



NEWSLETTER

Carb Heat

Hot Air and Flying Rumours

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NOVEMBER NEWS LETTER

Next Meeting

Thursday November 21st , 1991

7.30 p.m.

At the

**NATIONAL AVIATION MUSEUM
BUSH THEATER**

Featured Topic

Riveting ; Theory and Practical Demonstration.

PRESIDENT: Lars Eif 837-6680
VICE-PRESIDENT: Gary Palmer 596-2172
SECRETARY: Luc Martin 744-5347
TREASURER: Deric Dods 692-6121
EDITOR: James Oliff 724-6123

AIRCRAFT OPERATIONS: Dick Moore 836-5554
SPECIAL EVENTS:
PUBLISHING: Dick Moore 836-5554
MEMBERSHIP: Rodney Stead 836-1410
RECORDING SECRETARY: Roger Fowler 225-6070

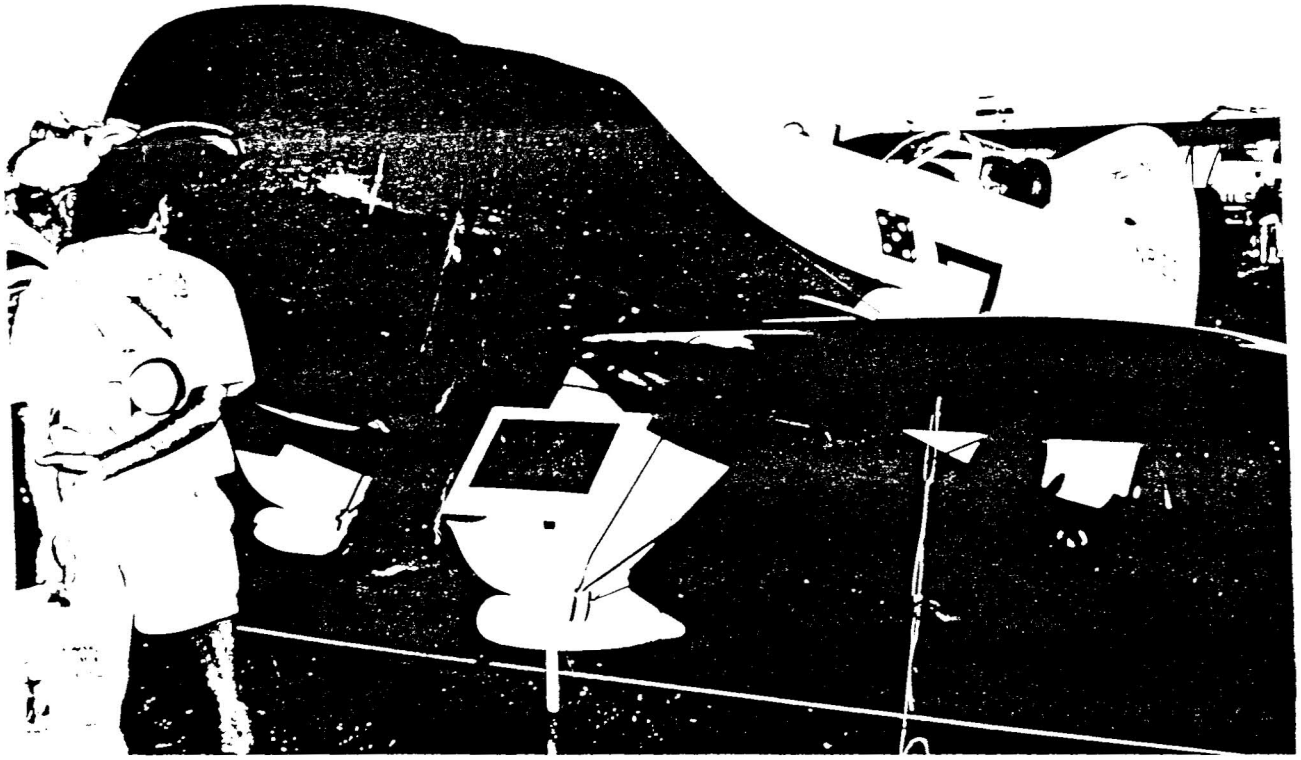
... require a 4.0 litre 48 valve V12 for its new Amati series of luxury cars. Imagine this aluminium block engine with a special racing inspired four blade piston in the nose of your 3/4 scale engine. It's a "Mustang" 5.0 if you are looking for an engine conversion for your Mustang. It might be a good idea to hold off a bit since the 5.0 litre V8 premium auto engine is still available to be a reality in the near future.

Passing the Torch

As a result of the elections held at the recent meeting, Tom Palmer was re-elected as the Chapter Vice-President, Jerry Elliot replaced Deric Dodds as the new treasurer, and Manfred Flicker will take over the Membership duties from Rodney Stead. As Manfred is not available in the summertime, Matt Brown kindly offered to cover that position during the summer. To the new members on the Executive Committee,

Welcome! To the outgoing officers, I now I speak for the entire club in thanking you for the countless hours that you put into keeping our club alive and growing. Some of us have decided to give up our memberships for our jobs, but we were able to find a replacement for each of our positions. I have Martin Vanturel as the new Vice-President for each of the positions. We have all immensely enjoyed your wit and wits, yet the final word on the proceedings over the last few months. Your cutting humour was much appreciated in the issues of the magazine but we hope that you will continue with a "Fowler" wit and wit. It is time to given up our loads. We will know it needs it!!

That's enough from me for this month. 'See you at the Museum on the 21st and at the RV-4 Open House on the 22nd.



Elections: Gary Palmer was returned to another term as VP; George Eliot is the new Treasurer; Manfred Fricker will look after Memberships (spelled off by Matt Pearson in the summer months); and Luc Martin agreed to add the chores of recording secretary to his duties as executive secretary. Congratulations to all!

FEATURE PRESENTERS

James Oliff and his "Rag and Tube" Pitts Special

James' choice was largely dictated by what he wanted the plane to do—heavy duty aerobatics—and what a ready-built specimen would cost—far too much. His solution was to buy a Pitts-project. The plane is part “rag” and thus the builder learns about rib stitching, stapling vs. nailing, fabrics, paints, finishes, etc. The 4130 “tube” part offers lessons in welding, bending, drilling, reaming, stress relieving, and rust inhibiting. The wood requires a knowledge of glues, sanding, varnishing, scarfing, and preservation against water. The aluminum portions demand a knowledge of the different kinds of aluminum and choices about welding, riveting, gluing, etc. In short, James' project offers a challenge in many fields of aircraft construction. By scratch building much of it, James will save money and have an intimate knowledge of virtually every aspect of his plane. He has already come to respect the skills of other builders, having measured his own abilities against the various materials found in his Pitts. His advice: talk to owners, choose carefully, and don't let your wife know the real cost!



Rod Emmerson and his Aluminum Teenie Two

Rod's choice of material was tied to his choice of a design. The kind of aircraft he wanted was only available in aluminum. A lost battle against wind shear gave him the opportunity to make numerous changes in the design: some didn't work; some produced only marginal change; and some were definitely worthwhile. Aluminum allowed these alterations and made them feasible because it is a relatively cheap material and one which is fairly easy to work. Another advantage is that it has an indefinite life span. In addition, if you don't mind polishing the metal, you can get by without painting it. A botched rivet can usually be rectified simply by drilling it out and bucking another one in the same hole. Final fitting of large panels must be done carefully and slowly, but on the whole, Rod was well pleased with his choice of metal.



Luc Martin and his 5/8 Scale SE5A

Since this is a largely wooden design, Luc concentrated on glues, the principal means of joining all those pieces of wood.

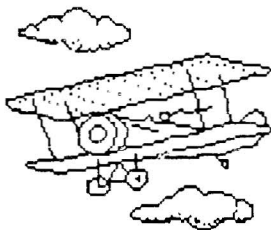
Early glues were protein-based and made extensive use of horse parts. Not surprisingly, bacteria loved this bonding agent. These casein glues had good water repellancy, penetrated well, and were easy to sand. On the negative side, they needed a

high curing temperature (65⁰ F minimum) , were ultra violet sensitive, dried slowly, needed high clamping pressures, and weren't good at filling gaps.

WWII saw the emergence of epoxies, at first quick drying and brittle, but in their modern form, much improved. They are very strong in shear, not so temperature sensitive, not affected by ultra violet, non poisonous, not attractive to bacteria, good gap fillers, flexible, and won't soften once dried. **WARNING: don't use Aerolite**

hardener until your epoxy glue has cured at least 72 hrs. or it will soften the glue. Epoxies need careful mixing, clean wood, and clean hands (good gloves are best). The mating surfaces should be freshly cut, planed, or sanded (with aluminum oxide paper—garnet paper leaves particles, thus weakening the joint).

In a word, wood is a traditional, time-tested medium which is both challenging and rewarding.



Gary Palmer and his Composite Lancair 235

Gary wanted something sexy, sleek, along the lines of a Falco but with the construction of a Glasair. The Lancair 235 offered just what he was seeking. The plane's design was very thoroughly analyzed and built 100% above its rated stress loading. The extensive use of high-temperature cured and vacuum-bagged Nomex honeycomb ensured a light but strong final product, provided joints were properly degreased, prepared, and laid up—a point Gary laid particular emphasis on. If there is a negative side to this method of construction, it would be the imbalance between the daunting amount of time spent sanding and finishing as opposed to the encouraging speed with which the main structure takes shape. On the positive side, however, the finished product is fast, light, strong, smooth, virtually weather proof, and aerodynamically efficient to a degree almost unattainable in wood or metal designs.



What these informative presentations showed is that no one method is wholly superior. Ultimately, the prospective homebuilder will have to weigh a large number of factors in making a choice. Hopefully, however, this kind of evening will have supplied the kind of information necessary to make an informed decision about the method of construction best suited to the prospective builder.

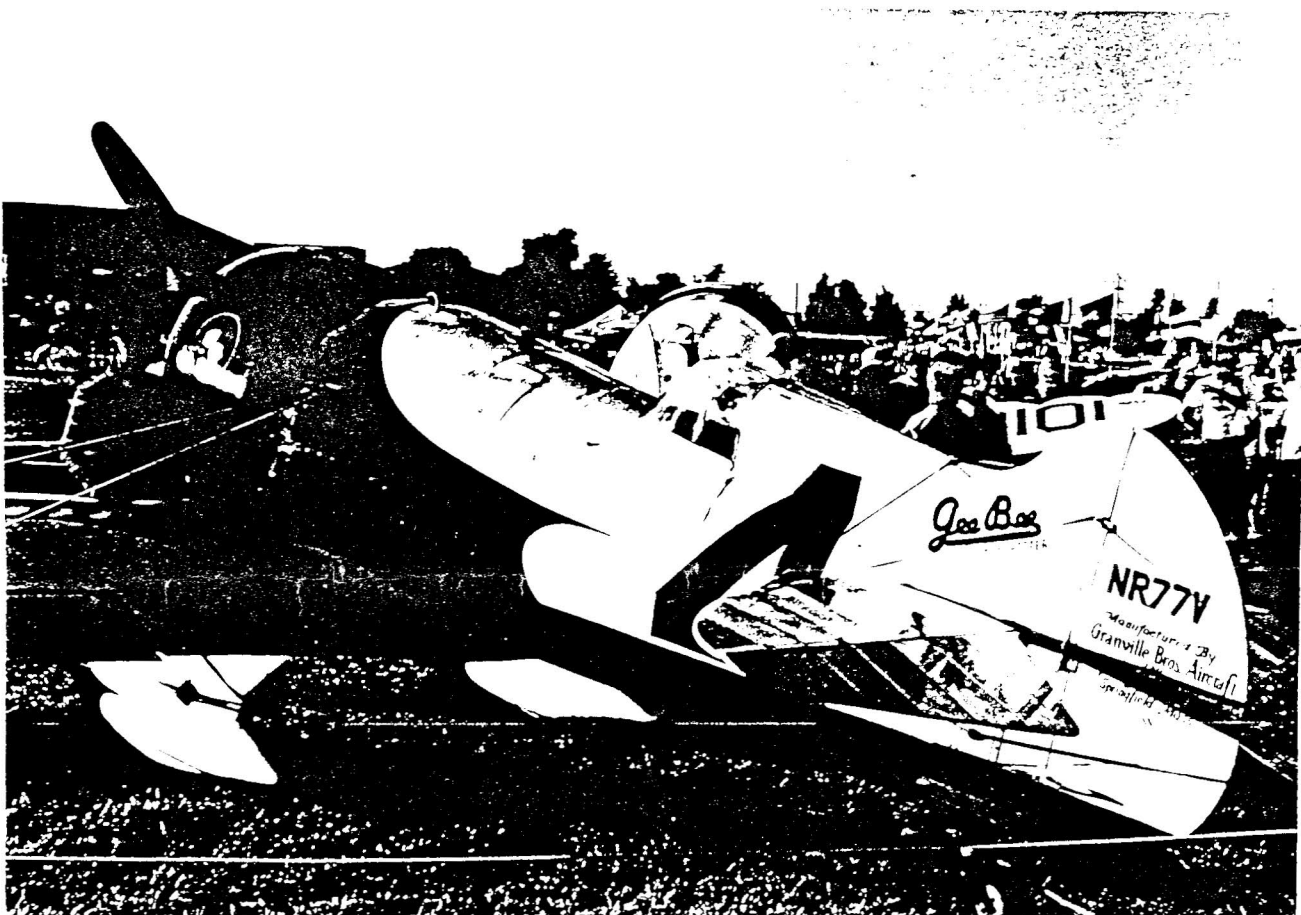
Your faithful scribe,



Roger Fowler.

Aluminum Aircraft Open House

Project: RV-4
Date & Time: Saturday, November 23, 1991 at 10:00 am until 2:00 pm
Host Builder: Matt Pearson
Location: 24 Bernier Terrace, Tampa, Florida 33611
Telephone: (813) 592-2311



CLASSIFIEDS

AIRCRAFT FOR SALE:

Homebuilt Super CUBy. Completed 1988. 100 TTAF. Lycoming O-320, 100 hrs SMOH; set up for auto fuel. Full gyro panel; 2-20 gallon wing tanks. Excellent condition. Contact Henri Beaudoin at (613) 749-9720.

PROJECTS AND PLANS FOR SALE:

Baby Great Lakes Project: Fuselage 90% complete; all ribs and spars; Continental C-85; McCauley metal prop; all instruments. \$6500. James Oliff (613) 724-6123.

Zenith CH250 tri gear; 75% complete. Signed off by DOT, ready to finish closing. Wings and tail nearly completed, includes gear, cowlings and fairings. Call Jim Robinson at (613) 830-4317.

Zenith CH250 tri gear: Complete, airframe, Lycoming O-320, instruments, cowlings and fairings. Signed off. Requires final assembly, inspection, paint and prop. If you don't want to spend years building then this could be the aircraft for you. Price - \$11,500. Phone (613) 591-7622.

PLANS for Davis D2A. Call Russ Robinson 831-4317.

PARTS FOR SALE:

Engine mount rubbers, new, (8), for a straight mount O-320 Lycoming. Call 591-7622.

Vari Eze landing gear legs. New. Call Peter Plaunt, (613) 839-2283.

Randolph butyrate dope in unopened gallon containers; 2 gallons clear; 1gallon Juneau white; 1gallon Piper

Lockhaven yellow (Maule yellow): 1 gallon insignia blue.
- 2 large oil coolers (~8x9")
- 1 hydraulic pump
- 1 vacuum pump
- 1 Lycoming dual accessory case adapter for above pumps.
- 1 Spinner, 11" base diameter; pointed type.
- piston rings for Continental E-185-3.
Contact Garry Fancy (613) 836-2829 for any of the above items.

OTHER:

The new "Canadian Amateur Built Aircraft Registry" is now available from CASTC. Call Ted Slack at 226-8373.