

Fiat C.29	F2B
Design	Wing, empennage and arms as per Igor Burger's Max Bee. Fuselage shape inspired by the Italian Fiat C.29 1'000 hp racing floatplane from 1929.
Built	Peter Germann, May 2017
Date	24.05. 2017
Remark:	Motor thrust axis position & angle and stabilizer position & incidence laid out for pusher prop & fixed ldg gear use. In-flight gyro forces and moments calculated by Wolfgang Nieukamp.
Specifications	
Span	1500 mm / 59 in.
Area (Wing, incl. flaps)	43.2 qdm / 670 sq.in.
Wing airfoil	Burger slightly modif. d max 65 mm / 2.56 in. Nose radius 8 mm / 5/16".
Flaps	Flat plate 7 mm / 5/16", square TE
Empennage airfoil	Burger modif. d max 19 mm / 0.75 in. Stab LE radius 0.5 mm / 0.018 in
Elevator	TE radius 1/16"
Spinner backplate to wing LE	275 mm / 10.8 in
Hingeline to hingeline	475 mm / 18.7"
Hingeline seal:	none
Stabilizer AoA	-1.0° (down)
Motor thrust axis up	+ 1.2° (up)
Motor thrust axis out	1°
Motor thrust axis below wing CL	10 mm / 0.4 in
Empennage CL above wing CL	19 mm / 0.75 in
Rabe Rudder)	15° - 30° deflects out with elevator up
Motor	AXI 2826/13 710 RPM/Volt
Battery	ThunderPower Magna 2700 mAh 5S 70C
Spark surpressing	Jeti 4 mm
Timer	Hubin FM-9
Programmer	Hubin Programmer
Speed Controller	Phoenix Edge lite 75A
Castle Link	V3.63.00
T/O weight	1'800 Gr. / 63.5 oz.
Speed Controller Setup	
Vehicle Type: Control Line Throttle Type: Governor Mode Governor Mode Setting: Governor High Governor Gain: Medium (25) Initial Spool Up Rate: High (8) Head Speed Change Rate: High (8) Brake Strength: 90% Brake Delay: 0.6 sec Brake Ramp: Slow Cutoff Voltage: 15.0 V Voltage Cutoff Type: Soft Cutoff Current Limiting: Normal (105A) Current Cutoff Type: Hard Cutoff Auto-Lipo Volts/Cell: Inactive Battery Pack Voltage: 18.500 Motor Start Power: Low (39)	Motor Timing: Normal (5) Direction: Reverse PWM Rate: 12 Khz Gearing Info: No Gearing/Direct Drive KV of Motor: 710 Magnetic Poles in Motor: 14 Power-On Beep: Enable BEC Voltage: 5.0 V Link Live Enable: Disabled Auxiliary Wire Mode: Disabled Logging; 2 sample/second: Batt. Voltage, Batt. Current, Contr. Temp., Contr., Input Throttle, Controller Motor Power Output, Motor RPM, BEC Voltage. Automatic Data Reset: 90% Firmware: V 4.22
Timer Setup	
	Mode: ICE/EDGE, Runtime: 5'20", Delay: 30 sec.

Bench Trim (initial flight setup)	
Lines (eye-to-eye)	19.5 m / 65 ft) (0.4 mm / 0.015")
Propeller	APC 12 x 6 EP
RPM	9'504
Speed	5.3 sec/lap
Handle Spacing	102 mm / 4 in
Outside tip heavier	30 Gr / 1.2 oz
C.G. from hingeline fwd.	192 mm / 7.5 in. Battery in mid position
Leadouts center	45 mm / 1.6" rear of C.G. or 147 mm / 5.8" from hingeline fwd.
Flap / Elevator ratio / throw	1 : 1 45° / 45°