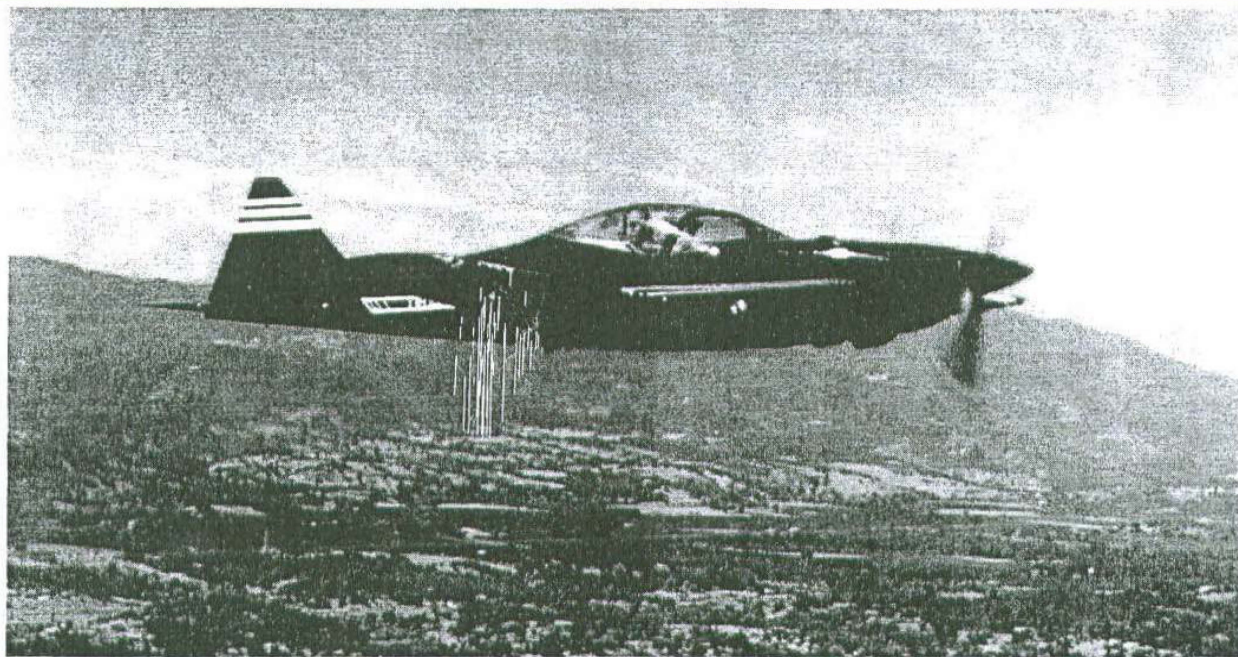




THE OFFICIAL VOICE OF GP-4 BUILDERS ALL OVER THE WORLD

VOLUME 13

MARCH - APRIL 1997



GEORGE PEREIRA IN HIS GP-4 HEADING HOME FROM CLEAR LAKE, CALIFORNIA

● George's Corner

Fellow GP-4 builders:

What a pleasure it is to hear from a builder that he has successfully flown his GP-4. I got that news over the phone from our good friend Bill Berrick on a Sunday evening March 23rd. Bill said that he was quite pleased with the flight characteristic

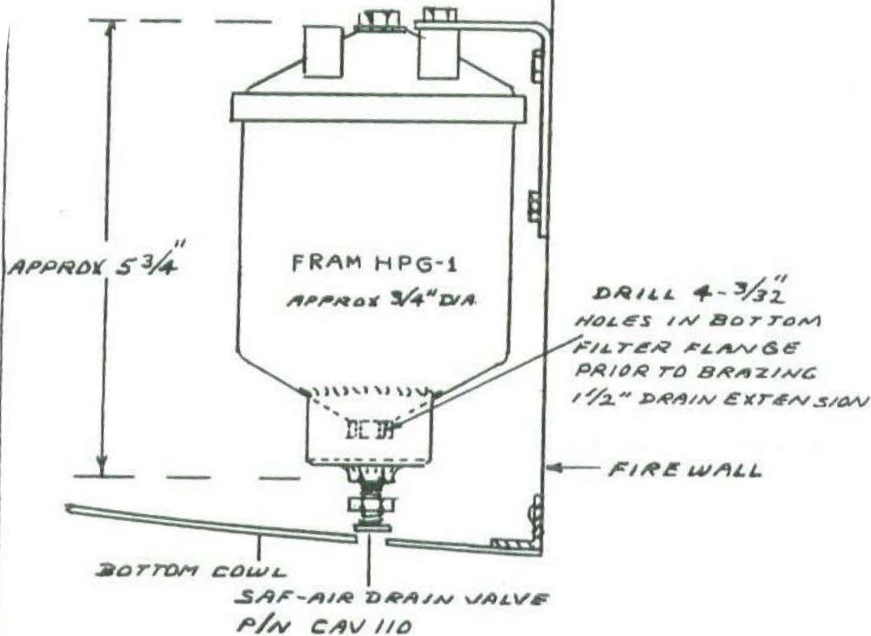
although hasn't retracted the gear as yet. I told him that it flies even better with the gear up so I'm sure we will be hearing from Bill as he opens up that the flight envelope.

Bill called me about two weeks prior to his flight asking for a general flight briefing for a first flight while he waited out some Nebraska weather. I always have some trepi-

dation on first flights from builders. It never starts when I first assign a serial number and mail out the prints, but after some phone calls, progress photos, perhaps some letters, a distant rapport between builder and designer starts to develop. I sense a bond of friendship with these builders so its only natu-

Continued on page 3

FUEL INLET & OUTLET IS ON TOP. USE 2-3/8 NPT TO 1/4" NPT REDUCERS FOR THE AN 816-6D OR AN 822-6D ELBOW AS REQUIRED TO PLUMB THE FILTER



1/2" DIA. TUBE BRAZED TO FILTER BOTTOM. I USED A SECTION OF EXHAUST TUBE MILD STEEL.



STEEL WASHER WELD OR BRAZED TO 1/2" TUBE



BRASS FITTING TAPPED FOR 1/8 NPT. SILVER SOLDER TO WASHER



QUICK DRAIN: SAF-AIR DRAIN VALVE

GP-4

FUEL FILTER

AVAILABLE AUTO SPEEDSH

DESIGN MOD: OSPREY AIRCR

MAR. 1997



ral to worry about a friend on a first flight! Its nice to be able to say. *"Congratulations Bill for crafting a beautiful representative of my design"*.

● Fuel Filters:

When using a carburetor on an engine we can get away with a little lighter plumbing. With only 5 lbs. of fuel pressure the old gascolator will suffice. The GP-4, with its fuel injected engine, requires a little more sophistication. First we are running 18 to 25 lbs of fuel pressure. Your fuel filter has to be fuel tight with this higher pressure. A larger capacity filter

will also help filter out contaminants from your new fiberglass fuel tanks. Some one told me that a new fiberglass tank will leave some residue in a fuel system. I am not sure that this is true. I wonder if he meant a resin break down using auto fuel? If any of our builders have some experience on this subject, please share it with us through the newsletter. Since the IO-360 must use 100 Low Lead I am not going to worry about it.

I selected a large capacity filter with

a disposable paper cartridge. Its a FRAM HPG-1 and the replacement cartridge is a FRAM HPGC-1. This is a popular filter with the hot rod gang so its generally available from most auto speed shops. I change the cartridge every annual and it always looks clean. Its mounted on the firewall as low as possible to insure a head of fuel to prime the engine on a cold start. I felt it necessary to install a quick drain on the bottom of the filter bowl to check for water contamination. I have enclosed a drawing on how I modified the filter for the lowest possible point for water collection. The inlet and outlet are in line on the top of the filter. They are tapped for a 3/8" NPT so you need two reducers from

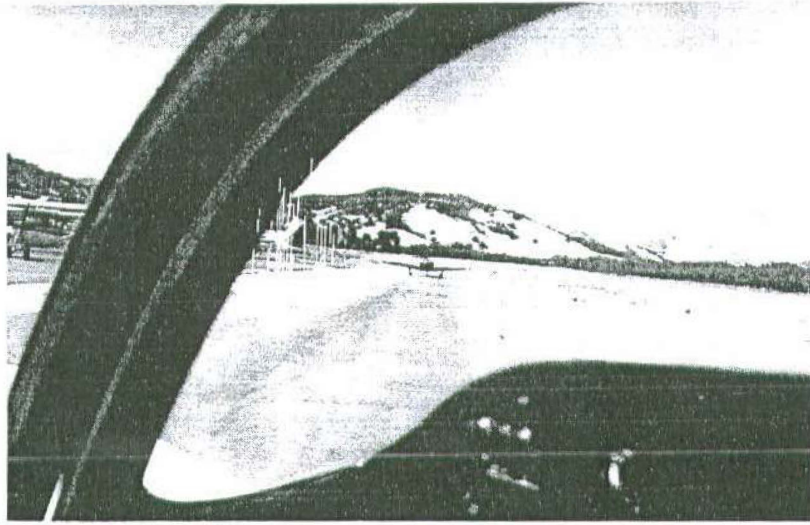
The FRAM filter bowl is chrome plated steel. To save the chrome just above the brazed 1 1/2" diameter drain extension. I first ground off the chrome about 3/8" to 1/2" above the extension. I then wrapped all of the remaining chrome with a wet rag. After brazing on the extension I painted the lower extension and up on the 1/2" area above the extension. It looks pretty nice as I was able to save most of the chrome on the filter bowl.

● Buzzard Flight:

Our flight of buzzards flew last Saturday to Clear Lake for lunch.

Although we didn't find a dead cow we had a pleasant lunch. On departing I asked Jake Jackson if he would like to do a little formation flight back to Rio Linda. I lifted off just behind Jake's GP-4 sliding off to one side to get out of his prop wash. We joined up out over the lake and climbed to 5,500 feet. This was a good opportunity to compare some performance numbers since Jake now has all the bells and whistles in his panel. When we

set up identical power settings we are very close in speed and climb. I guess this shouldn't surprise me since both aircraft have the same engine, prop and weigh within 5 lbs. of each other empty. One of the other buzzards returning to Rio Linda in his Bonanza said approach called saying he had two fast movers at his six at 210 knots (242 mph). We went sailing by the Bonanza. Jake and I were in a flight corridor of the Sacramento ARSA as Jake called Rio Linda for landing



George taxing out for take-off at Clear Lake

3/8" NPT to 1/4"NPT. Your AN fitting will now screw into the reducer for the 3/8" diameter fuel line you are going to use. You should use Teflon tape on all NPT tapered threads. Be sure to wrap the fitting one thread from the end to be sure you don't overlap over the end of the threaded fitting. It can foul up your line as the threads cut off the Teflon if it hangs over the end of the threads. Remember, you only use Teflon tape on NPT tapered fittings. Your AN compression fittings don't require Teflon tape.

of a flight of two. It ought to be illegal to have this much fun! Keep building gang , It is worth all the hard work.

● **Spud's GP-4 newsletter:**

Hey you guys. How about writing some articles for OUR newsletter. We need your input to keep things going.

Regards to all,

George Pereira



MULTICOM

● **Aviation Poems**

I must admit that I've been remiss in not telling the everyone about this gentleman a lot earlier (Read that a year!). Johnny Taylor's Jr. of Silver Creek, Mississippi is an aviation writer of sorts. He writes aviation poems. Now I'm not much on poetry, but found the message and wit in which Johnny writes refreshing.

Johnny has published a 45 page book of Aviation poems. I found this book of poems to be a light hearted break from the norm. I guess I can relate to what Johnny is describing in his poems because we share a lot of the same thoughts of all the people who have the quest to fly.

We have a sampling of one of Johnny's poems on the back cover.

Johnny is selling his book of poems for a modest fee of \$6.00 including postage. I highly suggest those that

INTERESTED IN FLYING ?

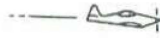
Then You'll Love

"FLIGHT LINES"

In Verse and Reverse

by

John S. Taylor, Jr.



Illustrated Book of Aviation Poems

Exciting, Memorable, Humorous.

\$5.25 plus \$5.75 postage and handling

send check or money order to:

Flight Lines
Rt 1 Box 1372-A
Silver Creek, MS 39663

would like to take a mental break for the aviation mind, take a moment to slip Johnny Taylor a check or money order for \$6.00.

● **GP-4 T-shirts**

We haven't received any responses on the T-shirt question posted in the last issue. So unless we hear any input, that's going to be a dead issue.

● **Oshkosh Dinner?**

We didn't get any response on this subject either. This one sorta surprised me. If we don't get any responses very soon, this will become a dead issue also.

● **Newsletter Input.**

We continue to get input from the same people. I'm going to review again on how we can contribute. We can now handle your first flights, technical pieces, stories and articles easier than ever before. We can handle your input via E-mail, fax, 3.5" disk, 5.25" disk, CD's, typed letters, hand written, It doesn't make

any difference how you do it. While we're on the subject of newsletter input.....There is a bunch of you guys that have been holding back way too long. Some of you have been promising stuff for over two years! You know who you are and lets get with. Remember this is "our" newsletter. Don't be just takers, you also need to be givers. What you may be taking for granted may exactly what some of us are starving for. So lets get with and lots of photo's. Remember the old saying, a picture is worth a million words! - Thanks Spud

● **You're Guinea Pigs.....**

We're going to use this issue and maybe some of the next issue to experiment with this new gizmo called a HP 4C scanner. At this point I not to sure who's winning! I thought I was going to have to "Body Slam it a couple of times"..... it now seems to be coming around to my thinking. They say we can get good quality pictures (with a little practices) with out half-toning and blowing up or down with a camera.....we'll see. Don't worry if we can't get the quality we want, we'll go back to the old way of doing the half-tones. - Spud

OUR ROVING REPORTER!

Hello Spud,

Here are the photos of Tom Evan's GP-4 project of Lake Wales, Florida. I spent some time in Florida with Tom and as you can see, I spent some film also and it was well worth it. Tom said it was OK to send in the photos or the newsletter.

Tom has done some very interesting things with his project. The biggest mod that I could see is the Buick engine installation with a Ross reduc-

t.

my project, I have received my package from Wicks Aircraft and also picked up my structural e. All for less than \$1500.00. Now I been looking for spruce for a while have been getting prices from 00/bd. ft to \$23.00/bd. ft. in the tri e area, when I found 1/4 sawn stika ice for \$6.00/bd. ft. I couldn't believe ut here it is. They also have a pretty od ply selection. If anybody is inter- ed in this lumber, they all welcome to il me after 6:00 PM.

also visited Jack Yoder and his "Cotton andy" GP-4. You know, the color kind a rows on ya. I send photos and notes on /hat I saw when I get permission from ack.....

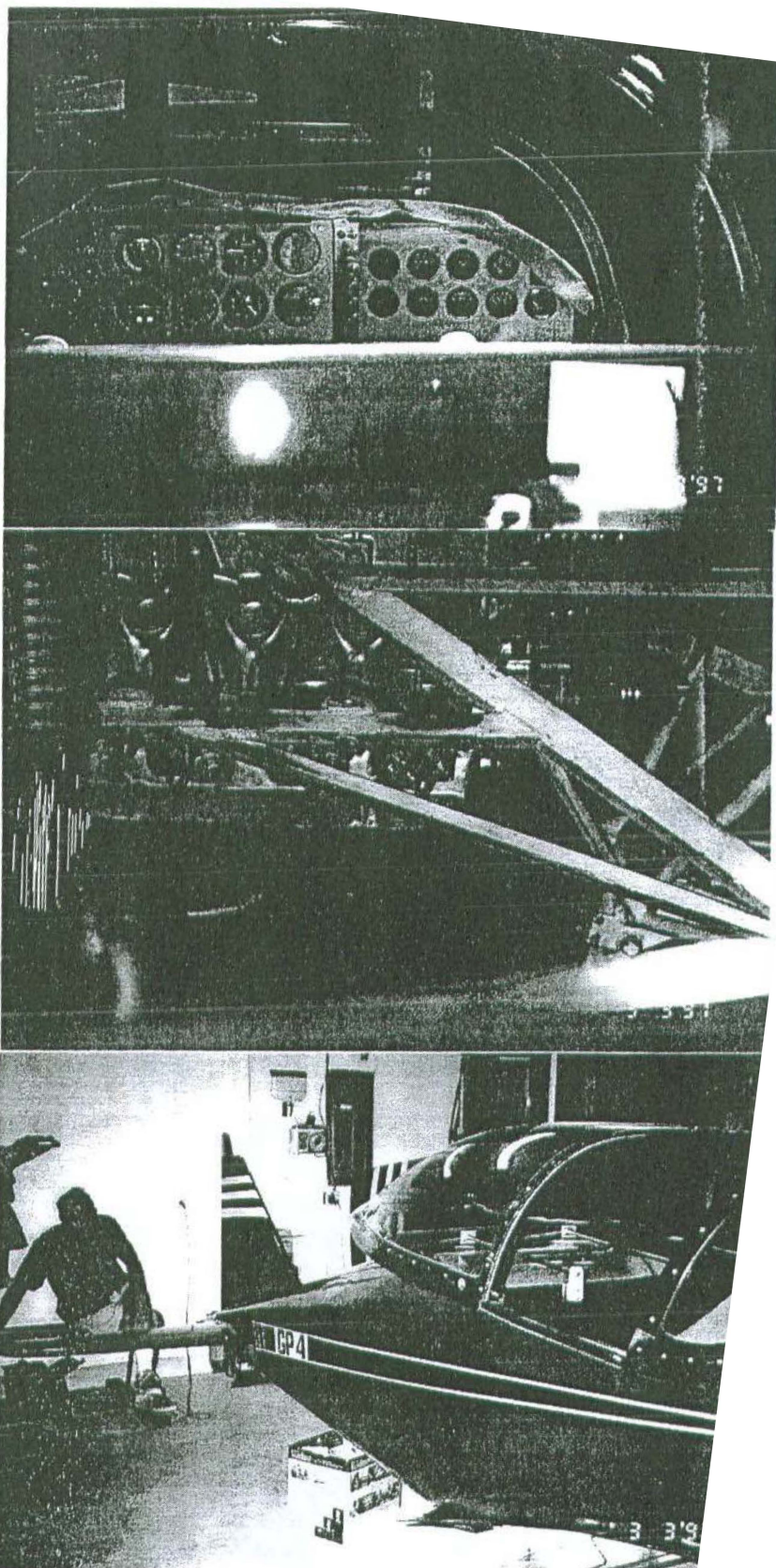
Back to my project, I plan on having the metal components completed by this September with the intention of installing a Continental O-470 or even a Dyna Cam Engine (pretty wild idea....Huh!). Time and money will tell.

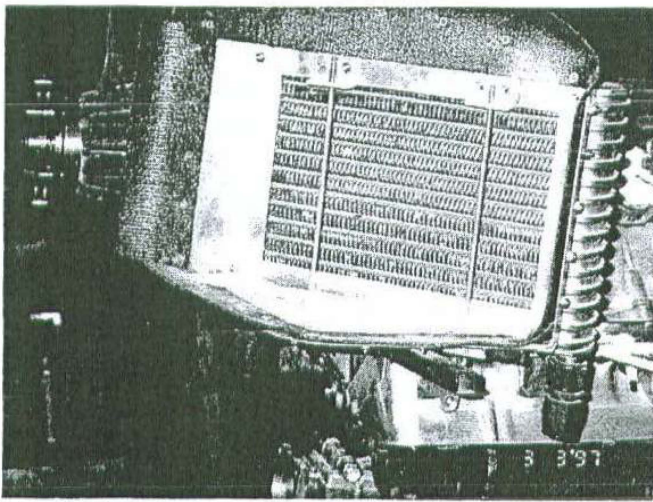
Yours Truly,

Charlie Davis
499 Furnace St.
Manchester, MI 48158
(313) 428-9369
(313) 484-4800 ext. 333 work

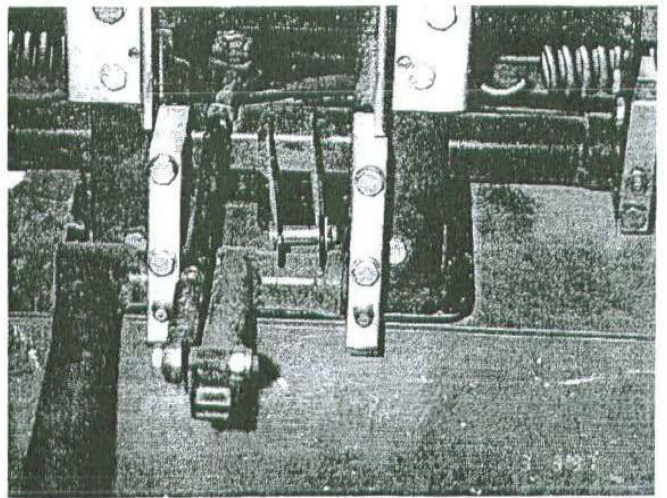
On this page and on the next page are photos of Tom Evans GP-4 project.

I'm going to include several shots of specific brackets, linkages and etc.. So many times we stare at a blueprint and try and visualize what we are exactly trying to produce. Many times over the years I have shown a person (myself included!) a picture of an item or let the person hold the item in their hands and instantly.....Wa lah! Everything registers and they can go home and produce them like rabbits!!! So again..... **"A picture is worth a million words!"** - Spud

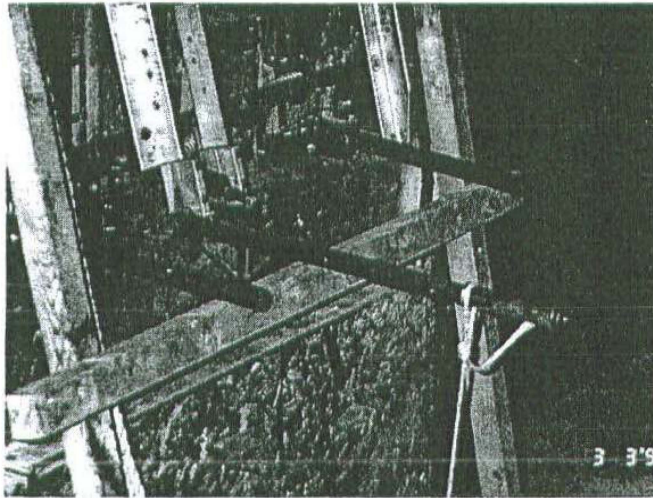




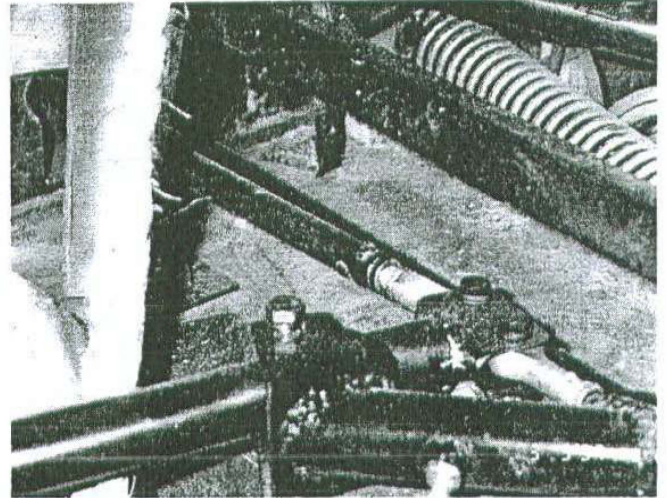
Cooling Radiators



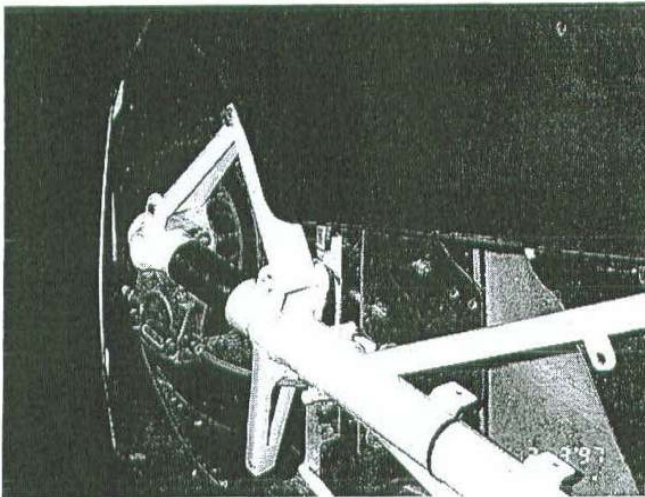
Control Quad



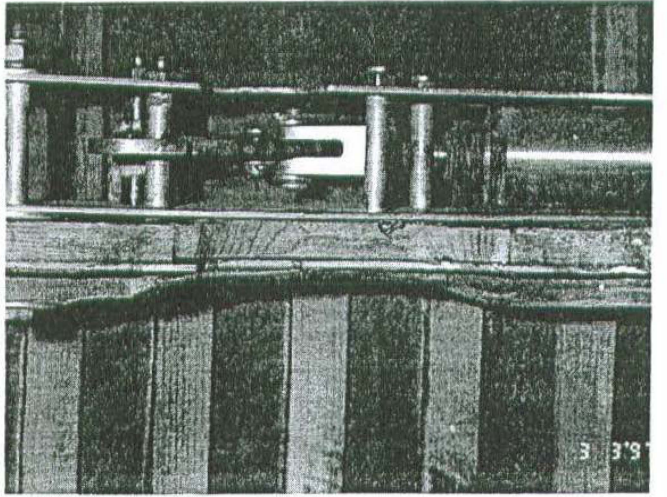
Control System Area



Control System Area



Main Gear



Uplocks

COMPOSITE COMPONENTS PRICE INCREASE

Dear Spud:

I'm sorry to inform our GP-4 builders of a slight increase in price of my cowlings due to costs of resins and environmental charges. I've kept the prices as low as possible in the past, but with this latest increase in these base costs I must make a price adjustment



THE CLASSIFIEDS

For Sale: Pre-fabricated composite components for GP-4. Cowling - \$750.00, exhaust blisters - \$110.00, inlet ramps - \$110.00, tailcone - \$105.00. Complete four pieces package for \$1000.00 and \$75.00 shipping charges Jake Jackson - Rio Linda, CA (916) 992-0608

For Sale: Quality custom fabricated metal components for your GP-4. See GP4BFN issue #4 for complete component listings and pricing. Please allow generous time allowances for your orders. Darry Capps, 813 Hoyer Road, Newman, California (209) 862-2707

For Sale: We have all of the GP-4 back issues (1996 and back) available for \$3.00 each. Mail your checks to Bill Spornitz - 1112 East Layton Drive - Olathe, KS 6061-



● NEW PACKAGE PRICES

Complete cowl, inlets, inlet seals, exhaust blisters and tail cone assembly - \$1000.00 (\$75.00 savings!)

Shipping charges for the above package is \$75.00

● INDIVIDUAL PRICING

Cowl - \$750.00

Ex-blisters - \$110.00

Inlet/seals - \$110.00

Tailcone - \$105.00

Shipping charges on the above individual will vary depending on final packaged weight. Will notify before final shipment.

Builders can contact me at (916) 992-0608 or by E-mail at J7200@aol.com.

I look forward to talking and working with all of our fellow builders.

Jake Jackson

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.

Classified advertising; (non-commercial) for current subscribers may place an ad of 50 words or less for \$6.00 per issue, with one photo an additional \$14.00. 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

HANGAR FLYING

Have you noticed pilots possess a common trait,
That they all walk with a self-assured gait?
Doesn't matter the certificate in their hand,
Private, commercial, multi-engine sea or land,
They all have been challenged and taken the test
Making them among the finest; above the rest.

Have you seen several of them in verbal intercourse,
When others gathered round to hear the discourse?
There's none of that stereotyped hand-in-flight animation
Portrayed as pilots describing flight in conversation.
But, theirs are serious, descriptive, pertinent remarks
Highlighting flying events as clear as bright sparks.

Now, at times there might be some slight embellishment
On a few minor points, but with no intent of devilment;
For a pilot gets excited when describing low penetration
Executed on partial panel due to no electric generation,
And may fail to remember the problem wasn't all gray
Considering his emergency instruments were working OK.

There's no doubt hangar flying will always take place
Where two or more gather, be they student or ace;
For it's natural as sin to exchange daring adventures
Which are as common to pilots as bankers with debentures.
It's through this media that heroes' praises are sung,
And it's the best method known to keep old airmen young.

Johnny S. Taylor Jr.
Silver Creek, Mississippi



1112 EAST LAYTON DRIVE
OLATHE, KANSAS 66061

FIRST CLASS MAIL

NEWS FOR CRAFTSMEN OF FAST WOODEN AIRCRAFT!