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Newsletter, March, 2016

Notice of Meeting:

Thursday, March 31, 2016 at 7:30 PM

Topic:
DRONES
Mr. Charles Vidal – will present a Seminar on Drones.
Includes: License Requirements, Pilot Issues, Flying Drones, Fuel Cells, Manufacturing, Flying Model(s) for Display, Videos & PowerPoint.
Visit: www.koptrimage.com

Location:
Room 204
Penfield Building
John Abbott College
Ste. Anne de Bellevue

This month’s contributors:
Mike Lustig

President:
Mike Lustig
mike.lustig@eaa266.org

Membership:
Michel Moreau
mjmorea@videotron.ca

Treasurer:
Roberto Cea-Campo
rceacampo@eaa266.org

Secretary & Webmaster:
David Cyr
davidjcyr@eaa266.org

Newsletter Editor:
Richard Guevara
itsGottaFly@rgbuzz.ca

Catering:
Leo & Nora Nikkinen

Librarian:
Ed Hannaford
skyranch33@eaa266.org

Technical Counselor:
Frank Hofmann
fhofmann@eaa266.org

Flight Advisor:
Graham Batty
graham@letsgoflying.ca

Check out our website at:  http://eaa266.org
A word from our Chapter President…

Mike Lustig

Dear Members,
Here are several items that have recently come to my attention in local aviation news...

On March 12, 2016, Godfrey Stewart Pasmore passed away at the age of 83. Mr. Pasmore was the founder of the Montreal Aviation Museum (formerly the Canadian Aviation Heritage Centre, which lives in the old stone barn on McGill’s Macdonald Campus in Ste-Anne-de-Bellevue. The museum will host a public celebration of Godfrey Pasmore’s life on Saturday April 2, 2016 from 2 to 5 p.m.

Earlier this month, I became aware of the noble efforts of our sister organization, EAA Chapter 245 out of Carp, ON (CYRP), in support of the Pilots N Paws initiative. On March 19, Dave Matheson and Matt Mountain were involved in a rescue and transport of three puppies in Chapais, QC (CYMT) to Brampton, ON (CNC3) – with a fuel stop in CYRP on the way. The total trip was 926 nm. The previous week, a dog was saved from an abusive owner up north and flown to a new family in Tillsonburg, ON. The last update I received on this topic involved a dog that needed emergency eye surgery and Dave M. was asking for assistance on that. I am sure that any help in efforts like this one from any of our dog-loving readers out that way would be greatly appreciated. Contact information can be obtained in the aforementioned link.

On March 15, I received a letter from Yvan Albert, President of the Corporation de l’aéroport de Mascouche, to the effect that the city of Mascouche has decided to shut down the Mascouche airport (CSK3) and plans to rezone the land and sell it to the best offering. The airport will cease its activities on 15 November 2016. To quote Mr. Albert: “The closure of the Mascouche airport is a serious blow to the future of general aviation in Quebec, and will most likely have repercussions across Canada. This is why the Corporation and a group of volunteers are determined to work hard to ensure that a replacement aerodrome can be operational in November 2016.” If any readers have comments for me to pass on to Mr. Albert, please forward them to me at mike.lustig@eaa266.org. I will be compiling a formal response on behalf of the Chapter shortly, as was requested.

Please be aware that April’s meeting will be held on April 21, exceptionally, being the third Thursday of the month. This month’s meeting is not affected.

Best Regards to All,

Mike Lustig
President, EAA 266
A word from our Editor

Richard Guevara

I have included in this edition of the Newsletter some pages from some old Newnes (Strand, UK) Practical Mechanics magazines that used to belong to my father that are now so old that one has to be careful when turning them to ensure that he pages do not snap off like a potato chip would. The first article in the series was in the October 1958 edition and the last was in the August 1960 edition. Of interest is to see how much this project cost in its day. I present them as historical documents only as the copyright is probably still in force (not sure - 70 years?). Enjoy!

RG
Build Your Own Aeroplane

A New Version of the Luton Minor is Being Produced

The Luton Minor single-seater is already a well-patronised machine. It was originally produced in 1958 and many examples were built and flown in various parts of the world. The construction was also detailed in Practical Mechanics.

The Minor can take off in 80yd and can land in 90yd. By removing the wings and placing them along the fuselage sides, the entire aircraft can be towed along the road on its own wheels behind a small car (Fig. 2). The Minor is small enough to go in a garage and can be built in a spare room without the use of costly or complicated tools.

Of fabric-covered spars and plywood construction, the Minor costs £250 to make including the cost of the engine. The complete book of plans and instructions, specially written and prepared for the amateur who has little or no previous aircraft experience, costs £8 15s., which includes one year's subscription to and membership of the Popular Flying Association, whose address is Londonbury House, 10, Park Lane, London, W.1. Phoenix Aircraft will send a representative to give advice and help to any constructor who requires it. During construction the aircraft is carefully inspected by Popular Flying Association inspectors. When it is completed, it is thoroughly examined to ensure that it is properly made and then it is recommended to the Ministry of Transport and Civil Aviation for the issue of a Permit to Fly.

Many constructors used the series of articles published before this year in this journal to build their Luton Minors, including Mr. A. W. J. G. Ord-Hume. It is hoped that plans for the construction of the Luton Major will also be available.
Building the 'Luton Minor'

Flying and Operation

If the aircraft flies in a pronounced nose down—or tail down attitude—requiring firm pressure on the controls to maintain level flight, land immediately and adjust as follows:

1. Nose down. Check the centre of gravity location. If within limits, remove the tailplane and fit new front spar brackets to lower the leading edge of the tailplane by up to 1in. If the C.G. position is found to be too far forward, adjust the seat position and/or fit ballast to the stern post. (Fig. 84, last month's issue.) Expert advice should be sought before adding any ballast.
2. Nose up. Check the centre of gravity location. If within limits, remove the tailplane and fit new front spar brackets to raise the leading edge by up to 1in. Do not lower.

Part 12 is the Concluding Article in This Series

Fig. 84.—Details of a fixed trim tab.

the ailerons in the free position (hands off) in level flight relative to the control column. If the aileron flies high on the low wing (aileron trailing edge above the wing trailing edge), adjust the rigging of the control cables to allow for this, remembering that the correct cable tension must be maintained and also that there must be no more than 1in. droop on each aileron on the ground (Fig. 86).

Flight Characteristics

The Minor is extremely easy to fly and the stick forces are very light throughout the full range of normal manoeuvres and airspeeds. Control at the stall is exceptionally good when the aircraft is correctly rigged and there is no tendency to spin. The aileron drag with this type of aircraft makes it possible to perform an inceptor spin if the stick is held over at the stall. Recovery is immediate upon centralising the stick and lowering the nose.

There is no definite stall warning other than the general sloppiness of the controls as the speed lowers. The machine will settle in a nose-up attitude with the throttle closed and the stick held back.

Landing Grounds

Many constructors will wish to use fields other than licensed aerodromes for their flying. Assuming that the field is suitable and is smooth with good approaches and ample room, the only requirement is that the pilot shall have the permission of the landowner to use the field. Additionally, the pilot must ensure that his flying may not create a hazard or nuisance to nearby houses or populous areas. Never indulge in unnecessary low flying or stunting and the regulations state that, except for the purposes of landing and taking off, no aircraft may be operated below 300ft, over open country or below 1,000ft, near any town or populous area. This is as much for the safety of the pilot and the preservation of his aircraft as for the safety of the general public.

If use is to be made of private land as a landing site, it is sound practice, wherever possible, to advise the local police beforehand. They cannot stop you flying so long as you have the consent of the landowner, but by warning them of your intentions you can avoid the embarrassment of a full-scale turnover of the emergency services brought about by a member of the public who, upon seeing an aeroplane descending in a field, may assume the worst! Additionally, the police

in the Pilot's Notes for the Minor which cost 7s. 6d. per copy post free from Phoenix Aircraft Ltd.
are very co-operative and in many instances can prove invaluable assistance to deterring the attempts of "sovereign hunters."

Never leave your aeroplane unattended in an open field without picking it up and never leave an aeroplane in a field with cattle—the smell of dope acts as an aperitive to cows and many cases are on record where cows have actually eaten tail-units and ailerons.

Licensed Aerodromes

There are many private aerodromes dotted around the countryside and any flying club will provide information as to airfield locations. Most airfields are free to light, private aircraft, although some municipal airport in particular charge a nominal landing fee of between £1.6d. and £5. The exaction of exorbitant sums of money from the pilots of ultra-light aircraft for landing fees is one of the few bases of ultra-light flying. If the amateur is asked for more than half-a-crown, then he should ask the landing fee for an Auster and tender one-third of that sum since his aircraft weighs less than one-third the weight of an Auster. Fortunately, aerodromes where such practices exist are very few and far between—and they have a reputation.

A large number of operational Royal Air Force airfields are also available to the amateur pilot by prior arrangement—or normally only a telephone call beforehand is necessary to secure landing clearance.

Maintenance

The Minor requires very little maintenance and an annual general check and lubrication of the moving parts of the controls are normally all that is required for the airframe. The engine oil should be changed every 25 hours by draining and cleaning the filter in petrol. Every 10 hours or so, check the spark plugs settings with the data shown in the engine log-book and also check the propeller for security with the engine mounted bolts.

If the engine begins to run roughly, to vibrate more than usual or to develop a sour smell, the fault can almost always be traced to loose mounting bolts or a loose propeller.

Always keep your aeroplane clean. A well-groomed aeroplane is a handsome tribute to its constructor, and, furthermore, by thorough and regular cleaning any minor damage or defect is much more likely to be detected.

Full details as to maintenance and periodic overhauls are contained in the Luton Minor Servicing Manual available from Phoenix Aircraft Ltd. at 78, 6d. post free.

Never jeopardize the future prospects of the amateur flying movement by indulging in unimaginative or stupid flying and, when operating at a licensed aerodrome, observe meticulously the airfield discipline which applies to everybody, in the common interests of safety.

Do not be tempted to take chances. If something "isn't quite right" do not trust to luck that it will "sort itself out." Such action could cost you your aeroplane—if not worse. If the weather looks doubtful it is better not to fly and fly another day than to risk your Minor. Listen to and consider advice given you by more experienced flying.

The "Major"

For the amateur who wishes to construct a practical two-seat light aeroplane, the Luton Major is a thoroughly proven machine which features folding wings and full dual control in cabin comfort. Embodifying many design features of the Minor, the Major is simple to construct and was originally designed to fulfill a stringent Air Ministry specification for a training aircraft.

Materials

Every part and all materials necessary for constructing the Minor are available from Phoenix Aircraft Ltd. The constructor must bear in mind, however, that should he decide to purchase his metal fittings ready made, his aeroplane will cost more than if he were to purchase the raw material and fabricate everything himself. In this manner, the Minor aircraft may be built for between £50 and £75, depending on the wheels and instruments used and the finish desired.

For the convenience of constructors, materials have been grouped together into kits and the following are available:

- Kit A: Spars for the tail assembly
- Kit B: Spars for the wings
- Kit C: Spar for the fuselage
- Kit D: Complete kit of plywood
- Kit E: Complete kit of spruce (contents of Kits A, B, C, D)
- Kit F: Complete kit of nuts, bolts, A.G.B. parts etc.
- Kit G: Complete kit of sheet metal
- Kit H: Complete kit of steel tubing

Sundries

- Synthetic resin glue
- Mainwheels (depending on type)
- Paint £10 to £18
- Phoenix tailwheel
- Set of Phoenix undercarriage shock absorbers
- Brass aircraft gimp pins (1 in. & 1 in. × 20 s.w.g.) per lb.
- 2 oz. extra flexible control cable per yards. coil
- Streamlined steel tubing for lift struts
- Lift strut adjustable end fittings (4 pairs)
- Shoulder harness, nylon, quick release type

Instruments

- Airspeed indicator (calibrated in knots)
- Altimeter (calibrated in m.p.h.)
- Oil pressure gauge
- Oil temperature gauge
- Tachometer
- Phoenix Key Ignition Switch

If at any time the amateur constructor should experience any difficulty in the construction or operation of his Minor, the designers will be pleased to advise.

This series of articles has been specially prepared for Practical Mechanics by A. W. J. G. Ord-Hume of Phoenix Aircraft.
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<th><strong>The Unclassified</strong></th>
<th><strong>Free Ads for Paid-Up Members</strong></th>
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<tr>
<td><strong>For Sale:</strong> Hangar doors (sliding) complete with rails for 40-foot hangar. Door height is 11'5½&quot; all metal. As removed from hangar at Cornwall. $1200.00. Ed Hannaford. <a href="mailto:skyranch33@sympatico.ca">skyranch33@sympatico.ca</a></td>
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<td><strong>For Sale:</strong> 1 ea. H - Type shoulder harness 2 inch, black with metal to metal fittings. New never used, from Aircraft Spruce, no lap belts, $100.00. <a href="mailto:skyranch33@sympatico.ca">skyranch33@sympatico.ca</a></td>
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<td><strong>For donation:</strong> Vari-Viggen Rutan, designed by Burt Rutan inspired by the SAAB 37 Viggen. It is 60% complete with almost everything you need to complete except the engine and the propeller. Located at the airport of Louiseville, QC CSJ4. Gaston Girard (438) 495-5253</td>
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<tr>
<td><strong>Seeking:</strong> Active aircraft builder looking for old projects or materials. Specialized in old wood aircraft and restoration. Ron Gosselin (514) 808-1808 - <a href="mailto:ronny@total.net">ronny@total.net</a></td>
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