-170's controls do

not and the EXPRESS' do. Unlike some other responsive airplanes I've flown, however, I was almost immediately comfortable at the EXPRESS controls and am now reluctant to trade them back for anything less.

During our longest leg of four hours and over 800 miles, I found that holding heading and altitude was easily managed. The level of pilot workload required actually seems tuned to prevent fatigue and boredom. At the end of each leg of the trip, Gary and I tended to feel more rested and ready to fly than when we started. The airplane does that to you.

One of the more impressive segments of our trip was the stretch from Centennial just south of Denver to Pocatello, Idaho. With Gary, me and all the dirty laundry from eight days at Lakeland and the gear from the show, we were around 2600 pounds gross. The altitude at Centennial is 5883 feet. We left about 10 in the morning and instead of heading north in a very slow climb as I've done in the past with my 170, we set the Loran for Pocatello and flew right over the Rockies. I was impressed. Our rate of climb started at just over 1000 feet per minute and stayed well above 500 feet per minute up to 12.5 thousand.

Not all of our flying was at altitude as you might guess. There are more than a few enemy tractors and silos between here and Florida, and most would have been the worse for it had our cannons not malfunctioned. The handling of the airplane in these "non-straight and level" activities is outstanding. The sporty characteristics of the EXPRESS have not been neglected.

In the final analysis the airplane does cruise at over 200 miles per hour, it handles turbulence well, it is easy to keep on the straight and level for long periods, it is fun to fly and very comfortable and I would still rather have one of my own than any other four place airplane that I know of. As a result I am intensely proud to be part of this team and to be able to represent such an outstanding product.

Just for the record, and to continue to defend my unbiased perspective on the EXPRESS, I met Ken and Gail Wheeler as a prospective customer. After doing my homework regarding alternative kits and/or production aircraft, I did order an EXPRESS; all **before** I knew I would get the opportunity to work here.

After being with the Wheeler crew for over six weeks now and seeing everything from the inside, the only thing I would do different than I did the first time is not to wait so long to order my EXPRESS.

My money says that you'll agree once you've looked closely at what we have to offer.

- Jim Cooper

The 1989 Express Show chedule

Our plan for airshows this year focuses on the larger shows aimed at general aviation enthusiasts and kit builders. To supplement these shows, we will visit as many strategically located FBOs as possible before and after the airshows on our schedule.

The locations and dates that are solid at press time are as follows:

- | | |
|-------------------|------------------|
| • Watsonville, CA | May 26-28 |
| • Merced, CA | June 3 Only |
| • Yakima, WA | June 24-25 |
| • Arlington, WA | July 14-15 |
| • Oshkosh, WI | July 26-August 3 |

For those of you in California, Arizona and Nevada you should have already received a schedule for the EXPRESS to visit 8 additional locations during the week between Watsonville and Merced. We will mail similar notices to those of you in states near our path as our schedules develop.

The most notable upcoming excursion is a trip to the Northeast. We'll bring the EXPRESS that way around 9 June, be on the East Coast from June 12 to June 19, and be back here around the 22nd. We have some solid dates set aside for interviews with magazines, etc., but during the remainder of the trip we'll set up visits to well located FBOs so we can see everyone who has expressed an interest in seeing the airplane.

Stay tuned for more info as the summer unfolds...and call if you have any specific requests. We'll do our best to accommodate everyone.

Express Prices - The Best Value In Aviation History - Even If We Raise Them A Bit

Value is a very subjective term and any discussion of relative value will always spark a lively debate; however, being one who never ducks a lively debate, let me plunge in.

\$19,975 for a 200+ mile per hour, true four passenger airframe kit with the prefabrication, documentation and support of the EXPRESS has got to be one of the truly great bargains in aviation history. We know of no other way for you to get the combination of performance, economy and comfort that the EXPRESS offers in **any** other airplane, either kit or factory built, at **any** price.

As you might expect, a deal like this won't last forever. In the medium to long term, as our processes become even more efficient and our volume contin-

ues to increase, we believe that we'll be able to hold or even reduce prices. In the immediate time frame, in order to maintain our production capacity and support capabilities at the levels you should expect from any kit plane manufacturer, we intend to increase our prices on 1 July 1989.

On 1 July 1989 the price for the fixed gear, standard fuel tank EXPRESS will be \$22,975 and the retractable EXPRESS will be \$25,975 with standard fuel tanks. Our auxiliary tank option will continue to be an additional \$250.

Our current prices will hold until the end of June. If you hadn't planned to start on your EXPRESS until later in the year, you can still take advantage of the current price by placing the required deposit on your EXPRESS before the end of June. At the time of order you can then specify a later delivery date as long as your required delivery is not more than six months away. In so doing you'll lock in the current price for 12 months from delivery of your first kit.

Even at the new prices, it's still easy to demonstrate that the value of an EXPRESS is the best bargain in general aviation. If you don't agree, then give me a call (ask for Jim) or, better yet, stop by for a visit so we can show you what everyone else is talking about.

Notes of Interest

On a different note, we have been in contact with a company who can make quality models of the EXPRESS. The models are not exactly inexpensive, but the quality is good and they'd make a great desk piece. The EXPRESS model will be about 12 inches long with a desk stand. In a standard paint scheme or in all white the model will list for around \$150. If you're interested let us know.

A final note, the nice folks at Unique Ideas, Inc. are doing a version of the EXPRESS in stained glass. We saw their work at Lakeland and think you'll be pleased with the quality. The proprietor, Mr. Bud Shank, is offering the model for around \$30. You can contact Bud at (614) 687-0457 or write to him at 222 Lake View Dr., Lancaster, OH 43130.

We're always glad to hear from you, so if you have any other ideas which you'd like to see us consider, let us know. Thanks again.



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