

# Express Press

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## The Show Stopper

Whether  
you're looking  
to feed your  
ego or  
maximize your  
transportation  
efficiency,  
or both,  
you've got it in  
the *Express*

The last few Newsletters have been extolling the virtues of the *Express* in functional, fundamental and realistic terms which help to reinforce the reasons why many of you have bought an *Express*. Well, it's time we reinforced that all too powerful human force, the Ego.

Some would say that to have a kitplane in ones' garage, in full assembly, open to all, friends and neighbors, would be more than enough to fill the ears of all who would care to listen to boastful tales of home building techniques, expertise, and comments such as, "Boy, he must be good! I would never have the guts, fortitude and perseverance to complete such a project, much less fly it!" (sounds pretty good right?). I can recall a similar analogy back in the 60's when I was a teenage surfer cruising the coast from Rincon to Swamis', looking for waves to ride. There was this contingency of what we called "Ho-Daddys".

They never got in the water, but boy did those boards look good "bolted" to the top of their cars! I guess it was a great way to pick up the "chicks", but I always thought it was better to actually experience the excitement, exhilaration and just plain fun of the sport. (I was a teenager, remember).

For those of you who plan to continue in the world of experimental and homebuilt aircraft and to continue to attend airshows, fly-ins, etc., you have a great vehicle to feed that ego. In those shows that take the "whole" aircraft into account and don't just dwell on the cosmetic, you will steal the show every time with the *Express*.

This was brought to light recently when Jim Warner attended an airshow in Truckee, CA (Lake Tahoe area). Jim pulled down another trophy, which in itself is not that unusual as many of you know if you have seen Jims' *Express* either at shows or in the magazines. As the story unfolds, as told by

Jim, it becomes evident that the *Express* is truly a SHOW STOPPER. Heres' his story. . . . . paraphrased. . . . .

"I went up to the Truckee show on an invite by the organizers and Saturday we enjoyed ourselves looking over the airplanes and watching the fly-bys'. There were some great looking airplanes up there. On Sunday we looked over some more nice quality airplanes and there was a Glasair III that especially stood out. It had a beautiful paint job with a snake scheme. He had the cowling off and all the valve covers and guides were gold plated, and he had his book out in front of the airplane and a real nice set-up."

"I had no idea there was judging at this show because no one had come up to me with paper-work and there had been no indication at the organizers table of any judging. About 4:00 PM, my wife and I had started to load the chairs and were getting ready to leave when my wife

heard my name announced over the loud speaker. She said, "I think you won something". Well, this was a surprise to me because there had been no indication of judging. About that time, the Glasair III guy comes up and shakes my hand and says, "Congratulations!" I asked "For what?" and he says "For winning the show". "The whole thing?", I asked, and he said "Yeah!"

Jim says that the guy in the Glasair III had him beat six ways to Sunday on workmanship and the only thing he can figure is that the judges graded on overall best experimental and took all the factors of looks, performance, range, uniqueness, and workmanship into account and found the *Express* to be the most impressive airplane.

Whether you're looking to feed your ego and/or maximize your transportation efficiency, you've got it in the *Express*. (I know I don't have to sell you guys but I just can't get over how great this airplane really is!)



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# Notes From Our Tech Director

## Universal Exhaust System

*Express Design* has recently developed a universal exhaust system that allows for the installation of virtually any of the modern opposed cylinder aircraft engines to be installed within the *Express* cowling. The system consists of fully slipped jointed components that are interchangeable between various models of engines. The illustration below shows the various components required for both 6 cylinder and 4 cylinder engines. Note that the exhaust flange stacks are the only model critical parts in the exhaust system. The IO-520 and IO-550 Continental engines utilize the 1 3/4" 4 bolt flange stacks. The IO-360 Continental 6 cylinder engine utilize the 1 1/2" 2 bolt flange stacks and the IO-360 and IO-540 Lycoming engines utilize the 1 3/4" 2 bolt flange stacks. Since the flange stacks are the only engine model critical item, the rest of the exhaust system is generic in nature. The elbows, T's, and Wye's are slip fit over inner cylinder tubes between the cylinder as well as slip fit over the exhaust flange stacks. Pin clamps secure the slip joint mounts which allow for contraction and expansion thus relieving stress which is inherent in non-slip jointed exhaust systems.

An additional feature of this exhaust system is the ability to trim the exhaust flange stacks thus allowing the exhaust runners to closely hug the engine allowing substantial cowling clearances. Another feature is that if a particular component becomes damaged that component can be easily replaced with simple hand tools, no cutting or welding required. Since this system is quite compact

several options exist regarding the tail pipe. One option is a simple tail pipe unit only, a tail pipe fitted with a heat muff, or a tail pipe muffler and heat muff.

As with all aircraft parts the price of the system is directly related to the economy of scale. Therefore we request that you express your interest as soon as possible in this exhaust system so that we can ascertain a sales volume which will allow us to obtain the most favorable pricing. All indications from our vendors point towards a very economical stainless steel fully slip jointed exhaust system for the *Express*.

## Lycoming Oil Coolers

Recently EDI has arranged to purchase a limited number (13 units) of large new surplus Lycoming oil coolers designed for the turbo charged IO-540 engine installation in the Piper Mohave. These units list for nearly \$900, however, for a limited time and number we are able to sell these units for \$375 each. These units are new, sealed in the original manufacturer carton. Since we have installed one of these units in our IO-540 demonstrator *Express* we have seen our oil temperature remain quite low. If you are installing Lycoming IO-540 in your *Express* this is the oil cooler for you. Once the supply of these oil coolers is depleted the only option will be to obtain the large units at or above list price with lead times of months. To date three builders have purchased these oil coolers and only 13 remain. So these units will be sold at a 1st come - 1st serve basis.

*An additional features (of the universal exhaust system) is that if a particular component becomes damaged, that component can be easily replaced with simple hand tools. No cutting or welding is required.*

## Builders' Comment Corner

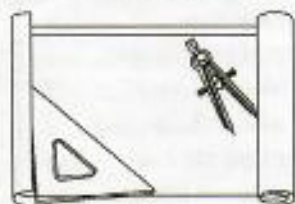
This is a new section of the Newsletter. We would like to see it filled by builders' with articles on their techniques, tips and suggestions. Hopefully, it will also become a forum for questions and comments.

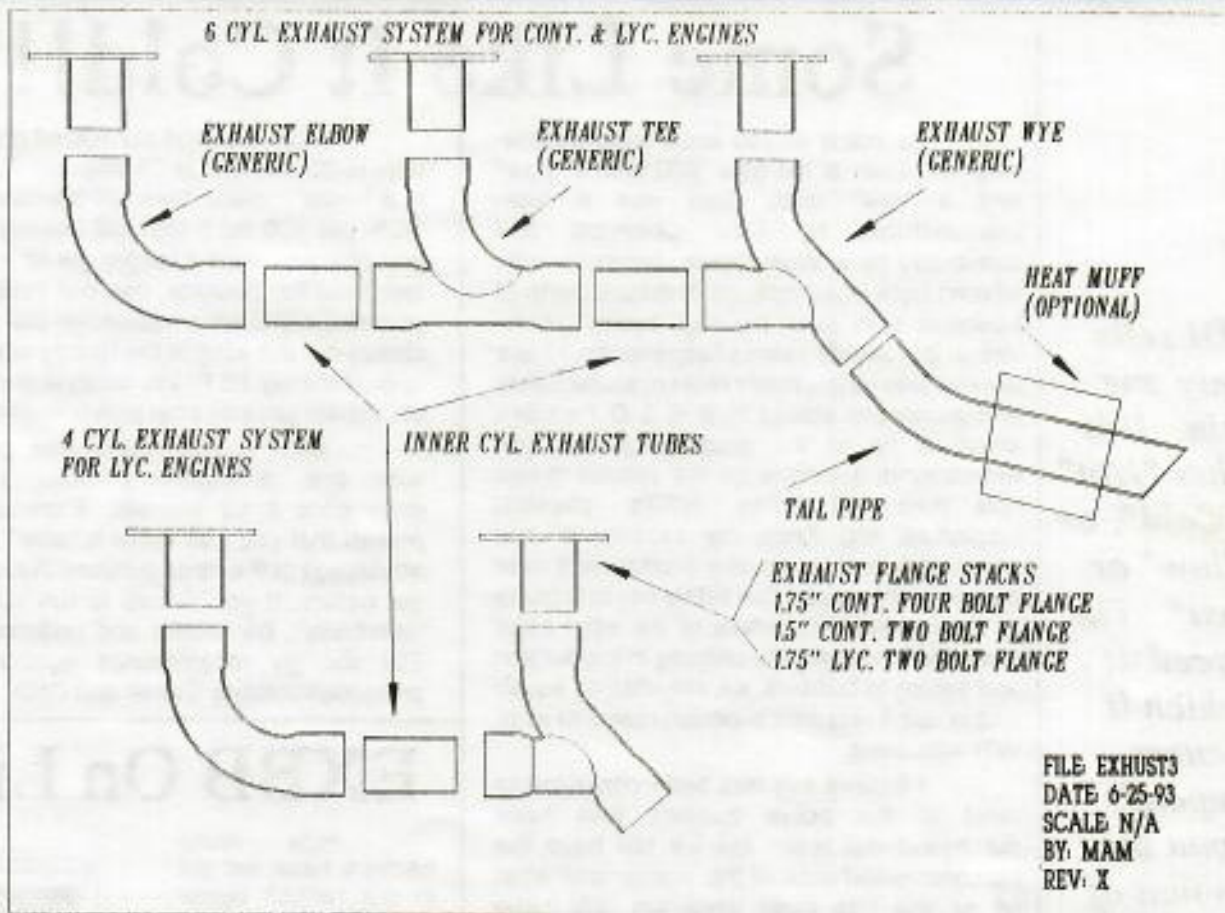
We have had some feedback from readers that this would be a positive addition to the *Express Press*. We at EDI have been considering this and other ways, (see "EXBB On Line" on Page 4 in this Newsletter), to enhance builder input not

only to and from the factory, but also between builders. So builders, please feel free to write or fax any tips, techniques, or

questions, etc., which you feel may be of interest to other builders or the factory.

We will plan to make the "Comment Corner" a new and valuable addition to all





## E.D.I. Welcomes New Personnel

Meet Ken Haase our new Parts and shipping person. Kens' an old drag racing buddy of Mike McDaniel and has been working with parts all his career. Ken is so enthusiastic about EDI and the *Express* he has stopped taking his high blood pressure pills. Figure that one out if you can. (Now the way he explained it to me it made sense.). Seriously, Ken has been a great positive addition to our team and is making tremendous progress in getting out those parts. He has brought his wife and kids in to the factory numerous times on the weekends to "re-count" that inventory, sweep the floors, or do whatever it took to keep that warehouse in order.

Our next addition concerns our new "Director of Sales". It all started one day when I was watching "TOP GUN" for the umpteenth time with my son, Matthew. Just when Maverick & Goose were going "ballistic", I caught myself thinking, "Now, how can I beat Lancair at their own game?" "I know, they may

build an F-14, but what I'll do is hire somebody that has flown the real thing!"

Granted, it really didn't happen that way, but David Bruener, our new "Director of Sales" flew F-14's for six years in the Navy. "DB", as we call him, has been out of the Navy for about a year and grew up in the Bay Area of California. This last year he has been in Real Estate but not enjoying it a heck of a lot.

The other day, we were doing a photo shoot over the San Juan Islands and Olympic National Park. DB was in the photo plane (Dave Gustafson's Cherokee six) flying over this magnificent snow covered peak in the Park and he remarked over the microphone "This sure beats real estate".

DB has a business degree from UC Berkeley and knows the serious side of selling as well as flying. His maturity in selling and flying the *Express* should give us a big boost. Now, if I can only have him cut out that military bravado..., I had to caution him the other day when I caught him saying "I really want to go gunning for that bogie next door!"

EDI welcomes its new employees.

# Some Like It Cold!!!

**EDI sells only one resin. It is neither "Hot" or "Cold", or "Slow" or "Fast". The speed at which it cures depends upon the amount of catalyst and inhibitor that is added by the user.**

As many of you know from purchasing WTI resin in the past, WTI sold a "slow" and a "fast" resin. This was a resin manufactured by Dow Chemical and distributed by a West Coast distributor with whom I have done millions of dollars worth of business with over the last twenty years. Within this twenty years of experience, I have worked with all the major resin manufacturers and personally visited their R & D Facilities where a lot of the prototyping and Lab experiments are done on the various resins and their gel times, HTD's, physical properties, etc. From my experience and knowledge in this Industry (composite) over these twenty years, I can safely say in regards to the physical properties of the vinyl ester resins we are currently utilizing in production and selling to builders, we are utilizing equal, and in some respects superior, resins to what WTI was using.

I believe this has been conveyed to most of the active builders who have purchased our resin, but we still have the personal preference of the builder and what he or she has been used too. We have received many positive comments concerning this resin, in that it allows better "wet-out" and its styrene smell is lower than that supplied by others. But we still have that element of builders that do not feel comfortable with the Gel time. So rather than arbitrarily lose resin sales to our competition without giving up a fight, the following explanation is repeated for those who have not heard or read about it:

EDI sells only one resin. It is neither "hot" or "cold", or "slow" or "fast". The speed of which it cures depends upon the amount of catalyst and inhibitor(if added) that is added by the user. Our resin is "pre-promoted" with Cobalt and DMA. There are two big reasons we do not promote at our facility. First of all, the method of promotion and most especially, the order of promotion with Cobalt and DMA is very important. Use these chemicals in the wrong order and you have an explosive and volatile mixture on your hands. Secondly, Cobalt and DMA are closely scrutinized by the EPA and your local Fire Department as far as storage and handling. If you receive these chemicals from a supplier, you are recorded and logged through the many pages of paper work that the supplier is bound by regulations to keep on these chemicals.

At 2% catalyst per 100 ml of resin, gel time is 20 minutes at 70 degrees F. If you're in a hotter climate, back off the catalyst to 1 1/2% per 100 ml. If that still doesn't work for you or if you want a longer gel time for wing close-out for instance, use our inhibitor. Our personal experience has shown that when we closed-out our wing at the factory when it was approximately 70 F, 2% catalyst and 4 drops of inhibitor gave us a gel time of over one hour.

Most builders have had good luck with this arrangement. You need to experience it for yourself. Experience has proven that you can make it "slow" and take advantage of the other qualities that you didn't get before. If you decide to run your own "chemistry", be careful and understand that EDI strongly recommends against builder promotion utilizing Cobalt and DMA.

## EXBB On Line

How many hackers have we got in our ranks? Better yet, how many builders out there feel comfortable with utilizing their computers to get more information about the *Express*. EDI, the Kitplane Industry as a whole, new developments, etc.? We have decided to find out!!



Yes folks, EDI has entered the world of Electronic BillBoards, or is that Bulletin Board?? Anyway, *Express* now has its own Bulletin Board and if you have Modem capability and are somewhat acquainted with this kind of service, (ie: Compuserve, etc.) you can "offload" general, technical, industrial articles and information that may be of interest and direct usefulness to your building experience.

Our operator is none other that Jacob Kinner, the son of one of builders out of Spokane Washington. Jacob graduated from High School this year and will be entering College in the Fall. But, you can be assured that the "board" will be maintained and appropriately monitored at all times. First month is free to all, just Log-On and get the details. The number is 509-624-4624 and the password is "KIT". To start off with, we will have some articles entitled "Homebuilt Stability Woes" and "Too Hot to Handle?".

# Oshkosh By Gosh

Its time once again for that annual ritual we all hold as being the ultimate pinnacle of our aviation-minded existence. This will be the first Oshkosh for *Express Design Inc.*, and we anticipate that it will be a very exciting, stimulating and successful trip. We will have the same space(s) that have become a tradition for the *Express*.....up front on Airport Way, next to the Cessna display and across from the Beech pavilion. We will be traveling across country in our Truck rig with 21 foot self-contained trailer in tow. The trailer will be available in the back of our space for relaxing, getting away from it all, orwhatever service it can be put into on behalf of the builders. A tent will be erected on part of the space (20' X 30') and there will be chairs, umbrellas, and tables for taking a breather. There will also be plenty of ice cold lemonade to help combat the expected heat.

The **Leadmaster** will be on static display, as well as an "*Express*-build" wing, an *Express*-build tail, and a front nose static display of our new "Moriah" front-end, complete with motor-mount and exhaust system. (oh yeah, a new Continental IO-550 will also be mounted on the motor mount). A fuselage will also be on static display as well as our fully instrumented and avionic-equipped instrument panel.

Yes, folks, I promise the options catalog will be available at Oshkosh!! I know, that's what I said would happen at Sun N' Fun.

Here's the deal... for every builder that comes up to me at Oshkosh and asks me for the option catalog and I don't have it!, you will receive absolutely free an *Express* hat. Now that may not give you a lot of confidence, but believe me, I have a feeling I could be furnishing a lot of free hats if I don't come through as promised

As you can see, we have a very full plate at the show and Mike, Carol, David Bruener (DB), and I will have our hands full. Given the above program, we may be understaffed, **DO WE HAVE ANY VOLUNTEERS???**

Jim Warner and Ed Bernard have confirmed that they will be bringing their aircraft to the show. We have not heard from the Lind brothers, but we hope they will show up with their *Express*. Hardy Huber is sooooo close to completing his airplane that I'm calling it a done- deal that he will be there. These builders are great to come and share their story with you and hopefully new members of the family which we all know is the best advertising we could ever expect.

Seriously, if you are coming to Oshkosh, and think you might have time to volunteer some effort at the booth, please fill in the form below and send it back to us ASAP so DB can schedule the show to our best abilities. Thanks very much if you can help. ( And thank you for just coming by to talk to us too).

*This will be the first Oshkosh for the E.D.I.*

*Express and we anticipate that it will be a very exciting and successful trip.*

## \* \* Oshkosh Volunteer Form \* \*

YES...Sign me up to volunteer some time in the E.D.I. booth. I'll be available for any or all of the following dates:

Indicate All Days and Shifts That You Can Volunteer

July 29 30 31 August 1 2 3 4

Morning: 9:00 - Noon (indicate days) \_\_\_\_\_

Afternoon: 1:00 - 4:00 (indicate days) \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ SPECIAL SKILLS? \_\_\_\_\_

I can serve as the Coordinator for "After Hours Activities" \_\_\_\_\_


I / We would like to see an "Informal Banquet/Dinner" for all volunteers. \_\_\_\_\_

PLEASE CLIP AND RETURN OR FAX THIS FORM AS SOON AS POSSIBLE



## News Notes

### NEWS



Some is good, some is bad, but we have been blessed with some very positive publicity lately and I hope you have been catching it. In the July issue of Sport Pilot - Hot Kits and Homebuilts, John Conrad wrote a terrific and lengthy article about the **Express Loadmaster 3200**. In the August issue of Kitplanes, we ran our first full color advertisement. It ran on the same page as the photo of the **Express** aircraft "on the line" at Sun N' Fun. We sincerely thank the staff at Kitplanes for their special efforts.

We have also received some calls from folks in New England who saw a recent review in Atlantic Flyer. If any of you have a copy of that article, we'd appreciate receiving one.

Thanks to all the builders that have spread the good word about the **Express**. I know at times it is especially difficult to be positive about us when parts are back ordered or there are glitches in communication. Please accept our apologies, we are making headway. Thank you again for your patience.

## Documentation Update

Several builders have called in relation to the recently released Revised Volumes of the construction manuals. There have been some instances where builders have not received various sections of documentation either because they have not been complete or because we goofed and left out the specific sections during shipping.

Just before Oshkosh, we will be sending out a separate communication concerning documentation. It will list all of the sections not yet complete and it will list all the Builders Alerts, Service Bulletins and Service Letters that are still applicable to those that have the earlier manual from WTI. This communication will be in the form of a check list so you can mark what you don't have, mark what you do have, and mark the date and/or revision number.

This list will also be available at Oshkosh for those that would like to take care of the updating at the show.

**Coming Next Month**  
**Oshkosh Recap** 6

*Express Design, Inc.*

P.O. Box 609

Redmond, OR 97756



Hope to See You at Oshkosh - July 29 - August 4