

Parts List CL-415 [2018-04-20]

	Description	Material	Width x Length x Thickness Grain /// Length	Amount	Allocation	
0	Nose shape	Balsa	140x92x3	1	1	[No 1 = Balsa, 1000x500x3]
1	Fuselage cross section	Balsa	70x87x3	1	2	[No 2 = Balsa, 1000x100x3]
2	Fuselage cross section	Balsa	100x117x3	1	2	
3	Fuselage cross section	Balsa	118x134x3	1	1	
4	Fuselage cross section	Balsa	131x103x3	1	1	
5	Fuselage cross section	Plywood	159x143x3	1	23	[No 23 = Plywood, 1000x500x3]
6	Fuselage cross section	Plywood	214x177x3	1	23	
7	Fuselage cross section, top, before wing	Balsa	29x177x3	3	2	
8	Fuselage cross section, bottom, before wing	Balsa	65x177x3	3	1	
9	Fuselage cross section	Plywood	227x177x3	1	23	
10	Fuselage cross section	Plywood	210x177x3	1	23	
11	Fuselage cross section	Plywood	209x177x3	1	23	
12	Fuselage cross section	Plywood	192x164x3	1	23	
13	Fuselage cross section, bottom, after wing	Balsa	35x144x3	1	2	
14	Fuselage cross section, bottom, after wing	Balsa	32x123x3	1	2	
15	Fuselage cross section, bottom, after wing	Balsa	27x100x3	1	2	
16	Fuselage cross section, bottom, after wing	Balsa	24x79x3	1	2	
17	Fuselage cross section, bottom, after wing	Balsa	19x57x3	1	2	
18	Fuselage cross section, bottom, after wing	Balsa	16x35x3	1	2	
19	Fuselage cross section, top, after wing	Balsa	22x122x3	1	2	
20	Fuselage cross section, top, after wing	Balsa	19x100x3	1	2	
21	Middle of bottom, step	Plywood	234x49x3	1	23	
22	Cabin bottom	Plywood	128x177x3	1	23	
23	Nose wheel box top	Plywood	90x152x5	1	24	
24	Nose wheel box sides	Balsa	49x146x3	2	2	
25	Landing gear reinforcement top	Plywood	253x48x1.5	2	25	
26	Landing gear box back	Balsa	54x156x3	2	3	[No 3 = Balsa, 1000x100x3]
27	Landing gear reinforcement top	Balsa	40x375x6	2	4	[No 4 = Balsa, 1000x100x6]
28	Landing gear reinforcement bottom	Plywood	253x46x1.5	2	25	
29	Landing gear reinforcement top	Plywood	197x25x1.5	2	25	
30	Landing gear box bottom	Plywood	125x25x3	2	23	Type of wood is unspecified, but since this is a small piece, and part of the landing gear construction, plywood was chosen.
31	Wing mount back	Balsa	27x136x3	1	2	
32	Wing mount back	Plywood	137x48x5	1	24	
33	Internal elevator lever	Plywood	204x25x3	1	0	[No 0 = Not used]
34	Elevator lever mount	Plywood	102x15x3	2	0	
35	Landing gear reinforcement top	Plywood	60x17x5	2	24	Type of wood is unspecified, but since this is a small piece, and part of the landing gear construction, plywood was chosen.
36a	Rudder mount front	Plywood	66x240x1.5	1	25	
36b	Rudder mount front	Balsa	66x240x1.5	1	5	[No 5 = Balsa, 1000x100x1.5]
37a	Rudder mount back	Plywood	41x237x1.5	1	25	
37b	Rudder mount back	Balsa	41x237x1.5	1	5	
38	Landing gear reinforcement bottom	Plywood	198x32x1.5	2	25	
39	Battery bay sides	Plywood	168x56x3	4	0	
40	Battery bay water bottom	Plywood	56x31x3	2	0	
	Covering of the fuselage, sides	Balsa	1000x250x1.5	2	26-27	
	Covering of the fuselage, top and bottom	Balsa	1000x100x1.5	4	28-31	
	Fuselage spars front top	Balsa	1000x4x4	1	58	
	Fuselage spars front sides	Balsa	1000x5x3	2	59, 60	
	Fuselage spars front bottom side	Balsa	1000x10x3	1	61	
	Fuselage spars front bottom	Balsa	1000x4x4	2	62, 63	
	Fuselage spars sides	Balsa	1000x10x5	1	64	
	Fuselage spars sides	Pine	1000x5x5	2	78, 79	
	Fuselage spars bottom	Balsa	1000x4x4	2	65, 66	
	Fuselage spar bottom	Balsa	1000x10x5	1	67	
	Fuselage spar top	Balsa	1000x5x5	2	68, 69	
	Fuselage spar top	Balsa	1000x10x6	1	70	
	Fuselage spar top	Balsa	1000x4x4	2	71, 72	
	Fuselage spar top	Pine	1000x5x5	2	80, 81	
	Fuselage spar sides	Balsa	1000x10x5	2	73, 74	
	Fuselage spar bottom	Balsa	1000x8x5	2	75, 76	
	Fuselage spar bottom	Balsa	1000x10x3	1	77	
P1(e)	Nacelle cross section (electric)	Balsa	66x102x5	2	6	[No 6 = Balsa, 1000x100x5]
P2	Nacelle cross section	Plywood	51x66x3	2	23	
P3	Nacelle cross section	Plywood	46x66x3	2	23	
P4	Nacelle cross section	Plywood	34x66x3	2	23	
P5	Nacelle claw nut mounting	Plywood	30x66x5	2	23	
P6	Nacelle cross section	Balsa	54x66x3	2	3	

	Description	Material	Width x Length x Thickness Grain /// Length	Amount	Allocation	
P7	Nacelle wing cover motor exit	Balsa	66x100x3	2	3	
P8a	Nacelle side internal	Plywood	60x251x1.5	4	0	Will be implemented as extensions of A2 (Nacelle is permanently fixed to wing)
P8b	Nacelle side external	Balsa	65x253x1.5	4	0	Will be implemented as extensions of A2 (Nacelle is permanently fixed to wing)
P9	Nacelle front mounting	Plywood	69x41x3	2	0	Nacelle is permanently fixed to wing
P10	Motor mount (partly)	Balsa	60x99x10	2	ad hoc	5mm would seem thick enough if not load bearing with the chosen e-motors
P11	Motor mount (partly)	Plywood	49x49x5	2	ad hoc	Round, may not be necessary, if not load bearing with chosen e-motors
	Nacelle covering	Balsa	370x100x1.5	2	11	[No 11 = 1000x100x1.5]
	Tube	Paper	length = 45, diameter = 40	2	ad hoc	45mm long, diameter 40mm
	Nacelle front part	Balsa	70x75x10	4	ad hoc	5mm would seem thick enough, if not load bearing with the chosen e-motors
Elevator	1x 1000x100x5	Balsa	100x1000x5	1	32	Rough estimate
	3x 1000x10x5	Balsa	10x1000x5	3	33-35	Rough estimate
	2x 1000x5x5	Balsa	5x1000x5	2	36-37	Rough estimate
	2x 1000x5x5	Pine	5x1000x5	2	38-39	Rough estimate
Wing						
A1	Rib	Balsa	43x247x2	14	7, 8	[No 7 = 8 = Balsa, 1000x100x2]
A2	Ribs under the Nacelle	Balsa	43x247x3	4	ad hoc	Integrates with P8a & P8b -> 1.5mm balsa, 1.5mm plywood
A3	Ribs with aerleon	Balsa	43x247x2	10	8, 9	[No 9 = Balsa, 1000x100x2]
A4	End-rib	Balsa	43x247x3	2	3	
A5	End-rib	Balsa	47x265x3	2	10	[No 10 = Balsa, 1000x100x3]
A6	Winglet	Balsa	265x110x3	2	1	
A7	Nacelle pin hole mount	Plywood	69x18x5	2	0	Nacelle is permanently fixed to wing
A8	Nacelle pin hole mount	Plywood	65x16x2	2	0	Nacelle is permanently fixed to wing
A9	Profile filler front	Balsa	30x41x34	2	ad hoc	Purpose unclear: Possibly for mounting screws?
A10	Wing joiner left/right	Plywood	180x16x2	1	ad hoc	May be unnecessary, depends on wing mount?
A11	Profile filler back	Balsa	68x25x10	4	ad hoc	Purpose unclear: Possibly mounting related
	Wing covering	Balsa	500x1000x1.5	2	12, 13	Top and bottom, central part between nacelles [No 12 = 13 = 1000x300x1.5]
	Wing covering	Balsa	100x1000x1.5	8	14-22	Rough estimate [No 14..22 = 1000x100x1.5]
	Main spar top & bottom	Pine	13x1000x4	4	40-43	
	Main spar top and bottom joiner	Balsa	78x42x1.5	24	44	Of which 2 are divided in half. [No 44 = Balsa 1000x100x1.5]
	Hind spar top	Balsa	10x1000x5	2	45-46	
	Hind spar bottom	Balsa	15x1000x5	2	47-48	
	Flaps top spar	Balsa	5x1000x5	2	49-50	
	Flaps bottom spar	Balsa	20x1000x5	2	51-52	
	Aerleon front spar	Balsa	28x500x5	2	53	[No 53 = Balsa 1000x100x5]
	Wing opposite aerleon	Balsa	27x500x5	2	53	
	Wing leading edge	Balsa	16x1000x5	2	54-55	
	Wing cover/leading edge joiner	Balsa	16x1000x3	2	56-57	
	Ballonet	Balsa	220x120x5	2	1 or extra	Increase to 6mm thick or add a balsa plank of 5mm needs to be bought

Parts Ordered [2018-04-20]

Position	Description	Amount	Balsabar		Balsabaum	
1	Balsa 1000x500x3	1	€9,70	€9,70	€5,80	€5,80
12, 13	Balsa 1000x300x1.5	2	€7,84	€15,68	€4,50	€9,00
26, 27	Balsa 1000x250x1.5	2	€3,30	€6,60	€4,50	€9,00
4	Balsa 1000x100x6	1	€1,73	€1,73	€1,62	€1,62
6, 32, 53	Balsa 1000x100x5	3	€1,50	€4,50	€1,45	€4,35
2, 3, 10	Balsa 1000x100x3	3	€1,19	€3,57	€1,15	€3,45
7, 8, 9	Balsa 1000x100x2	3	€1,07	€3,21	€0,96	€2,88
5, 14-22, 28-31, 44	Balsa 1000x100x1.5	15	€0,95	€14,25	€0,91	€13,65
51, 52	Balsa 1000x20x5	2	€0,98	€1,96	€0,40	€0,80
54, 55	Balsa 1000x16x5	2	€0,98	€1,96	€0,40	€0,80
56, 57	Balsa 1000x16x3	2	€0,74	€1,48	€0,40	€0,80
47, 48	Balsa 1000x15x5	2	€0,75	€1,50	€0,40	€0,80
70	Balsa 1000x10x6	1		0		0
33-35, 45-46, 64, 67, 73, 74	Balsa 1000x10x5	8	€0,57	€4,56	€0,38	€3,04
61, 77	Balsa 1000x10x3	2		0		0
75, 76	Balsa 1000x8x5	2		0		0
36-37, 49-50, 68, 69	Balsa 1000x5x5	6	€0,38	€2,28	€0,35	€2,10
59, 60	Balsa 1000x5x3	2		0		0
58, 62, 63, 65, 66, 71, 72	Balsa 1000x4x4	7		0		0
23	Plywood (Birch) 1000x500x3	1	€21,11	€21,11	€10,00	€10,00
24	Plywood (Birch) 500x250x5	1	€3,52	€3,52	€3,60	€3,60
25	Plywood (Birch) 500x250x1.5	1	€3,32	€3,32	€3,00	€3,00
38-39, 78, 79, 80, 81	Pine (Kiefer) 1000x5x5	6	€0,51	€3,06	€0,44	€2,64
40-43	Pine (Kiefer) 1000x13x4	4	€0,76	€3,04	€0,48	€1,92
				0		0
				0		0
				0		0
				0		0
				0		0
				107,03		79,25

Table 1