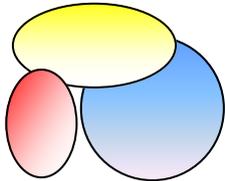




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Brissle Strutter



Newsletter of the LAA Bristol Strut

December 2014

NEXT MEETING— Annual Quiz

This month's meeting will be on **Wednesday 3rd December** and will take the form of a friendly aviation orientated Quiz. We gather at 7.45 pm in Room 7 at BAWA. and do bring along some nibbles to share around and keep the atmosphere festive. Partners welcome to join us for this fun evening.

Alan says: *There will be some aircraft recognition, both light aircraft and with a Bristol connection, but not too hard.*

There will be Bristol aviation links that will tax local knowledge and also aircraft technical questions that are designed to make you think. Conversely there will be some fun questions that do not require an encyclopaedic knowledge of aviation. I think the quiz has something for all; spotters, enthusiasts and pilots. Come along and maybe learn something and on the debatable questions teach others something too



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LAST MONTH'S MEETING— Phil Hall

We were fortunate to have as our guest the LAA CEO Phil Hall, together with his wife Cristina. Phil talked to us for a short time, giving us his view on the prime tenets of the LAA:

- the core of the organisation is its members, not its aircraft, and that is where the focus should lie;
- we should not be over-ambitious, taking on new responsibilities too far from our norm; it's about people like us flying aircraft like ours;
- we mustn't forget that our purpose is to enjoy ourselves!

He also expressed concern about the lack of investment in the future generation of pilots, who are of course needed to support the future of organisations like ours; the rate of issue of new licences is decreasing sharply.

He then responded to a wide range of questions from the audience for the next 90 minutes - and for a further hour after the meeting formally closed! Thank you Phil for spending your time with us and being so responsive. There are opportunities for beneficial change at present; let's be sure we all make our contribution to help the LAA and our other representative organisations capture the opportunity.

BRISTOL ATC

Many thanks to Bristol ATC for a very friendly and informative visit to see them at work on 1st November - they must be one of the best 'view out of the office window'!

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Picture Quiz

Last month's Picture Quiz from Trevor

Clue was: "Single-engine high wing retractable - no, it's not a Cessna 177RG, it's British."

Only **Phil Mathews** replied with: It's a Heston Phoenix, built by the Heston Aircraft Company. Well done Phil.



This month's aircraft is here for you to identify and get your brain into gear for Alan's quiz on Wednesday 3rd Dec:

"A long way back in the archives - but what's appropriate about this month's picture?"

Member's News

We are very pleased to report that at The LAA AGM held on 1st November at Sywell, our retiring Treasurer and Membership Secretary **Gordon Pritt** was awarded the prestigious **Lois Parker Trophy** for behind-the-scenes services to the LAA, in recognition of his 28 years in the role.

Well-deserved, Gordon! That makes two years in succession that a Bristol member has been awarded the Trophy, with Mary receiving it last year.

Time to rest on our laurels!



UPDATES FROM THE CAA

ORS4 No.1054: Flight by Type-Approved Gyroplanes Over Assemblies of Persons and Congested Areas in Specified Circumstances

<http://www.caa.co.uk/docs/33/ORS4No1054.pdf>

PILOT MAGAZINES

Brian Osley has a collection of old Pilot Magazines looking for a good home. If you're interested contact Mary and she'll ask Brian to bring them along to the meeting on Wednesday 3rd December.

Forthcoming Wing Meetings:

Tuesday 6th January

"Dawn to Dusk" by John Baker

Tuesday 3rd February—Members flying adventures of 2014

Where to go...

Free landing vouchers for **December 2014**

Flyer: Enstone, Gloucester, Holmbeck, Kirkbride, Netherthorpe, Shipdham

Pilot: Bagby (Thirsk), Kemble, Oxford (Kiddlington)

LAA: Andrewsfield, Brimpton (Weekends Only), Glassonby, Sherburn-in-Elmet

LAA and CAA News

The LAA has a new Chairman: Brian Davies.

Roger Hopkinson has accepted the position of Vice-President of the Association. He built and flies a Europa and has been a director of the LAA since 2012. The Board also elected James Tannock and John Brady to be vice-chairmen and James Tannock to be company secretary. For full details see

<http://www.lightaircraftassociation.co.uk/2014/News/Chairman.pdf>

The CAA has announced that the UK implementation of significant elements of the European Union's Standardised European Rules of the Air (SERA) has been delayed. As a result, there will be no changes to the UK Rules of the Air stemming from SERA that will impact UK pilots. The changes to be introduced on 4 December 2014 resulting from SERA will only be those that replicate existing UK rules. The decision has been prompted by concerns over the impact of the changes on UK aviation, the need to complete the derogation process with the European Commission and delays in providing the CAA with the authority to administer the rules seamlessly. The proposed change to move the UK from quadrantal to semi circular cruising levels is therefore postponed and will not now happen in December. There will be no changes to minimum height rules, and both VFR and Special VFR flight at night will continue to be permitted.

The CAA has also asked the European Commission for two derogations from SERA. The first would allow the UK's existing clear of cloud rule, governing flight in visual meteorological conditions (VMC) in controlled airspace, to be maintained. This gives flexibility to pilots and air traffic controllers and reduces the need for Special VFR in a control zone. The second derogation seeks to avoid the unintended effect of air traffic control not being able to issue a Special VFR clearance when the ground visibility at the reporting aerodrome is below the specified new criteria, despite a pilot being able to fly in VMC (or under a Special VFR clearance) within a control zone away from the affected aerodrome. As a result the items covered by the derogation requests will not be implemented in the UK in December. See: <http://www.caa.co.uk/application.aspx?catid=27&pagetype=65&appid=9&mode=detail&nid=2402>

A few interesting internet links

Propellers and Camera Shutters: An interesting article referenced on the Flyer Forum which discusses how prop blades appear in digital photos. Click on this link <http://forums.flyer.co.uk/viewtopic.php?f=1&t=91990> and there are a couple of articles referenced in it.

Early Aviation: For your amusement. The first one is quite an impressive microlight for its time!

https://www.youtube.com/watch?v=Wwovm1FJ_Bo

A Nostalgic look at London Heathrow: This film, which is 9½ minutes long, shows the building of London Heathrow in the late 1940s. A wonderful nostalgic look back at how things were then. Click on the link:

<https://www.youtube.com/watch?v=DUTvuGptD6I>

Air Traffic as it is today: This short clip, produced by NATS, shows just how aviation has developed since those early days and engenders great respect for all Air Traffic Controllers today everywhere. Do read the short explanation before watching: <http://nats.aero/blog/2014/03/europe-24-air-traffic-data-visualisation/>

And lastly two very different approaches and Airfields

Bembridge Isle of Wight: <https://www.youtube.com/watch?v=k4CAuoBoM1o>

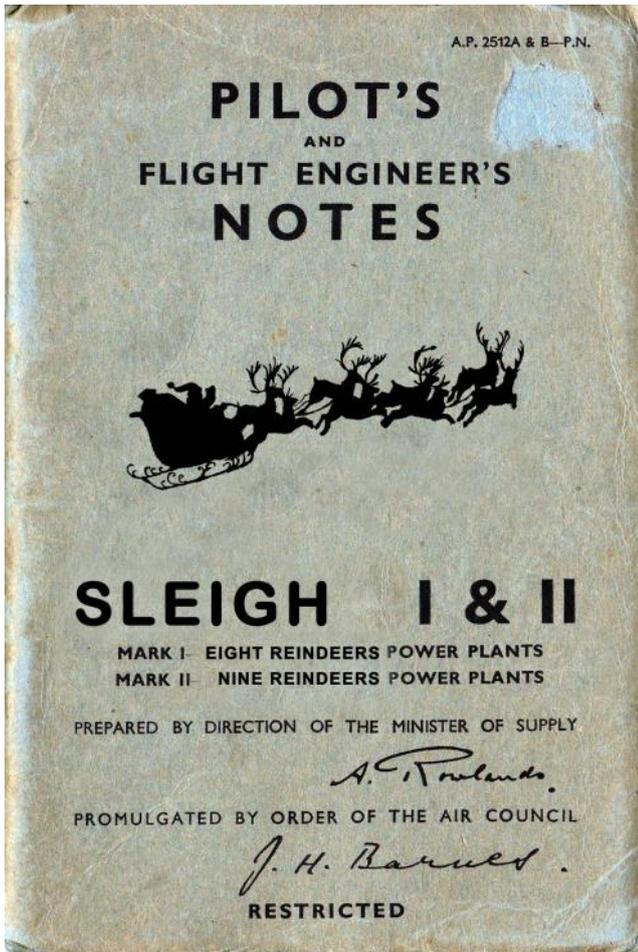
Simmonds Strip in Idaho Backcountry <http://vimeo.com/99490998#t=50s>

FASVIG Trevor Wilcock

I have mentioned the Future Airspace Strategy VFR Implementation Group (FASVIG) at a couple of our meetings and in the Newsletter. The FASVIG Coordinator has now created a dedicated FASVIG Forum within the LAA User Forum on the LAA website. A separate topic has been generated in the forum for each Draft Package of Change from the Draft FAS VFR Implementation Plan. The Forum is viewable by everyone but to post comment you need to be a LAA member with a registered login for the website; it can be accessed at <http://services.lightaircraftassociation.co.uk/phpbbforum/viewforum.php?f=39>. This gives all an opportunity to raise matters for future change and to identify airspace areas which are particularly important for VFR activities. I'm also happy for matters relating to the local area to be passed to me for consolidation.

**Aerodynamically the
bumblebee shouldn't be
able to fly,
but the bumblebee
doesn't know that so it
goes on flying anyway. ~**

Mary Kay Ash



AMENDMENTS

Amendment lists will be issued as necessary and will be gummed for affixing to the inside back cover of these notes. Each amendment list will, where applicable, be accompanied by gummed slips for sticking in the appropriate places in the text. Incorporation of an amendment list must be certified by inserting date of incorporation and initials below.

A.L. NO.	INITIALS	DATE	A.L. NO.	INITIALS	DATE
1	<i>STB</i>	<i>10/10/50</i>	7		
2			8		
3			9		
4			10		
5			11		
6			12		

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NOTES TO USERS

THIS publication is divided into six parts : Descriptive, Handling, Operating Data, Emergencies, Supplementary Notes for Flight Engineer, and Illustrations. Part I gives only a brief description of the controls with which the pilot should be acquainted.

These Notes are complementary to A.P. 2095 Pilot's Notes General and assume a thorough knowledge of its contents. All pilots and flight engineers should be in possession of a copy of A.P. 2095 (see A.M.O. A93/43).

Words in capital letters indicate the actual markings on the controls concerned.

Additional copies may be obtained by the Station Publications Officer by application on Form 294A, in duplicate, to Command headquarters for onward transmission to A.P.F.S., 81 Fulham Road, S.W.3 (see A.M.O. A1114/44). The number of this publication must be quoted in full—A.P. 2847A & B—P.N.

Comments and suggestions should be forwarded through the usual channels to the Air Ministry (D.T.F.).



Frank says he found this by the fireplace last year—anyone know who's it is?

Air Ministry A.P. 2512A & B—P.N. June 1947 Pilot's Notes

Air Ministry A.P. 2512A & B—P.N. June 1947 Pilot's Notes

SLEIGH I & II

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Air Ministry A.P. 2512A & B—P.N. June 1947 Pilot's Notes

PART I

DESCRIPTIVE

INTRODUCTION

Santa Sleigh Mk.I and II are eight or nine engines transport aircraft, powered by magic reindeer engines. The Mk.II version allows extended all weather operations.

FUEL SYSTEM

Mk.I version is equipped with 8 fuel independent fuel tanks, connected each one to one engine. Particular care must be taken during refueling in order to guarantee equal tank filling for each engine. Not following this procedure can have catastrophic consequences including loss of engine during take-off or cruise and weight and balance problems.

AIRCRAFT CONTROL

The flying controls are conventional. Each rudder pedal may be adjusted for reach during flight by depressing the lever on the outboard side of it.

An automatic pilot is available. Heading entry is based on detection of ground beacons signal "I have been nice". For operation see A.P. 2095 Part III, Note C. The engaging lever is on the bottom left-hand face of the control pedestal, but before the gyropilot can be engaged the milk shut-off valve on the hydraulic control panel must be ON. The automatic pilot oil-pressure gauge is mounted on the lower right centre of the instrument panel; normal operating pressure is 120 lb/sq. in.

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Air Ministry A.P. 2512A & B—P.N. June 1947 Pilot's Notes

ENGINE CONTROLS

Engines are voice controlled. No automatic boost control is fitted and care must be taken to avoid over-boosting on take-off and at all times in flight

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Air Ministry A.P. 2512A & B—P.N. *June 1947 Pilot's Notes***PART II****HANDLING****Pre-flight checklist**

- 1 – Reindeer Full
- 2 – Check weather report
- 3 – (Mk. II only) Rudolph's nose pre heating
- 4 – Inspect reindeer hooves
- 5 – Check loading done by Elves
- 6 – Sleigh logbook and license on board and valid
- 7 – Kiss Mrs Claus good-bye

Starting the engines and warming up

- 1 – Pat on the back for each reindeer
- 2 – Check alignment of engines
- 3 – Call each reindeer by his name
- 4 – Give additional cookie and milk to reindeer during warming up.

Testing the engines and services Particular attention should be paid to engines exhaust. Any suspect leaks must trigger the engine shutdown and replacement.

Take-off Warning –If backfiring is experienced during the take-off run the take-off should, if possible, be abandoned and the air intake shutter examined for damage. To avoid backfiring, do not feed reindeer with beans.

- (i) Align the Sleigh on the runway
- (ii) There is little or no tendency to swing on take-off except in cross wind conditions. This tendency can easily be corrected by slow differential power opening.
- (iii) When comfortably airborne brake the legs and raise the arms
- (iv) Safety speed at full load at full take-off power, flaps up is 105 M.P.H. IAS.

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Air Ministry A.P. 2512A & B—P.N. *June 1947 Pilot's Notes***Approach and landing**

A particular attention should be paid to the last landing of the Christmas night. Weight and Balance are considerably modified and Sleigh handling can be tricky. Last turn before landing should not exceed 30 degrees and no sideslip must be done.

After Landing

Immediate cares must be given to the Reindeer. A particular attention should be paid to hooves. No Elves or ground support should touch them before:

- (i) Grounding the Sleigh in order to avoid electrical sparks
- (ii) Reindeer's hooves temperature is below 140 Fahrenheit.

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Air Ministry A.P. 2512A & B—P.N. *June 1947 Pilot's Notes***Climbing**

The recommended climbing speed is 120 m.p.h. I.A.S. from ground level to operating height.

General Flying

Stability: The Sleigh is stable about all axes under all conditions of flight

Flying at reduced airspeeds in conditions of poor visibility: Reduce speed to 120 M.P.H. (104kt) I.A.S. in order to delegate navigation to Rudolph. Normal cruise speed can be restored once time control has been delegated.

Stalling

There is little warning of the approach of the stall except for a slight sleigh buffeting which may be felt some 5 m.p.h. before the stall itself. At the stall, the nose drops gently. In all cases recovery is straightforward and easy.

Diving

Engaging the sleigh in a dive is forbidden under all circumstances. Exceeding the manoeuvring speed with the cargo load can have direct consequences on cargo wrapping and conditions. Children expect to hear reindeer's bells, not a Stuka diving horn.

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Air Ministry A.P. 2512A & B—P.N. *June 1947 Pilot's Notes***PART III EMERGENCIES**

Engine failure during take-off Eight or nine engines configuration allows a minimum impact of one engine loss during take-off. Power boost can be applied by supplying additional cookies to remaining reindeers.

Engine failure in flight In case of engine failure during flight, a particular attention must be given on the distance remaining and fuel consumption. During extreme weather condition and limited visibility, no automatic landing must be attempted without Rudolph (M.K. II only)

Cargo jettisoning Cargo jettisoning can be attempted only above desert area or oceans. A particular attention must be paid to weight & balance during the procedure. Equivalent mass of Milk and Cookies must ingested by the pilot during the procedure in order to respect the CG envelop.

Ditching Ditching speed must not exceed 105 M.P.H. Reindeers power must be reduced to the minimum and all cargo must have been previously jettisoned. One time in the water, the Sleigh is designed to float and reindeers should provide necessary power to reach the closest land available

Parachute exits Parachute exit can be done under 120kt I.A.S The free fall position must take in consideration all interferences between the pilot's barb and the opening mechanism (See figure 1)



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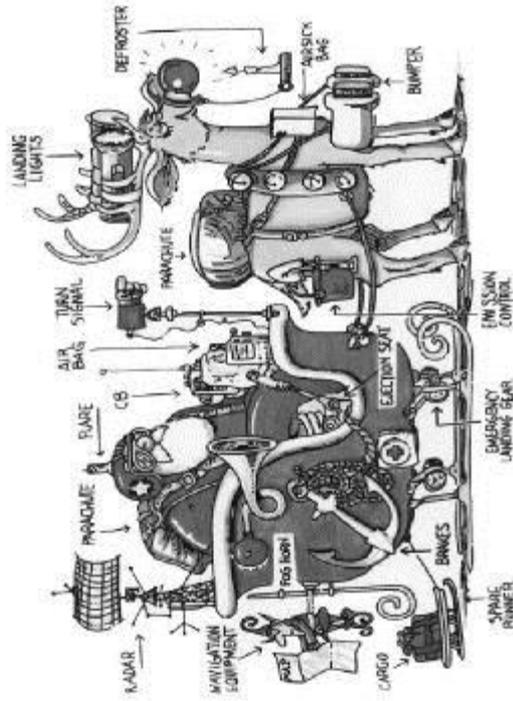
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Air Ministry A.P. 2512A & B—P.N. June 1947 Pilot's Notes

Air Ministry A.P. 2512A & B—P.N. June 1947 Pilot's Notes

ANNEXE I : DRAWINGS

ANNEXE II : ENGINES DATA



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SLEIGH MK. I

Eight reindeers:

- DASHER
- DANCER
- PRANCER
- VIXEN
- COMET
- CUPID
- DONNER
- BLITZEN

SLEIGH MK. I I

Nine reindeers : Identical to M.K.I. with additional RUDOLPH engine.



Figure 2: Engine Cutaway

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MEMBER'S NEWS

Don't forget if you've changed your address, telephone number or e-mail address then please contact our Membership Secretary, Stephen Pemberton(details on the front page) to ensure that he can continue to keep you in touch. Please also let the Editor, Mary Leader know if you've changed your e-mail address otherwise you may not receive your monthly newsletter!



Best wishes for Christmas and the New Year to all our readers



Ian Leader Trophy

During the Christmas Quiz evening we will also be counting the anonymous nominations for the Wing Member who will receive the Ian Leader Trophy for *"Services to Bristol Wing"*. Please complete this form and bring it with you to the Quiz Evening on Wednesday 3rd December. If you can't join us on Wednesday and still wish to nominate a member please contact Mary or Trevor who will add your vote to those submitted at the meeting.

If there is no outright candidate then the trophy will not be awarded this year.

Nomination form for Ian Leader Trophy

The member I feel most deserving to receive the Ian Leader Trophy for their 'Services to Bristol Wing' during 2014 is:

