15 October 2024

From: Thomas E. Adams, Ph.D., Scientist
Expeditionary Power and Energy Branch, JXMR
Naval Surface Warfare Center Crane Division (NSWC Crane)

Subj: Letter of Support for an Innovative and Revolutionary Approach to Manufacturing Lithium-ion Solid-State Batteries in the US

Dear Marc Jaker, CTO, JakerTech

I am writing to support the development of a compelling technique that will revolutionize the manufacturing of US-based batteries. The injection molding approach will simplify the need for complex equipment and processes to quickly produce battery cells that are uniform and of high quality. The solid-state battery cells produced will increase battery pack energy and power densities while mitigating catastrophic failure resulting in thermal runaway. The Department of Defense (DOD) and Department of Navy (DON) have identified Power and Energy as a major thrust area in advancing national security and maintaining strategic dominance. The proposed project addresses National Defense Strategic (NDS) objectives in Forward Force Maneuver and Posture Resilience and Resilient and Agile Logistics, and Department of Defense (DoD) Energy Strategic Plan Operational Energy gaps in several technology needs: Standardized Battlefield Power, Hybridized Tactical Microgrids for Expeditionary Forces, Energy-Efficient Modifications and Interoperability, Platform Electrification, and Intelligent Power Awareness.

In my capacity as a scientist in the Power and Energy Division at Naval Surface Warfare Center Crane Division (NSWC Crane), our objectives are to verify and validate emerging and existing technologies to ensure the high-energy battery systems are reliable, robust, and most importantly, safe. NSWC Crane provides test and evaluation (T&E) services to support the Navy Lithium Battery Safety Program (S9310-AQ-SAF-010) and development of High-Energy Storage Systems (SG270-BV-SAF-010). NSWC Crane's Power and Energy Division is a Center of Excellence in the Navy that is highly regarded and trusted across DOD and government agencies.

I encourage investment into this innovative Li-ion solid-state manufacturing technology and if this proposal is selected for funding, it is our intent to collaborate and/or commit resources as detailed in the Project Description or the Facilities, Equipment or Other Resources section of the proposed effort. We look forward to the potential advantages this technology could provide to the Navy and DOD. Please feel free to contact me for clarification or additional information.

Respectfully,

Thomas E. Adams, Ph.D.
Scientist, Alternative Energy and Power