



Cessna Aircraft Company
Raytheon Missile Systems
AIAA Foundation

Please remember that questions submitted prior to the entry deadline of 31 October that were not answered in the FAQ must be resubmitted.

DBF Q&A #1

8 Nov 2008

Q: Can we use two transmitters and two receivers to provide enough functions for our aircraft and the required store release possibilities?

A: If you are using 2.4 GHz radios you may use two transmitters and two receivers in a single aircraft. Only the pilot and his observer/assistant may hold or operate either transmitter. Teams that selected the 72 MHz option on their entry can change to 2.4 GHz to allow the two transmitter approach but must notify the contest director with the change. Remember that the transmitter containing the aircraft flight functions MUST meet the full fail-safe requirement outlined in the rules.

Q: Are we allowed to orient the Patriot stores sideways or backwards?

A: No. They must be oriented with the nose cone forward.

Q: Can we strengthen the Patriot stores and fins to survive the release drop?

A: Yes.

Q: Are we allowed to orient the fuel tank/water bottle sideways?

A: No.

Q: Can we use LiPo batteries in our transmitter?

A: No.

Q: The specified fuel tank/water bottle will hold slightly more than 4 Liters. Will it be filled to exactly 4 Liters or to completely full for the contest?

A: So that we do not have to weigh the water in the bottle at each flight the bottles will be completely filled.

Q: May we thin out the fuel tank/water bottle to reduce it's weight?

A: No.

Q: Are the transmitter and receiver allowed to be store bought?

A: The transmitter and receiver **MUST** be a commercial FCC approved system. No modifications to the transmitter (or it's case) or the receiver (or it's case) are allowed.

Q: Can battery pack configuration, cell size and number, be changed between missions?

A: You may have more than one battery pack and may select any pack for flight. All packs must be presented and marked during the tech inspection. The heaviest battery pack will be used for the Total System Weight measurement included in the mission scoring formulas.

Q: Must the stores, including the fuel tank/water bottle clear the ground when installed or may they be part of the landing gear system?

A: All stores must clear the ground when the aircraft is on it's landing gear. Landing gear may not be attached to the stores.

Q: Must the "box" be completely rigid? Can we use only one box, or two boxes smaller than the specified sizes?

A: The box must be self supporting and maintain it's external shape with or without the aircraft inside. Fewer/smaller boxes are allowed. You may use **NO MORE THAN** two boxes, each **NO LARGER** than the specified sizes.

Q: May the aircraft control system be powered during the loading to actuate servos?

A: The aircraft control system must be powered off when the aircraft is in the box, but you may power it on as part of the assembly task to allow for actuating the servos during store loading. It must be powered off again before the assembly task "Time" is called.

Q: Regarding FAQ #8 are landing gear or landing gear struts considered part of the aircraft mold line shape?

A: No. Fixed landing gear and deployed retractable landing gear may "obscure" part of the stores provided they do not contain excessive fairings obviously designed to shield or streamline the store installation.

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