<u>Mid Thames Model Boat Club</u> <u>F600B Multi Racing Rules - Issue 6 – April 2022</u>

Objective

- 1. To establish a one class fun racing boat at club level.
- 2. To ensure that all boats comply with a standard specification, with the intention of ensuring close racing.

F600 Racing Rules

- 1. A race duration of 5 minutes, plus seconds to complete the lap you are on. (Maximum time to complete the last lap is 60 seconds).
- 2. Race numbers as supplied with the boat must be stuck on each side of the engine cowl towards the rear on an area with a white background of at least 80mm x 80mm so it can be seen clearly from both sides.
- 3. The course shall be an 'M' shape approximately 30 x15 metres, negotiated in an anti-clockwise direction.
- 4. A maximum of 8 boats per heat.
- 5. A boat may only be run by more than one competitor, if one is a senior and one is a junior.
- 6. Starting procedure: Boats shall be placed in the starting gate. Drivers will be asked if they are ready. They will then be informed that the race will start within the next 10 seconds. The race will start on the shout of 'Go'. To the right of the middle buoy is the first one to be negotiated. The race is over on the shout of 'Race over'.
- 7. Race Marshals shall record missed buoys. A time penalty is to be imposed in each race for missed buoys, 5 seconds for the first offence, then 1 lap deducted for each offence thereafter. The circling of buoys is banned, to minimise damage to any of the boats.
- 8. The lap scorer will record the number of laps completed by each boat and at the end of 5 Minutes a seconds count will start. Boats will complete the lap they have begun, and the lap scorer shall record the time in seconds when the boats next cross the scoring line.
- 9. The Rescue Boat may be used during a race if boats are in danger of sinking. Colliding with the Rescue Boat means immediate disqualification from that race.
- 10. Drivers of 'dead' boats must inform fellow competitors immediately of the position on the course where their boat has stopped, using the words 'Dead boat, top left' etc. Hitting a dead boat, once it has been called, also means immediate disqualification from that race.
- 11. Scoring: Points will be awarded for the highest number of laps and part laps from two races in a regatta. The points will be: 9 for the highest lap score, 6 for second, 4 for third, 3 for fourth, 2 for fifth and 1 for all other competitors who entered. The end of season results shall be a total of the six highest points scored during the season. In the event of a tie the competitor with the highest number of First and Second place finishes will be the winner.
- 12. Competitors can expect to have their boats scrutinised by the Race Officer at any time during race meetings. The Race Officers decision is final.

Construction Rules

- 1. All replacement parts must be from the list below (if parts are no longer available the list will be updated with an approved replacement)
- 2. No modifications or additions to the outside of the hull.
- 3. The propeller tube bearings must not be altered in any way.
- 4. The propeller may be cleaned up to remove any manufacturing rough edges. It must not be trimmed to make it a visibly smaller diameter.
- 5. The battery pack must be mounted on the battery pack platform with Velcro tape. The pack may be moved around on the platform.
- 6. The motor may only be replaced with one of the identical specification. Motors are available of the same external appearance, but often have different armature windings. These are not legal for F600 racing.
- 7. F600B The ESC timing **must be set at 3.75 degrees as supplied.** It is recommended that the running mode is set at Forward Only; Lipo cells set at 2; Low-voltage cut off threshold set at No Protection.
- 8. Boats without clearly visible numbers will not be counted regardless of how the number was lost or damaged.

Construction Recommendations (Optional allowed additions to construction rules).

- 1. It is strongly recommended that the access hatch in the deck moulding is fully taped down during a race to render the entire hull watertight.
- 2. The addition of silicon and plain washers to the rudder post will make the tube/post assembly watertight.
- 3. The addition of metal thrust washers to the propeller shaft is permitted.
- 4. The propeller tube may have an oiling tube attached.
- 5. Buoyancy should be added to the hull and hatch cover, i.e. airbags or foam

Replacement Parts List for MTMBC F600 & F600B Club Class Boats						
Parts Description	Part Type/No.	Source	Possible Supplier	Comment		
ABS Hull moulding	F600 Club Class	Sarik Vac form	MTMBC	Only from MTMBC		
Rudder assembly	5511705 Rudder Small or MTMBC re-profiled	J Perkins	Gliders Distribution	Re-profile by MTMBC		
Brushed Motor	Speed 600 Race 8.4V G6312	Graupner	Puffin Models			
Brushless Motor	KB28-47-13S-Fin Part 28396	Hobby King	Hobby King	MTMBC hold spares		
Brushless Motor	Turnigy XK2858 2,900KVA	Turnigy	Hobby King			
Prop Shaft M4xM4x127mm	JP5511130 S/Steel	J Perkins	Gliders Distribution			
7 inch prop shaft/tube assy	HSST.7inch x M4	SHG	MTMBC Special	Prop shaft upgrade		

Prop Shaft M4xM4x6inches	Caldercraft part No. 4314 Fine line Stainless	Caldercraft	Cornwall Models	MTMBC modified
Solid Aluminium coupling	25mm long x 3.2mm plain x 4mm thread MTMBC	Modelboatbits	Modelboatbits	Prop shaft upgrade
Coupling Flexible (Cardan)	JP5511898	J Perkins	Gliders Distribution	
Coupling Insert 3.17mm	JP5511870	J Perkins	Gliders Distribution	
Coupling Insert M4	JP5511878	J Perkins	Gliders Distribution	
Coupling Hex/M4 solid Ally	Hex 26mm long x 3.17mm plain x 4mm thread	MTMBC	МТМВС	MTMBC hold spares
Prop 2 blade M4	Carbon Hydro 2318.31	Graupner	Gliders Distribution	
Prop 2 blade M4	Octura® X431 nylon prop. pitch 1.71"	Octura	Marine Model Sup	Tapped M4
Electronic Speed Controller	JES 350 Eco	Jetti	Puffin Models	
Electronic Speed Controller	Turnigy Marine ESC 30Amp ID9020000031-0	Turnigy	Hobby King	MTMBC hold spares
Electronic Speed Controller	HobbyWing SeaKing 30Amp	HobbyWing	Component Shop	
Water cooling jacket	For LBP2850 / LBP2860	Leopard	Component Shop	
Water cooling coil	Like 500/600 G3324	Graupner	Howes	
Water cooling tubing	3mm i.d. 6mm o.d. Silicone	Any	Any	
Servo	HS311 Std 3 KG/CM	Hi-Tec	Gliders Distribution	
Servo mount	25mm equal angle aluminium	Any	B&Q	MTMBC Design
Ball type servo link	G3582	Graupner	Gliders Distribution	
Wire red	CSA 2.5mm 31 Amp	Any	Any	
Wire black	CSA 2.5mm 31 Amp	Any	Any	
Turn Fins	1.5mm aluminium plate	MTMBC	МТМВС	MTMBC Design
8.4V sub C NiMH battery	Extreme power racing battery pack 3700 mAh	Vapextech	Vapextech	
Race Numbers	Black stick on plastic at least 65mm high	Any	Any	