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## Batteries supplied to US based Martac

- Batteries supplied to iM3NY offtake customer Maritime Tactical Systems ["Martac"] using BMLMP cathode technology
- Martac is a leader in unmanned water and surface vessels for the US government and private and public enterprises
- NY Battery Plant funding update
- Discussions with strategic investors continue to advance

Magnis Energy Technologies Limited ["Magnis" or the "Company"] is pleased to announce that its technology partner Charge CCCV ["C4V"], of which Magnis has a 10% ownership, has supplied batteries to Martac using its proprietary BMLMP cathode technology for its unmanned water and surface vessels.

### Supply of Batteries to Martac

The C4V batteries that have been delivered to Martac are lithium-ion batteries with the BMLMP cathode composition. Each battery is 20KW in size and these will be used in commercial marine vessels for demonstration and testing purposes. The aim under the extreme condition testing program would be to make the BMLMP batteries compatible in many applications. The high power and energy density batteries do not have the ingredient of cobalt and focus on the use of higher voltage composite materials in combination with a higher energy anode, along with unique 3D electrode designs that reduce costs and have the benefit of relying on a less volatile supply chain of composition materials.

The C4V Generation 1 battery cells were built in prismatic form factor with the BMLMP cathode and delivered to Martac as fully built battery packs for drop in replacement. The prismatic cells built are of the exact size that iM3NY are aiming to commercially produce from the New York Battery Plant. Magnis has a 47% ownership via its direct and indirect shareholding in the iM3NY company and NY battery plant project. Martac have already signed a commercial in confidence agreement with C4V and iM3NY on cost and supply terms of batteries to be used in maritime boats. It is anticipated Martac would

need several hundred MWh of batteries over the next five years to satisfy the demand levels they currently have for their vessels.

### New York battery plant funding

The signed term sheet announced on 18 March 2019 has progressed to loan documents being received in late April as mentioned in the Company Quarterly Activities Report released on 30 April 2019. Following a review of the documents from legal teams representing iM3NY, some changes have been requested with new amended documents yet to be received.

Discussions with other financial organisations continue to progress on the funding for NY. Options include full debt, full equity and a mixture of debt and equity. The groups involved include private equity, family offices, large banks and government bodies.

The production of lithium-ion cells from NY is the main priority of the iM3NY consortium and its members.

### Strategic Investors

In recent months discussions have progressed with potential strategic investors who are looking at investing into Magnis. The groups are significant companies in industries with belief that future disruption is coming with the adoption of lithium-ion batteries. More information will follow with disclosure once agreements have been reached.

Magnis Managing Director, **Marc Vogts commented:** "During my current travels attending battery conferences in North America it is apparent that our supply chain is generating great interest especially with the current trade wars, our projects are receiving great interest overseas."

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Please find the C4V Press Release Below



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## **C4V Batteries Delivered to MARTAC for Commercial Demonstration**

- **Lithium Ion batteries with BMLMP cathode has been delivered to Maritime Tactical Systems ('MARTAC')**
- **Each battery is 20KW power rating and is to be used in commercial Unmanned Surface Vehicles (USVs) for demonstration and testing purposes**
- **Extreme condition test program would further prove C4V's battery compatibility in diverse applications.**



**MANTAS T12 heading out on an Intelligence, Surveillance, and Reconnaissance (ISR) mission**



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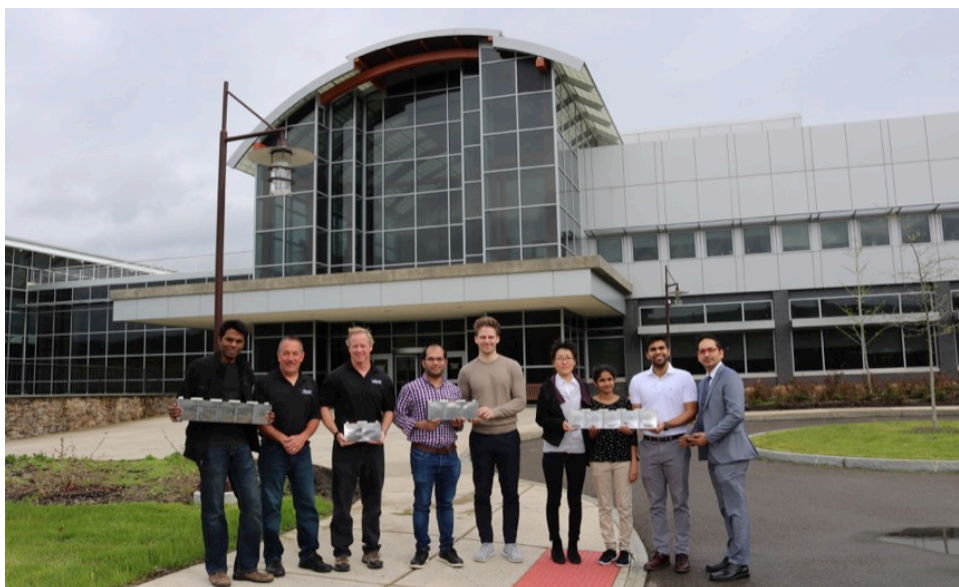
Binghamton, NY, May 13, 2019– Charge CCCV (C4V), today, delivered batteries to Maritime Tactical Systems, Inc., of Florida for use in extreme environment mission-critical maritime applications.

C4V and MARTAC collaborated for the last 15 months to fully demonstrate the efficacy of C4V's major advancement in high-performance battery cells. MARTAC conducted critical test protocols to qualify C4V cells designed for harsh environment and extreme load applications. Upon successful completion in 2018, C4V was given the opportunity to supply batteries to be integrated into MARTAC's fully autonomous high-end maritime vessels.

C4V's cells were built in prismatic form factor with its patented BM-LMP Cathode formulation and were delivered to MARTAC as fully-functioning battery packs configured for drop-in replacement. For ease of transition into full-scale commercial production, these prismatic cells built were of the exact same size that iM3 New York will produce in Endicott, New York Giga Factory.

C4V works closely with end users to qualify technology and products that provide customers with a high level of confidence so that commercial supply agreements can be smoothly and effectively crafted.

MARTAC has entered into a commercial supply agreement with iM3 which clearly defines the cost and supply terms of batteries to be used in their maritime boats. MARTAC's demand for batteries is planned to be several hundred MWh over the next 5 years.



**MARTAC and C4V team showcasing BMLMP based batteries supplied to MARTAC for commercial demonstration of Autonomous Unmanned Surface Vehicles (USVs).**



*MARTAC CEO, Bruce Hanson said, "The objective is to deliver reliable and innovative unmanned products and systems to our military, security, commercial, scientific markets and customers. We develop these systems to provide solutions focused on solving real-world problems in challenging environments where manned or other unmanned systems have limited operational capability. These extreme weather challenges require robust propulsion systems and batteries. We are very glad that one such technology exists with C4V batteries. Our early tests in 2018 provided very positive performance results and now we are moving forward with commercial scale demonstration and test programs.*

*C4V President, Dr Shailesh Upreti said, "We are very excited about the development made by taking our technology from lab to system level validation with commercial designs. C4V has taken a commercial approach to develop material and design for products including its BMLMP Chemistry. By successfully delivering batteries to MARTAC we have demonstrated the drop-in nature of our technology that facilitates uninterrupted adoption on existing manufacturing plants. For every single component used in these batteries we received supply from well-established supply chain partners. While the battery industry can typically take several years and sometimes up to a decade to bring new technologies on-stream and to market, C4V has minimized this costly time gap by de-risking various hurdles both upstream as well as downstream".*



**Battery pack designed for MARTAC by C4V team for Autonomous vehicle applications.**

**About C4V:** C4V™ is an intellectual property company based in Binghamton, New York with expertise and patented discoveries in Lithium-Ion battery composition and manufacture. C4V leverages its expertise in materials science, electrode design, process development and deep roots into the supply chain to create next-generation energy storage solutions that can be seamlessly integrated into current cell manufacturing infrastructures. C4V is currently involved in multiple GWh projects as a technology partner and aims to bring its products on line in high volume (GWh) quantities in 2020.

**About MARTAC:** MARTAC is an innovative provider of the MANTAS line of Unmanned Surface Vehicles (USV) for military, security, commercial and scientific missions and markets. MANTAS integrate with a wide array of sensors and communication technologies. They operate in diverse maritime environments where other manned and unmanned systems can not. MANTAS is scalable in sizes from 6 to 50 feet. MARTAC's team possesses thousands of hours of Unmanned Vehicle experience. It has been proven in many military missions and commercial markets and its MANTAS has received glowing reviews and orders from commercial and military customers. MARTAC is headquartered in Melbourne, FL with Satellite offices in Binghamton, NY, San Diego, CA and Apex, NC.

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