ASX ANNOUNCEMENT

FOR IMMEDIATE RELEASE TO THE MARKET

Li-S Energy Limited – ASX Code: LIS

Monday 11 November 2024

Successful UAV flights using Li-S Energy lithium sulfur battery pack

Li-S Energy (ASX:LIS) is pleased to announce that it has successfully completed its first uncrewed aerial vehicle (UAV) test flights, powered by a twelve cell lithium sulfur battery pack.

A video of the flights can be seen here: https://lis.plus/UAVFlight1

Li-S Energy is focused on the key target markets of drones, eAviation, security and defence, where reduced cell weight, extended range and longer flight times are highly valued.

The purpose of these flight tests was to deliver a clear demonstration that the Company's Li-S cells can be configured into a battery pack, integrated into a fixed wing UAV, and successfully flown in a typical flight profile that includes take-off, ascent, level flight, aerial manoeuvres and safe landing.

The Li-S Energy team built the 6S2P battery pack using twelve 10Ah Li-S cells manufactured on the Phase 3 production line, with a nominal pack voltage of 11.4V, a capacity of 20Ah, and a weight of 550 grams at a pack level.

The pack was then integrated into the airframe of a 2.4 metre wingspan, fixed wing, single motor uncrewed aircraft, and successful ground tests were completed.

Test flights were carried out using both catapult launch and hand launch methods, with each flight completed successfully.

While the flights were not an endurance test, the total flight time was 30 minutes, completed with a single battery pack with no intermediate recharge. The battery pack was only partially discharged at the end of the tests. Importantly, on return to the LIS facility, the battery pack recharged successfully.

Li-S Energy Limited
ABN 12 634 839 857

Level 13, 120 Edward Street
Brisbane Qld 4000 Australia
GPO Box 754
Brisbane Qld 4001 Australia

p +61 7 3054 4555
e info@lis.energy
w lis.energy

Dr Lee Finniear, CEO commented:

"*Last month, we announced that we had achieved cell energy density of more than 450Wh/kg on our new lithium sulfur cells. This month we are demonstrating our cells in a full battery pack, successfully powering an uncrewed aircraft in flight profiles typically required by our target markets.*

This is an outstanding achievement by the entire Li-S Energy team. It accelerates us toward the integrated battery pack needed for our "dawn-'til-dusk" drone program, and clearly demonstrates to our target markets that Li-S Energy is a credible power delivery solution for drone, eAviation, and security applications."

Uncrewed aircraft powered by an Li-S Energy lithium sulfur battery pack flies high over farmland in Southern Victoria during flight testing

Dr Steve Rowlands, CTO commented:

"*I was very pleased with the results of this first demonstration of our GEN3 cells at a pack level.*

"The cell parameters from our production line are very consistent which, when combined with our semi-solid-state chemistry, means that balancing the cells in the pack has been far less complex than with traditional lithium sulfur chemistries.

Whilst we are still engaged in production development and expect to continue to improve our cell performance over time, this is a milestone achievement to show how our technology can be integrated successfully into a UAV."

Li-S Energy battery pack being installed into the airframe before flight testing

The Company expects to continue to use the current UAV platform as a performance test bed to test pack level performance in practical scenarios, including flight duration testing which will feed into the "dawn-'til-dusk" drone development and into other partner programs.

For further information contact:

Dr. Lee Finniear
Chief Executive Officer
Li-S Energy Limited
+ 61 (0)7 3054 455

Ben Henri
Executive Director
MC Partners
+61 (0)473 246 040