Tool info

Serial API:	1:1.0
Board:	Custom STM32F401RE thrustBoard v2
Firmware:	thrust++ : ChibiOS RT 7.1.0 : HAL 8.1.0
Commit:	[0ea573c] : Sep 15 2022 - 20:11:16

Measurement info

Motor:	RaceStar BR2507S
KV:	1800
Magnet poles:	14
Propeler:	no propeller
Blade count:	0
Note:	Battery 4S 2250mAh

Measurement Results 1:

Output [%]	Thrust [G]		Torque [G cm]		RPM [1/min]		Voltage [V]		Current [A]		Pin [W]	ThrustEff [G/W]
	mean	std dev	mean	std dev	mean	std dev	mean	std dev	mean	std dev		
20	4.86	1.816	-3.69	0.646	13741	150.7	15.520	0.0047	0.492	0.0297	7.632	0.637
30	6.25	1.792	-0.53	0.415	17980	56.6	15.510	0.0047	0.753	0.0288	11.682	0.535
40	5.03	1.791	1.03	0.381	20529	68.4	15.500	0.0046	0.903	0.0392	13.997	0.359
50	5.20	1.793	1.99	0.364	22303	50.9	15.492	0.0041	0.974	0.0521	15.083	0.345
60	4.33	1.794	3.47	0.358	23471	50.3	15.485	0.0046	1.069	0.0299	16.555	0.262
70	3.56	1.795	4.36	0.358	24369	63.8	15.478	0.0045	1.134	0.0415	17.555	0.203
80	7.22	1.790	5.78	0.357	25094	82.6	15.471	0.0046	1.217	0.0374	18.835	0.383
90	5.59	1.792	5.72	0.362	25701	60.1	15.465	0.0046	1.245	0.0298	19.255	0.290
100	4.46	1.850	6.81	0.361	27496	69.8	15.458	0.0046	1.308	0.0608	20.222	0.220

Measurement Results 2:

Output [%]	Thrust [G]		Torque [G cm]		RPM [1/min]		Voltage [V]		Current [A]		Pin [W]	ThrustEff [G/W]
	mean	std dev	mean	std dev	mean	std dev	mean	std dev	mean	std dev		
20	1.82	3.031	-5.06	1.609	13573	155.8	15.496	0.0054	0.478	0.0349	7.405	0.246
30	3.43	3.002	-1.90	1.558	17728	52.6	15.487	0.0059	0.755	0.0293	11.688	0.293
40	2.03	3.001	-0.37	1.549	20366	48.6	15.475	0.0042	0.934	0.0298	14.458	0.140
50	2.91	3.003	0.93	1.544	22092	53.6	15.467	0.0057	1.043	0.0505	16.124	0.181
60	2.03	3.000	2.14	1.540	23317	56.1	15.463	0.0045	1.113	0.0300	17.213	0.118
70	1.55	3.000	3.56	1.544	24266	48.2	15.454	0.0035	1.156	0.0298	17.862	0.087
80	5.23	3.015	4.71	1.540	25039	52.5	15.445	0.0042	1.213	0.0399	18.729	0.279
90	4.07	3.002	4.51	1.542	25693	66.4	15.439	0.0044	1.235	0.0379	19.071	0.213
100	1.54	3.008	6.08	1.543	27459	87.1	15.433	0.0061	1.284	0.0567	19.822	0.078

Plots for Measurement Results: