

## WEATHERMAN SPEED RULES - 2013

1. Model      Cyril Shaw's Weatherman as published by Ian Allen (Model Aviation ~1949). To be built as plan (except classes VI and VII, see below) with no scaling down although wing and tail areas can be increased if desired. Optional; 1¾" diameter spinner, Mandatory; 2 x 2" minimum diameter wheels, bellcrank fastened to hardwood spar built into wing (position optional), undercarriage approximately as plan, external controls. Wing dihedral optional but preferred, but wing and spar must be additionally attached to bearers using screws and/or dowel pins. The tail section should be reinforced and pushrod additionally supported as necessary to prevent vibration in flight.  
Classes VI and VII to be built as plan, but scaled up by a factor of 1.414 to give a minimum wingspan of 26.6". Spinner to be 2" diameter.  
Class 0 to be built as plan, but scaled down by 25% to provide a minimum wingspan of 14". Spinner to be 1¼" diameter, 1½" diameter wheels and fixed 14swg undercarriage.
  
2. Engine      Any commercially produced diesel or glow engine may be used except class 1 which is for the Mills 1.3 diesel only, all variants and replicas. No performance enhancing exhaust systems or extensions allowed.  
  
Class 0      Up to 1.0cc  
    I      Mills 1.3 diesel only  
    II      Up to 1.5cc  
    III      Up to 2.5cc  
    IV      Up to 3.5cc  
    V      Up to 5.0cc  
    VI      Up to 6.6cc  
    VII      Up to 10.0cc
  
3. Fuel      Unrestricted within BMFA safety rules
  
4. Propeller      Any commercially available 2 blade wood, plastic, GFRP/carbon, no metal.
  
5. Fuel system      Suction only, no pressure from silencer/exhaust or crankcase, no bladders.
  
6. Silencers      Optional, but no tuned pipes or other devices that increase power allowed.
  
7. Timed distance      Class 0 and I to be ¼ mile from standing start, all others ½ mile from standing start, handle to be on pilots chest by end of first lap. No whipping after 1<sup>st</sup> lap allowed, otherwise this will result in disqualification.

8. Lines Only 2 line operation is allowed. Line length and diameter (tolerance  $\pm 2.5\%$ ) shall be as noted in the table below and will be measured from the centre of the handgrip to the centre of engine crankshaft. Model, handle and lines shall be pull tested prior to each flight. A restraining strap attached to the handle is mandatory in all classes. All single strand line ends must be made in accordance with the BMFA handbook, section 4. Line diameters are for single strand carbon spring steel wire. Multi strand may be used, but minimum diameters of 0.3mm ( $\pm 2.5\%$ , class 0) and 0.4mm ( $\pm 2.5\%$ , classes II, III and IV) apply. Classes V, VI and VII must use single strand only.
9. Handles U-Reely and similar control handles which allow the line length to be varied shall not be allowed.

#### 10. Class Specifications

	Capacity (cc)	Max. weight (ozs)	Line length	Line dia.	Test pull (lbs)	Laps
0	Up to 1.0	12	35' 0"	0.25mm	15	6
I	Mills 1.3	16	35' 0"	0.3mm	10	6
II	Up to 1.5	16	42' 0"	0.3mm	16	10
III	Up to 2.5	16	46' 8"	0.3mm	25	9
IV	Up to 3.5	20	52' 6"	0.3mm	25	8
V	Up to 5.0	24	52' 6"	0.4mm	35	8
VI	Up to 6.6	32	60' 0"	0.4mm	45	7
VII	Up to 10.0	40	60' 0"	0.4mm	55	7

10. Timing Ideally there will be 2 watches for timing, the time taken used to be the average of the two. If the difference exceeds 0.2 sec, entrant will be offered choice of the slowest time or a reflight.

Tony Goodger / Dick Roberts September 2011

#### Current Records (as at 1.1 2013)

W0	73.95 mph	P Fox	Norvel 061	28.8.2012
WI	52.02 mph	D James	(I) Mills 1.3	26.6.2010
WII	81.26 mph	R Gedge	CTAH 1.5	21.7.2012
WIII	103.74 mph	M Walpole	Nelson 15	8.9.2012
WIV	108.50 mph	T Goodger	MVVS 21	25.8.2012
WV	103.70 mph	T Goodger	MVVS 28	10.9.2011
WVI	110.97 mph	P Fox	K&B 40S	25.8.2012
WVII	114.65 mph	D Roberts	ST X61	18.8.2012