

DRAGONFLY BUILDERS AND FLYERS NEWSLETTER

THE OFFICIAL VOICE OF DRAGONFLYERS ALL OVER THE WORLD

VOLUME 82

NOVEMBER - DECEMBER 1999



Wayne Ulvestad's "1999 Best Overall Dragonfly"

Electric Elevator Trim Tabs:

The electric elevator trim system I developed for my plane works quit well. It consists of 2 MAC 6A servo's - one mounted inside each elevator on the inboard ends (see drawing). A rocker switch and indicator were mounted in the instrument panel. Remember, when you order your 2MAC servo's to get a matched set or the motor speeds will be different. Additionally, I made the elevators removable without taking the canard

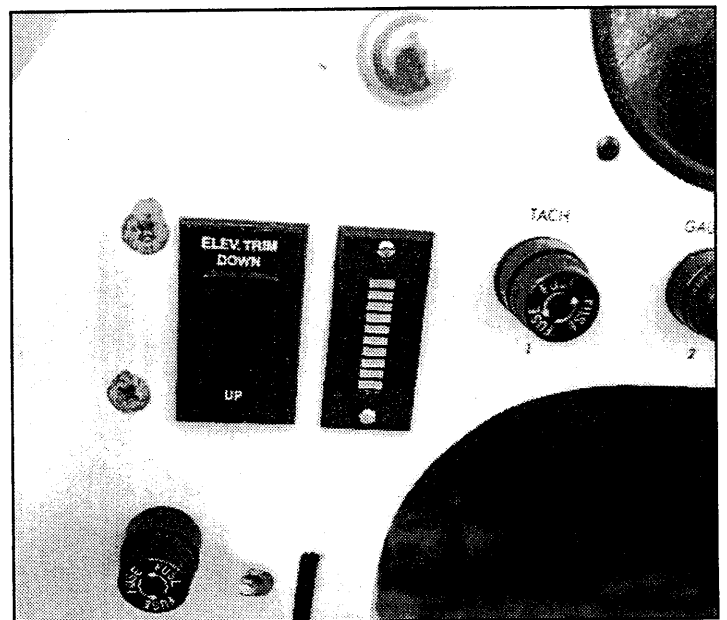
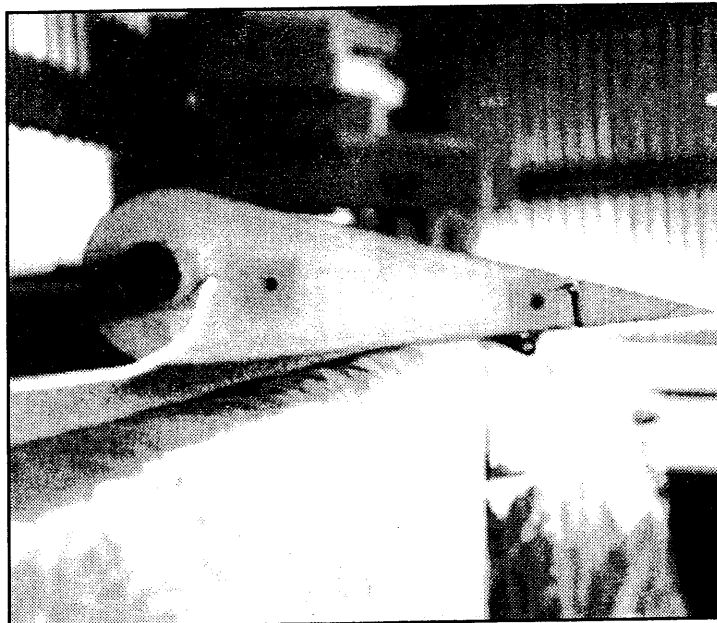
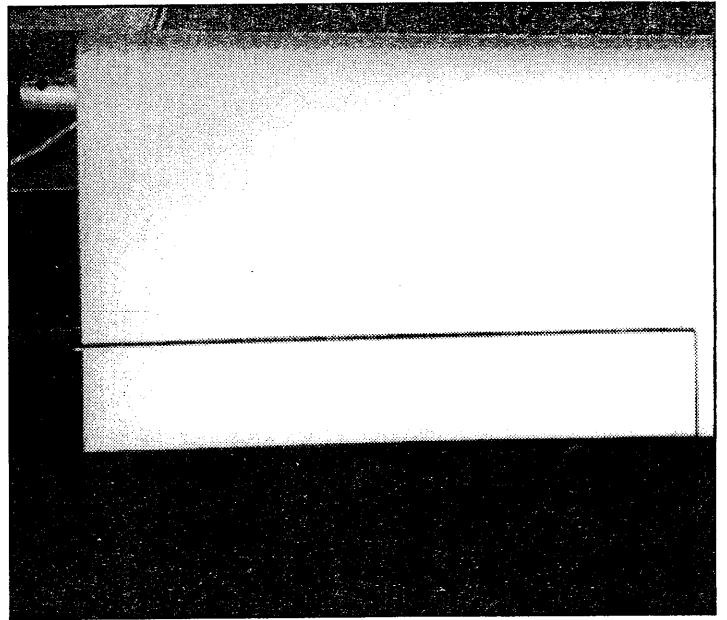
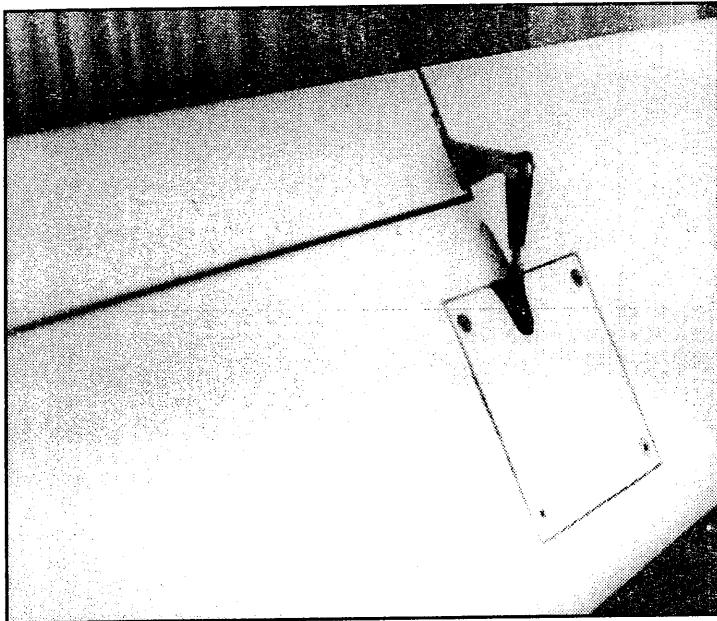
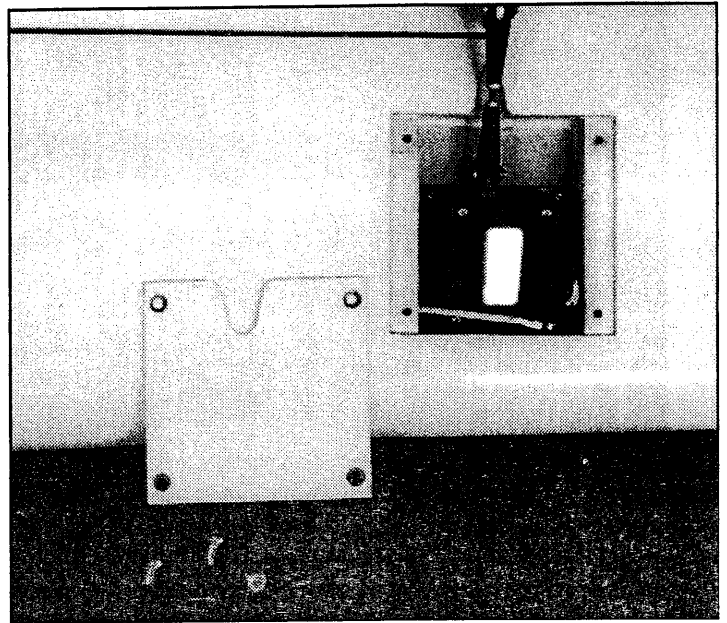
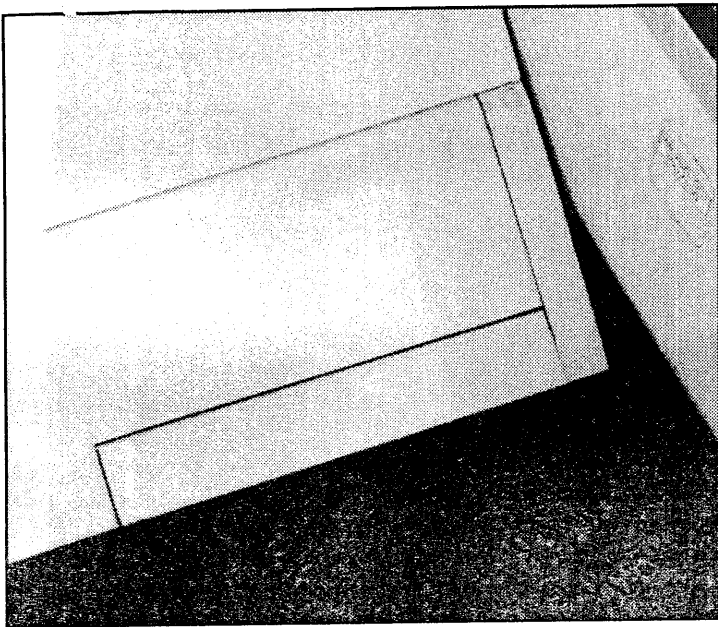
off the airplane (see drawing). I eliminate the fixed trim tabs but after the first flight I reinstalled them because there was not enough trim authority. It works quit well now but the electric trim tabs should be larger.

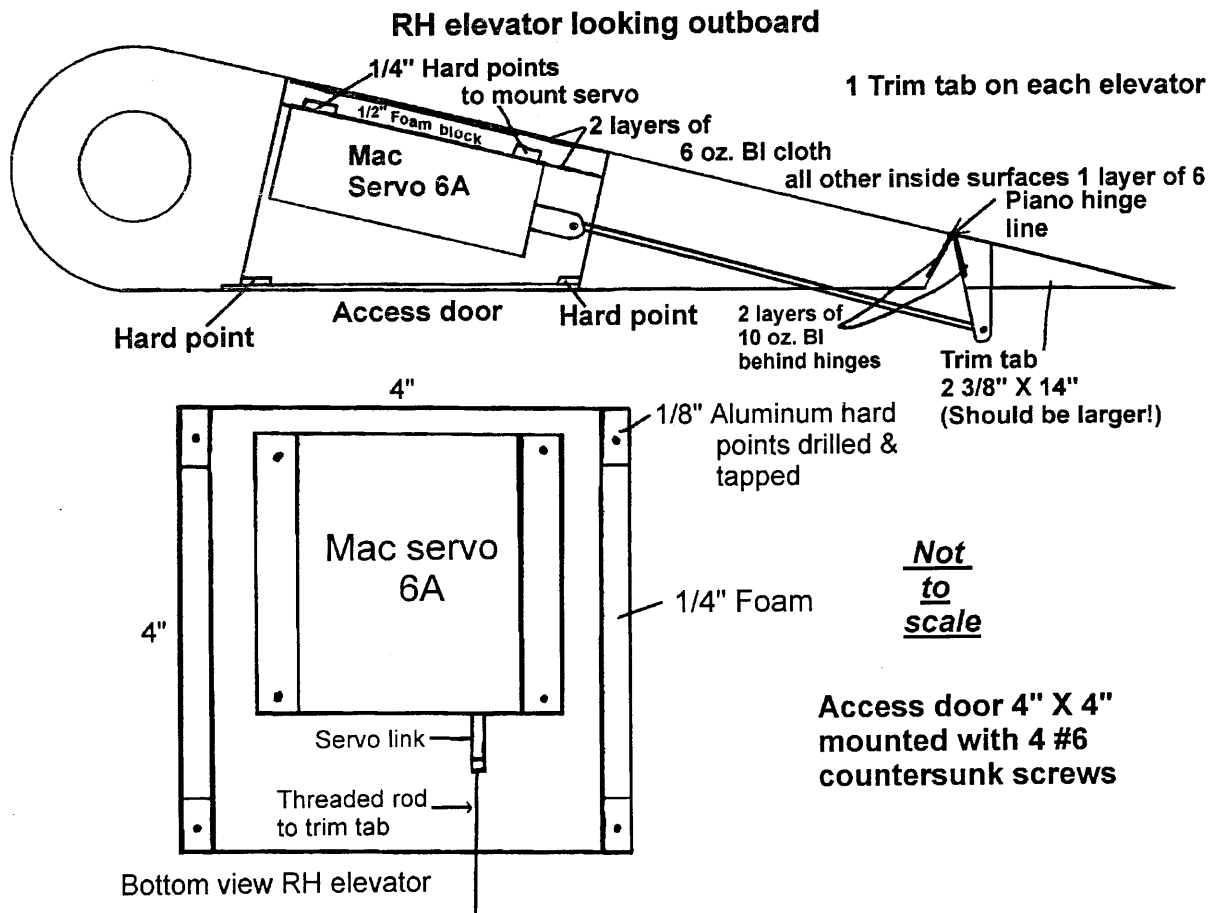
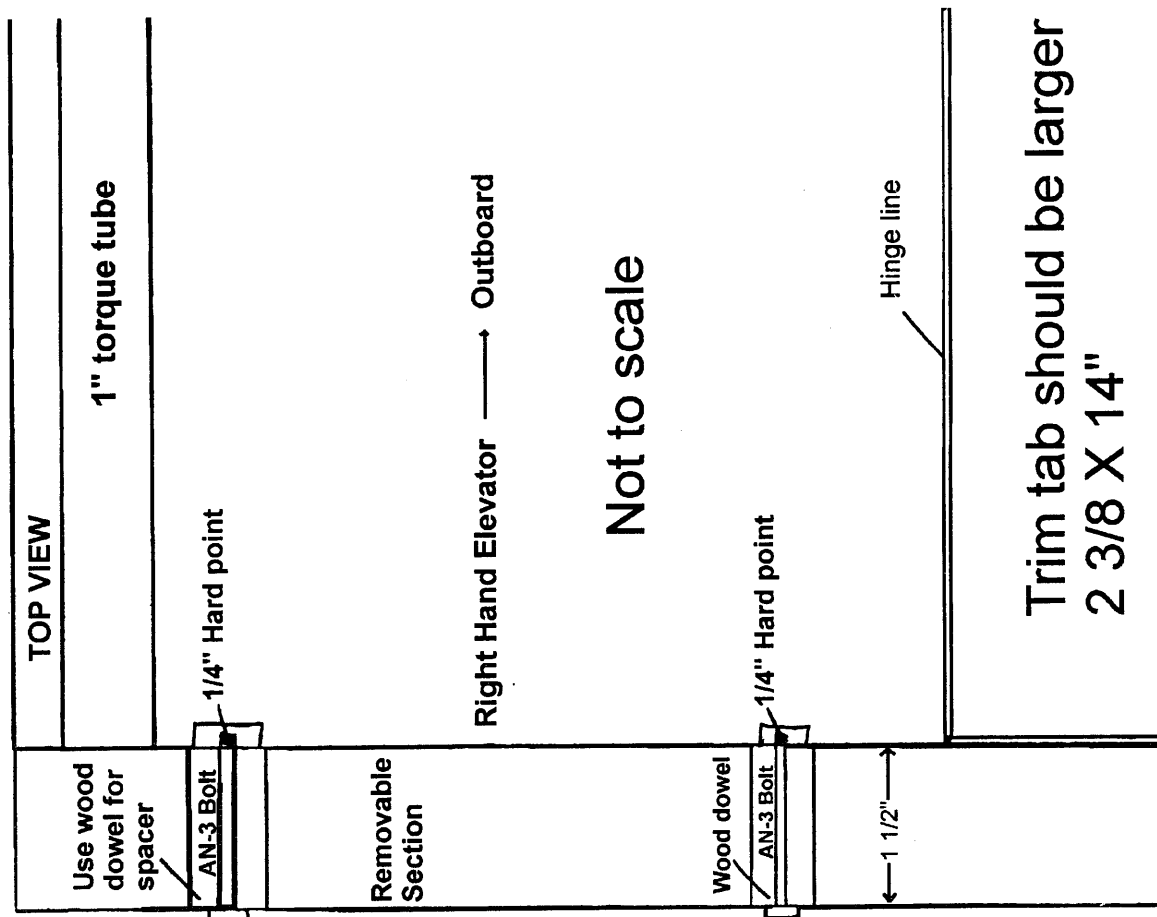
I've included several drawings and photo's that should make the project self-explanatory for those who would like to install the system on their Dragonfly.

I'm in the process of installing a 80hp Jabaru engine on my Mark I which I'm going to do a series of articles on the installation, the test flying and performance comparisons between the 60 HP VW engine that I've had in my plane for over 900 hours.

More later and Happy flying!

Wayne Ulvestad
Volga, South Dakota





**Jon Crawford builds
the new gear leg!**

Hello Everyone,

Well, another part of the saga is completed. I got my landing gear yokes back from the powder coater yesterday. Everything came out great, it only took them 4 hours (!) and I'm embarrassed at how little I actually paid for the job! Needless to say, my engine mount and other metal items exposed to harsh environments will be powder coated!

I took the various components of my recently completed LG to the post office tonight, to get accurate weights. (I was just curious) Here are the results:

Yoke: 3 lbs., 2.5 oz.

Leg (18" long...will be shorter) 5 lbs., 14.5 oz.

Wheel & brake assembly, incl. axle, nut, cotter pin, & brings 14 lbs., 2 oz.

Total weight of 1 complete LG assembly: 23 lbs., 3 oz.

I expect this number to decrease by approx. 2 - 2.5 lbs. when the leg is shortened to it's final length.

It just occurred to me that I should compare the weight of the spring steel leg to that of the fiberglass leg. Maybe I'll do that tomorrow.

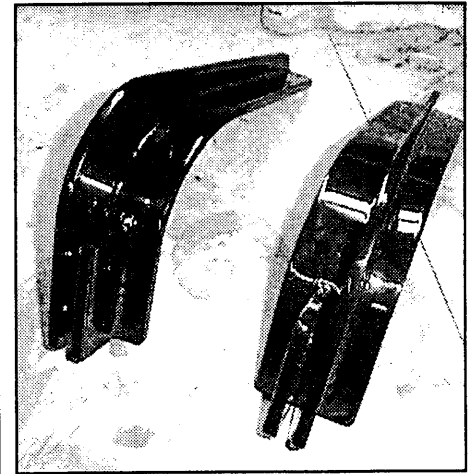
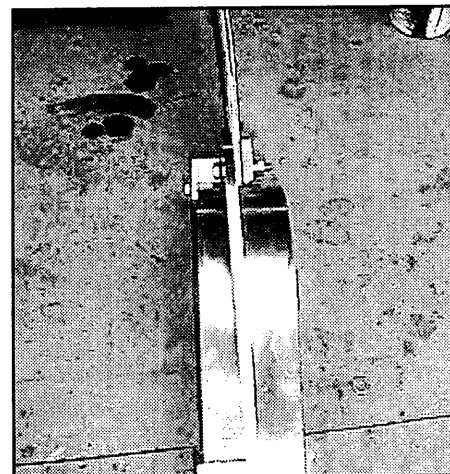
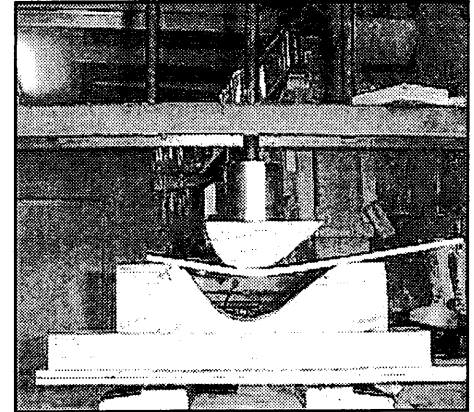
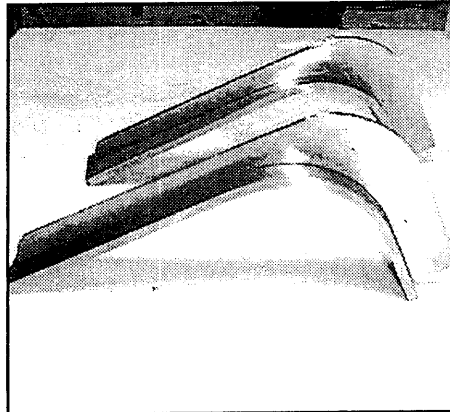
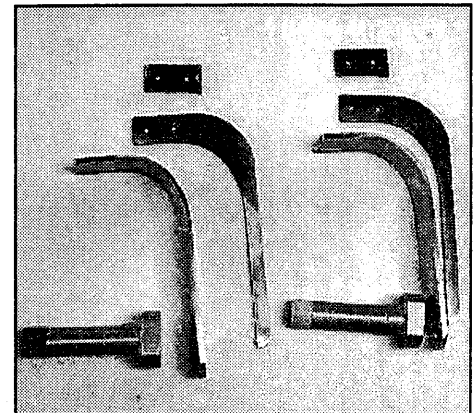
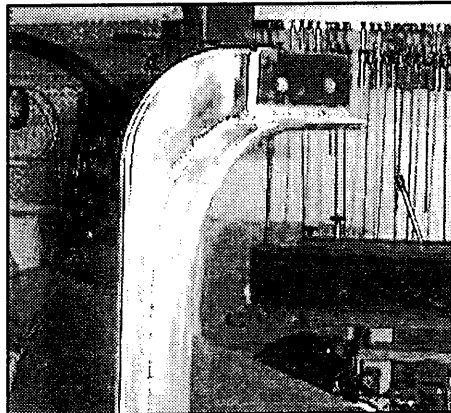
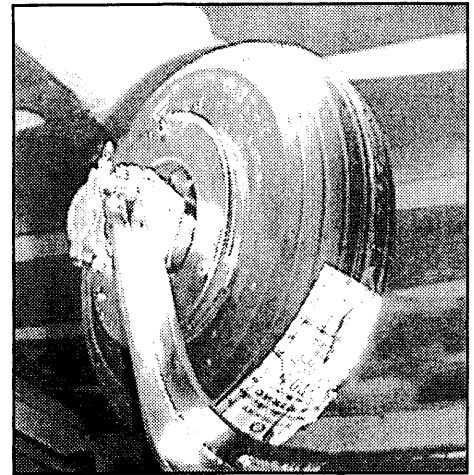
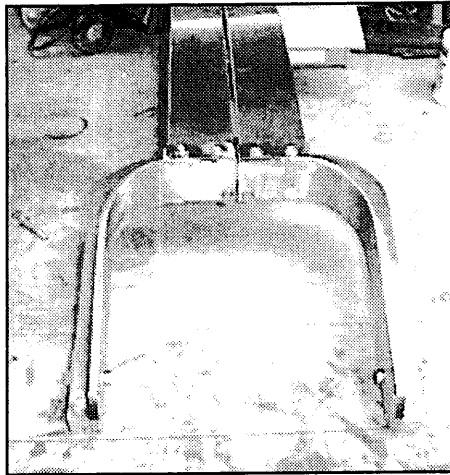
Stop by my web site and take a look when you get the chance. There are a many more pictures in color on the page.

<http://home.att.net/~jon.laurel/gear-legs.html>

Regards, Jon Crawford
San Antoino, Texas

Hi Jon, Thank you for suppling us with a few of the pictures from your super web page to showing your progress on your construction of Pat Panzera's great gear leg plans.

Regards, Spud



Pat Panzera's "Improved Steel Gear and plans"

Hello Dragonflyers, Here's a reduced copy of the steel gear leg I drew. Better than a year ago, I offered to help a fellow Dragonfly owner out of a bind. Seems he had purchased a Mark I with an 0-200, and the weight was just too much for the poor 'ol canard to bear... while on the ground. The solution-seemed simple enough, convert it to a Mark II. The owner also wanted to be able to land on grass strips, so we decided that steel gear was in order.

In order to speed along the process, we decided that while I was working on installing the gear boxes, he could build the gear legs. The newer owner was also new to the Dragonfly community in general and did not own a set of newsletters, so it was decided that I'd do the research and draw a set of plans for him to use.

I read the appropriate issues of the newsletters and I asked the guys on the internet e-mail list about steel gear legs. Chris Walterson came forward and gave me tons of great information, including

sketches and photos of his proven set. From what I learned from the newsletters, Chris, and others on the internet, I came up with a design based around Cleveland wheels (which we already had) and the aftermarket aluminum axle sold by Aircraft Spruce.

The owner of the Dragonfly then took the plan to a machine shop who fabricated them perfectly. After they were shipped to me, installed them and fine tuned the ride height. However, to this day, the Dragonfly has yet to be flown. I offered the plans to the people on the internet to look over and try out. Any and all feedback so far has been positive. I'm made a few small changes from the original drawing and am now making the plans available to anyone who wishes to own a set.

Additionally, I chronicled the process of converting from a MK1 to MK2 on a website on the internet.

The address is:

<http://www.angelfire.com/ca2/PanzeraFamily/YellowDragonfly.html>

Jon Crawford of Texas did an excellent job of fabricating a set of gear legs from a variation of my plan. He also has a website dedicated to the building process of the legs.

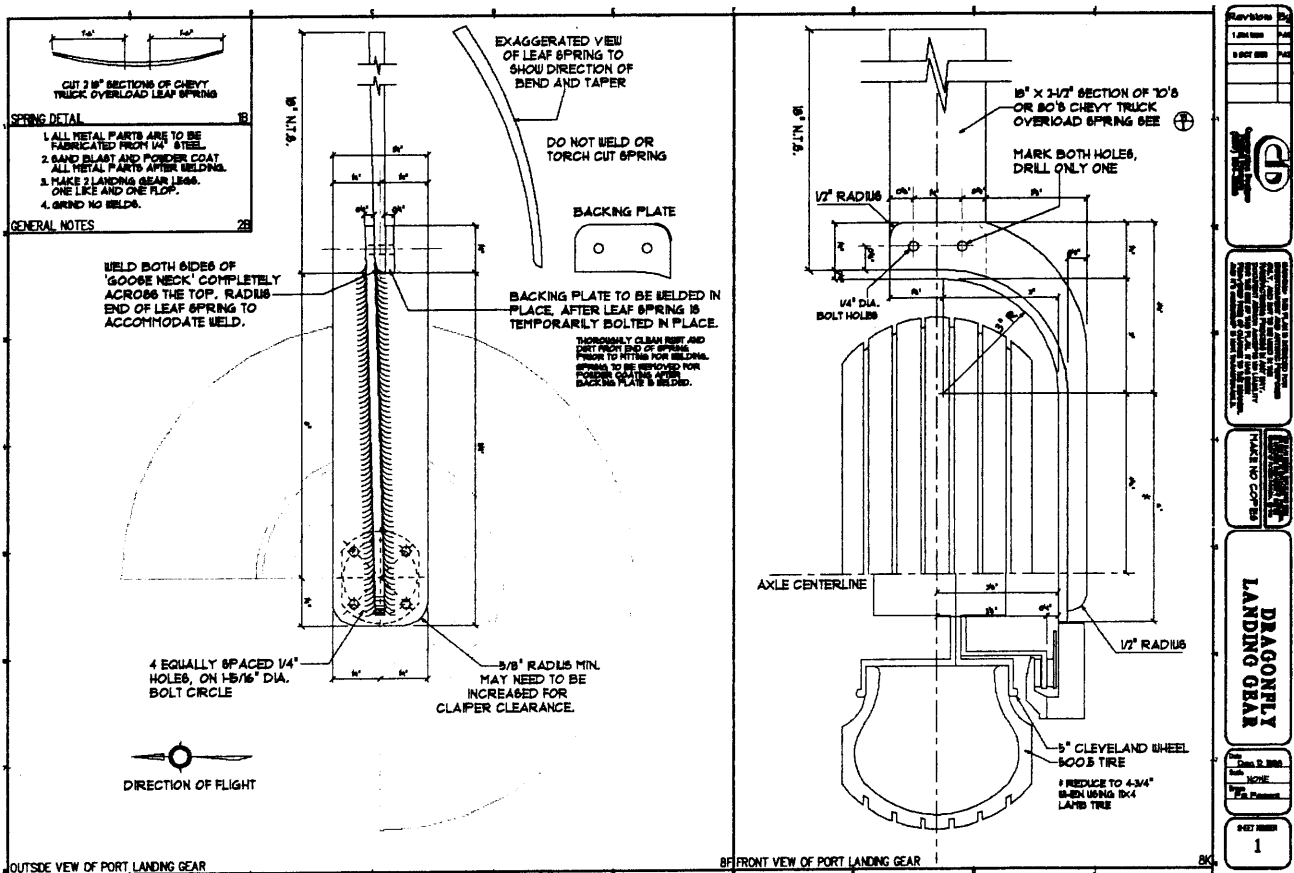
<http://home.att.net/~jon.laurel/gear-legs.html>

Well that's all for now. If anyone is interested in a 18" x 24" copy of the plan, they can send \$15 to:

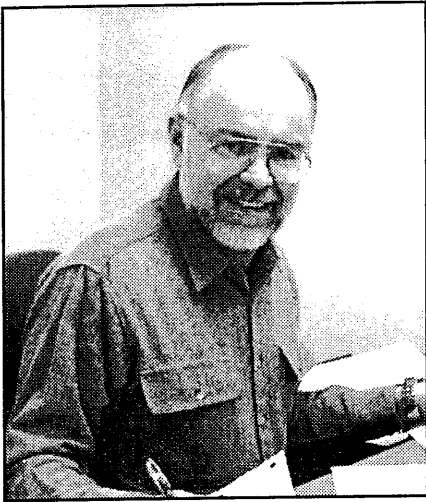
Pat Panzera
 1931 Emma Lee Lane
 Hanford CA 93230
 E-Mail panzera@cnetech.com

Regards to all,

Pat Panzera



Mike's Corner



Fellow Dragoflyer's!

My name is Mike Puhl and I am President of SlipStream Industries. As most of you know by now, back in January of this year my company purchased the rights to the Dragonfly from Patrick and Robin Taylor of Viking Aircraft. Our main interest in purchasing this design was to reintroduce the Dragonfly to the mainstream of the experimental aircraft market, by developing a true quick-build kit, complete with a fire-wall forward package.

As with many of you, I started out as a GA pilot and never envisioned myself flying an experimental, or God forbid, an ultralight. However, the outrageous cost of owning, operating and maintaining my own aircraft gradually opened my eyes to the future of aviation. General Aviation, a misnomer if there ever was one, is dying, frozen in time by aging designs and astronomical price tags. Experimental aviation, and I include the ultralight in that same category, is truly the last frontier. Yet despite the dozens of new age companies, and hundreds of futuristic designs that appear on the scene each year, the Dragonfly remains timeless. The opportunity to restore the market's awareness of the Dragonfly, as one of the best designed aircraft of all time proved too great to pass up. Unfortunately,

the realities of running a competitive kit aircraft business, has not allowed us to make the kind of progress we envisioned for 1999. However, make no mistake about it, we have not backed off of our vision for the future of the Dragonfly. During this past year we have constructed a brand new 15,000 square foot facility at the Wautoma airport in Wisconsin, some thirty air miles due west of Oshkosh. We have recruited a top composite designer, who, incidentally, has build a number of Dragonflys as well as Lancairs, Glasairs, etc., and we have begun to stock the entire litany of materials for the Dragonfly builder, for sale at prices competitive to Aircraft Spruce and Wick's, including engine instrumentation, avionics, and finishes to name but a few.

Several realities still remain. The Dragonfly molds are dated, and have seen more than a few parts over the years. The investment required to remake and/or restore these molds, both in terms of time and money, will undoubtedly be significant. The drawings need to be converted to CAD, and the old errata sheets eliminated, while a brand new quick-build manual, needs to be developed. Already, we have begun manufacture of the Dragonfly control systems components in house, while at the same time continuing to meet an aggressive R & D program and the ever increasing production requirements of our existing line of aircraft kits. Our staff consists at present, of twelve talented and dedicated full time employees, who are committed to the achieving the objectives we have established. As our resources and growth allow, we will intensify our focus on the Dragonfly, but as of yet cannot commit to a date when the first kit will ship.

In the meantime, we ask for your

support. This is an effort that will benefit both plans builders and kit builders alike. If you have contributions you would like to make, whether it be of a technical or market related nature, please let us know. We want to make Dragonfly synonymous with the best that experimental aviation has to offer!

Regards, *Mike Puhl*

Mountain States Canard Wing
Fly-In February 25 & 26, 2000 at Bullhead City, AZ - Details at website at: <http://www.si-inc.com/MSFly-In2000/> or Call Don Stewart at (520) 778-6988

The Classifieds

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For Sale: 2276cc HAPI engine just completely freshened, New GPAS "Force One" prop hub, dual electronic ignition, gear reduction starter, Hapi alternator, HAPI/Scat split cylinder heads. Call for more details. \$2000.00 Paul Fischer - Kansas (913) 829-2536 after 6:00 PM CST or e-mail at: pattfischer@msn.com

"Classifieds" continued

For Sale: Dragonfly Mark II project - 100 TT. Aircraft was purchased approx. tw years ago, less FWF. One gear box and steel gear leg damaged. Project includes an EA 81 Subaru Turbo. O time on engine and turbo. All appropriate engine parts balanced, also includes the fuel injection and related components. Engine mount, custom radiator, starter, ring gear and alternator mounted. Cleveland wheels and brakes, instruments. First \$5,900.00 takes it. Contact Robert Bircher, PO Box 71, Hinckley, MN 55037-0071 (320) 384-7566 E-mail robertc@pinenet.com

For Sale: "Snap" Dragonfly MKIIH hoop gear project for sale. 75% complete. Fuselage built. All bulkheads in place. Fuel tank in place. Wing, canard, aileron, and elevators completed, ready for primer and alignment to the fuselage completed. Most everthing to compete the project: tutle decks, canopy, hoop gear, verticle fin/rudder, tail wheel assembly, tubing, bellcranks, VW engine mount, etc.. No engine or instruments. \$5800.00 OBO. Located in Omaha NE. Ask for Doug "Hawkeye" Humble Call weekdays 402-558-1211. See photo's at <http://hometown.aol.com/hawki-doug/myhomepage/sale.html>

For Sale: Prefab Dragonfly Kit - \$5,500.00. Fuselage assembled with tail fin, rudder, fire wall, motor mount angles, upper-lower seat back, intercostal-tail bulkheads, fuel tank & consoles installed. Pre-cut canard and wing cores, fiberglass cloth, some carbon fiber, engine cowling, Mark I wheel pants, some hardware. Wayne Ulvestad, Volga, SD work (605) 627-9291 home (606) 627-5365

For Sale: Inboard Mark II "Hoop Style" Gear Plans - Full size hoop gear template drawings for making the mold and instructions on how to mount to the fuselage. \$14.00 (\$18.00 outside of U.S.) Mail your checks to: Bill Spornitz, 1112 East Layton Drive, Olathe, Kansas 66061-2936

For Sale: Dragonfly Firewall forward package. 1835 HAPI 60 2DM with Great Plains heads, Extra set of heads, mount, matched prop & spinner, exhaust, Super carb, Baffling, Hapi alternator & regulator. Call for more details \$3,000.00 of best offer. Contact Wayne Ulvestad - Volga, SD (605) 627-9291 days or (605)627-5365 evenings & weekends.

Wanted: New or gently used Dragonfly canopy and/or frame. Please contact Mark Jones at (414) 542-9561 (after 6 pm central time) or 2710 Meadowbrook Rd. Waukesha, WI 53188

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Dragonfly Builders & Flyers Newsletter (DBFN) is currently published Bimonthly at a rate of \$3.50 per issue/\$21.00 a year in U.S. \$3.84 per issue/\$23.00 a yr. in Canada, Alaska & Mexico. \$5.00 per issue/\$30.00 a yr. (U.S. funds) per 6 issues to foreign subscribers.

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The use of "VW" or Subaru by DBFN is for the sole purpose of application and description only and is not intended to infer or imply a direct connection between DBFN and Volkswagen or Subaru.

Bill "Spud" Spornitz
(913) 764-5118
E-mail dbfnspud@aol.com

The Grin Department!

PROPOSED FEDERAL AVIATION REGULATION ACT

1000. A No pilot or pilots, or person or persons acting on the direction or suggestion or supervision of the pilot or pilots may try, or attempt to try or make or make attempt to try to comprehend or understand any or all, in whole or in part of the herein mentioned Federal Aviation Regulations, except as authorized by the Administrator or an agent appointed by, or inspected by the Administrator.

1000. B If the pilot, or group of associated pilots becomes aware of, or realizes, or detects, or discovers or finds that he, or she, or they, are or have been beginning to understand the Federal Aviation Regulations, they must immediately, within three (3) days notify, in writing, the Administrator.

1000. C Upon receipt of the above mentioned notice of impending comprehension, the Administrator will immediately rewrite the Federal Aviation Regulations in such a manner as to eliminate any further comprehension hazards.

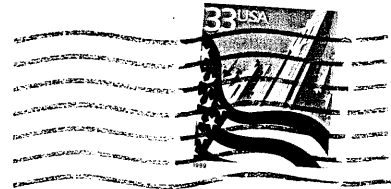
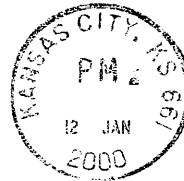
1000. D The Administrator may, at his or her option, require the offending pilot, or pilots, to attend remedial instruction in Federal Aviation Regulations until such time that the pilot is too confused to be capable of understanding anything.

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