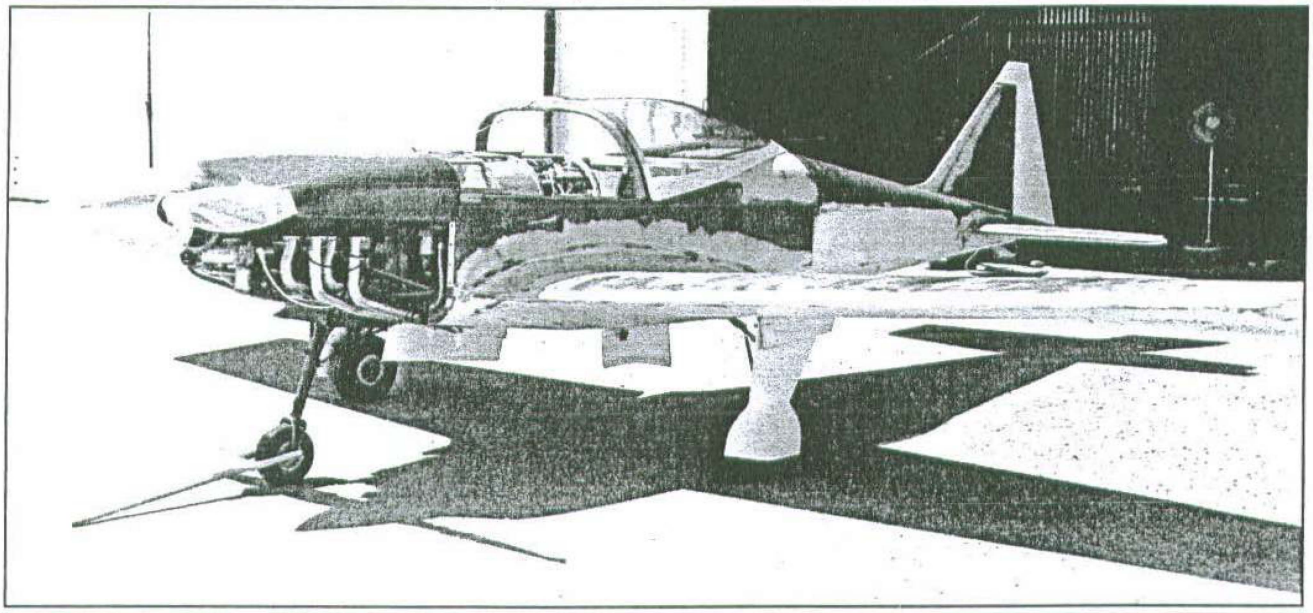
BUILDERS & FLYERS
GP4
NEWSLETTER

THE OFFICIAL VOICE OF GP-4 BUILDERS ALL OVER THE WORLD

Volume 33 Fourth issue of 2000



C.J. Reinhart of Fort Worth, Texas getting very close to that first flight!

Hello GP-4 builders,

Instrument panel now installed and I'm connecting all the wires to powe r and ground and running system te sts one more time. I did all of this at home and disconnected it to take to the hangar and install it in the plane . so far— all panel post lites and lighted instruments work from a rheostat. Transponder, Davtron 5-function display, encoder system works. Marker Beacon rcvr #1 works, Narco Nav 122 Nav. GS, MKR bcn Rcvr works, electric trim system works from the stick to the elevator, pitot heat works, recognition lites and strobes work, landing gear position lites and air pump motor work as designed, electric aux fuel pump works. Next week I'll turn on the King KLX135 GPS/COM and test all functions (it has its own blind encoder for altitude). So far—nothing smokes or smells.

All canopy assembly parts are complete and finished on the inside. all chrome rails installed, and I pick up the chrome latch assembly today. Just need final assembly . there was a lot of work in this thing.

My brother finished the upholstering of the seats (he used "astronaut foam") and delivered this last Christmas Eve (Ho-Ho-Ho!) when he came up from Austin.

Here's the latest as of August - just after my son and I put the prop on.

As you can see, the engine is on and all the plumbing and wiring is complete. I finished the exhaust stacks the week before. The interior is complete except for the engine control cables that are being made up by ACS. All upholstrey and trim

work is complete.

I'm working on the engine baffles as of this writing. I started with Van's aircraft kit for an IO-369. That's a good kit and a good place to start. It has things in it that you don't know you'll need until you need'em - like those 4 little round pieces that fit up into the cylinder heads that you bolt the baffles to on the front and rear sides of the cylinders. Its well made and worth the money. All you have yo do is trim it to fit Jake Jackson's cowl.

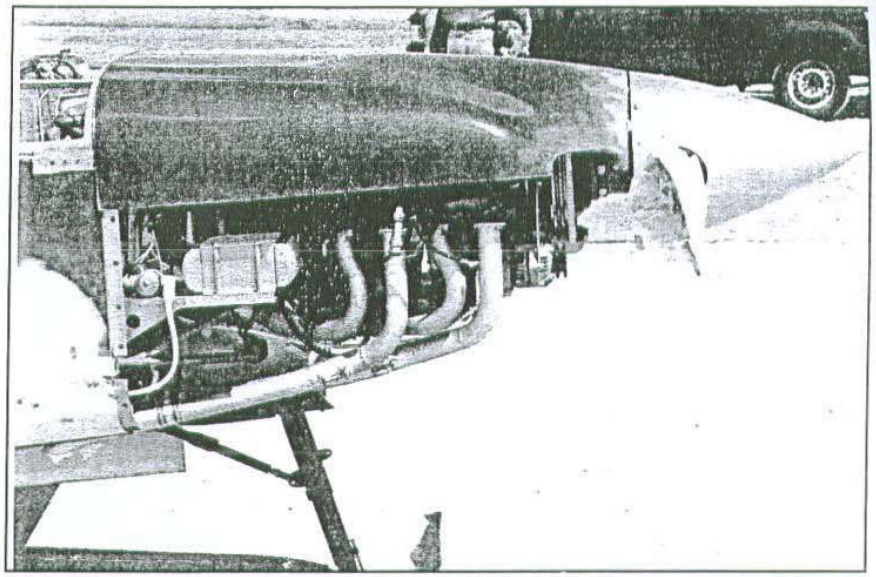
Notice how well Jake's cowl fits. PERFECT! The RV guys at the airport have threatened yo get into my hangar some night and put a blowtorch to it so it warp and not fit - like the ones they get from Van's. They say nothing should fit that well!

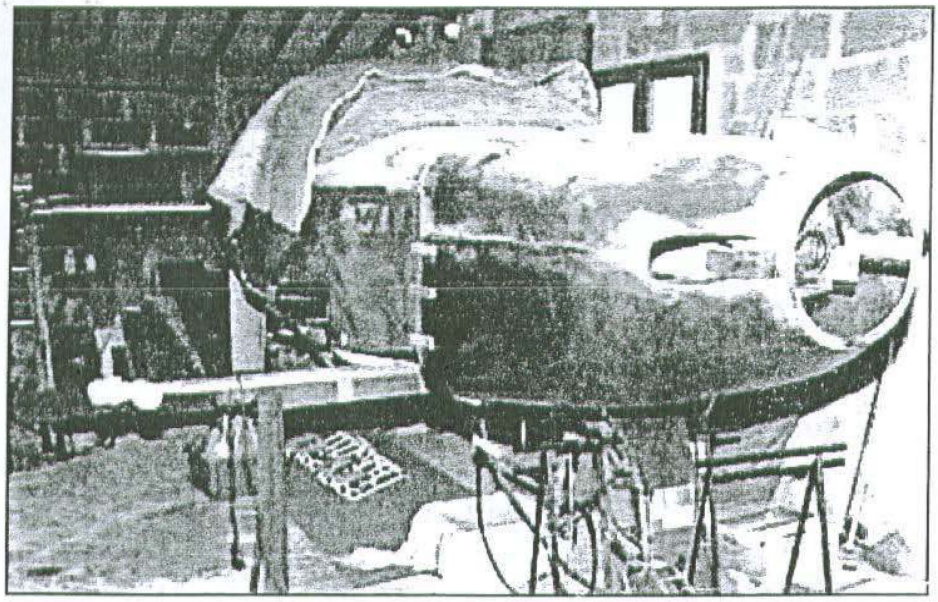
The light at the end of the tunnel is getting larger. Once the engine control cables get here and I install them, I can start the engine. After I do that, and nothing leaks, I can put the forward deck on and begin to finish up. The list is short:

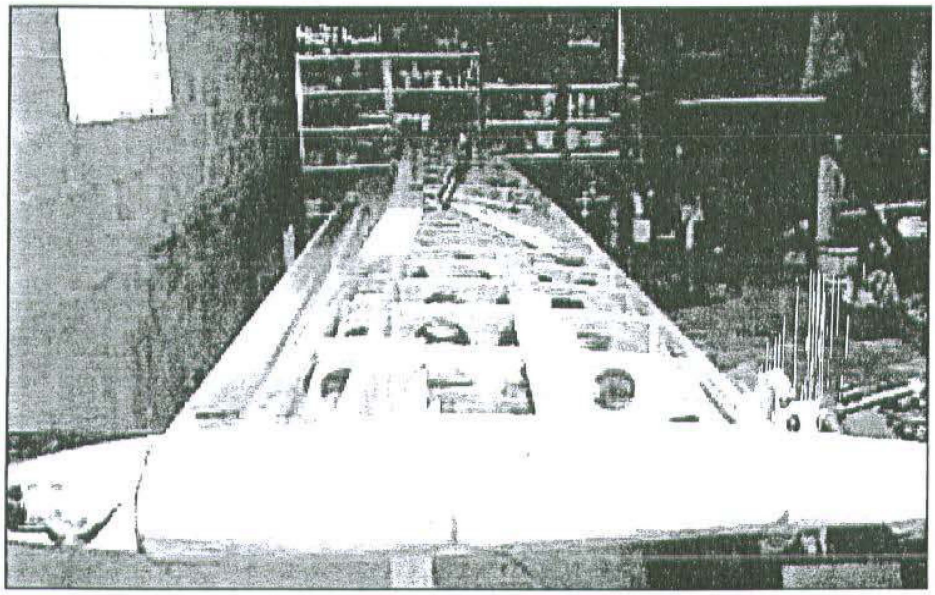
Finish baffles
Make oil cooler ducts
Make intake ducts
Finish upper/lower cowling assbly
Finish tail cone and light
Install the forward deck
Cut, fit, install windshield
Epoxy, micro-balloon filler around canopy/windshield
Primer on top (bottom is ready)
Paint Yellow
Call inspector
Go Fly!

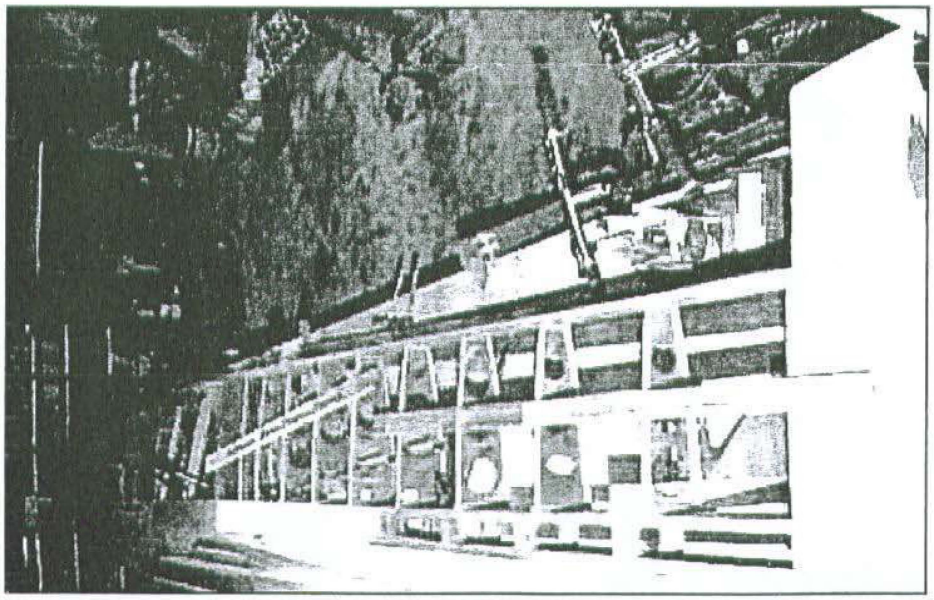
4380 hours to date

C. J. Reinhart
6812 Toledo Court
Fort Worth, TX. 76133
H(817)294-9451-W(817)962.5273
Plan set #233 - N233CR









Luxey Update

Hello

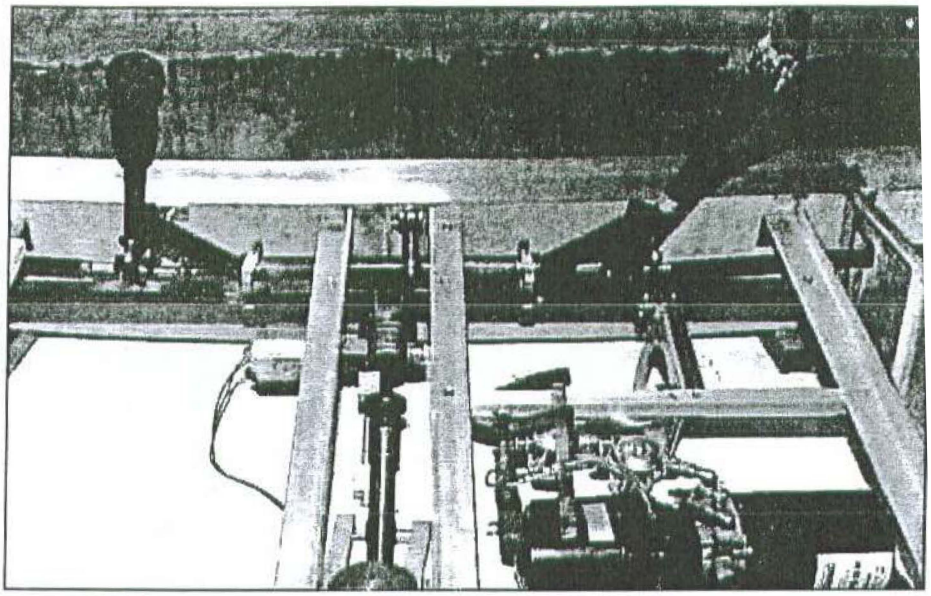
Let me introduce myself.

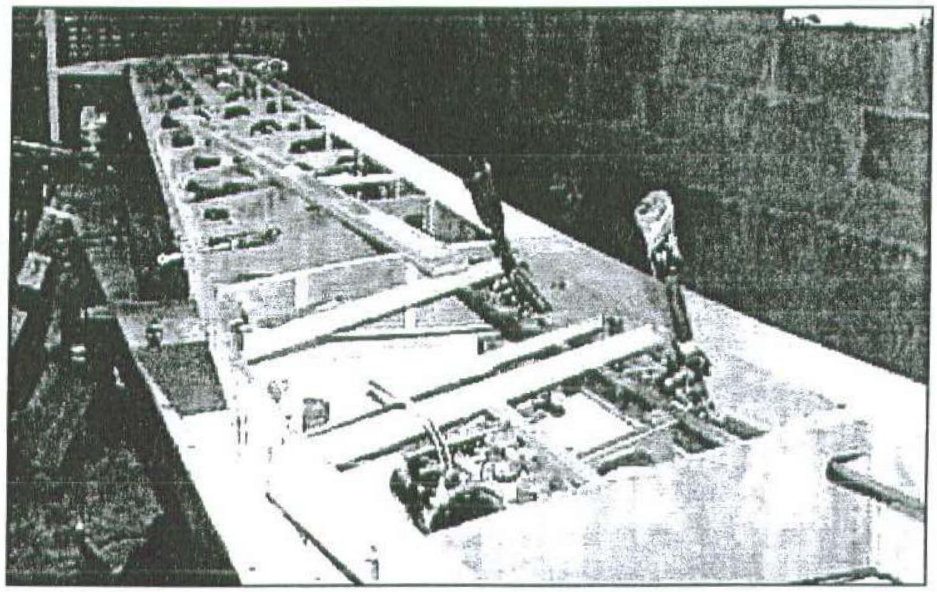
My name is Jean Claude LUXEY, I am a French citizen, 52 years old, working in the oil-field as drilling superintendent/ drilling engineer. My hobbies are sailing, flying and building . I pushed my daughter years ago to be a pilot, and to save money, I decided to build one airplane.

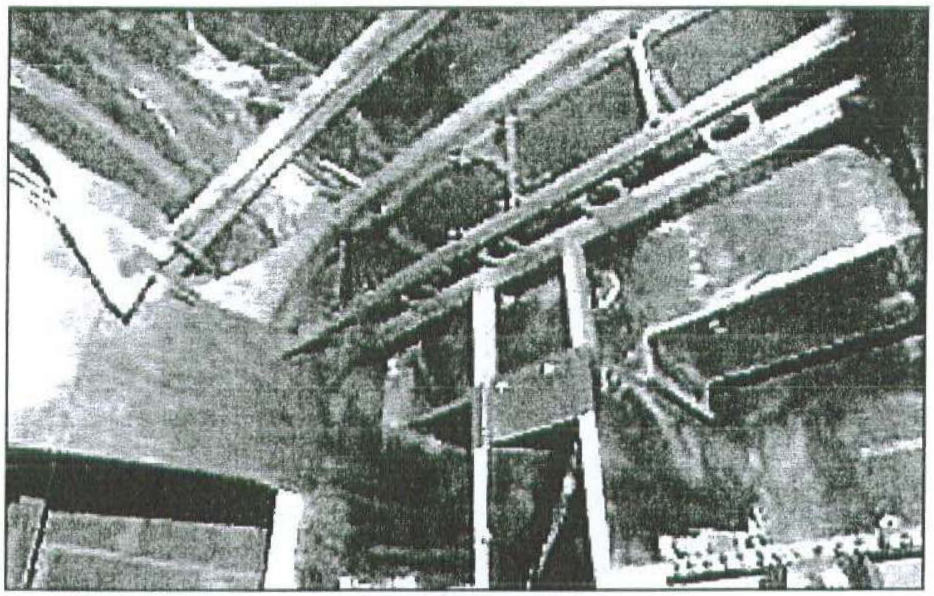
As I am a lover of the second world war 2 fighters, my first (wrong) choice was to built a full scale Focke Wulf 190, drawings were available in France at an affordable price at that time, engine and prop from one old DC-3 (C47) could be bought mostly every where in the world for peanuts, It was not realistic, by chance few friends from the aeroclub said to me: That plane is certainly a marvel, but is too big, is only one seat airplane, is burning to much gas, it never been built until now, where you will find spares for that old R 2800 PRATT & WHITNEY engine if something fail.... Discouraged, I stopped the construction , resold the drawing (with heavy losses) and started to look for a modern, fast and economic two seats side by side airplane, capable to do some aerobatics figure as my daughter was learning it at that time. It was like chasing a needle in a hay stack. At the end I was close to buy the FALCO drawings (a compromise), when during my home holiday, a gentleam who knew I spoke English knocked on my door, asking for some help making an order to Wicks Aircraft. Looking through the Wicks catalog I discovered the GP-4, I immediately fell in love, contacted George and bought the No 323 blue prints. I spent nights to study the draw-

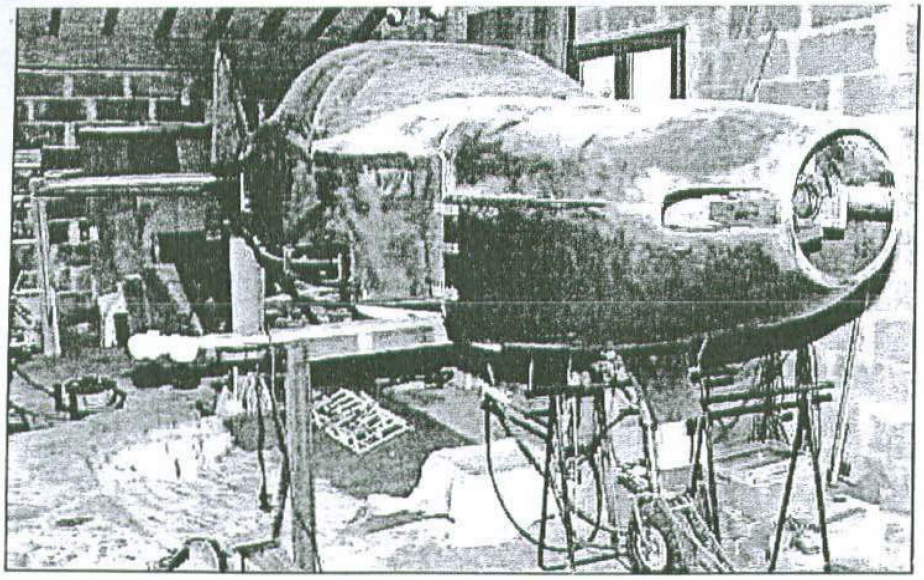
ings, and my wife was not really happy, as at first I stopped the construction of the FW 190, but much more I was also building in my back yard my third ocean racer sailing boat. You may understand her, she saw a 36 foot (an echec, a training if I can say) A 44 foot, fast and very good at sea but damaged one day in the harbor by one stupid drunk guy, and having after the repair done by Professional people so many problems I decided to built another hull 45 foot long to reuse the mast/sails etc from the previous her, cars, and airplane, That was may be the straw that "broke the camesl back". After some beautiful lies she accepted what I was saying (I will only built that plane for and during my retirement) As she said to me, you are a LIBRA and you may change as the wind, yes it is true, but when I am in love of something I am going until the completion . Just to see how the fuselage was looking, I did it. Was it an error? I mostly stopped the construction of the sailing boat (it will be for my retirement) and my wife pushed me to continue the GP-4.

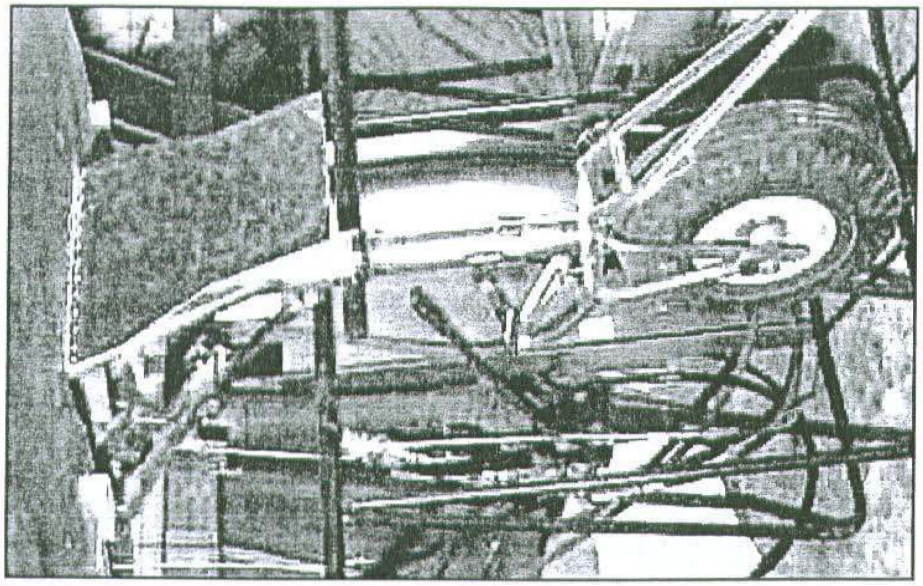
Until two years ago, I was working on the drilling unit with a nice 4 weeks on - 4 weeks off schedule, I did great and fast with the wood work, during the winters I was doing the steel and aluminum parts including the parts for the hydraulic landing gear (As my daughter will fly that plane it will be easiest for her to ..just flip a switch). Now , I had a radical change in my contract, 3 months on for only 2 weeks vacation. I am at present in the USA, in PASCAGOULA, Mississippi. supervising for my company the construction of two semi submersible drilling rig and I think I will be stucked here for a while) but nevertheless during my short home rest, did the wing tanks, sanded the

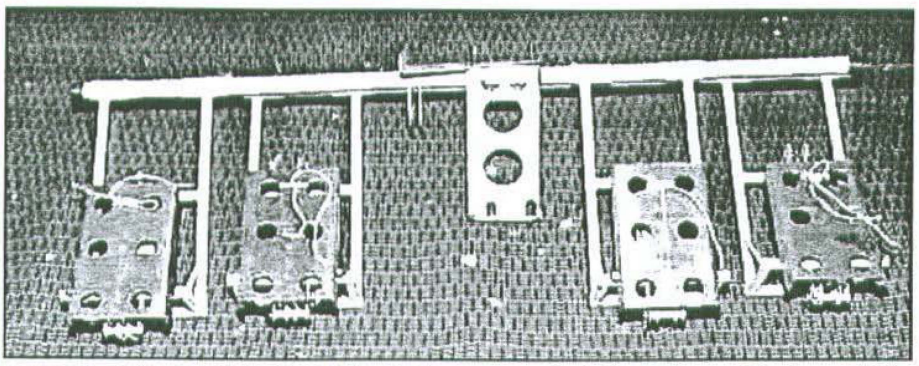












I am not paid to do this but just trying to improve our tools to exchange. You have rights to access the information but if you want to put pictures or else you have to sign in once and I'll give you access, then you will be able to create modify and delete anything you add to the site. Again this is not may site (I already have one) this is yours. Give me some comments about this idea. This is a good one or a bad one. I am the manager of the site (giving access), but for the rest, I have the same access as you.
Thanks for looking, Patrice

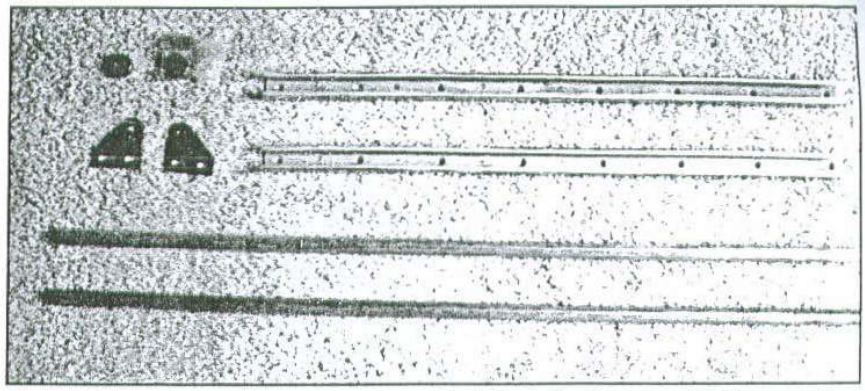
fuselage, prepared different opening and visit doors in carbon/kevlar composite instead of aluminum (lighter and stronger) as you can see on the color picture the fuselage is also covered with carbon and kevlar fabric used in conjunction with epoxy SP 106 system . The only problem of that resin is during the winter cold and humid where I am living (110 miles from Spain border and 6 miles from the Atlantic ocean) I can do nothing . During my previous May holiday, I had my first Veritas/DGAC inspection (FAA equivalent) before closing the longeron. As you can see on the picture the aft ribs are in place with all the steel and aluminum parts. I will continue that story another day, hope you have appreciated.

Best Regards,
LUXEY Jean Claude
Drilling Engineer - Petrodrill Eng.
NV - TDI Halter Site,
Pascagoula,MS,USA
Tel. +1-228-712 2264
Fax +1-228-712 2265
Home +1-228-769-5158
"letouzo@primocomputers.com"

A new GP-4 web sight!

Hello GP-4 enthusiast,
For those of you who d'ont know me, I am Patrice Theriault GP-4 S/N 104 a French builder from Canada. I already have a website dedicated to my project (http://w3.arobas.net/~gp4/index2.html). What about to share a website together? Of course it has to be free and easy to maintain. And everyone can access the site and had pictures, events, message and why not chat ? I prepared something like this for us. Please look at http://communities.msn.com/GP4AircraftBuilders.
THIS IS YOUR SITE. You can add pictures, messages, your own webpage ect EASILY. This site is not intended to replace the list tools we use or GP4BFN which I encourrage you to subscribe. This is just a new tools to see pictures.... or anything useful to us. I have just created this site so this is a kind of an empty shell. YOU CAN FILL THIS SITE WITH PICTURES OR ANY INFO YOU WANTS ! AND IT'S EASY AND FREE.

Canopy Hardware



Hi Spud:

Well, if you can believe this, I'm getting ready to install the canopy and associated hardware. (Speaking of canopy hardware, enclosed are pictures of duplicate canopy hardware I would like to sell via the GP4BFN This stuff is first class, stainless steel, built to specifications called for in the drawings. The components include: Stainless steel canopy side rails, stainless steel canopy slide rods, 4130 steel brackets for side rail bearing mounts, and the bearings. Call for pricing. If you could put this ad in the GP4BFN, I'd be most thankful indeed.) Anyway, I purchased the canopy from Airplane Plastics in Ohio and let me tell you it is a very nice canopy. I ordered the canopy tinted green to cut the glare a bit which is somewhat of a factor in a canopy design such as the GP-4. The canopy jig is complete as is the 1/8th mahogany ply canopy base. Just getting ready to trim the thing to fit. (No easy task as plexi-glass is difficult to work with.....must have lots of patience.) In addition to the canopy work, I have custom fabricated the tail stinger and fairings on the Fin and Stab.

Thanks for putting the pictures and ad in the newsletter.

Mike Traud
11907 Prospect Hill Drive
Gold River, CA 95670
(916)635-1147

GEORGE'S CORNER

Fellow GP-4 builders:

In the last newsletter, Volume 32, I mentioned an exhaust coating company called Jet Hot. Since I recently sent them my new fabricated 4 pipe headers for coating, they recommended their Jet Hot 2000 coating system for aircraft headers. This coating will stand up to over 2,000 degrees F. Since your EGT's will show 1,500 F. or more, it makes sense to use their highest temp tolerance. they have 4 other coating systems but they are limited to 1,300 degrees F. The jet hot 2000 is available in colors black, grey and blue. To order call 1-800-432-3379, or write 55 East Front St., Bridgeport, Pa. 19405. They will assign an I.D. number to your order. You then tape the following information to one of your packaged pipes. Name, address, I.D.#, credit card #, type of coating, (Jet Hot 2000) and color selection. My cost for my 4 pipe headers was $240 plus $20 shipping. If your slip joints are a snug fit, you will need to open them up some for the interior and exterior coating. Any muffler shop can do this prior to coating.

Rod End Bearings:

There has been some confusion on how to set up rod end bearing installation. Here are some basics that may help. They least expensive are the uniball type, which are suitable for any installation on the GP-4. The uniball is designed to be fixed, allowing the outer race to rotate around the ball. If you are bolting up to a clevis, the walls of the clevis should be tight against the ball. If the clevis is wider than the ball, it is OK to washer on each side of the ball, then use a fiberlock nut to fix the ball against the clevis walls. It is standard practice to use a high temp metal lock nut on all fittings on the engine side of the fire wall. (AN 363 or MS 21045)

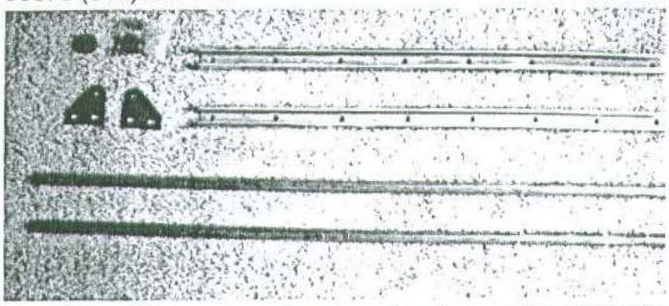
When bolting a rod end to a non clevis bell crank such as our aileron bell crank (drawing #30), we use a washer between the ball and the nut. The washer is slightly larger than the ball race opening. This is a safety factor that keeps the push rod connected in case the ball fails and pops out of the race housing. In a non rod end assembly where an axle is free to rotate, always use a castellated nut (AN 310 or AN 320), and a cotter pin.

If a push rod has a female rod end on each end, always use a jam nut to keep the rod end shank tight. The little hole in the shank of the female housing is to check that the threads are deep enough in the shank. I always drill a small hole through the thread stud, and pin one end of the rod end once the push rod is adjusted to length. this will insure that the rod end cannot unwind, should the jam nuts get loose. If you are using male rod ends, one end should be pinned as well.

Regards, George Pereira

The Classifieds

For Sale: **Stainless Steel canopy hardware kit.** The components include: Stainless steel canopy side rails, stainless steel canopy slide rods, 4130 steel brackets for side rail bearing mounts, and the bearings. Call for pricing. Mike Traud,11907 Prospect Hill Drive, Gold River, CA 95670 (916)635-1147



For Sale: GP-4 project: fuselage framing, vertical stabilizer framing, horizontal stab and elevators framing complete. Firewall installed. All fuselage internal hardware complete (D. Capps). All wood packages, two fastener kits. Project signed off by EAA Tech Advisor with compliments on construction quality. Fuselage signed off for closure. Stu Fitrell, sfitrell@lxpk.veridian.com or (301) 373-8087 or 25723 Vista Road, Hollywood, MD 20636. (27/28)

For Sale: New Hydraulic Gear Plans Upgrade. Convert your GP-4 manual landing gear system to hydraulic - electric system. Complete with emergency back up system. (Note: System must be installed prior to wing skinning!, no retro-fits) Complete print package for $150.00 Mail your checks to: George Pereira 3741 El Ricon Way, Sacramento, California 95864 phone (916) 483-3004 Fax (916)978-9813 E-mail GP-4@juno.com

For Sale: Pre-fabricated composite components for GP-4. Cowling , exhaust blisters, inlet ramps, tailcone . Complete four-piece package. Call or E-mail for current pricing. Shipment will be sent "Freight Collect" - Jake Jackson - Rio Linda, CA (916) 992-0608 E-mail J7200@aol.com

Back Issues: We have all of the GP-4 back issues (#1 thru #23) available for $3.00 each. Mail your checks to Bill Spornitz - 1112 East Layton Drive - Olathe, KS 6061-2936

Wanted: Looking for a GP-4 project that is "well under way" through "close to being finished". Will consider all projects. Contact me at (503) 646-5276 or by mail at Edward Mitchell, 13835 S.W. Devonshire, Beaverton, OR 97005

Wanted: An original video (not a copy!) that George Pereira made on the GP-4. I have a multi-copied video now, but is very poor. Will gladly pay a reasonable price. Contact: Spud Spornitz (913) 764-5118 or 1112 East Layton Drive, Olathe, Kansas 66061

Subscribers Information Center

GP-4 Builders & Flyers Newsletter (GP4BFN) is currently published Bimonthly at a rate of $3.00 per issue/$18.00 a year in U.S. $3.33 per issue/$20.00 a yr. in Canada, Alaska & Mexico. $4.83 per issue/$29.00 a yr. (U.S. funds) per 6 issues to foreign subscribers. Send remittance to: GP4BFN, 1112 Layton Drive, Olathe, Kansas 66061. **PLEASE MAKE CHECKS PAYABLE TO: BILL SPORNITZ**

Ideas and opinions expressed in GP4BFN are solely those of the individual submitter. This information is for educational purposes only! Application of these ideas and/or suggestions contained in GP4BFN are the sole responsibility of the experimental aircraft builder at their own risk, which could result in builder/pilot personal injury or death. GP4BFN, George Pereira, Osprey Aircraft do not imply or suggest in any way their usage.

Letters, Pictures and computer supplied data submitted to GP4BFN are subject to final screening by GP4BFN / Bill ``Spud" Spornitz and may be restricted, deleted or revised. Material returned by request only.

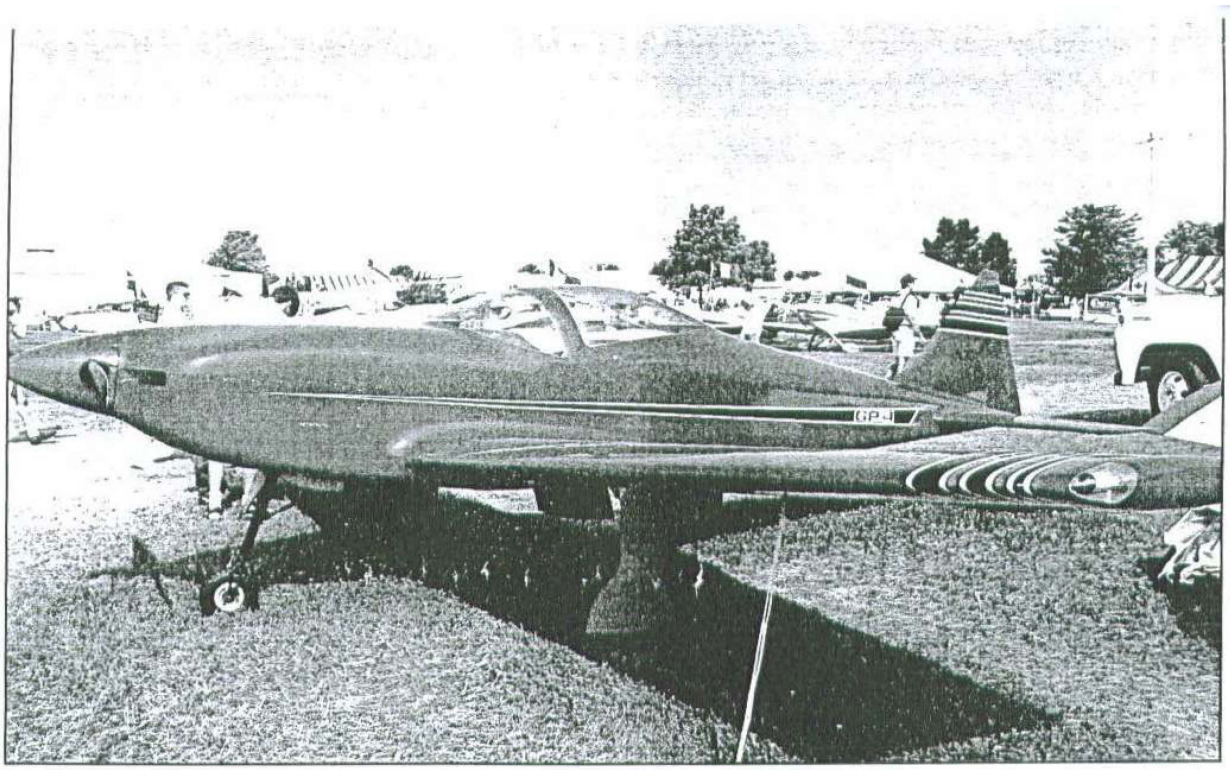
Back issues of ``GP-4 Builders & Flyers Newsletter", back issues are available for $3.00 each.

The use of "Lycoming", "Hartzell" and/or "Osprey Aircraft" by GP4BFN is for the sole purpose of application and description only and is not intended to infer or imply a direct connection between GP4BFN, Lycoming, Hartzell or Osprey Aircraft.

913-764-5118

E-MAIL BSPORNITZ@AOL.COM

George Pereira
Phone (916) 483-3004
Fax (916) 978-9813
E-mail ***GP-4@juno.com***



Darry Capps at Oshkosh

BUILDERS & FLYERS
GP4
NEWSLETTER

1112 EAST LAYTON DRIVE
OLATHE, KANSAS 66061

First Class Mail

NEWS FOR CRAFTSMEN OF FAST WOODEN AIRCRAFT!