Media Contact:
Ian Kitajima
ian.kitajima@pichtr.org

PICHTR Awarded Second Year of J-StarX Dual Use Program

Connecting leading Japanese dual-use technology companies with government opportunities in the United States.

Honolulu, HI – December 11, 2024 – The Pacific International Center for High Technology Research (PICHTR) is pleased to announce that it has been awarded a second year for the J-StarX Dual-Use Technology Accelerator Program. This innovative program, funded by the Ministry of Economy, Trade and Industry (METI) of Japan, and supported by Japan External Trade Organization (JETRO) and Deloitte Tohmatsu Financial Advisory LLC (DTFA), connects leading Japanese dual-use technology companies with government opportunities in the United States.

The program's first year was the first of its kind, with a cohort of Japan's most innovative technology companies and entrepreneurs. These venture series A/B funded companies represent multiple industries with revenue-generating products and services. The program gave them fundamental working knowledge of the US dual-use sector and facilitated connections with US government and private sector customers and stakeholders.

The J-StarX program aligns with PICHTR's mission to facilitate technology collaborations between the US-Japan to solve the Asia Pacific region's toughest challenges. PICHTR's expertise lies in the following:

- Facilitating collaborations to implementation.
- Dual-use technology scouting and due diligence
- Facilitating and administering US government contracts.
- Helping entrepreneurs secure funding, developing technologies, and bring them to market.
- Providing training and consulting.
- Facilitating valuable networking opportunities with government, business, academic, and non-profit leaders.

The second year of the J-StarX program will build upon the successes of the first year, providing even more opportunities for Japan's most innovative technology companies to expand their businesses into the US market. PICHTR is committed to fostering innovation and collaboration between Japan and the United States, and the J-StarX program is a key initiative in this effort.

Summary of J-StarX Cohort 2025

- **AirKamuy** is a Japanese defense technology startup focused on developing low-cost, biodegradable, and easily transportable cardboard UAVs. Aiming to address Japan's urgent need for defense UAVs due to labor shortages and militarization in neighboring countries, AirKamuy's UAVs are designed for swarm attacks, anti-air physical barriers, and anti-ship naval mines. Their unique approach, focusing on affordability and environmental consciousness, positions them strategically within the growing Japanese defense market, where large companies prioritize expensive contracts and startups primarily focus on civilian applications.

- **Diarkis** is a middleware for online multiplayer games, operating as a distributed and decentralized server-client system. Its key features are scalability and fault tolerance, achieved through a cluster of independent servers that can communicate and share data instantly. This eliminates single points of failure and allows for dynamic scaling in response to spikes in concurrent users. Diarkis also features distributed shared memory storage, enabling efficient matchmaking without reliance on databases. The company offers comprehensive

SDK support for various platforms and proposes use cases in areas like drone simulations and vehicle synchronization.

- **Elephantech** is revolutionizing the PCB manufacturing industry with its sustainable Pure Additive™ method, which eliminates the wasteful etching process common in traditional subtractive methods. By printing copper only where needed and then plating it, Elephantech significantly reduces water, copper, and energy consumption, resulting in a 75% lower carbon footprint. Their SustainaCircuits technology is already in mass production, with notable customers like EIZO Corp. and Fukuda Co., Ltd. Beyond PCBs, Elephantech is also expanding into non-PCB business areas by selling customized high-performance inkjet printing equipment and materials for display manufacturing and semiconductor back-end processes.

- **Innophys** is a Japanese company dedicated to improving independent living through the development and distribution of exoskeletons. Their primary focus is on addressing labor shortages and caregiving burdens caused by Japan's aging population and declining birth rate. Innophys offers two types of passive exoskeletons, supporting the waist and arms, which are designed to be user-friendly, lightweight, and affordable. These exoskeletons are used in various industries, including manufacturing, logistics, healthcare, agriculture, and defense. Notably, the Japanese Self-Defense Forces utilize Innophys exoskeletons, showcasing their suitability for demanding tasks and diverse environments.

- **LQUOM** is a company developing quantum repeaters, a crucial technology for establishing a secure and robust quantum internet. Recognizing the limitations of current encryption methods and the potential of quantum communication, LQUOM aims to provide solutions that surpass the vulnerabilities of RSA encryption and the distance constraints of existing quantum technologies. Their approach involves a two-pronged strategy: offering a two-photon source for generating entangled photon pairs and developing quantum repeaters for long-distance entanglement distribution. Leveraging their expertise in photon sources, frequency stabilization, and quantum memory, LQUOM is well-positioned to capitalize on the rapidly growing quantum communication market.

- **Letara** is a Japanese company specializing in hybrid rocket propulsion systems, offering cutting-edge technology for fast and safe space travel. With over 20 years of research and development, Letara has established a world-class track record, demonstrated through their CAMUI hybrid rocket series, which achieved significant milestones, including long-duration testing, multiple restarts, and throttle capability. Letara's hybrid rockets offer advantages such as lightweight design, minimized volume and mass, and patented cooling systems for extended firing durations. Their technology caters to both in-space and ground/air use cases, including satellite propulsion, orbital transfer vehicles, interceptors, hypersonics, and rapid drone deployment.

- **Solafune** is a company specializing in satellite data analysis, providing a platform for global innovations using a diverse range of satellite data sources covering land, air, and sea. Solafune has developed a unique crowdsourcing approach to algorithm development, leveraging online competitions to gather expertise from developers worldwide. By making datasets available online and offering prize money for excellent algorithms, they have amassed over 17,000 algorithms, enabling them to provide software solutions for various applications. Their business strategy focuses on expanding their domestic market, penetrating global markets, fostering technological innovation, and diversifying into new business areas related to environmental monitoring, disaster prediction, and agriculture.

- **xMap** is a company that uses generative AI for real estate analysis, aiming to expedite investment decisions by providing insights 100 times faster than traditional methods. Their platform allows users to draw polygons on a map and ask questions about the suitability of the area for various purposes, such as gas stations, hotels, or helicopter landings. xMap's technology leverages knowledge graphs, site tech, consulting, and LLMs to analyze and provide answers based on factors like traffic, demographics, income levels, and access to attractions. Their revenue model includes free and pro models, an API model for integration with real estate listings, and government contracts.

- **Ookuma Diamond Device** is a company specializing in the manufacturing of diamond semiconductor devices. Diamond offers major advantages over other materials, such as severe environmental durability, high frequency performance, and high-power efficiency, therefore highly anticipated as a next-generation semiconductor material. Ookuma Diamond Device commercializes such semiconductors, through a self-reliant supply chain of domestically sourced diamonds, giving them a unique competitive advantage.

About:
METI (Ministry of Economy, Trade and Industry of Japan) is a Japanese government ministry responsible for developing the country's economy and industry. METI is a key funder of the J-StarX program, demonstrating its commitment to supporting Japanese dual-use technology companies seeking to expand internationally.

Japan External Trade Organization (JETRO) is a government organization that works to promote mutual trade, foreign direct investment, and helping Japanese startups to maximize their global potential. JETRO operates the J-StarX program by collaborating with global accelerators such as PICHTR, to provide Japanese startups with mentoring and networks necessary for global expansion.

Deloitte, specifically Deloitte Tohmatsu Financial Advisory LLC (DTFA), is a business consulting firm that administers the J-StarX program on behalf of METI. DTFA provides operational support and expertise to PICHTR in managing the program and connecting Japanese companies with opportunities in the United States.

PICHTR is a 501(c)(3) non-profit organization established by the State of Hawaii Legislature in 1983. For over 41 years, PICHTR has been creating economic opportunities in Hawaii and across the Pacific, raising over $350 million to help Hawaii companies commercialize new technologies. For more information about the J-StarX Global Growth for Dual-Use Program, please contact Ian Kitajima at ian.kitajima@pichtr.org