

20/12/2022

All Instructors and Examiners,

The Panel has decided there is a need for more guidance to be given to Instructors and Examiners on 1) Eventualities, checks and the POH and 2) Diagonal restraints in Flexwings.

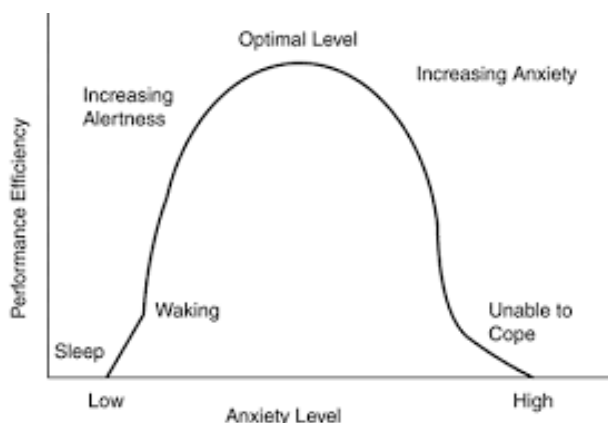
Until the Guide is amended to incorporate the points covered in this Instructor Bulletin please make sure this content is included, where appropriate, in your flying training/testing.

1. The following points are a list of reminders on the importance of teaching EVENTUALITIES, through CHECKS and referring to the aircraft's POH

Eventualities

When confronted with an unexpected situation/emergency one will typically freeze momentarily. The first reaction is usually 'What happened?' followed by 'I can't believe this is happening.' This is the '*startle*' effect. Until this is under control you cannot function effectively to deal with the crisis.

See below the Yerkes Dodson Law with the bell shaped graph of *performance versus anxiety/ stress*. Note the need to remain on the upslope of the curve to be able to act effectively.



Discuss with students the importance of preparing beforehand by practising/ considering what can go wrong to be able to react with minimum delay to reduce the '*startle*' effect should the unexpected/emergency occur.

For example: prior to take-off, considering contingencies for an engine failure on take-off.

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How to use checks efficiently

Reinforce the understanding that checks are not just to be read from a list but to be part of a procedure that must incorporate both the check list and the actions together. Too often checks are just seen as a list to complete rather than a physical action.

Stress the need to practice **touch checks**, and the instinctive knowledge of position of the controls. This will help to prevent fumbling and losing time when things go wrong and actions need to be swift.

Remind students that touch checks mean physically touching, but **not** engaging/ activating systems such as ignition switches, fuel on/off, throttle, brake, parachute release mechanism for example.

Students should be taught to practice responses to various unintentional mishaps/ emergencies whilst on the ground, taxiing and in flight.

Examples include, but are not limited to the following:

- 1) Brake failure on start up
- 2) Starting unintentionally with full throttle
- 3) Failed or stuck throttle causing aircraft to go to full power on start-up and taxiing.
- 4) Throttle failure in flight for those aircraft with throttles that will fail 'safe,' i.e., go to full power. (What could happen? How will the engine perform with only one carb operating? What are the consequences? What to do?)

Preventative actions which must be incorporated into daily checks and routine:

- Aircraft should be stopped with the nose wheel straight. In any case, this should be checked before start up then, if the unexpected should happen the aircraft would go straight ahead to the pre-planned open area. There has been more than a one accident due to the aircraft not moving in the same direction as intended on start up!
- Wherever possible, have one hand on the throttle as the engine is started.
- Daily Inspection on aircraft to include throttle checks at carbs, on and off, and in the case of Flexwings, hand and foot throttle check.
- Additionally in the case of flexwings the control bar should be under armpits or at least untied at start up.
- Take note of and teach the aircraft manufacturer's instructions for dealing with emergencies in that aircraft, they may be specific and additional instructions.

The Instructor and Examiner Guide Section 4, Ex 16e - Systems Failures, will be updated for this.

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2. USE OF DIAGONAL RESTRAINTS IN FLEXWINGS

There is a worrying trend developing of pilots not wearing diagonal restraints when fitted to flexwing aircraft.

This may be because students see instructors not wearing them and therefore consider them not important.

A reminder that any restraints fitted to an aircraft must be worn by a pilot in accordance with the requirements in the aircraft's POH and whatever restraints are fitted must be used.

Instructors do not have to wear the diagonal harness if they assess it will interfere with their ability to remain safely and effectively in control.

Students must be left in no doubt that this is an exception purely for instructors whilst conducting flying training, and examiners whilst conducting GSTs.

Whilst conducting GSTs the candidate must demonstrate to the examiner the correct use of these restraints, even if the examiner is not wearing them for safety considerations.

This guidance will be added to the Instructor and Examiner Guide.

Should you need advice on any of the content of this Instructor Bulletin get in touch with one of the Panel members/ FIEs.

Hopefully see you at the Instructor Seminar where I am sure more will be discussed.

Finally, warm welcome to Chloe, FTLO and SO, from the Panel, we have already benefitted from her experience and advice over the last couple of months and look forward to working with her in 2023.

Merry Christmas, clear skies and gentle winds for 2023.

Fiona Luckhurst

Chair Microlight Panel of Examiners