HAWAII FISH COMPANY, INC.

Since 1978

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THE SENATE THE TWENTY-EIGHTH LEGISLATURE REGULAR SESSION OF 2016

COMMITTEE ON ECONOMIC DEVELOPMENMT, ENVIRONMENT, and TECHNOLOGY

Senator Wakai, Chair Senator Slom, Vice Chair

DATE: Wednesday, March 16, 2016 TIME: 1:20 P.M. PLACE: Conference Room 414 State Capitol 415 South Beretania Street



HB 2668 HD1 RELATING TO THE HIGH TECHNOLOGY CORPORATION. Appropriates funds to continue the Small Business Innovation Research Program within the High Technology Development Corporation.

Aloha Chair Wakai, Vice Chair Slom, and Committee Members:

Hawaii Fish Company Inc. (HFC) strongly supports HB 2668 HD1.

HFC has been awarded nine USDA/SBIR awards since 1993 comprised of five Phase I awards and four Phase II awards. These awards have totaled \$1.8 M in Federal research dollars for our family-owned North Shore fish farm, providing an approximate 20:1 return on our Hawaii SBIR Phase I matching grants. However, we have always had to borrow additional funds to complete these grants and to pursue subsequent Phase III commercialization because of the high costs associated with doing R&D and business in Hawaii, and due to the fact that most of our research supplies must be shipped in from the mainland.

In addition, Federal SBIR funds may not cover the purchase of essential research equipment necessary to successfully carry-out the R&D effort, do not cover the costs associated with the protection of intellectual property developed under the SBIR program, such as preparing nondisclosure agreements and obtaining critical patents; and cover only cover limited travel expenses, not the high trans-Pacific travel expenses necessary to meet with Federal program managers and R&D collaborators. HB 2668 HD1 will provide Phase II and III matching funds that will help companies like HFC to compete more effectively with our mainland counterparts for these increasingly scarce and competitive Federal SBIR Phase II research dollars and Phase III commercialization investments, and to more completely develop and protect our intellectual property. For our company, these efforts in turn contribute to providing rural employment, contributing to the economy of rural Hawaii, and improving Hawaii's food security and sustainability.

HFC strongly supports this important measure, which will help our company develop cuttingedge aquacultural and aquaponic technologies for increased local food production.

Mahalo for your support.

Ron and Estralita Weidenbach Hawaii Fish Company, Co-Owners



Statement of Duke Hartman Vice President, Business Development Makai Ocean Engineering, Inc.

before the

Senate Committee on Economic Development, Environment, and Technology Wednesday, March 16, 2016, 1:20 p.m. State Capitol, Conference Room 414

In consideration of

HB2668 HD1

RELATING TO THE HIGH TECHNOLOGY DEVELOPMENT CORPORATION.

Chair Wakai, Vice Chair Slom, and Members of the Committee on Economic Development, Environment, and Technology.

Makai Ocean Engineering, Inc. strongly supports HB2668 HD1 that appropriates funds to continue the Small Business Innovation Research (SBIR) Program within the High Technology Development Corporation (HTDC).

Makai Ocean Engineering, Inc. is a locally-owned and operated technology company based in Hawaii for over 40 years and an active participant in the Small Business Innovation Research (SBIR) grant program. The SBIR program consists of three phases that encourages early stage investment and innovation in technology. Phase 1 provides a very small amount of money that is barely enough for "proof of concept" research. However, it is the Phase 2 and 3 funding stages that provide a "bridge" for companies to survive the "valley of death" between the idea and research stages of development, through prototyping to commercialization.

In 2012, the State of Hawaii matched an SBIR Phase I grant to Makai from the US Navy with \$20k in State funds. This Phase 1 and State matching grant led to a partnership between Makai and the University of Hawaii (UH) for our current work on an innovative new concept for an underwater vehicle for the Navy's anti-submarine warfare surveillance efforts. The State's matching grant enabled Makai to win Phases 2 and 2.5 and bring over \$4 million in Navy research and development (R&D) money to the State to date. This money is currently supporting several highly-paid, highly-skilled engineers, including a professor and a graduate student from UH. While this highly leveraged investment already has a multiplier of about 200X for the State, Makai is struggling to find funding to commercialize the technology, even though it has the promise to escalate into many more years and into the tens of millions of dollars for high tech R&D in the State.

The Phase 2 and 3 SBIR matching grants assist companies with a difficult, but commerciallypromising stage of development than Phase 1. Carefully selected Phase 2 and 3 matching grants represent more of a "sure bet" in terms of a successful and highly leveraged investment in economic development for the State, and growing our tech sector.

According to HTDC for every dollar invested through this program, Hawaii companies have attracted 20 federal dollars in return to the state, plus commercialization funding. For example,

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Makai's subsea cable laying software began as a Phase 1 SBIR (matched by State for \$20k in the year 2000) and then went on to Phase 2 and 3 and became the world's #1 commercial cable laying software, with over \$30 million in commercial revenues and high tech jobs for Hawaii over the last 16 years. This is a direct multiplier of more than 1,500X for the State's investment, not counting the indirect benefits of retaining some of the world's best engineers in Hawaii and the additional technologies they have generated during this time. Imagine a return like that on an investment more substantial than \$20k.

This is why we **STRONGLY SUPPORT HB2668 HD1**, which would provide the state matching funds for Phases 2 and 3 of the federal SBIR program to enable companies to commercialize new technologies more effectively. Not only would this expansion of funding enable our tech industry to compete and win more Federal monies for technology development, it would provide highly-skilled professional jobs for our keiki here at home.

Thank you for the opportunity to testify.

info@makai.com www.makai.com





Written Statement of DR. PATRICK K. SULLIVAN PRESIDENT/CEO OCEANIT

Before the SENATE COMMITTEE ON ECONOMIC DEVELOPMENT, ENVIRONMENT and TECHNNOLOGY March 16, 2016 1:20 a.m. State Capitol, Conference Room 414 In Support of HB2668 RELATING TO THE HIGH TECHNOLOGY DEVELOPMENT CORPORATION

To: Chair Glenn Wakai, Vice Chair Sam Slom and Members of the Committee

From: Dr. Patrick K. Sullivan, President/CEO

Re: Testimony in Support of HB2668

Honorable Chair, Vice-Chair and Committee Members:

Thank you for the opportunity to submit testimony in support of HB2668

The technology industry in Hawaii has grown over the past 10 years and has made significant strides towards achieving the goal of diversifying and stimulating Hawaii's economy. The continuation of the Small Business Innovation Research ("SBIR") grants is crucial to move the technology towards prototyping, customer interface, and commercialization,

The objectives of the SBIR grants are:

- To support economic growth and the diversification of our economy;
- To launch new ventures based on technology innovations; and
- To support the growth of the tech industry and the creation of intellectual property and innovation in the State.

We strongly urge you to support of HB2668 and we appreciate your continued support of the technology industry.