



AIRSCREW

April 2020

Please note that there will be no April Club meeting due to the continuing Coronavirus Covid 19 lockdown travel restrictions.

The March edition of Flight Safety Bulletin contained a reference to a Met Office publication about the revision of areas for weather forecasts for GA users. The link is:-

<https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/services/transport/aviation/ga/proposed-airmet-revision---gamet-area-forecast-.pdf>

As I'm sure you are all aware no recreational microlight flying is currently allowed. Please stay at home and stay safe.

For all the latest updates on rules regarding flying and licence validations etc., please check out the BMAA website <https://www.bmaa.org>

Hopefully we may be able to resume flying later in the year if the current restrictions work and the virus is defeated. If this does happen then it would be nice to have somewhere to fly to.

We need someone to step up asap please!

We still do not have a volunteer to take on the role of Summer Fly-In Coordinator so our summer events are still at risk. If you are able to consider stepping into this role then please give Brian Finch a call (07775 794426) to discuss what is involved.



For the latest Club updates and information please check out the club website:
<https://svmc.info>

Carbon Monoxide Poisoning

Extract from CAA Safety Notice SN-2020/003

1.5 The best protection against carbon monoxide (CO) poisoning is to avoid exposure. The physiological effects of CO poisoning are cumulative and take a very long time to disperse. Even a low level of CO ingestion, below the level that causes immediate physical symptoms, will cause a progressive reduction in blood oxygen levels which will reduce pilot performance and potentially cause permanent damage to the brain, heart and nervous system. It is therefore a mistake to assume that a cockpit contaminated with very low levels of CO is acceptable. Low levels of environmental CO could be considered just as dangerous as high levels, as the cumulative negative effect on human performance may not be noticed.

1.6 Preventive maintenance remains the first line of defence against CO exposure during flight. If that fails, effective alerting of its presence in the cockpit can be achieved through the use of an appropriate CO detector. This Safety Notice provides guidance on both topics.

2.3 CO Presence: If you experience symptoms or the detector alarm sounds:

- Turn off the cabin heat supply and maximise fresh air entry into the cabin
- Keep flying the aircraft and make a radio call to alert others to your predicament
- Land as soon as possible
- Seek medical attention when on the ground
- Ensure the problem is identified and rectified before further flight

The Link to the full document is:-

<https://tinyurl.com/tf6zrww>

Video Gallery

We have a couple of videos submitted by Lyndon Griffith, taken just before the lockdown restrictions.



Penultimate flight before Lockdown

<https://www.youtube.com/watch?v=0JmOp5E9C1k&feature=youtu.be>



Last flight before Lockdown

<https://www.youtube.com/watch?v=eUQ6jBlcnaI&t=13s>

Annual Maintenance 2020 - Mainair Blade 462 – GBZDC – Ed Wells.

I did a short article last year about all the work I did on GBZDC to bring it back upto scratch - and I didn't realise how much I may need to do all over again!

It started raining in mid September 19 through to the front end of March 20 and most of us wont have done very much flying to keep the machinery working properly. Looking back at my log book Pete and I did actually manage an hour on November 3rd – filming floods. Looking at the crud still hanging in the wheel spats the strip must have been a tad soggy then.

So here we all are during the virus lockdown neglecting the machines we hope one day will take us reliably back into the sky. Having had a brilliant spell of weather I thought I would take a day off from jobs at home and actually go down to Over Farm and see what state GBZDC was in. Lock down dictates I should only go out for exercise , so not wanting to risk the police interceptors I jumped on my bicycle and rode to Over from May Hill. Apparently it was 9.4 miles the way I went and it took me just 50 minutes. I checked with Rees earlier to make sure it would be ok but still phoned him to let him know that someone was getting into the hangars and he would hear an engine soon – no problem. Can't be too careful with all the engine thefts recently.

I opened the door and decided that whilst it was dry outside, the hangar floor was still very damp and the whole thing badly needed air flow. I opened all the doors and let the spring sunshine in.



And then I began to see the damage which is caused by six months of damp followed by heat. I think most of us have some hangar and aircraft tidying up to do. If you fancy a bit of old carpet to keep your machine snug? **Don't!**, Carpets get damp and full of mould spores. GBZDC was sitting next door to this and I now have to get rid of the mould all over again. From what I can see Rotax air filters provide a lovely breeding ground for mould – you have been warned...



So I had an early spring clean inside our end of the hangar then it was time to see if the engine still ran. The day was fine and the QNH was showing around 1017 with a light breeze. Pity there is no flying but its always as well to take some time to do some proper checks early in the season, because later we do tend to rush and go.

I made sure I was somewhere away from public gaze to avoid the opportunity to comment.

I made safe all the loose bits, chocked all three wheels and put the brakes on.

I primed the carb and hand cranked the engine ten rotations with the choke on and the ignition off to get some fuel into the motor.

I had already checked for water in the bottom of the fuel tank and carb bowl. Fuel line switch on and carb primed ok.

I also checked the 462 rotary valve lube pot was on max. The radiator was also checked for water.

In addition I made sure the prop wash was well away from the open hangar.

And finally I climbed in and did some basic STAIP checks.

Security: passenger/ pilot harness attached, no loose objects

Throttles: set to SHUT, choke as required

All clear: all persons & animals clear of propeller arc to the side and prop blast behind

Ignition: contact switches set as required

Press/pull: starter action as required



As I get older I find I am reverting more to the checks we all learn as part of our flying training – so just to annoy you all here they are. I have seen or heard of a number of incidents with microlights over the years associated with ground running. Most of those are due to having no pilot on board and checking for throttle return before the engine fires. Most incidents are completely avoidable by following the STAIP and CHIFWAP mnemonics.

CONTROLS: full and free movement of control bar & nose wheel; set trimmer to takeoff.

HELMET & HARNESS: check both your own and particularly your passengers seat belt & harness.

INSTRUMENTS: all functioning, CHTs correct, Altimeter set, Oil temp and Oil pressure (912 & HKS BETA only) altimeter set, Intercom and Radio switched on and working.

FUEL: fuel cap on, fuel tap on and fuel sufficient for planned journey + reserve.

TRIM: set to takeoff position.

WIND DIRECTION & STRENGTH: within both aircraft and pilot limits?

ALL CLEAR: to taxi, to line up for finals, check for other aircraft in the circuit?

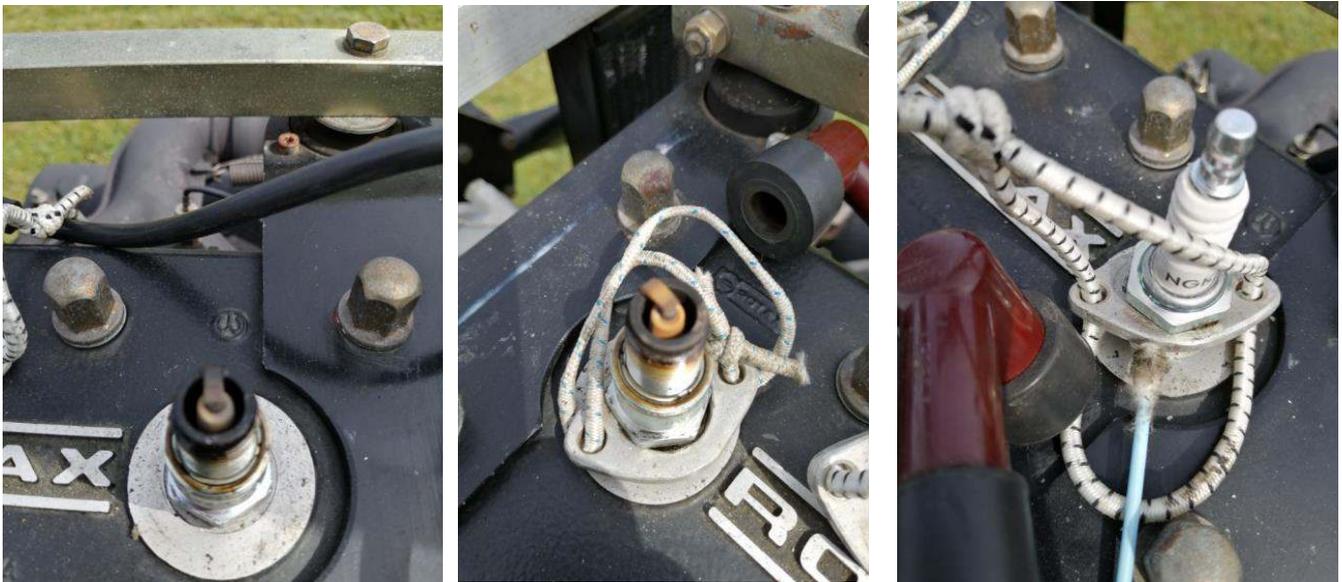
POWER: if possible do a full power check to check static RPM (as per table below). Exercise extreme caution during this manoeuvre - do not allow the aircraft to creep forward out of control, it is better to accept a lower RPM and ensure full RPM is achieved during take off roll. If it is not possible, check the rpm during the take-off roll and abort the takeoff if full RPM is not reached or rough running occurs.

I turned the master switch on, ignition on then shouted 'CLEAR PROP' at a deserted airfield and pressed the starter. The engine fires instantly, choke off and I let the engine warm up at around 2000 rpm (the tick over on this 462 will do more damage than good).

Over the next 25 minutes I ran sequences of 3000, 4000, 5000 rpm etc. And then finally cut the throttle dead on a 4000rpm run to see what the plugs looked like.



And this was slightly worrying given that there appeared to be no issues at all. The front plug was rich, rear plug OK– but the contrast between the two was more than I had ever seen before given the rear cylinder always runs hotter due to airflow. I checked the plug caps and poked a cotton bud up them in turn. The front one had more than a small amount of dust from the plug top fretting. The rear was fine – the only thing I could see is that the shot cord on the front plug top retainer wasn't as tight as the rear. Anyway a new pair of plugs were fitted ready for a flight test whenever that maybe. This is one advantage of a single carb – both pots should be running consistently. Simplistically this is either plugs, plug tops or delving deeper a possible ignition or timing problem. We will see. But it is running well.



I normally take the GPS and the radio home for the damp winter weather to avoid gemlins setting in. But like many of us I hadn't expected so much wet weather – so they were still in the cockpit. So while I

was doing power runs I was messing around checking the GPS and the radio. The GPS came up with this...



Each time I quit it became obvious that the GPS had forgotten all it ever knew. I fitted a new set of batteries as it was apparent the damp had done some damage.



So all in all I'm glad I took the time to start the post winter checks. At the moment we also have a recurrence of the gearbox oil leak and I now suspect a porous adapter plate (anyone got one?). Another big clean up due to mould is needed and all electronics need to be checked now to ensure the connections haven't been sweating and corroding. Oh and the good news – no rodents this year.

Its absolutely right what they say... Use it or loose it! Use this virus time wisely folks because even after the government restrictions are lifted it would be unwise to drop out of the sky and require NHS treatment.

Items for Sale

50% share available in a fantastic 912 Rans S6!

A great opportunity to get very cheap 4 stroke flying.

Based in Gloucestershire and already hangared

Very good performance as you'd expect with a 912. Cruises at 80mph and will well exceed 1000fpm flown solo.

Engine and airframe have roughly 750 hours on each.

Permitted until 14th of April, but will be extended at no extra cost for the buyer.

Recent work includes (not shown in photo):

Update of dash panel including wiring, LED replacement and general tidying

New Yaesu radio

Microavionics intercom fitted

Pilot aware fitted

Audio installed for pilot aware and iPhone

RAM mount for phone/tablet fitted

The share available is being sold on behalf of the registered owner (moved to a new machine) by myself, the other share holder.

£6950, plus very competitive monthly contributions including hangarage and running costs to be discussed.

Call Rees on 07824704272 or email: rees@overfarm.co.uk



Special thanks to Ed Wells for his maintenance article this month.

**Please send any future contributions to the Airscrew to the Editor Pete Smith at:
email: jellylegs56@hotmail.com Tel:- 01594 562545**

**For the latest Club updates and information please check out the club website:
<https://svmc.info>**