

**UAV Flight Time Increased By 80% Using New High Energy Battery System**



QinetiQ has carried out an autonomous demonstration flight of a UAV using SION Power's new high energy, rechargeable lithium sulfur battery. Previous flights with lithium polymer cells only enabled flight times of 1 hour and 10 minutes. The lightweight, high energy lithium sulfur battery packs from SION Power yielded a flight time of over 2 hours.

SION Power is the global leader in the development of the next generation of high energy rechargeable batteries based on the lithium sulfur technology. The base cells in the battery packs used in this flight had a specific energy of 350 Wh/Kg. This is 50% greater than the best available lithium ion batteries. The battery pack electronics and assembly were provided by Nexergy Inc, Columbus, OH.

Global defense and security company QinetiQ is at the forefront of UAV technology with their Zephyr High Altitude Long Endurance (HALE) UAV. Designed to fly at altitudes exceeding 50,000 feet, these planes can perform a wide range of missions and functions for both military and civilian applications. SION's lithium sulfur battery packs are a critical part of the system design.

“It was very exciting to see SION's batteries in action,” said Mark Jost, Executive Vice President, Marketing for SION Power. “We are already looking forward to the next flight utilizing our lithium sulfur battery technology in conjunction with QinetiQ's HALE UAV technology. We are confident that SION's Li-S battery technology will achieve the 12+ hours of flight time required for the night time portion of the multi-day flights of these UAV systems.”

Paul Davey, Zephyr Business Development Director at QinetiQ, said “We were exceptionally pleased with the operation of our system during this flight. Our goal is to expand on what we learned on this flight to achieve a UAV flying autonomously for months at a time using SION's rechargeable batteries coupled with a solar array.”

**SION Power Corporation**, an innovative battery company headquartered in Tucson, Arizona, is creating a new class of electrochemical energy storage products based on proprietary lithium sulfur (Li-S) rechargeable battery chemistry. SION Power holds 66 patents related to this new battery. The Company has 50 employees, including 11 Ph.D's., and is dedicated to true "Next Generation" battery technology. For additional information, please contact Mark Jost at (520) - 799 - 7643 or via email at [mark.jost@sionpower.com](mailto:mark.jost@sionpower.com). Please visit SION's website at [www.sionpower.com](http://www.sionpower.com)

### **QinetiQ plc**

QinetiQ (pronounced ki net ik as in 'kinetic energy') is a leading international defence and security technology company that was formed in July 2001 from the UK Government's Defence Evaluation & Research Agency (DERA). QinetiQ has over 11,400 employees, who deliver technology-based services and exploit QinetiQ's strengths in technology research by selling systems solutions, products, managed services and licences to government and commercial customers in a spectrum of defence, security and other commercial markets, and by creating technology based ventures. For further information,

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