2019 Bronze Propeller Competition – Venom LiPo 1500 mAh 4S 90C
December 19, 2018

This document outlines the results of performance tests on a representative battery pack for the 2019 Bronze Propeller Competition. The data was obtained using a computer-controlled battery analyzer operating at room temperature. The battery was properly cycled and charged prior to all testing. All discharge rates were tested a minimum of two times to ensure repeatability (for clarity only one plot for each is shown).

Battery Pack Information:
- Venom LiPo 1500 mAh 4S 90C
- Pack composition: 4 cells wired in Series
- Nominal Voltage: 14.8V
- Listed Capacity: 1500 mAh
- Size & Weight: 1.5” x 3.0” x 1.35”, 6.43 oz

Test Data:
- 3 discharge currents were tested: 15, 30, and 45 Amps.
- The plots display measure pack voltage (Volts) vs. capacity (Ah)
- Cutoff Voltage: 12V

Notes & Warnings!
- Temperature impacts battery performance (high ambient temperatures and/or poorly ventilated installations can notably diminish battery performance – consider this aspect during design)
A specific competition Electronic Speed Controller (ESC) may be required to protect batteries and to simplify purchasing (watch web page for additional information)

References:
If you are interested in learning more about batteries the following websites have great information and references:

http://batteryuniversity.com/learn/article/lithium_based_batteries

http://www.buchmann.ca/buchmann/