Carb Heat

NEWSLETTER

Hot Air and Flying Rumours

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JUNE 1988

NEXT MEETING 17 JUNE 7:30 PM
At the chapter hanger CARP

TOPIC Henry Beaudouin and the famous CUBY
The cuby is being assembled and rigged

President – Doug Richardson	592-5279	Hangars – Dave Murray	825-0871
Vice President – Roger Fowler	225-6070	Aircraft Operations – Garry Fancy	836-2829
Secretary – Andy Douma	591-3801	Special Events – Gord Standing	224-2879
Treasurer – Deric Dods	692-6121	Membership – Rodney Stead	836-1410
Editor – Ted Chambers	749-0268	Publisher – Dick Moore	836-5554

EAA CHAPTER 245 MEETING

DATE: Friday 20 May 1988
LOCATION: EAA Hangar Carp Airport
ATTENDING: 38 members, 14 guests.
TIME: 2000 hrs.

OPENING REMARKS: Chapter President Doug Richardson EAA286166 welcomed and read off the names of the evening's extensive guest list. It seems that advertising pays off.

NEW MEMBERS: Doug welcomed our most recent member, Richard Livingston, who has drawn some very entertaining cartoons for us.

ANNOUNCEMENTS: - The annual Fly-in breakfast will be postponed to a later date due to the many activities taking place on the weekend of June 17-19.
- Thanks to Laurent Ruel EAA138183 and Doug Richardson, we now have a well. Thanks to Bob Knapp of the Ottawa Flying Club, we have a water pump and thanks to Colin MacAndrew of the BMW Club, we have a pressure tank. Now if we can only join them all together into a working pressure system.
- Thanks are also due to Nina Petersen for her efforts at sprucing up the place with the flower bed.
- And thanks again to Laurent who has taken on a new project of building a stairway to a storage loft in the hangar.
- EAA President Paul Poberezny sent the members a letter of thanks for their support of EAA in the matter of the Mode "C" NPRM.
- There is still no news from the "Land Use Committee" in Toronto regarding our application to build a row of hangars.
- Doug mentioned the dates of the Chapter Forum at Oshkosh this summer, Tuesday August 2nd 8:30-11:15 a.m..
- Guy Lefebvre briefly mentioned the Volmer Sportsman he has for sale. The ad will be appearing in the newsletter next month.
- Cliff Sutton of the Ottawa Flying Club briefly mentioned the program planned for the 60th anniversary celebrations being held over the June 17th to 19th weekend.

BUSINESS: In our continuing effort to upgrade our Carp facility, Doug asked for approval to buy and install drywall over the summer. After a short discussion and comments from the members, Eric Taada EAA104293 proposed a motion to approve the expenditure of $200.00 for drywall, insulation, and hardware. The motion was seconded by Parr Tate and carried by majority show of hands.
Doug also indicated that it would benefit all the airport users if the windsock was more visible. He asked for a donation of used car tires that we could paint white and place around the windsock. Rodney Stead EAA303490 indicated that he could probably get them from Al Joy's garage.

GUEST SPEAKERS: We have many new members who are searching for a project to build and who are looking for information on the various types of construction in use. Chapter Secretary Andy Douma EAA271456 introduced this evenings topic and speakers.

There are four basic types of construction for light homebuilt aircraft 1-Wood 2-Steel tube 3-Sheet aluminum 4-Composites. Many projects use combinations of the above for different components i.e. tube fuselage and wood and fabric wings or a composite fuselage and a wood skinned foam core wing, etc. This evening we have one or two representatives from each category who will answer four basic questions:
1- Why did you decide on the type of construction you chose?
2- How have you found working with it?
3- Have you encountered any particular problem with this type of construction?
4- If starting a new project, would you go this route again?

WOOD:
In chronlogical order of materials in historical use the first speakers were Ken Martin EAA14918 and Parr Tate EAA18459 both builders of wooden airplanes. Ken built most of the Jodel D-112 C-FYOR now owned by Andy Douma. Parr is building a Volmer Sportsman Amphibian.
Ken chose the Jodel because he believed the claims of easy building and he chose wood because, at the time (mid 1960's), wood was relatively inexpensive and was available locally. Both points are no longer true. Parr was interested in amphibious aircraft and the Volmer was the only one available at the time. Both have found wood to be easily worked with readilly available home woodworking tools. The points of peculiarity were that one must learn to "read the Wood", one must also be aware of the changing properties of wood due to humidity. They mentioned a number of hints in dealing with wood and they both brought samples of woods used showing the types of joints and illustrating the strength versus weight of the

materials available. Both would work with wood again. It should be noted that it is best to keep wooden aircraft hangared out of the elements.
A note of interest is that Jim Laing, a local amateur builder of some renown has over 1100 hours of trouble free flying in the wood and fabric Volksplane that he built 12 years ago.

TUBE and FABRIC:
In historical order, the next aircraft construction type was tube and fabric. Several of our members have completed this type of aircraft and several more are being built. Lars Eif EAA258680 has always wanted to build an aircraft and when the mortgage was paid off he began in earnest to look at the plans and designs available. He chose tube and fabric because it was different from the currently most popular building material, sheet aluminum. He chose the Steen Skybolt because he wanted aerobatic capability and he was impressed with the enthusiastic response he received from other builders. He was hooked after a first flight from one obliging individual and he is currently about half way through his project which he expects to complete in 3-4 years. He is "scratch building" after taking a welding course from Algonquin College which he recommends if only that it teaches you how not to blow yourself up. The Skybolt, as with many aircraft, combines tube and fabric fuselage construction with wood and fabric wings. None of the phases of construction have given him any particular problems.
From the start of the project he has kept a detailed computer record of expenses and he reports that his expenditures to date nearly match the mortgage payment of $645 per month he used to make. He noted that of the $25,000 spent so far, $7000 has gone for jigs, tooling, and other non-flying incidentals. He expects to have spent near $50,000 by completion.
When asked if he would go this route again, he said that the the whole experience is extremely challenging and interesting but he would not try this method a second time.
There are several steel tube aircraft in use or being built these include Charles Martel's Sportsman 2+2, Garry Fancy's second Skybolt, Dave Murray's Pober Pixie and Henri Beaudoin's soon to be ready Cuby.

SHEET ALUMINUM:
The most popular construction material in use today is sheet aluminum. Several of our members have completed aircraft of this type and several more are being built. Speaking for the "sheet metal" group we have Jim Robinson and Ted Chambers. Jim and his son Tim are nearing completion of their Zenith 250 TD. Ted completed his Zenith 300 from a Zenair kit last year after a 5 year building program. Jim chose the Zenith because there was a partially completed kit available at a reasonable price. Both Jim and Ted went the Zenith route because of the ready availability of aircraft grade sheet aluminum and the because the aircraft designer and kits and parts producer lives in Ontario. Both maintain that sheet aluminum is easy to work with and only a few special tools are required, i.e a long bending break and a drill press. Most parts that require welding may be purchased from Zenair aircraft based in Midland Ontario. Since niether have hangar facilities they decided that the all metal aircraft would better survive the ravages of weather. Both builders have been reasonably happy with the plans, building proceedures, and designer support and both would recommend sheet metal as the material of choice.
Other Sheet metal aircraft flying or being built are - Jim laing's CH250, Gerry McGrath's CH250, Doug Richardson's CH250, John Richardson's CH300 and Andy Douma's CH300. Jim Bradley EAA 33414 has been flying the two Davis DA2,s he built for a number of years,

COMPOSITES:
"Better living through chemistry" has brought us the material that is rapidly gaining on sheet aluminum as the building material of choice. Garry Palmer EAA176826 came to us a few years ago with a very interesting kit, the Lancair 235. This aircraft is capable of 200 mph on an O-235 engine due in most part to it's super slick construction method and materials. The kit is complete except for engine and instruments and it looks like a very large plastic model. The basic kit is currently selling for close to $23,000 Cdn. with an estimated completion tag of close to $40,000 so thrift is not a big selling feature. This is not out of line in terms of building Lars's Skybolt or Ted's Zenith. Garry chose the Lancair because he likes to work with the modern materials and he likens it to a composite Falco. The Falco is a beautifully designed aircraft but it is constructed of wood, is expensive to build and it would need hangaring. He is well along on the project as he had the first kit in Canada he will probably have the second one to fly in this country. Garry mentioned the potential problems of working with composites. He indicated that a two car heated garage is pretty well essential and proper ventillation is a must.

The last person to speak was Alex Fulton EAA182066. He is working to complete the second Starlight project in the Chapter. This aircraft has a composite fuselage and foam core with plywood sheathed and fiberglass covered wings. This aircraft comes as a complete kit including engine and instruments for around $14,000 . This tiny one seater has some spectacular performance features as shown by Dave Murrays beautifully built aircraft that is busilly flying of its restrictions. Dave spoke to us about his aircraft at an earlier meeting at NRC.

There are several composite aircraft flying locally or nearing completion. These include Bruce Bolton's Long Eze and Tom Van Tuyl's Q-II.

The speakers were thanked for their efforts and we hope that the questions of the many new members and the visitors were answered.

This wrapped up the evening's main topic, anyone who wishes further information may contact any of the speakers. Their phone numbers are on the member lists.

LATE ANNOUNCEMENT:
Eric Taada introduced John Rodney who is this years Director of the National Capital Airshow that will take place on the July 9-10th weekend. John invited the Chapter to participate with another display of our aircraft and he invites anyone who wishes to contribute their time to contact him at 836-1101.
A further announcement was that the Airshow Committee will be meeting at Carp on Sunday June 26th at 9:00am.

ADJOURNMENT: 2330hrs.

WHAT'S UP

The answer this month to the What's Up question has to be the temperature. And the grass. This month is for Henri Beaudoin and his CUBY. It arrived at Carp on the first of June and as Hen ri put it, "only three weeks behind schedule, three weeks and four years." May that be the last time that we see the Cuby on a road. With the hangar all set for him and plenty of workroom available as I recall, I can only guess as to the hardships that some of our earlier members must have put up with. One other thing to be proud of no doubt.
As the minutes of the past meeting reflect, the walls of the hangar are going to be weather stripped and drywalled. Some of the knowledgeable drywallers pointed out that there would need to be some work done on the wood framing to even it out and a little work was needed on the insulation in the walls, before the plastic could go up.
I have finished the electrical work in the walls and Laurent is nearing the end of the plumbing. If you have some spare time the walls could use it both in prep work and drywall. Bring a hammer.
The May meeting was billed as a success on all accounts, with many good ideas past and insight gained. In future newsletters I will get some information on these and other projects and report them to the club. Thanks to the speakers, recent members have a better idea as to what all is involved in this sport.

On the flying end of the club., I flew down to Kingston for their annual Fly-In and met a few other 245 members . With perfect summer weather the event looked as though it was a success.

As Rockcliffe Flying Club has asked us to put up a small display we will need a couple of aircraft and or projects. If you can spare a couple of hours on the 18 of June please call Ted Chambers. Coupled to that event John Perrins has donated his time , experience, and materials to create a good display for this and other events in the future. The prints will vary in size but will be up to 20"x24" and use both black and white and color formats. He is hoping to to visually what the May meeting did with words.

One last thing for this month, now is the time to get the paperwork ironed out and the charts bought for the trip to Oshkosh this summer. Remember, homebuilts take more time to cross that border. The Zenith will be going this year, as will Ted's and I believe Charles Martel's Sportsman 2+2 is to make the trip. I can't speak for them but I will be looking for a co.
See you next meeting.

Doug

Flight Lines

by Nina and Olav Peterson, June, 1988.

During our short one-day cross-country flights in the region this spring we accumulated some fuel statistics:

80/87 OCTANE FUEL PRICES
MAY 1988

AIRPORT	Price per liter
Carp	69 ¢
Ottawa Int'l	67 ¢
Gatineau	76 ¢
St.André-Avellin	67 ¢
St.Lazare	66 ¢
Lachute	65 ¢
Cornwall	65 ¢
Brockville	69 ¢
Smiths Falls	60.1 ¢
Arnprior	66 ¢
Oshawa	70 ¢

ELT's, which have had a rather dismal performance record, are in the news again, now in improved versions. Statistics concerning problems vary. The early models indicated a 97% false alarm rate and only 30% successful activation record in real emergencies. In the past year Canadian statistics show that the false alarm rate dropped by 10% and that the success rate climbed by 30%. To reduce the number of false alarms pilots should monitor the frequency 121.5 MHz after each landing. The challenge to redesign the ELT has been met by the Arnav Systems who have introduced their ELT-100. This model will prevent false alarms by a special switch which measures the duration of G's above a threshold, and will alert the pilot via a cockpit alarm whenever the system is activated. (COPA General Aviation News, May 1988, p.4; Aviation Trade, May 1988, p.31).

Government regulations concerning ELTs may also change. AOPA is requesting that new standards for ELTs be implemented and that FAA have the manufacture of the present TSO-C91 model discontinued in favor of a new-technology model which has proved free of false alarms for a period of two years. In Canada DOT plans to maintain present rules until the 1990s. The new ELTs will use the frequency of 406 MHz, which is reserved for emergency beacons, is more compatible with satellites and is able to provide faster and better localization. (COPA Newsletter, May 1, 1988).

We recently had occasion to wish for an ELT cockpit alarm. When en route to St. André-Avellin, we picked up a strong ELT signal. Our immediate concern was to verify that QDK's alarm had not triggered inadvertently but there was no way of confirming this from the cabin while in flight! Gatineau Flight Service, to whom we reported the signal,

were for some curious reason, unable to pick it up. Upon landing we checked our ELT and fortunately found it to be inactive. A direct link from the ELT to the instrument panel would have made for a less tension-filled flight.

Don't be an avio-peasant and practice unsafe, foolhardy flying habits during the warm, carefree summer months. A useful article to read about safety considerations for hot-weather flying is featured in the latest issue of Canadian Aviation. It points out that strong winds and thunder are associated with windshear, that you should always have an alternate airport for your destination, and that it is important to use a good filter against contamination when refuelling in remote areas. Summer haze is not safe in under three mile visibility since recovery from a stall or a spin by using ground as reference is difficult. The article suggests that VFR pilots consider a few flights with an IFR instructor and be at least capable of a 180 degree turn under the hood in order to make a sudden exit in the event of unexpected, poor visibility. It is also vital to keep your aircraft clean and free from bugs, since sandpaper-like roughness can cause a ten per cent increase in stall speed. (Canadian Aviation, May 1988, p.38).

When is a homebuilt not a homebuilt? A new category referred to as "component form", rather than kit form, is used to describe Piper's reintroduction of the famed Super Cub, known for its impressive take-off and landing capability. Parts for do-it-yourself assembly will be sold for $21,095 US, not including the engine, propeller and paint. The Super Cub Owner Assembly Program requires the builder to follow detailed factory instructions and submit to regular inspections by the Piper field service representatives whereupon factory authority will approve the Super Cub as a fully certified aircraft. In order to minimize labor time, all the welding is done at the Piper factory and the Ceconite fabric comes in sleeves eliminating the need for stitching. (The Canadian Aircraft Operator, April no. 2, 1988, p.3).

Aviation, which for many people has been associated with danger, war and fiery barnstorming infernos, is currently making more and more positive headlines in connection with safety, rescue and medical missions.

In Alberta a medevac helicopter, a German-made MBB BK 177 machine, is providing air ambulance service for STARS, the Alberta Shock Trauma Air Rescue Society. Medical specialists are flown to remote hospitals to return with patients to more extensive and advanced facilities at Calgary. In addition to the flight crew the medevac helicopter is staffed by volunteer paramedics.

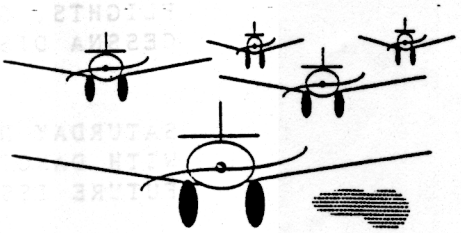
EVAQ, the Service Aerien's Evacuation Medicale du Quebec is installing a complete operating room into the Canadair Challenger 601. The Challenger's wide cabin will allow enough space for the operating table and accompanying equip-

ment and make possible active medical treatment onboard for a maximum of seven patients and their attendants. The medevac Challenger will add a new dimension to the highly progressive medical rescue work carried out by the Quebec government. Prior to the Challenger 601 a British Aerospace HS-125 served as an air ambulance since 1980, carrying over 3000 patients in six years. (Aviation Trade, May 1988, p. 19).

Safety is the primary concern of the testing of all new aircraft, from the most basic homebuilts to the highly complex new generation aircraft. It was interesting to read about the extensive and elaborate test carried out by British Aerospace in connection with their Advanced Turboprop. Venturing far and wide, they carried out cold weather and icing trials in Finland and Iceland and hot weather tests in the Mojave Desert. In addition to being climatically comprehensive the tests assumed a further international character when noise trials were undertaken in Spain and in the United States. (Aviation Trade, May 1988, p.13).

Among the new products which recently received Department of Transport approval is the Hipec finishing system for fabric, wood, metals and fiberglass. Available from Falconar Aviation it is supposed to be easier to use than traditional systems and to contain a highly effective adhesive sealer and ultraviolet blocker. (Canadian Avaiation, p.14).
Hipec, which has already been used on the ultralight Birdman Chinook, is now approved for use on factory built aircraft weighing up to 12,500 pounds. Tests on the Birdman Chinook by A.C. Ultralight claim a marked improvement in performance, citing a cruise speed increase by 10 mph, and a stall speed decrease by 8 mph after an application of Clear Hipec Top Coat. (Canadian Aircraft Operator, April no.2 1988, p.3).

Loss of traffic separation can, among other things, be caused by the misinterpretation of a clearance, where a similarity in names of airspace intersections has led to confusion. Citing "phonetic proximity" as the cause, the Canadian Aviation Safety Board is asking Transport Canada to rename intersections with both geographic and phonetic similarities. Names like BANNE and BADDY are involved in incidents of confusing identity. This type of a problem points out the limits of verbal transmission as well as aural receptions and makes a case for visible video print-out in addition to the spoken message. (COPA Canadian General Avaiation News, May 1988, p.17)



CARP AIR-FORCE

Safety

THE AGING AMATEUR BUILT

From David C. Baxter of Lake Grove, Oregon, author of Starduster History.

Dave has an interesting point in that some of the amateur built aircraft are aging, many of them 20 years of age and older, that may have been sold, damaged or rebuilt several times since they were first built. During the building process, many builders neglected to drill holes undersize and ream them to the proper dimension, which results in loose fitting bolts. Operating a control system with loose fitting bolts, elongated or worn holes, and misaligning control push-pull tubes and control reverses results in a sawing or abnormal wear pattern. Thus, after many hours of use, they could fail. His recommendation is that when an airplane is first built, that all control system hole dimensions be drilled undersize and reamed to the proper bolt size. He further recommends that all aircraft in service be inspected to ensure that bolts and control systems are in good condition and show no wear, and that bolts in the chain of stick to stick to control push pull tube to reverser be immediately removed and checked for any signs of wear.

A new EAA member, Steve Pate, says that both GM Truck and Coach make reamers, and they are available from the Hayden Twist Drill Co., 22822 Globe, Warren, MI 48089-2580; telephone (800) 521-1780. They make reamers of 2.47 inches, and 2.48 inches, and others, that fit the diameter of a 1/4 inch bolt. He believes the price to be about $35.00.

ANATOMY OF A THROTTLE FAILURE

From info submitted to the FAA by Keith E. Embree, Cambridge, Ohio

Amateur builders use the same type of throttle cable used on lawnmowers, motorcycles, automobiles and aircraft.

There are many good quality products used in all of these machines. There are some not so good. Two points to look for are:

SOLID BRASS BODY - Some cheap units are made of light tubing. Worst of these is a rolled tube. When the conduit is crimped into the body of a tube, it may easily come loose with time, use and vibration. If this happens, the conduit will move and the cable will remain stationary - resulting in throttle failure.

6

STAINLESS WIRE OR CABLE - This is important because stainless resists corrosion. Corroded cable = throttle failure.

The aircraft I was flying incorporated a body made with a rolled tube. The conduit was crimped into the tube. This was of little use, because the seams in the rolled tube opened up with use, releasing the conduit.

Ottawa Flying Club

DIAMOND ANNIVERSARY

THE ENTIRE CANADIAN FLYING FRATERNITY IS INVITED TO MARK THE WEEKEND OF 17 JUNE ON THEIR CALENDAR.

FRIDAY 17 JUNE - BBQ DINNER AND SQUARE DANCE WILL TAKE PLACE AT THE OTTAWA FLYING CLUB.

SATURDAY 18 JUNE FLY-IN BREAKFAST AT 0800
0930 OFFICIAL OPENING OF THE ANNIVERSARY CELEBRATIONS.

CONTINUING ALL DAY - TOURS, STATIC DISPLAYS, INTRO FLIGHTS, GROUND SCHOOL BRIEFINGS, CLUB HISTORY DISPLAY, CESSNA DISPLAY, SLIDE SHOWS. TRIPS TO AERONAUTICAL MUSEUM.

SATURDAY NIGHT - DINNER DANCE AT THE CONGRESS CENTRE WITH DANCING TO A LIVE BAND. DETAILS TO FOLLOW IN FUTURE ISSUES OF WING TIPS.

SUNDAY 19 JUNE - SUNDAY BRUNCH AND A POKER RUN. THE POKER RUN WILL COMMENCE AT 1400.

CARELESSNESS MAIN CAUSE OF UNSARS

If you had been in Stittsville, Ontario, on the morning of 16 July, 1987, you would have been treated to the sight of a rescue helicopter homing to a United Parcel Services van. "What manner of test", you'd have wondered, "is this?" Unfortunately, it wasn't a test. What you watched was an UNSAR (unnecessary search-and-rescue) activity; one of a number which continue to plague the search and rescue system. In this instance, the ELT had been shipped with the function switch in the ON position and the batteries connected. The result? The system worked as designed and summoned help to a van driver who needed none, at a cost of roughly three hours Labrador flying time, which at $2500 per hour totals $7500 for this bit of carelessness.

In 1986, the Canadian Forces spent 766 hours in UNSARs, at an average cost of $2,000 per hour, or about $1.5 million, tracking down UNSARs. While it is erroneous to suggest that the sudden cessation of UNSARs would result in an instant saving of $1.5 million, it is apropos to recognize that a false alarm could easily divert scarce SAR resources from a real distress incident and result in loss of life.

A review of UNSAR activity over the past couple of months shows that possible hard landings, coupled with failure or inability (NORDO) to listen on 121.5 MHz before shut down is still a primary cause of UNSARs. Another primary cause is not listening on 121.5 MHz after installing, or re-installing the ELT in the aircraft. For some reason, the jolts associated with the Bigger Hammer School of Aircraft Maintenance seem to inspire newly installed ELTs into a frenzy of activity.

Several UNSARs were caused by jarring the ELT while loading or unloading bulky items such as outboard motors. Others were caused by loading or unloading passengers. Still others were caused by high winds jostling the aircraft sufficiently to excite the ELT.

Not all the ELTs which triggered UNSARs were installed in aircraft. In addition to the one located in the parcel van, another was located in a private truck, one was in a flight school office and one - which had been reported stolen in 1984 - was located under a shed.

A couple of others were the result of, well, perhaps not crashes, but landings which resulted in substantial damage to the aircraft. Because these incidents were not promptly reported, the SAR birds found emergencies which had already been secured.

Although there is no leading cause of UNSARs, listening on 121.5 MHz before and after flight would prevent many inadvertent ELT activations from resulting in UNSARs. Hard landings will activate ELTs. So will the jostling associated with installation, loading or unloading cargo or passengers. But such activations need not progress to UNSARs if pilots of radio-equipped

aircraft monitor 121.5 MHz immediately before take-off and just before shut-down. Pilots who discover that their ELT is inadvertently transmitting should shut the beast off, and immediately notify the nearest ATS unit or rescue coordination centre of time, duration and location of the inadvertent tone.

The purpose of the ELT-SARSAT-SAR network is to speed rescue to injured survivors who need help. If the SAR helicopter is hovering over a commercial van in Stittsville, it is in no position to respond to a real emergency in, say, Kapuskasing.

Transport Canada encourages all pilots to become more ELT conscious. Monitor 121.5 MHz before and after each flight, after ELT installation or re-installation, and any time the aircraft has been jolted. When sending the ELT for its annual medical, disconnect the batteries if practicable, and ensure the function switch is in the "off" position. Don't assume that, because the ELT is indoors, SARSAT won't hear it. Last but not least, if you do inadvertently scare your ELT into action, report it to the nearest ATS unit or rescue coordination centre. You may forestall an airborne search. The SAR squadrons will appreciate the break, and parcel van drivers won't have their hair blown dry by an expensive rotary-wing hair-dryer.

CONTACT: Bob Merrick
Transport Canada (AAB)
Centennial Towers
200 Kent Street
Ottawa, Ontario
K1A 0N8

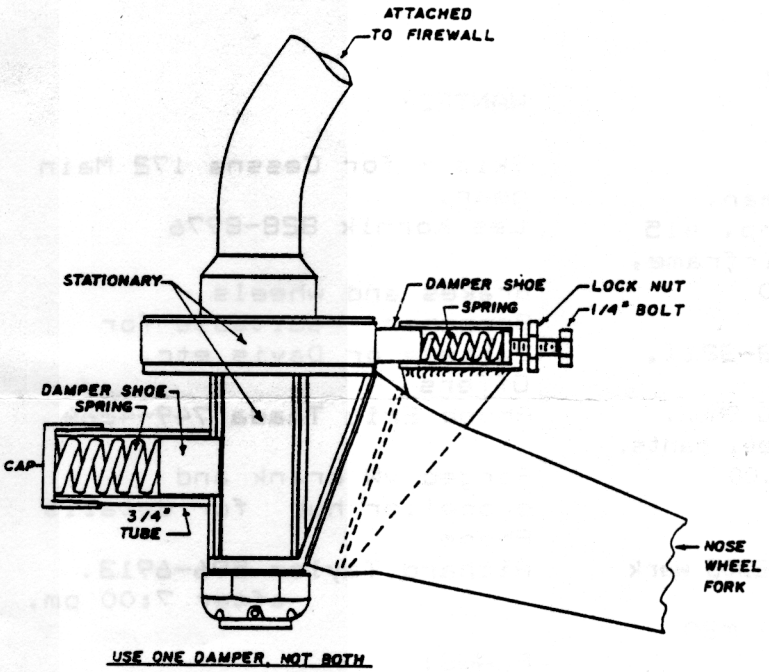
(613) 990-1292

The reason this is included in the news letter is a club member had an uneventful landing one day only to be wakened at 5 AM. and asked if they were the owners of said plane. They were then asked to go to the airport and rearm their ELT. It had gone off after the landing when some sideways movements were detected on rollout. Bob Merrick sent them some ELT litature which is filtered through the people to the club bulleton board. The information should be must read material for all that fly. It could happen to you.

NOTE Our secretary is in the midst of designing and having printed some club Logos or Crests for use on chapter aircraft.I have seen a prototype,and can hardly wait for one for the Zenith.

SHORTCUTS!

These articles are from the April issue of the EAA Tech. Counselor News. Some people have nose shimmy problems, maybe this might help.



HOW TO ELIMINATE NOSE WHEEL SHIMMYING

Nose wheel shimmying can be eliminated by several methods: FRICTION DAMPING, HYDRAULIC DAMPING, A HEAVY SELF CENTERING ACTION, TWIN TIRES OR THE MARSTRAND TWIN CONTACT TIRE. This from the book by Pittman Publishers, entitled "Component Design Handbook No. 2" by the Royal Aeronautical Society.

It might be of interest to note that there is an excellent book entitled "Landing Gear Design, Volume 1", by Ladislao Pazmany, available from him through Pazmany Aircraft Corporation, P.O. Box 80051, San Diego, CA 92138. It is the most up to date and complete volume on landing gear design since the previous benchmark by Conway. Write to Paz for further information. A drawing is shown of a damper designed by Roy Clemens of Kelowna, British Columbia, Canada, on his solution to his problem on his Cavalier nosewheel.

While on the subject of gear, here is another tip, on the fitting of wheel pants. Just finished installing mine on the Zenith and while doing so, the air around me at times, had a definite tint of blue. But they do make a pronounced difference in performance in all phases of flight. The tip?.. If at all possible do the fitting of the pants when the undercarrage is off the plane. The pants being round in all plains will not sit still and cannot be held in any one postion for any length of time. Compounding this is the general lack of a suitable place to take a resonable measerment to anywhere. It took alot of time to achieve the proper clearances around the tire. All this had to take place under the wing - three times! Well as most of you builders know, the solution presented it's self at the end, in two parts.

A real problem was at hand in attempting to keep the required distance between the rubber and pant, because you can not see the top sides or face of the tire, or even get your hand in to feel. The easy way out of that jam is to tape on cork strips(or what ever) from rim to rim every couple of inches. Now the tire can be in contact with the pant anywhere and give the required distance or greater, with no frig'n. The best way to solve this mess is to do the whole procedure when the gear is off the a/c. Cut a hole in a piece of plywood just large enough to let the tire hang out the bottom a distance equal to the amount you require the pant to be above the ground (allow for the wood and for aprox. I-I I/4" for tire compression) Tilt the gear to the necessary angle(s) and using the tip from above the hold down point can be drilled out in jig time. If nothing else this would haved saved a pair of jeans.

fILE = A:EAA\ADS\ADSMAY

CLASSIFIEDS:

AIRCRAFT:

Volmer VJ-22 Sportsman, Lycoming 0290D 125 hp, 415 hrs SMOH, 483 hrs airframe, needs paint. $11,000 negotiable.
Guy Lefebvre 463-3211.

Grumman AA1A 2 seat, 140 SMOH, full IFR, new paint, wheel pants. Truly excellent. $17000.00 negotiable.
Perry Wilkins 563-0821
782-2305 work

Parting out - Mooney M20 complete.
Mike Sacoutis 729-3774

Minicoupe - Partially completed. Unable to continue due to discontinued kits. All offers considered.
Richard Taylor 596-6913.
after 7:00 pm.

ENGINES:
O-320 engine with 800 hours with half inch valves

PROPELLERS:
0 time constant speed propeller.
1A170 metal with logs
Wood pusher
Metal prop for 150 hp
Zenair wood - 68/46

PARTS:
Hanlon Wilson mufflers
Spinner and backplate for Grumman
Instruments, Navcom, Wheelpants and more.

FOR ALL OF THE ABOVE ITEMS
PHONE MIKE SECOUTIS 729-3774

WANTED:

Skis - for Cessna 172 Main gear.
Les Kornik 828-8976

Brakes and wheels - Rosenhan - suitable for Varieze or Davis etc. Offers
Phone **Eric Taada 749-4264**

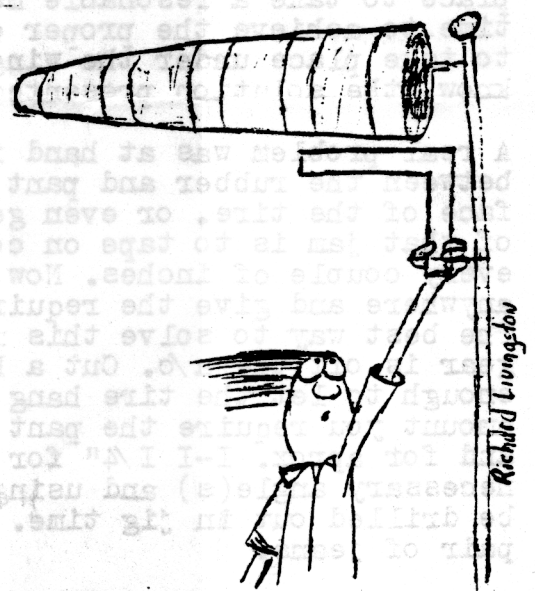
Forged VW crank and propeller hub for details
Phone
Richard Taylor 596-6913.
after 7:00 pm.

PLANS:
Davis D2A
Russ Robinson 831-2485.

OTHER:

Flight suit, beige, medium, little used. $50.00
Chuck Stonehouse 692-4097.

We've a cartoonist with us now!



Terry said that when the wind was at a right angle to the runway we would practice precision landings