



## DBF Q&A #3

18 Nov 2005

---

**Q:** can you please tell me what "DF" means?

**A:** The DF is a numerical constant used to scale the relative scores of the different missions. When combined with nominal results and the stated measured units it ranks the missions for their relative complexity.

**Q:** Would you be able to tell me the approximated overall length of the course?

**A:** The required dimensions for the course are shown in the drawing in the rules. The actual path length flown will depend on the pilots choice of line to fly and the maneuverability of your aircraft. There is no set turn radius or distance between the upwind and downwind legs.

**Q:** In the frequently asked questions it says that the plane must be able to fly without the payload insert. However, given that the plane at the competition never has to fly empty, is it safe to assume we can use positioning of the payloads to achieve the correct CG location? That is, the plane's CG will not be correct without payload.

**A:** I know of several aircraft that can not fly with "no" payload, and require ballast be added to accommodate different weight payloads (such as General Atomics Predator and the NRL FINDER). The contest payload combinations do not all have the same weight you would need to add ballast with some payloads and not with others. The rules do state that the aircraft must be "capable" of flying all the different payloads, so it will need to have some means to achieve an acceptable cg with any/all of those payload combinations.

**Q:** We are wondering what the definition of a fuselage is.

**A:** It's difficult to foresee all possible configurations. The fuselage is obvious for a traditional "wing and tube" configuration. There are specific details in the FAQ for definitions of blended wing/body configurations. If you have a unique configuration you can send a sketch/drawing for rules clarification.