Bristol Radio Control Model Aircraft Club (BRCMAC)

September 2014 Newsletter

Chairman's Chat

Well we have had an eventful few months since our last newsletter, with some fantastic flying weather interspersed by heavy winds and thunderstorms.

There was a great response from club members to clear the reeds and brambles on site, also to carry out extensive repairs and painting of our club cabin. Thanks to Murray Barnes and all those who gave up their valuable time to help. We had an excellent BBQ – great weather, a good turnout and fantastic flying from both our own members and visiting pilots. Thanks to everyone who helped make this a successful day.

We held a BMFA examiners workshop in August, (more details below from Peter Bennett), my thanks to Alan Marshall for helping out with cooking the burgers, (I always burn them).

For the first time ever, we had to close our site this month under instructions from the C.A.A. due to flying restrictions within a 20nm radius of Newport whilst President Obama attended the NATO meeting. We have a revised layout to our site which includes a helicopter setting up area and parking for blue badge holders, (as soon as the landowners have placed a few tonnes of aggregate over the culvert entrance to our strip).

That is enough from me, hopefully this bout of good weather will continue for a while, hope to see you at the strip

Ian Ferrari

Club BBQ 2014

The weather was fair and the flying was good. Here are some Julian Forsey's photos of some of the models that took part. Thanks to all who worked hard to make it happen.

Steve Haines and his 1/3 scale Tiger Moth

Standing firm! Arnie Mansell and his own design and built F3A aerobatic 'Boson' model.

Extra 300 and an Extra in knife edge, both flown by guest flyers from Woodspring Wings

Peter Bennett's electric twin engine Westland Whirlwind

By the way, Arnie Mansell went on to take third place in the top category of the F3A competition at this year's BMFA National Championships held at RAF Barkeston Heath over 23-25 August with his 'Boson' model shown above. Well done Arnie!

The Teetering-Plummet Flying Machine

The construction of this model was prompted by the recent discovery of a bundle of old papers in a chest in the Columbarium of Teetering Parva church. This consisted of ancient copies of the local organ, "The Teetering Warbler" dated 1909 and contained photographs of the machine as well as eyewitness reports which proved beyond doubt that Sir Oswald Teetering-Plummet made several notable flights in this remarkable aeroplane which had been constructed to his specifications by the Bentwood Rocker & Basket Case Co. of Great Splintering.

Indeed, according to these accounts, Sir Oswald should have gone down in history as the first aviator to have made an aerial crossing of the river Tydd at its widest point between Teetering Parva and Plummet Down, a distance of 497 yds as verified by Mr Fortesque of the Royal Aero Club. This achievement is undiminished by the fact that the crossing appears to have been made by accident when Sir Oswald strayed from his intended course. The Teetering Warbler of 26th July 1909 contains the following account of this epic flight:

"A great crowd assembled on Teetering Long Meadow on 25th July to witness the proposed cross-country flight by Sir O. Teetering-Plummet on his new flying machine. Sir Oswald had charted a course which would take him from Teetering Manor to the meadow of the Great Hall at Plummets Bottom, a distance of some 3 miles.

The flying machine had been positioned facing into a gentle breeze when, to a great cheer, Sir Oswald arrived dressed in aviator's carapace and leather helmet, and climbed into his seat. While 6 men held on to the framework of the machine's tail, the mechanic gave a lusty swing to the propeller. The motor burst into life, causing the machine suddenly to lurch forward, flinging the men from the tail frame onto the ground and spinning the machine round in a semicircle on the grass. Sir Oswald could be seen manipulating his levers but, unable to stop the careering machine which showed no tendency to respond to the helm, he was suddenly obliged to incline the elevators sharply in order to leap the high hedge at the end of the meadow. The machine hung for a moment in the air and then, to gasps and exclamations of horror from the onlookers, sank out of sight below the far side of the hedge. The motor could still be heard running, however, and then, to a mighty cheer, the machine appeared beyond the hedge, climbing strongly. However, it was heading not for Plummets Bottom as intended but in the opposite direction out over the river Tydd. Realising this, Sir Oswald put the rudder hard over in an attempt to turn about and regain his planned course. The machine began to turn to the right but was by now about half way across the river and turning to follow its course. At this juncture, an alarming "popping" sound was heard from the motor. Gasps again rose from the crowd as the motor appeared to be faltering and the machine began to lose height. With the wind athwartships, the machine was drifting towards the far bank of the river but still heading along its course.

It is at moments of great danger such as this that the judgement and courage of the true pioneer come to the fore. Instantly assessing his situation, Sir Oswald reversed his rudder and initiated a turn to the left in order

to gain the riverbank towards which he was drifting. With the engine still misfiring and the machine descending, Sir Oswald crossed the far bank and, seeing before him the expansive lawns of Colonel Bellowes' manor, he elected to cut the motor and perform a "vol plané" on to the grass in the manner of the French flying schools. During this manoeuvre, to his horror, he saw straight ahead of him, laid out on the lawn, a long table at which the Colonel, the vicar and several other ladies and gentlemen were partaking of afternoon tea. This tableau of startled faces, frozen in terror, was set out at right angles to his path. Sir Oswald attempted to veer right but could not significantly alter course in time to prevent his left wing sweeping across the table like a scythe. The assembled company was swept to the ground before it amidst a welter of cups, saucers, cakes and flying dresses. The vicar, however, had been ill-advised enough to rise to his feet at the machine's approach and he was half standing as the left wing struck him just below the chin. He was lifted bodily from the ground, his staring face clearly visible to Sir Oswald in the car of his machine. Fortunately, under the vicar's weight the aeroplane veered to the left, dropped a few feet to the ground and came to a halt. The vicar fell off and joined the others "par terre".

Surprisingly, there were no serious injuries, and once the guests had learned the import of this unceremonious arrival, indignation turned to admiration for Sir Oswald and they took it in good part: Sir Oswald became the hero of the hour."

Mike Sparrow

Low? Slow?- Definite No!

If you are a regular reader of the modelling comics, such as "Quiet & Electric Flight", you will know that Chris Golds, that prolific model builder, often describes a "bling" moment when old events return, sometimes to embarrass one. Last week, while 20 feet up in the willow next to the clubroom, recovering my ancient Svenson "Flyboy" from the clutches of the tree, I was suddenly reminded of another short landing, luckily without the tree content.

I was, at the time, in Coastal Command, flying the Mk 1 Nimrod from RAF Kinloss, a pleasant but rather remote base in northern Scotland. The Nimrod was a 1960s development of the 1949 designed Comet and, as such, the aerodynamics were still somewhat basic. For example, modern aircraft flaps are a technological marvel, the entire wing changes shape and function, depending on the flight requirements, but in 1949 the flaps were basic, having a couple of extra lift settings and a draggy landing setting.

All our Coastal aircraft, Shackletons 2 and 3, and the Nimrod were very much hand flown, none of this modern poncy autopilot assistance, and as such we took some pleasure in" getting it right", especially on the approach and landing. The technique with the "super modern beastie" was to arrive on finals, one mile out, at 300ft and with touchdown speed plus 15 knots. Selecting full flap at that point and holding the attitude resulted in a smooth reduction in speed and with just a tad* of backpressure on the control column, a squeaky smooth arrival resulted. (Cue for rapturous applause from the other eleven brave aviators and the first beers on me!).

The Nimrod flaps, being designed in the late forties, were, I suspect, copied from a medieval drawbridge, at full deployment were down to @80 degrees and were very effective.

On this particular day, we had completed a nine hour training sortie, all had gone well and I was setting the aircraft up for a beer earning "greaser". At 300ft, down went the flap and the speed started to reduce. At about 100ft I saw that I would be slightly below ideal speed at the touch down point, but thought "no problem, be about 5 knots low, still work ok, all nice and stable".

Arrive over touchdown, raise nose to flare, aircraft changes attitude but continues downward at @ 500ft/min with the obvious result, striking the north of Scotland a fairly substantial blow. Deathly silence from other hero types in the back of the aircraft. No beer offers that evening!

Due to the workmanship of the Avro engineers, no damage to anything, apart from my pride, but as I dangled from the willow branch, I thought I must be a slow learner, as at least the first time I did reach the runway!

"Dunlandin"

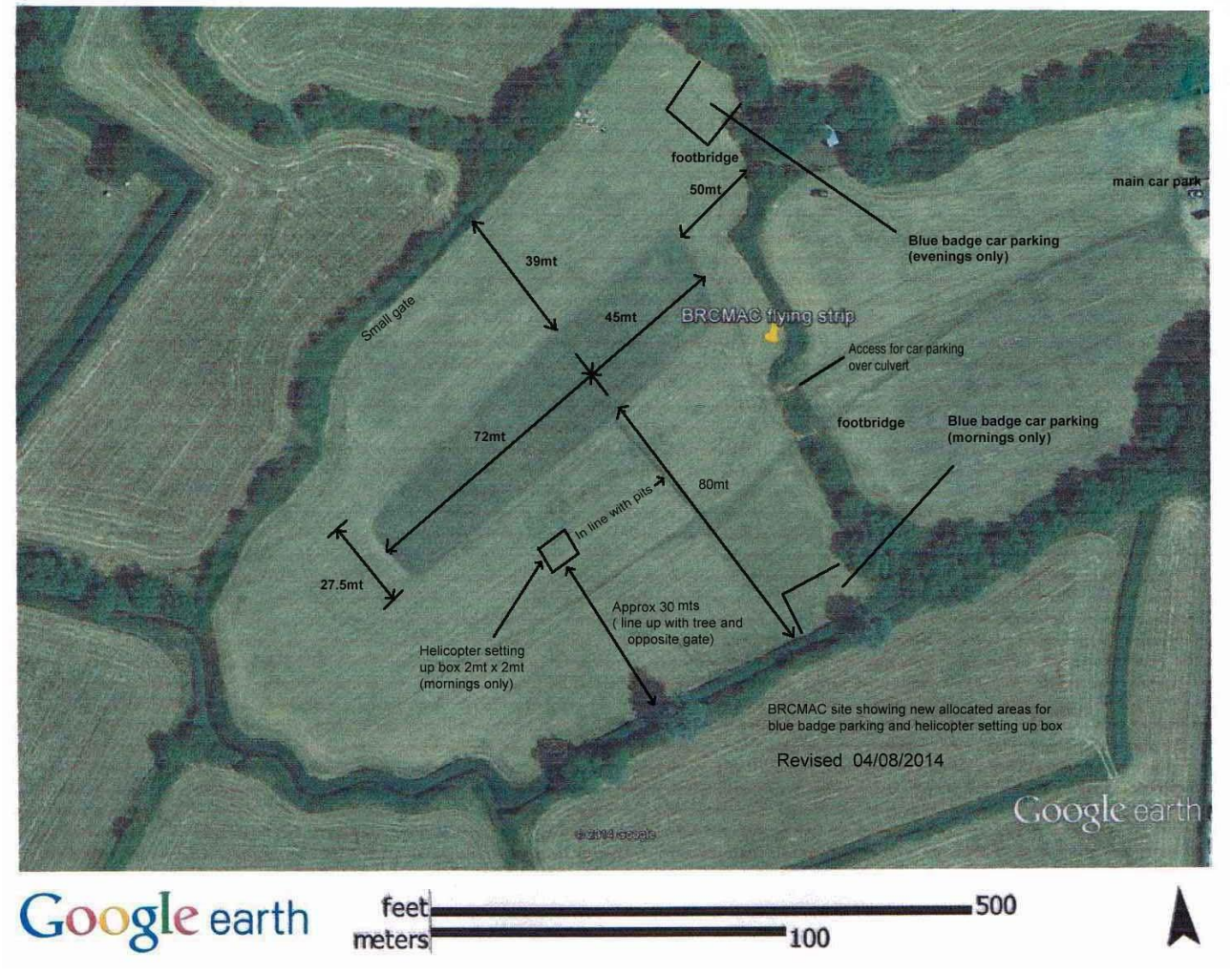
AKA*: Gerry York*

Mobility Parking & Helicopter Set-up Areas

The Committee has decided to trial the introduction of discrete areas for parking for those members with mobility difficulties (2 areas) and helicopter set-up (1 area only), as shown on the diagram below.

The mobility car park areas are strictly limited to Blue Badge holders only and cannot be used for general parking. The Pearce brothers have been asked to lay down several tons of aggregate over the culvert between the two fields in order to make vehicular access easier. It is hoped this will be laid down in the near future.

The Helicopter set-up area can only be used for setting up, hovering, and blade tracking only. It cannot be used for general flying which can only be done from the main strip with the consent of any fixed wing flyers present. Due to the constraints of our site, it will not be available when evening flying is taking place.



Western Area Examiner's Workshop Report

The BRCMAC successfully hosted the latest Western Area Examiner's Workshop on Saturday 30th August. Organised and run by John Harris, it was attended by approximately 20 pilots from a number of clubs in and around the Bristol area and as far afield as Trowbridge, including several members from our own club.

The main purpose of the workshop was to provide current and prospective club examiners an opportunity to hone their examining and coaching skills, and to moderate their markings. This was achieved by the Steve Kirby, Area Chairman, flying demonstration fixed wing 'A' and 'B' schedules, which included a number of deliberate deviations or errors of varying magnitude. Terry Honey carried out similar demo flights with his helicopter. During each demonstration, the flights were scored by the pilots after which there was a collective discussion in which the elements of each test flight were reviewed in detail and a general consensus reached.

At the end of the afternoon session, Peter Bennett, a trainee Club Examiner, was given the task of taking Daren Higginbotham, Beaufort Club, through his 'A' test for real, under the watchful supervision of the Area Chairman, Steve Kirby. Fortunately for all, despite a little 'wobble' during his Figure of Eight manoeuvre, Daren demonstrated sufficient competence to pass. Well done Daren. As a result, Peter has been authorised to progress to Club Examiner status following further in-house training. This will involve doing his 'B' schedule (again!) plus some additional manoeuvres thrown in.

All-in-all it was a very good day, thoroughly enjoyed by all who took part.

Thanks to Alan Marshall and Ian Ferrari in particular for manning the BBQ, and also to all those club members who lent a hand in other ways in making the day run so smoothly.

Franklin Trophy Scale event – Saturday 27th September

It is that time of year again and Saturday 27th September is the date for this year's Franklin Trophy club competition for scale models. Don't forget, it is not just an event for the die-hard scale fans amongst us. Any 'A' flyer or better and any model can take part provided the model has some 'scalish' aspect to it. This includes ARTFs, sport scale, aerobatic scale, and second-hand models. The more, the merrier!

As well as the main Franklin Trophy for the overall winner, there are trophies for the best the best ARTF model and the best 'A' pilot. Don't forget, all 'A' pilots get a bonus of double flying points. So the sky is the limit!

The rules are the same as last year.

We had a great turnout last year. Let's see if we can beat it - I have ordered the weather in advance! So go on – bring a model and have a go. You might even surprise yourself.

Peter Bennett

Event Organiser

Project 2015

I don't know if anyone else would be interested but I have an idea to try to build models of some of the very successful aircraft that were designed and built here in the West Country. The idea was triggered by seeing the rather low representation from aeromodellers at the recent Bristol Model Engineering Exhibition, held at the sports centre in Thornbury.

It is true that the Beaufort Club had a continuous indoor flying display in one hall, together with ten or so models on display tables, but with one exception, (a Flair Puppeteer), all were ARTFs. When you consider the output from Glosters, Bristol, Parnall, there are many aircraft that could be modelled, representing the "best of the west".

There are many plans available, especially on line, (check out "www.outerzone.com" for free downloads). For those who do not want the chore of tracing out parts, the kit cutters "Belair" offer a very reasonable service providing all the challenging bits.

The next exhibition is August 2015 so perhaps an opportunity to show the thousands of visitors to this popular and well attended show just what Bristol aeromodellers can do.

If you are interested and would like to discuss this idea, speak to me at the field or drop me an email or phone call.

Gerry York. **01453 844855** **dunlandin@btinternet.com.**

Club Tub Replacement 2

In the last edition of this Newsletter I reported that the old Club Tub had been replaced by a new machine. During its first outing with myself at the helm providing buddy box flight experience for members of John Paton's Thornbury Radio Club, it suffered a worrying 'glitch' with momentary loss of control, diving out of sight behind trees near the car park. Fortunately, control was regained and it re-emerged from behind the trees and was promptly landed. Post-flight examination by those present felt that the cause was possibly a duff elevator servo. This was duly replaced by a new unit and Steve Haines kindly (foolishly?) volunteered to test fly it post installation.

Regrettably the same 'glitch' happened but this time at a much lower height, thus preventing control being regained before the inevitable happened. Alas the 'new' Club Tub is no more.

The post-crash investigation concluded that the loss of control was due to a receiver 'brown-out' caused by the on-board battery (a brand new 4-cell, 4.8V NiMh) falling below the minimum voltage required for the Spectrum receiver to operate during periods of high current draw, as might happen when several servos are operating at the same time. All the controls froze momentarily at their last positions with disastrous consequences. This probably the cause of the demise of the previous Club Tub as well following the upgrade from 35Mhz to 2.4Ghz equipment.

We have now acquired a new Club Tub, a 'Wot Trainer', which has been assembled and test flow by Steve Haines. However, we have upgraded the on-board electrical supply. It now runs on a 7.2V 2S LiPo battery via a voltage regulator. This should ensure the receiver will continue to operate correctly even at time of maximum current draw.

The model is still being tested and will be available for training duties very soon.

Peter

New 'Old' Logo?

Not many of you commented on the inclusion of the old Club logo. However, those that I did receive were all positive so it will be a regular feature from now on. Thanks to all those who responded.

Peter

Site Maintenance

We have working hard on your behalf. Murray Barnes has compiled the following log of recent work carried out.

Owner: Murray Barnes tel 01454 856312 Last updated … **15 July 2014**

BRMAC Site Management Log

No.	Location	Task	Comments	Min no of people needed	Equipment needed	Man hours (est)	When logged	Target Date	Completed Date	Urgency	Completed?
1	Road to Flying Field (after concrete bridge, 500 meters?)	Cut bramble bushes both sides	Brambles scratch members' cars! IF conversant.	1	Hedge cutter (kept by MB)	10	25/05/2014	15/06/2014	10/07/2014	High	Yes
2	Portakabin, fit UPVC soffit boards (roof level)	Cut UPVC to length, fit UPVC, joints, mastic at top, paint	UPVC stored in Portakabin. IF conversant.	3	Scaffolding/ step ladders/ large table, planks, carpet, two cordless power drills, mastic guns, refreshments. Only step ladders held by MB.	35	25/05/2014	15/07/2014	10/07/2014	Medium	Yes
3	Portakabin, lower wood repairs (below Portakabin floor level)	Cut plywood, fit, add PVA glue to seal, fit screws, paint	IF conversant.	1	Saws, workmate, cordless drills, paint	25	25/05/2014	15/07/2014	10/07/2014	Medium	Yes
4	Cut grass and reeds at stream next to flying field		IF conversant.	1	Hedge cutter, grass trimmer (kept by MB)	8	25/05/2014	15/07/2014	10/07/2014	Medium	Yes

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Warbird Video Links

If you have not already come across this website on the internet, then you may find this interesting, they sell warbird DVD's but the site also has a selection of WW2 training videos on gunnery, navigation and flying various warbirds (admittedly some are awful).

Look through the site and you will also find pilot manuals on many aircraft including the Spitfiire IX, Mosquito, ME262, IL2- Sturmovik (unfortunately, this one is in Russian), all free to download. They make interesting reading when you consider some of these pilots had little or no experience on type and were told to get in the aircraft and have a go.

The warbird video site is- http://www.zenoswarbirdvideos.com

Ian Ferrari

Historic Bi-plane Rigging Drawings

The third in the series of contemporary WW1 rigging drawings originally penned by Air Mechanic 1sr Class Campbell under command of Chief Mechanic George Thomas Taylor is reproduced on the back page - a *Newport Scout*.

A higher resolution version will be placed on the club web site for those who may want to see it in even higher difinition.

Peter

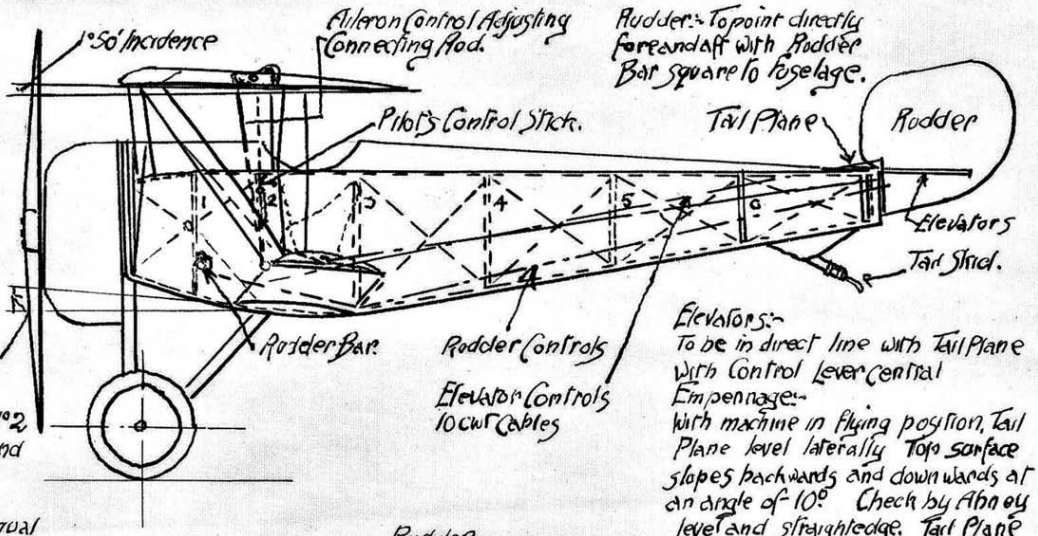
That's all for now. Happy flying.

Peter Bennett

Editor

NIEUPORT SCOUT

130 HP CLERGET



Flying Position :-
Upper Longerons level from No 2 fuselage strut to stem post and level laterally throughout.

Fuselage :-
Internal Cross Bracing Wires equal at each section Top and Bottom Cross Bracing Wires equal in each bay. Adjust Side Bracing wires until Upper Longerons are level from No 2 strut to stem post. Front upper edge of longeron to be 50 m/m below the level of top of straight Longeron. A plumb line dropped from the mid-point of a top cross member must cut the bottom cross member in its mid point.

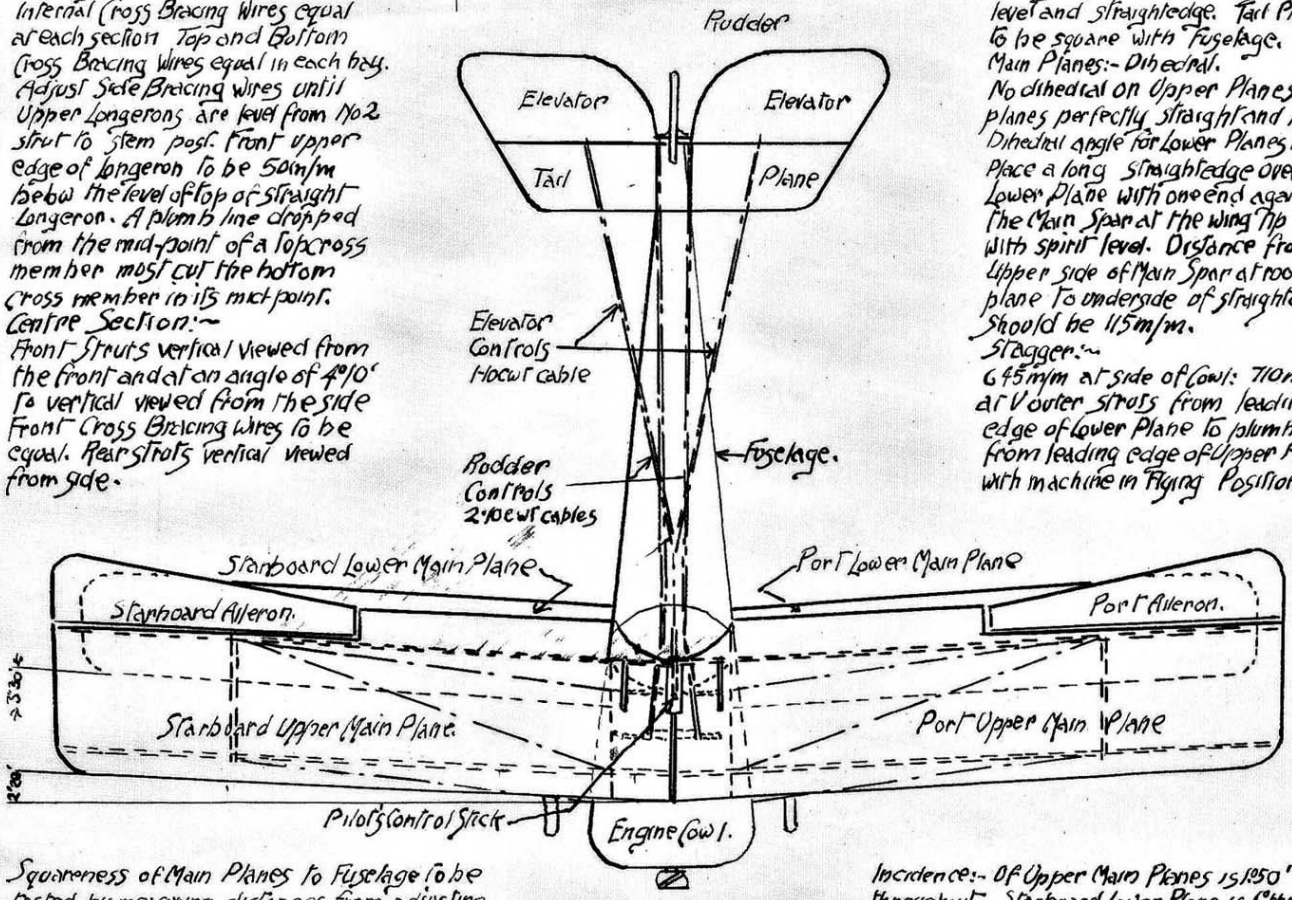
Centre Section :-
Front Struts vertical viewed from the front and at an angle of 4°10' to vertical viewed from the side. Front Cross Bracing Wires to be equal. Rear Struts vertical viewed from side.

Elevators :-
To be in direct line with Tail Plane with Control Lever central.

Empennage :-
With machine in flying position, Tail Plane level laterally. Top surface slopes backwards and downwards at an angle of 10°. Check by Abney level and straightedge. Tail Plane to be square with Fuselage.

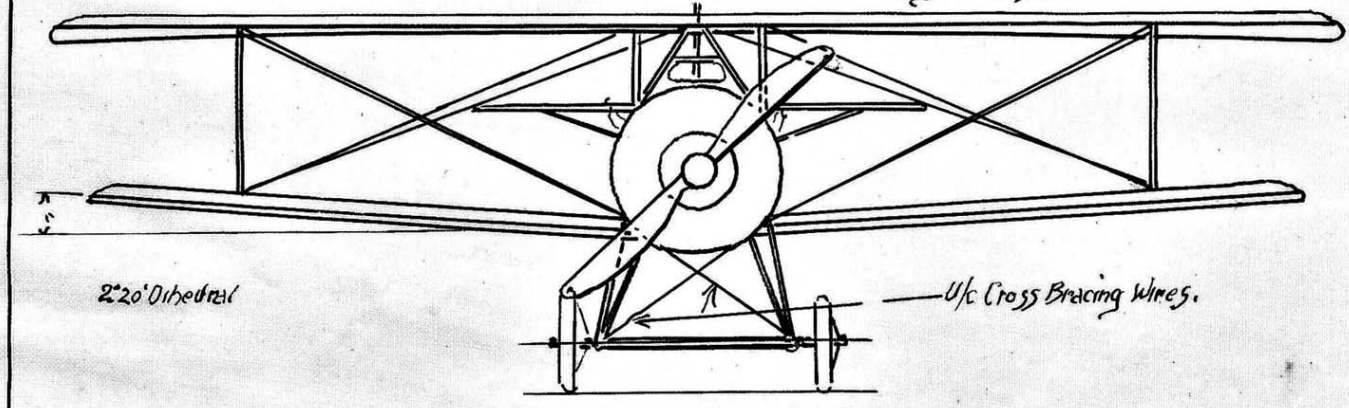
Main Planes :- Dihedral.
No dihedral on Upper Planes - planes perfectly straight and level. Dihedral angle for Lower Planes 2°20'. Place a long straightedge over the Lower Plane with one end against the Main Spar at the wing tip level with spirit level. Distance from Upper side of Main Spar at root of plane to underside of straightedge should be 115 m/m.

Stagger :-
645 m/m at side of Cowl: 710 m/m at V outer struts from leading edge of Lower Plane to plumb line from leading edge of Upper Plane with machine in Flying Position.



Squareness of Main Planes to Fuselage to be tested by measuring distances from adjusting collars at bottom of V outer struts to Rudder Post and Propeller Boss. Corresponding measurements to be the same on each side.

Incidence :- Of Upper Main Planes is 1°50' throughout. Starboard Lower Plane is 4° throughout and Port Main Plane is 4° at root and 5° at V outer Struts. Check by Abney level and Straightedge placed from leading edge to leading edge at ribs.



Undercarriage :- Symmetrical about vertical centre line of machine.

Traced by J. & A. M. Campbell.