

Preliminary BOM - Configuration I

		Price	Qty	Subtotal	Comments	Links
Motors		54.99	4	219.96	<p>Technical Specifications for Hacker A20-12XL</p> <ul style="list-style-type: none"> * Motor Type: Brushless, Outrunner * Weight: 84g (2.95 oz) * Power: 300 Watts * RPM/Volt (KV): 1000 * Continuous Current: 20A * Burst Current: 35A * Recommended Use: 20-25oz Aircraft * Recommended Prop: 11x4.7 * RPM / V (Kv): 1032 * Idle Current: 1.0 Amps * Operating Current: 20-25 * Peak Amps 35 Amps for 15 sec * Resistance: 75 Mohms 	Nesail RC TOYS Hacker Motors
Props		6.95	4	27.8	<p>Dragonfly Innovations 10x4/5 Counter Rotating Pair</p> <p>Shaft Diameter: 3mm Pitch: 4.5 inches per revolution Material: 1 Piece Composite Note: \$6.95/set</p>	RC TOYS
ESC		13.81	4	55.24	<p>30 Brushless ESC Speed Controller - Volcano Series</p> <p>Model #: Volcano-30 (07E04) Cont. Current: 30A Burst Current (>10s): 40A BEC Mode: Linear BEC Output: 5V/2A Li-ion/Li-poly: 2-4 Ni-MH/Ni-Cd: 5-12 Programmable: Yes Weight: 25g Size: 34x24x11mm</p>	HobbyPartz
Gyros		59.95	1	59.95	<p>6 Degrees of Freedom Gyroscope</p> <ul style="list-style-type: none"> * 2.7-3.6VDC power supply * Low power consumption * Pitch, yaw, and roll gyro outputs <ul style="list-style-type: none"> o 1x and 4x amplified (0.83 and 3.33 mV"/s sensitivity, respectively) o $\pm 300^\circ$/s range * x-, y-, and z-axis accelerometer outputs <ul style="list-style-type: none"> o 300mV/g sensitivity o $\pm 3g$ range * All necessary filtering components * Access to gyro's self-test, power-down, and high-pass filter reset pins 	SparkFun
Battery		70	2	140	<p>Turnigy NanoTech Li-Po 4 Cell Battery</p> <p>Capacity: 5000mAh Voltage: 4S1P / 4 Cell / 14.8V Discharge: 45C Constant / 90C Burst Weight: 585g (including wire, plug & case) Dimensions: 166x50x37mm Balance Plug: JST-XH Discharge Plug: 4mm bullet-connector</p>	HobbyKing
Charger		16.99	1	16.99	<p>HobbyKing 50Watt 5A X-Charger/Balancer</p> <p>Microprocessor controlled, Delta-peak sensitivity (NiMH/NiCd), Individual cell balancing, Li-ion, LiPo and LiFe capable, Ni-Cd and NiMH capable, Store function, allows safe storage current, Fast charge Function, Data store/load</p> <p>Operating voltage range: 10.0~18.0Volt Circuit power: max.50W for charging, max.5W for discharging Charge current range: 0.1~5.0A Discharge current range: 0.1~1.0A Current drain for balancing Li-po: 300mAh/cell NiCd/ NiMH battery cell count: 1~15cells Lithium battery cell count: 1~6Series Pb battery voltage: 2 to 20V Dimension: 135x100x40mm</p>	HobbyKing
Carbon Fiber Beams		35.5	2	71	<p>DragonPlate Braided Carbon Fiber Tubing</p> <p>OD: 1/2" (0.53" +/- 0.015) ID: 0.4" (+/-0.010) Weight: 0.05lbs/ft Tensile Strength: 640ksi Modulus of Elasticity: 34Msi Epoxy resin accounts for approx 50% of composition</p>	Dragon Plate

Total: 590.94