25 May 2012

Dear all

Daily Inspection (DI) training and sign off

As I announced at the AGM there has been both nationally and at BMGC an increasing trend in incidents or near incidents related to poor glider daily inspections.
Therefore we have been working on some basic training and competency sign off to help standardise all pilots in the daily inspection.
This is a one off for all current members and the training standard for all new future members.
This training and sign off will be applicable to all BMGC solo pilots who have a minimum 50 solo flights or 20 flights and 10 hours solo (the flying requirement for a Bronze).
The exception are the Instructors and the nominated DI sign off team (listed below).

There are two stages to the process.
Firstly, view the two (Pt1 andPt2) training videos that are now available on our website
http://www.talgarthgc.co.uk/vid_di_1.php

Both videos are just over 20 minutes long. Please take the time to watch both of them.
A huge amount of effort (especially by and thanks to Phil Swallow) has gone into making these as good as possible. Feedback so far has been very positive.

Once you have viewed both video's, grab an instructor (or nominated DI sign off team member) at the next conventienient opportunity and do a DI on a K13, as it has the most to look for and is consistent with the training video's.

Once this has been completed, fill out and sign the form (attached, available in the office corridor and briefing room). The instructor also needs to counter sign the form.
Place the completed form in the CFI in-tray in the office

To make things more convenient, the following non-instructors can also sign you off:
John Clarke, Keith Richards, Martin Brockington and Peter Saundby.

Please try and get this done asap. However, to give you time the closing date will be **30 Sept 12**. In other words you have the whole season to get this done.
After this date you will not be qualified to DI any glider, including your own.

If you have already done the check, which I know some of you have, please watch the video's, complete the form, get it countersigned and into my in tray.

Do make sure the form is complete and that it goes into my in –tray. That will be the only way I will track who and who hasn't completed the training. Also get your log book signed off – under qualifications at the back.

Eventual goal is to have a list of all 'approved' glider daily inspection pilots. Only those on the list will be able to do daily inspections once up and running.

Annual Flight Review (AFR)

It's that time of the year again where you will be due your Annual Flight Review at some point over the next 6 months.
As before, a tracking sheet with who and when is due their AFR will be issued. It will be available on "CFI corner" on the website and on the board opposite the office.

Some slight changes this year.

Our DCFI, Mike will be looking after the AFR. He will chase you up if not done.
The syllabus has been cleaned up a bit with slightly more emphasis on aerotow, following the recent tug upset (details below).

Please ensure you do your AFR in time. I don't want pilots flying solo/P1 after their due date.

The AFR consist of one soaring flight minimum.

- Launch fee only – make sure log sheet is annotated otherwise you will have to pay soaring

The AFR is applicable to all solo pilots (excluding Instructors) for full and country members.

Any Bronze C test, currency check, Friends/Family check, coach check etc all count as an AFR so long as the minimum syllabus requirements are met and the form has been completed.

Country members
For all country members we will obviously accept any annual review/check you do at your home club, however I will need you to provide a date of your last check or when it is due, for our records.

Please help with this small piece of admin by either sending me or Liz in the office your last review/check date

BMGC recent incidents

The following are excerpts from the CFI incident/accident log.
As you may know I record any incident or near incident however minor it may seem at the time.
It is really important to keep the feedback coming. It is dealt with in a confidential manner and is a really important tool in accident prevention.
The main purpose is to try and head off anything that might become a regular occurrence and /or may be useful feedback to you in the hope that you will not make the same mistakes or misjudgement.
In each case the last lines of defence in accident prevention are starting to unravel. Once the defences have been breached the incident can rapidly turn into something nastier.
Here is a selection from the last 6 months.

Tug Upset

We recently experienced our first ever tug upset.
This is where the tug has a rapid un-commanded pitch nose down and/or roll due to the glider under tow being too far out of position.
When this happens the tug adopts the new very nose down attitude very quickly, which can take some height (500'+) to recover from. In the past this has killed tug pilots.
In this example there was aerotow training taking place at height. The K21 was well out to one side and higher than normal (estimated at 10-15'). This was enough to cause the tug to have un-commanded roll to the left and pitch the nose down. We believe this was as a result of the fin/rudder stalling and blanking out the elevator, although all that is theory.
Importantly there was plenty of height for recovery and no harm was done but it is a wakeup call to us all. What it does emphasise is the absolute need to know how to find and maintain the correct tow position behind the tug and that it is not just vertical out of positioning that is potentially dangerous, gut also horizontal.

Lessons to learn

All of the tug pilot and instructors have been briefed separately. However for everyone else, consider the following
I know that some of you still do not use the correct technique and sit too high above the tug.
I also know that some of you have developed a habit of getting high behind the tug just before you release
I know because tug pilots tell me. This has to stop.
Keep in mind we are a bit more unique than other clubs. Shorter that usual rope, usually towing towards rising ground (the combination can sometimes never be above 1000'AGL) and turbulence are all important factors to consider.
Therefore you must calibrate to and maintain the correct tow position.
If you are regularly looking down at the tug you are in the wrong position.

- The **only** correct method is the one in the Instructors manual. Down onto the slip stream, back up into the smooth air, and hold that position with the elevator. Note the tugs position in the canopy.
- Before getting airborne then an idea of the correct tow position can also be obtained by noting the position of the tug in the canopy just as the rope goes tight on 'all out'.
- If you get out of position to one side, raise the down wing so that your wings are parallel with the tugs, do not let the inboard wing go down. Allow the tension of the rope to drift you back to the centre line. Be ready to correct to prevent overshooting.

- I'd like you all to re-watch the aerotow and launch video briefings as a reminder.
    - http://www.talgarthgc.co.uk/vid_launch_nw.php
    - http://www.talgarthgc.co.uk/vid_aerotow.php

- Annual Flight review syllabus already includes aerotow exercises including finding the correct tow position.
    - 2012 will be tweaked with emphasis on the correct technique for returning from horizontal and vertical positioning.
    - If you cannot demonstrate this adequately to your instructor you will not be able to go solo until you can.

I have been promoting and emphasising safety in the tow, especially getting too high at the club for some time.
Regular messages from me to the club and instructors, aerotow training video, visitor launch briefing video, re-emphasis as part of the Annual Flight Review emphasis to visitor on the correct tow position all contribute.
Don't let it happen again. If you are not sure – seek the advice of an instructor and get some training.

Several ground loops in one day

We recently had one of those rare soaring days – remember those. That's where the sun comes out and some puffy white clouds called cumulus are formed!
Due to the rain and the mower being u/s, we had quite long and thick grass on the day.

Unfortunatly because we had a good thermal soaring day there was little head wind component to speak of.
So, long grass and little headwind component.
By the end of the day we had three ground loops, two that I witnessed. Luckily no damage suffered.

Launch
Standard Cirrus who's aileron authority at low speeds is not great.

A short run on the wing tip by the wing holder. Wing immediately dropped. The longer/thicker grass came into effect and the glider ground looped. The release was pulled in time but only just.
Short wing tip run and long grass were a significant contribution to the incident.

Landing
ASW20 – full landing flap, therefore reduced aileron authority.
The glider touched down wing low and ground looped almost immediately.
Long grass and pilot fatigue were a significant contribution to the incident.

Long Grass, little head wind component, non athletic wing tip running and tired pilot! All innocent factors and yet pieced together we could have had broken gliders.

Lesson's to learn

- If you are running the wing – you do just that. Walking a couple of steps and letting go when there is little headwind component with a glass glider, which has poor aileron authority is likely to result in a wing drop. Mix in the long grass and a ground loop is likely if the P1 is not sharp on the release.
- The instructor manual states that if the wing tip touches the ground despite corrective action you will release. I think we have all got in the habit that if it touches we will beable to pick it up. That might be the case if the grass is short – but if it is long you will find it very difficult before a ground loop rapidly develops.
- Once a ground loop starts, it all happens very quickly – you have to be very sharp on the release.

Wave – cloud base closed in, No Turn and slip

Std Cirrus/Pilot: CFI
I got high in Southerly wave, with 3 or 4 of us quite high about the broken cloud base.
The cloud started to fill in so we all started to decend. In hindsight I left it a bit late before I started my decent. At this point I switched on my turn and slip.
To my concern the cloud base started to fill in quite quickly so I fixed on what looked like a reasonable hole with a good landmark visible below (end of Llangorse Lake). I set the glider up in a full airbrake, steeply banked turn trimmed out at 80kts, keeping the landmark on my wingtip.
The hole started to fill rapidly and I knew I had got it wrong. I was sure the cloud was not that thick but this was far from ideal as I was now committed to my decent. I elected to keep going as at least I knew where I was and in worse case would have a short decent through cloud (i hoped). I made a radio call with my intensions. I was certain no one else was in the vicinity but I could not be certain.
At this point I checked my T&S to set myself up for my short cloud decent, to find it wasn't running.
Too late now, I kept going. Luckerly cloud base layer was quite thin and I popped out under neath.
No harm done but it really got my pulse running.
Luck and experience saved the day. If I could get caught so could you – be careful.

Lessons to learn

- If there is any sign of the cloud filling in make a prompt decision to decend. This decision is partly governed by the type of glider you are flying and it's rate of decent.
- Be careful and alert to any change in conditions
- I was above a broken cloud base that was irregular – be careful and alert

- Be very certain you know where you are if descending through a small hole. In the ideal world you would not have left it that late in the first place
- Be certain you know where other gliders are. Coing out of the bottom of cloud leaves little time for you to spot or be spotted.
- Make your intensions clear with a radio call – the radio does work doesn't it?
- Getting airborne and then finding instruments such as a turn and slip don't work, is not good practice!

Two incidents on the same day – Showery day

January 2012. The day is briefed to be soarable on the westerly ridges but with large showers to be aware of.
As forecast, large showers develop with a frequency of about one every hour. However in between there are good bright spells and the conditions are quite soarable.

Incident 1.

Pre-bronze / first flight in Junior. / landing SW
P1 had already had a currency check flight and was briefed to fly the Junior for the first time.
P1 got airborne and joined various other pilots who were airborne and soaring in one of the gaps between showers.
The next big shower appeared. Many of the pilots elected to land. In the mean time the Junior P1 continued to soar up into a gap in the cloud making it more difficult to see any approaching showers.
He was joined by the CFI who was in the club K6. The CFI who had noticed others going back to the site elected to return (having noted the approaching shower whilst climbing in the gap) and landed just as it started to rain. He tried to call the Junior pilot in the descent but found the radio to be u/s.
Unfortunately the P1 of the Junior pilot left it late and ended up landing in what turned out to be quite a heavy shower.
The P1 did very well considering the experience level , first time on type and kept his cool landing without incident. It could easily have been different (see below).
If it can happen to this pilot – could it happen to you? What would you have done?
Good piloting after misjudging the conditions saved the day.

Incident 2

Bronze C pilot on a currency check flight in a K13; landing SW.
This incident occurred on the same day as the one described above.

The flight progressed normally with P2 doing all of the handling.
Just as the circuit started the heavens opened up.
Until that point P1 was not that concerned about any local shower activity. That lack of concern rapidly changed.
The circuit progressed in what was quite heavy rain. The wind speed had increased and they were experiencing strong sink.
The opportunity to land SE presented itself but was rejected at the time due to the cross wind component.
By low key things are now getting difficult. Heavy rain made the visibility poor, the glider was being banged about and they were in strong sink.
Well done to the P2 who was still the handling pilot, kept her cool and kept flying the glider.
At the late stages of the approach, the sun suddenly came out from behind the shower.
Wet canopy (still being rained on, was it clean?) and sudden bright sunlight caused a loss of forward visibility; P1 who took control.
Unfortunately all visual references were lost and the glider dropped in damaging some of the fuselage tubing. Thankfully no one was hurt.

Lessons to learn

- Clues, changes in weather – watch for the shower. Any doubt land earlier.
- Keep In touch with where any large showers are and their progress.
- Any doubt land earlier; don't leave it too late – the airfield fills up rapidly if there is a mass landing.
- If you get caught, keep flying the glider and keep the awareness going. Keep considering all options. Landing with a strong cross wind component but being able to keep external references, may be better than continuing to the into wind landing area but then not being able to see properly. The priority may be to get the glider on the ground safely as soon as possible.
- If you see other gliders making rapid descent's (especially if you know one of them has the CFI in it for instance, as the Junior P1 did in this case) – question why. What have I missed?
- Club radio's are an ongoing issue and are under review.
- If you get caught, your visibility decreases – both through the rain and on the canopy. This is made much worse if there is some sunshine behind the shower.
    - Made even worse still if the canopy is not clean!
    - You could start to lose all visual references – it is then getting really serious
- The wind will probably increase in strength and change direction.
- You could experience strong sink.
- The glider behaves differently with wet wings. The stall speed will increase. How well do you know your glider when it has wet wings?
    - I know that in my Cirrus I can get pre-stall buffet at 55+kt in a moderately banked turn (i.e. turning onto finals)

Who does – 'all clear above and behind?'

Simple answer – the person that does the signalling.
If you are signalling you will have also done the all clear above and behind.
You have the complete awareness of the launch and are the best person to confirm the start of the launch and importantly, stop it.
As P1 in the glider you have the ultimate say – release if you are not happy.

Currency reminder

The following is **minimum guidance only and not a target**.
Full club members

- Up to Bronze C – maximum of 4 weeks without flying
- Bronze to Silver – maximum of 6 weeks without flying
- Silver and beyond – 8 weeks or 3 landings in 90 days

Where ever possible you need to keep as current as you can.
Poor weather makes it more difficult to keep current, but it also can make the flying more challenging.

- Not just in flying the glider but your judgment and awareness will deteriorate with time
- You need to ask yourself the question. How rusty do I feel?
- How current am I for today's conditions in the glider I am about to fly in?
- Just because I flew a K6 in light conditions 6 weeks ago I might not be ok for flying today in my Cirrus in Easterly wave with strong rota!
- For instructors you also need to consider what type of flying you have done. If you have flown but have not had to do any handling you will get rusty.

The DI will also ask the question at the daily briefing and expect an honest answer. If you need support then take a flight with an instructor first.
If you do so then consider using it as an opportunity to do your Annual Flight Review saving you doing it again later in the year.
Winter mid week flying has no instructor supervision. It is even more important that you are honest with yourself about your currency.
Remember ask yourself the question: Am I current enough to fly in today's conditions in the type of glider I am about to fly? Any doubt don't fly solo or take a flight with an instructor first.

Hangar Pack
Thanks to Keith who has now come up with the 'standard' hangar pack.
Each glider position has been marked on the hangar floor and will have glider type added soon.

- This is the best hangar pack – no deviations please. We should then be able to keep hangar rash to a minimum.
- Each time you move any glider out/in the hangar it is a minimum of three members with one person in charge!

Cheers
Martin
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