The Planes:
The Planes that are currently used in our Stock warbird classes are the GWS WWII fighter kits. These are readily available at any local hobby store and are sold in a slope glider (minus the motor) kits. They usually run about 30 bucks a plane. These planes work well as racers and are cheap and easy to repair.

Planes Currently allowed in this class include:
P-51 Mustang, ME-109, Supermarine Spitfire, AM-6 Zero, F-4U Corsair, FW-190, P-40 and North American AT-6 are allowed.

The Motor:
In the stock class of warbird racing, the maximum speed limit at this time is 45 mph. Your warbird cannot exceed this speed limit at full throttle. Pilots can use any battery, motor, prop, configuration they feel comfortable with.

A standard setup used is a Scorpion 2215-22 outrunner motor, APC 9X4.5 prop, and a 2100ma 11.1v battery.
Other possible motors are:

- Speed Demon C2312-19D ($20)
- RimFire 28-26-1300 ($25)
- AXI 2212/20
- Himax 2812-1080

Max speed is 45mph static….RPM x Pitch divided by 1056.
ex. 9x5 prop @ 9000rpm = (9000x5)/1056 = 42.6mph

This website is useful for figuring out relative airspeed based on the info you put in.
http://www.rcpro.org/rccalc/PitchSpeed.aspx

The Battery:
Any battery brand and size is fine as long you to break the 45 mph speed limit.

Modifications:
Since this is a stock warbird series, no modifications to the airframe can be made. Which includes the following:

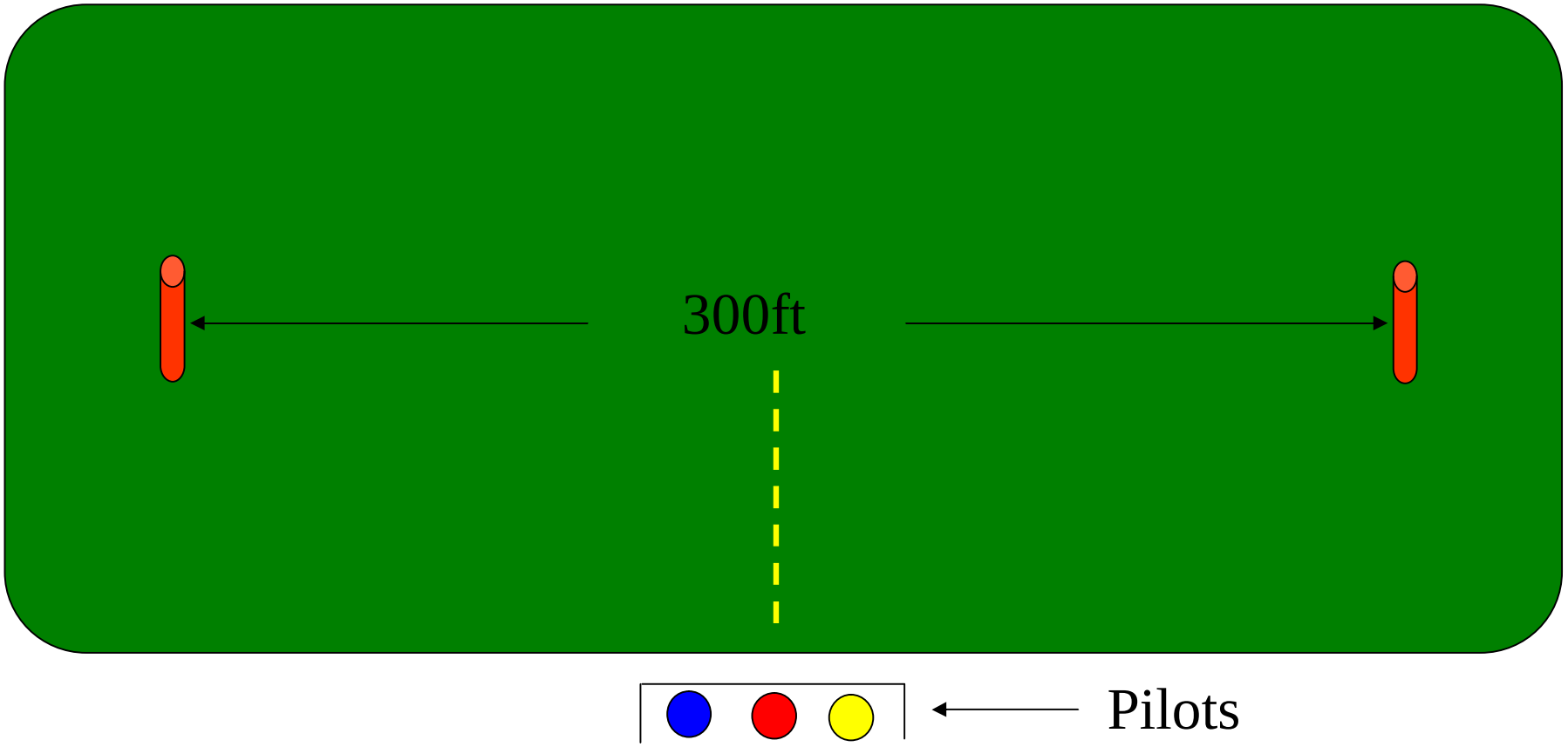
- No streamlining of the fuselage, (cutting of intakes or exhaust ports), or aftermarket canopy.
- No shortening of the ailerons or wings

Some minor modifications are allowed as followed:

- You can modify the battery compartment to fit a larger battery.
- You can place servos in the wings for the ailerons instead of using torque rods.
- You can use carbon fiber tubing to strengthen your wing.
- You can use landing gear, they optional.
- Other small modifications may be allowed, as long as they do not enhance the performance of your airframe.

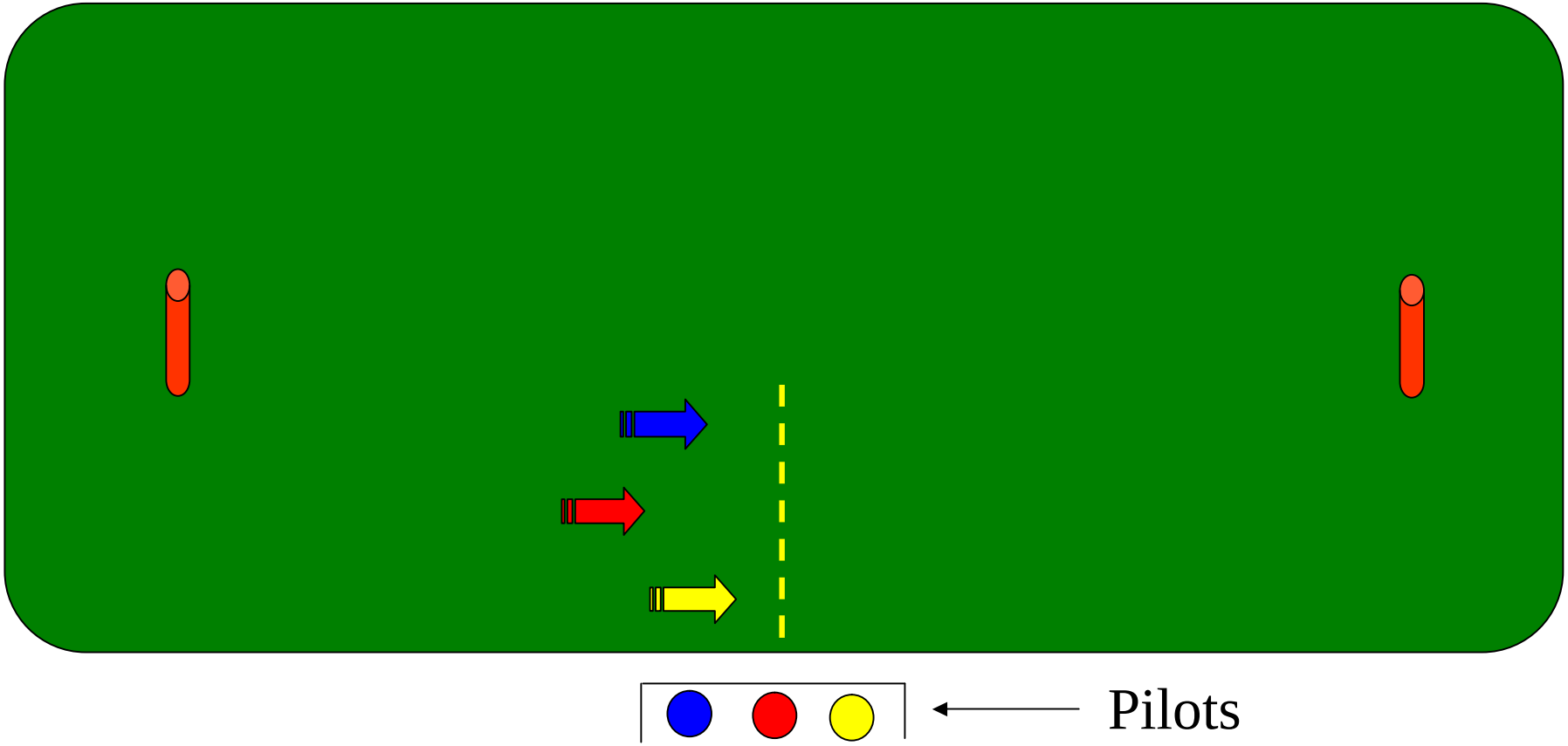
Cost (approx.)
GWS warbird– NPS = $31
Motors = $30
2 servos = $20ea
25A controller = $40
Receiver = $30
Total = $150

The Course



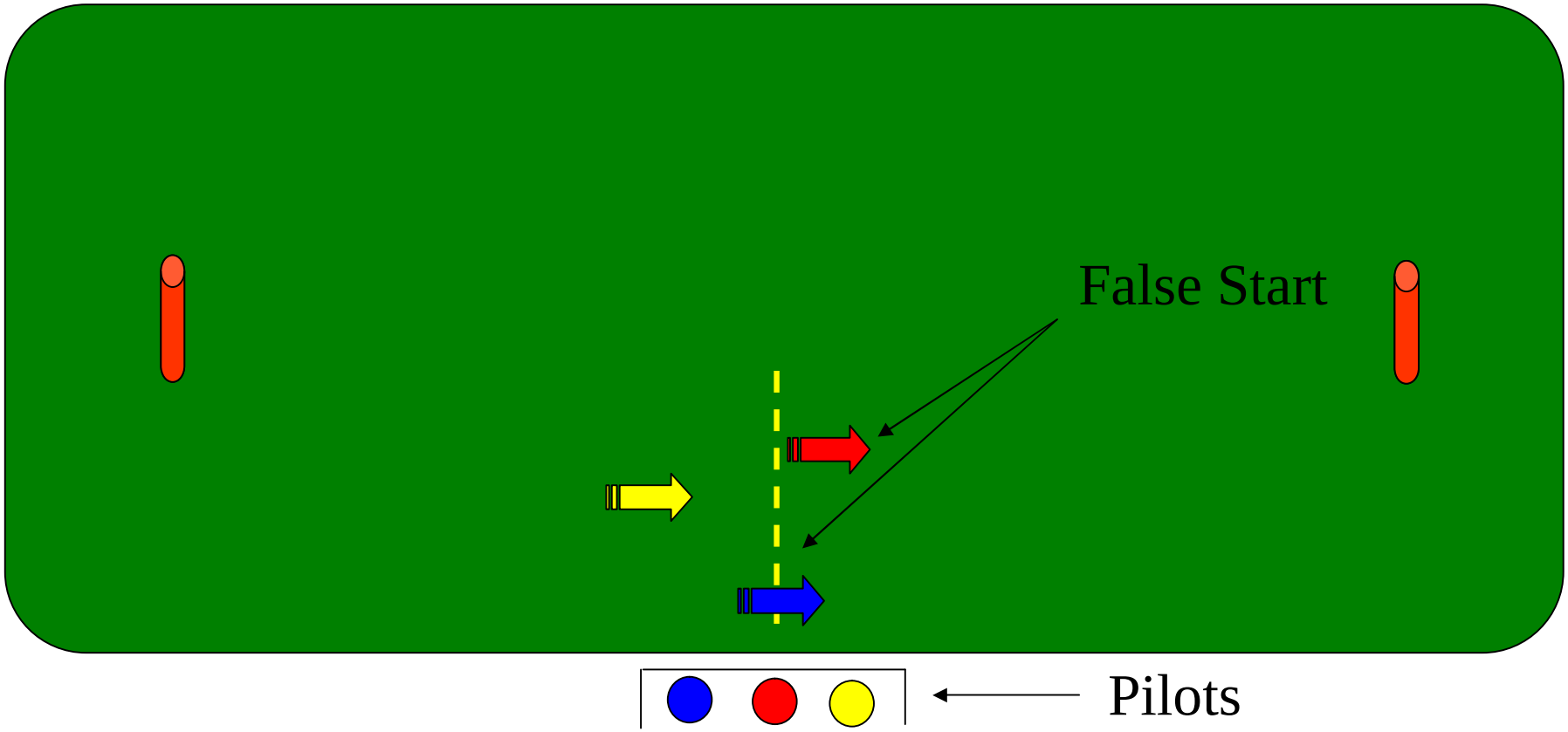
The pylon course is measured out at 300 feet from pylon to pylon. A cone line in the center designates the start and finish line of each race. Each heat consists of seven laps. This means that you must make seven revolutions around the pylons to finish the heat.

Clean Race Start



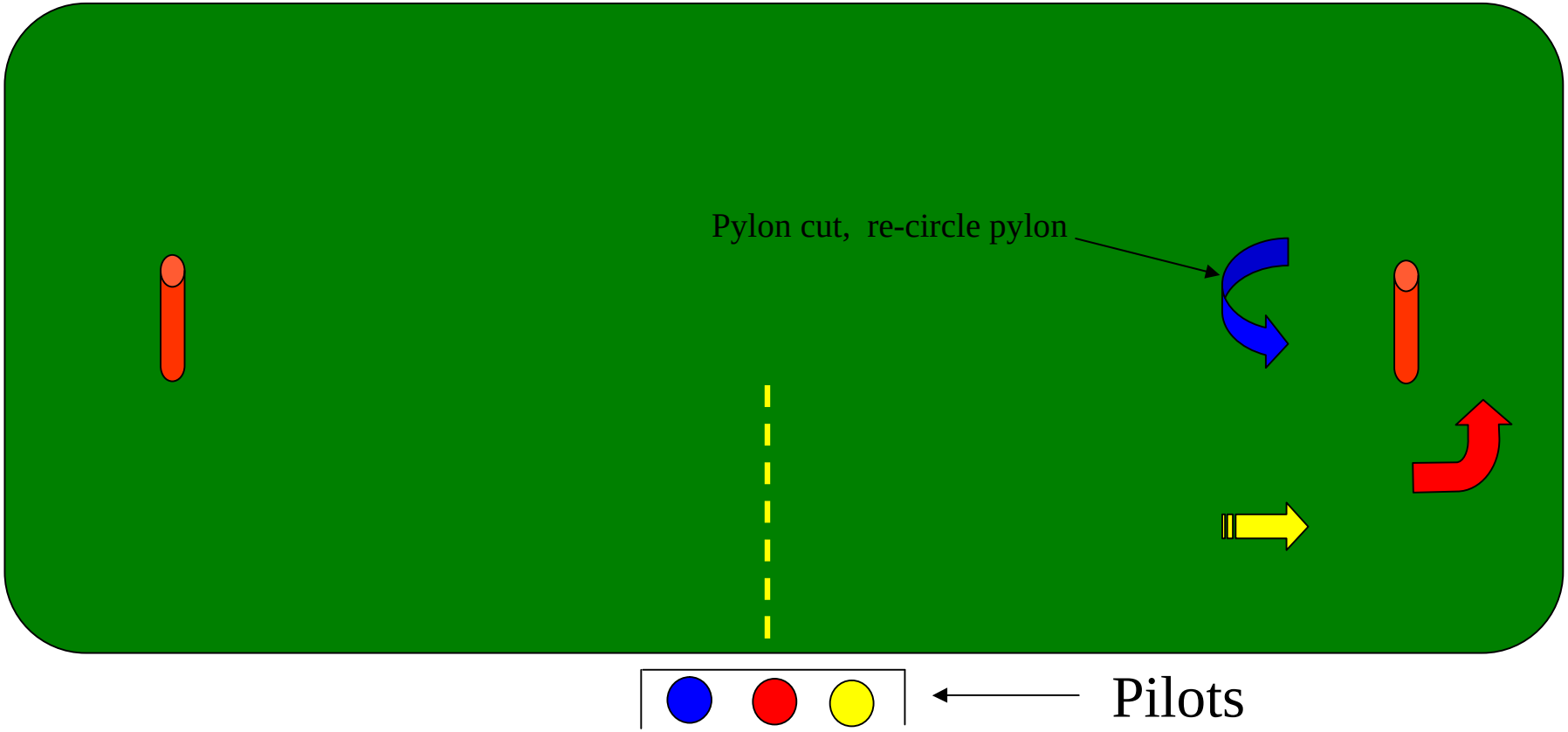
Each race consists of an Air Start. A countdown for the start of the race will begin at a designated time. Each pilot must have their plane in the air and behind the starting line before the announcer counts down to zero. If your plane is to the right of the starting line before the announcer reaches zero the pilot must turn around around and restart in order for the lap to count. The pilot can make a tight left-hand turn, but cannot "loop" in order to restart.

False Start



Both the red and blue plane crossed the start line before a zero count. Each pilot must turn round and cross the start again or face (1) lap penalty. The pilot can make a tight left-hand turn, but cannot "loop" in order to restart.

Pylon cut



The red pilot has successfully passed the pylon and is making the turn around the marker. If you make your turn before passing the pylon, it is considered a cut and you must immediately turn around and circle the pylon again making sure not to cut the pylon again. In the diagram the blue pilot had cut too early and must now re-circle the pylon. Once you have re-circled the pylon you may continue the race.

Penalties:

During racing penalties are given for false starts and cutting pylons. In the diagram above, the red pilot has successfully passed the pylon and is making the turn around the marker. If you make your turn before passing the pylon, it is considered a cut and you must immediately turn around and circle the pylon again making sure not to cut the pylon again. In the diagram the blue pilot had cut too early and must now re-circle the pylon. Once you have re-circled the pylon you may continue the race. This rule also applies to false starts and the beginning of the race.

Finishing the Race:

Once you have completed all **????** of your laps it is your responsibility to increase your altitude above the rest of of the racers and to stay above the race (in a continuing counter-clockwise pattern) until all competitors have complete their laps in the heat. Once all racers have finished, a landing order will commence and planes can make their final approaches.

Special Notes

* If your plane is having mechanical issues, land it immediately and retrieve it from the field once the heat has completed and all planes are on the ground.
* Flying over the spectator/pit area is not permitted. Pilots who fail to comply with this rule will be "black-flagged" and will be asked to land immediately.