

LATE

THE CHAMBER OF COMMERCE OF HAWAII
1132 Bishop Street, Suite 402
Honolulu, HI 96813

Testimony to the Senate Committee on Economic Development and Technology
Monday, January 31, 2011
1:45 PM
Conference Room 016
RE: SENATE BILL NO. 753, RELATING TO HIGH TECHNOLOGY

Chair Fukunaga, Vice Chair Wakai, and members of the committee.

My name is Charles Ota and I am the Vice President for Military Affairs at The Chamber of Commerce of Hawaii (The Chamber). I am here to state The Chamber's support of Senate Bill 753, Relating To High Technology.

The Chamber's Military Affairs Council (MAC) serves as the liaison for the state in matters relating to the US military and its civilian workforce and families, and has provided oversight for the state's multi-billion dollar defense industry since 1985.

The measure proposes to establish a tax credit for ten percent of qualified labor costs and extends tax credit for qualified research activities for five years.

Hawaii has the fortunate circumstance of being home to the headquarters for the US Pacific Command and combat forces of the component commands for the US Army, Navy, Marine Corps, and Air Force. This has also attracted the top prime defense contractors such as Northrop Grumman, Lockheed Martin, Boeing, and BSE Systems to establish offices in Hawaii. This combined presence of military commands and defense contractors has enabled many research and development businesses to establish operations in Hawaii.

As clearly stated in Section 1 of this proposed bill, R&D is the core of innovation and the foundation of a sustainable high technology industry. It is imperative that the state enact policies that will tilt the playing field to the advantage of Hawaii's R&D businesses, and place them in position to not only

compete favorably in the global market. In doing so, it could also place Hawaii in a leadership position in high tech development in the Asia Pacific.

The proposed measure would re-establish an R&D tax credit that has proven to be successful in helping to grow the emerging R&D industry.

The Military Affairs Council of The Chamber will strive to gain the support of the military commands and defense contractors in creating mentoring and research opportunities for the R&D businesses.

For these reasons, we respectfully request that the proposed measure be approved for adoption.

Thank you for the opportunity to testify.



From: mailinglist@capitol.hawaii.gov
To: [EDTTestimony](#)
Cc: fritz@oceantronics.net
Subject: Testimony for SB753 on 1/31/2011 1:45:00 PM
Date: Monday, January 31, 2011 6:51:34 AM

Testimony for EDT 1/31/2011 1:45:00 PM SB753

Conference room: 016
Testifier position: support
Testifier will be present: No
Submitted by: Fritz M Amsberg
Organization: Oceantronics
Address: 711 No. Nimitz Hwy Honolulu
Phone: 8085225600
E-mail: fritz@oceantronics.net
Submitted on: 1/31/2011

Comments:

Honorable Chair, Vice-Chair and Committee Members:

Thank you for the opportunity to submit testimony in support to SB753. Oceantronics, is part of Hawaii's emerging defense and dual-use technology sector, one of the fastest growing segments of Hawaii's economy. See www.oceantronics.net

Our company currently generate more than in \$2M revenue and pays over \$500K in compensation to our 10 employees. We understand the difficult financial condition of the State and want to help by maintaining and growing our workforce. As a technology-based business, we know that to accomplish this we need to continue to invest in research and development (R&D). R&D investment is the key to our ability to innovate, attract customers and outside funding, compete in the global marketplace, and continue to grow our workforce.

The State of Hawaii has much to gain from our R&D investment, which provides high-paying jobs to highly educated employees. These employees pay substantial payroll taxes and spend significant amounts of their income within the State for goods and services as they work on developing new technologies and products that will eventually bring new sources of revenue into Hawaii and help to diversify our economy.

Without Hawaii's R&D tax credit, we may be forced to curtail our investment in R&D. Because of the forward-looking nature of research, few R&D investments have a payoff horizon shorter than one year. In order to continue to invest in R&D and maintain or grow our well-trained workforce, it is critical that we have visibility into the future financial implications of today's R&D investments.

By extending the R&D tax credit, you will enable dual-use technology companies to keep investing in the future of our companies, our employees, and our State. You will also help keep one of the bright spots in our State economy intact, and growing.

We urge you to support the extension of the R&D tax credit through SB753. Thank you for the opportunity to testify

SB753 - Relating to High Technology**LATE**

DATE: January 31, 2011

TIME: 1:45 P.M.

PLACE: Room 016

TO: Senate Committee on Economic Development & Technology; Senator Fukunaga, Chair;
Senator Wakai, Vice ChairFrom: Ian Kitajima, Convener
Dual Use Network**Re: Testimony in Support of SB753**

Honorable Chair, Vice-Chair and Committee Members:

Thank you for the opportunity to submit testimony in support of SB753. Since 2005, as the convener of the Dual Use Industry's 'Breakfast Club', I have had the privilege to work with and learn about Hawaii's high-tech and dual-use companies, and having worked and lived in Tokyo, Los Angeles, and Helsinki Finland, I personally believe, we have the ideas, the talent, and a host culture to become a global innovator and contributor.

But to develop solutions to today's toughest problems, such as a cure for cancer or to create cheap renewable clean energy, substantial investments of time and money in research and development (R&D) are a prerequisite. A long term commitment to R&D continues to be a key competitive advantage in the world. Without it, we (our people, our products, our companies) will eventually become a commodity. We will become a State which does not have control over its destiny because we do not add substantial value in the world. If we're not careful, the slow-erosion of our R&D advantage, that's difficult to see in the short term, may one day render Hawaii defenseless, irrelevant, a victim of Globalization.

And Hawaii is not the only State in the U.S. who understand the value of R&D as a competitive long-term economic driver. Many States and Countries, are aggressively racing ahead to create economic engines based on science and engineering in the private and public sectors. Hawaii is competitive but is not alone in its attempts to attract and keep R&D expenditures at home. Due to aggressive foreign R&D incentives, the growth of U.S. R&D funds flowing into countries like Australia and the UK, are double the U.S. domestic growth rates for R&D, i.e., we are shipping more and more of U.S. R&D overseas. For example, China 2% of GDP for R&D vs. US 3.5% of GDP goes toward R&D. But China's R&D is growing 20% a year, and the estimate is that in 10 to 15 years China will surpass the U.S as the world's leading innovator.

So if R&D is such a great long-term driver of innovation, why are we not doing more? There are many reasons but one reason is that R&D requires a long-term investment in people, facilities, infrastructure, companies, the University and those investments or seedlings take decades to bear fruit. But the long-term success of an R&D industry, and the innovation culture that is

spawned, has tremendous economic and social benefits that improves our quality of life, and creates the next generation of careers, engineers, scientists, companies, educators, entrepreneurs, and philanthropists for our State, Country, and World. In addition to the long-term benefits of R&D, the following are examples of the immediate benefits of an R&D community:

- Biggest providers of STEM Internships/Mentorships
- Biggest supporters of STEM Programs in the State
- Professional role models inspiring Hawaii's children – e.g., Weird Science with Dr. V
- Living wage salaries which are taxed at higher rates
- Homeowners who pay property taxes
- Hawaii's tech companies must spend \$5 in qualified R&D within Hawaii before they can claim a \$1.

Finland and the mobile phone industry: A case study of the return on investment from government-funded research and development

Having lived and worked within Finland's high tech industry, and seeing their Country's success in building an R&D high tech industry, the following case study of the Country's return on investment in support of their high tech industry might be instructive, and relevant. Hawaii and Finland have similarities, with small isolated populations, limited natural resources, and successful core industries which made change difficult. Below is the Abstract. See link for the entire study.

"The sudden and dramatic growth of the mobile phone manufacturing sector in Finland is an interesting case study for science and technology (S&T) policy analysts. Mostly on account of the rapidity of this growth against a relatively static situation for the other sub-sectors, the Finnish economic data over the period 1990–2001 can be used without ambiguity to quantify the return of an initial public sector research and development (R&D) expenditure on the growth of a sectoral economy. Although it is apparent from the data that this economic success story is to some extent now running out of steam, the returns to date for all the participants have been astonishing. Using the Patterson–Hartmann model, which has been developed to link company-level R&D expenditure with product revenue, it is shown that government has managed to achieve a multiplier effect of about 66 on its initial R&D expenditure through initially a leveraging of business R&D expenditure (at a level of 1:3) and then the translation of the latter into an increase in gross domestic product (GDP) (at a level of 1:22). These figures are extraordinarily high, even in comparison to the multipliers obtained by large private sector companies. The keys to the success were both the vision and foresight of the Finnish R&D community, who identified cell phones as a major growth opportunity, the sharing of risk by the various role players (government, universities and industry) as can happen in an efficient national system of innovation, and finally a sustained commitment to R&D by the industry leaders. The latter has now reached a level of 3.5% of GDP (2005), which

makes Finland a global leader in R&D expenditure (as a percentage of GDP). The lessons for developing countries such as South Africa, which are moving towards higher levels of R&D expenditure but within a resource constrained context, are apparent."

http://researchspace.csir.co.za/dspace/bitstream/10204/799/1/Walwyn_2007.pdf

	Finland	California	Hawaii
R&D investment % of GDP	3.5% in 2005	4.3% in 2007	1% in 2007 (4th quartile - bottom)
Multiplier for Gov't R&D invested	1:66	?	?
Multiplier for private R&D invested	1:3	?	?
Multiplier for GDP	1:22	?	?

For the future of Hawaii, I ask that you empower our high tech companies to make Hawaii a global innovation center, with your support of SB753. Thank you for the opportunity to testify.

Sincerely,
 Ian Kitajima, Convener
 Dual Use Network

SB753 - Relating to High Technology

LATE

DATE: January 31, 2011

TIME: 1:45 P.M.

PLACE: Room 016

From: Kevin Miyashiro
President
TeraSys Technologies LLC

Re: Testimony in Support to SB753

Honorable Chair, Vice-Chair and Committee Members:

Thank you for the opportunity to submit testimony in support to SB753. Our company, TeraSys Technologies LLC, is part of Hawaii's emerging defense and dual-use technology sector, one of the fastest growing segments of Hawaii's economy. Our company provides products to the US Military and Public Safety markets to improve the reliability of wireless communications for Army, Navy, Marine Corps, Air Force, National Guard, Police, Fire, and Emergency Medical personnel.

Our company currently generates more than in \$1M in annual revenue. We understand the difficult financial condition of the State and want to help by maintaining and growing our workforce. As a technology-based business, we know that to accomplish this we need to continue to invest in research and development (R&D). R&D investment is the key to our ability to innovate, attract customers and outside funding, compete in the global marketplace, and continue to grow our workforce.


For the past three years, we have received over \$2.5M in R&D funding from the Department of Defense to improve their wireless communications. As a result of these investments, we now have our first generation of products that we have begun to sell to customers all over the country, generating over \$350,000 in product sales as well as securing the next round of R&D funding to develop even more products in coming years.

The State of Hawaii has much to gain from our R&D investment, which provides high-paying jobs to highly educated employees. These employees pay substantial payroll taxes and spend significant amounts of their income within the State for goods and services as they work on developing new technologies and products that will eventually bring new sources of revenue into Hawaii and help to diversify our economy. All of our eight employees are here in Hawaii and highly educated, four with Bachelor's degrees and four with Master's degrees.

By extending the R&D tax credit, you will enable dual-use technology companies to keep investing in the future of our companies, our employees, and our State. You will also help keep one of the bright spots in our State economy intact, and growing.

We urge you to support the extension of the R&D tax credit through SB753. Thank you for the opportunity to testify.

Sincerely



Digitally signed by Kevin Miyashiro
DN: cn=Kevin Miyashiro, o=TeraSys
Technologies, ou
email=kmiyashiro@terasys technolo
gies.com, c=US
Date: 2011.01.31 09:10:24 -10'00'

Kevin Miyashiro
President
TeraSys Technologies LLC