Successful Deep Cold Vehicle Starter Battery Customer Test

Photo credit: Cold Regions Research and Engineering Laboratory.

STATE COLLEGE, PA, UNITED STATES, March 17, 2025 /EINPresswire.com/ -- FastLion Energy Inc. (FLE) announces successful testing of a starter battery in a cold-weather tactical vehicle. This battery utilized FLE's 30x™ technology to restore high power on-demand from extremely cold conditions. This demonstration marks success under the "RRALiE" project, performed in collaboration with The MITRE Corporation, the U.S. Army Engineer Research and Development Center's Cold Regions Research and Engineering Laboratory (CRREL) and North American Aerospace Defense Command (NORAD) and U.S. Northern Command (USNORTHCOM). This project was funded by the U.S. Department of Defense Operational Energy Capability Improvement Fund (OECIF).

OECIF representatives, Army researchers, warfighters, and industry members were present for the demonstration. A prototype starter battery built by FLE was first frozen to deep cold Arctic conditions. Installation in a tactical vehicle confirmed that the battery was incapable of starting the engine in this environment. Subsequent activation of the battery via the 30x™ system restored starting power quickly, permitting rapid engine start.

According to CRREL Research Chemist, Timothy Cooke, "The prototype 6T that FLE delivered for initial evaluation has so far met or exceeded our expectations. It has demonstrated successful heat-up from extreme cold temperatures, allowing it to start our tactical vehicle without issue"

Individuals observing the demo commented that they appreciated that the new system was "much lighter" and that it worked in "freezing temperatures," overcoming a combination of historical issues for both lithium-ion batteries and lead-acid starter batteries in cold environments.

Remarkably for lithium-ion batteries, success was achieved with lithium-iron phosphate (LFP), a chemistry which performs particularly poorly in the cold for high power and fast charging. This further confirms that 30x™ permits safer, cheaper chemistries like LFP to be used reliably in cold-weather environments.

FLE is now delivering additional batteries to the Army and developing versions for the large commercial starter battery market.

Disclaimer: This material is based upon work supported by the Engineering Research and Development Center (ERDC) – Cold Regions Research and Engineering Laboratory (CRREL) under Contract No. W913E524C0001. Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of ERDC-CRREL or NORAD and USNORTHCOM. The Department of Defense (DoD) [nor respective Military Services or any other DoD Component] does not approve, endorse, or authorize this company, its products, or its services.

Distribution Statement A: Approved for Unlimited Release

Eric Rountree
FastLion Energy Inc.
email us here
