# Supplement to BGA CFE Presentation

This presentation does NOT form part of the official BGA CFE Presentation

It provides more information on HOW to conduct cloud flying in gliders

Reference – Instrument Flying Course Notes
Dartmoor Gliding Society
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# Prior to entering cloud

It is important to be trimmed before going onto instruments, whether wings level or in a thermalling turn

It is vitally important to listen out on 130.4 and make appropriate calls

# Flying straight and turning - 1

Scan the instruments, with T/S this means:

1) Slip Ball – take action if it is not centred
2) Turn Needle – note turn rate
3) ASI – note speed and trend

# Flying straight and turning - 2

Interpret your scan and make any necessary control inputs as follows:

- Turn rate not correct – make a gentle coordinated correction for 1 or 2 seconds then recentre.
- Speed increasing - ease back on the stick until the trend stops
- Speed decreasing – very gently ease forward until the trend stops

# Flying straight and turning - 3

To roll wings level at any stage:

- Apply a coordinated rolling manoeuvre until the the turn needle is just about to become centred then centralise
- If the aircraft was trimmed for turning then be aware that the tendency now will be to lose speed
- Trim changes should be small, if necessary check physical position of trim lever

# Correcting larger deviations - 1

If the turn rate is high and speed is increasing rapidly you are in a diving turn – to correct:

- If necessary remove any g force by easing forward on the stick
- Level the wings using the turn needle
- Control the speed by easing back on the stick until the trend stops

# Correcting larger deviations - 2

If the turn rate is high and speed is decreasing rapidly you are in a climbing turn – to correct:

- Control the speed by very gently easing forward on the stick until the trend stops
- When the speed is adequate then roll the wings level

# Correcting larger deviations - 3

If at any time the speed is approaching Max. Manoeuvring Speed then take the Emergency Recovery Procedure as described in BGA CFE presentation

# Turning onto Compass Headings -1

To achieve a change of heading:

1. Calculate the change of head in degrees
2. Divide by 10
3. Execute a rate 1 turn for this number of seconds

# Turning onto Compass Headings - 2

To roll out on a heading from a protracted turn:

- Count the number of seconds after passing east (or west) there are no turning errors on these headings

# Turning onto Compass Headings - 3

Alternative method (quicker when rolling out from a protracted turn):

Use the track information from a GPS to roll out close to the desired compass heading, and then, if required, make small corrections on the compass.

# Navigation

For brief cloud climbs well away from airspace you can use DR to provide your position

More protracted climbs, proximity of airspace, letting down near obstructions or terrain – you need help from a GPS unit.

Furthermore, for any sort of let down through cloud, you must have a (premeditated) plan

When using GPS waypoint information be clear that the unit displays bearing to waypoint