

**SB 1299**

**EDT**

6 February 2009

The Honorable Carol Fukunaga  
Chair, Committee on Economic Development and Technology  
11th Senatorial District  
Hawaii State Capitol, Room 216  
415 South Beretania Street  
Honolulu, HI 96813

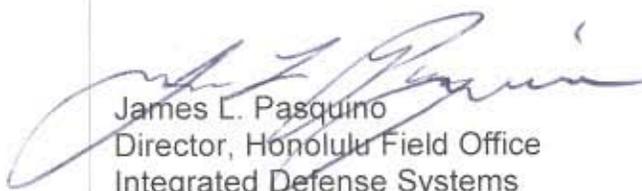


RE: SB 1299 – Relating to Advanced Flight Simulator Training

Dear Senator Fukunaga:

As the world's leading aerospace company and the largest manufacturer of commercial jetliners and military aircraft combined, Boeing offers its support for SB 1299. SB1299 has the potential to advance flight simulation training for pilots, dispatchers, mechanics, and air traffic controllers. Simulation is being used at an increasing frequency to train crew and support personnel for both civil and defense applications. SB 1299 will serve as an important tool for the State of Hawaii to capitalize from this expanding field. We encourage your support of this important legislation.

Sincerely,



James L. Pasquino  
Director, Honolulu Field Office  
Integrated Defense Systems  
The Boeing Company



# UNIVERSITY OF HAWAII SYSTEM

## Legislative Testimony

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Testimony Presented Before the  
Senate Committee on  
Economic Development and Technology  
February 6, 2009 at 1:15 p.m.

### ***WRITTEN TESTIMONY***

SB 1299 – Relating to Advanced Flight Simulator Training

Chair Fukunaga, Vice-Chair Baker, and Members of the Committee:

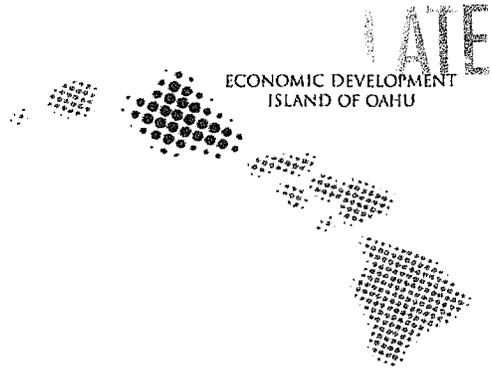
The University of Hawai'i stands in support of this measure.

Honolulu Community College (HCC) operates the University System's only flight training and aviation mechanic training programs. The mechanic's program was started in 1949 and the flight training program, founded in 1998, is looking forward to its 11<sup>th</sup> year of operation. Although the flight industry is in a turbulent time, both programs have the potential for growth. The College hopes to eventually partner with airlines and/or airplane manufacturers in offering this training domestically and internationally to countries that are in great demand for pilots and aviation mechanics.

Since the first private pilot class in August 1998, the Pacific Aerospace Training Center under HCC has helped over 650 students earn their FAA pilot flight certifications and ratings. These commercial pilots are flying with air carriers in Hawai'i, nationally, and worldwide.

Over the last 3 years, HCC has been in numerous discussions with one of the world's largest airline manufacturers to develop partnerships on both pilot and aviation mechanic training for their customers. A bill such as this would assist prospective private sector partners in making an investment in expensive flight training resources in Hawai'i.

We look forward to further solidifying the University of Hawai'i's capacity to become a world-class flight training center.



February 6, 2009

Hawaii State legislature  
State Capital  
Honolulu, Hawaii 96813

Support Testimony on  
**S.B. NO. 1299**

**RELATING TO Enterprise Zone Designations**

Senate Committee on Economic Development & Technology  
Senator Carol Fukunaga, Chair  
Senator Rosalyn Baker, Vice Chair

Friday, February 6, 2009, 1:15 p.m., Conference Room 016

Enterprise Honolulu, the Oahu Economic Development Board, **supports S.B. 1299**, adding advanced flight simulator training for pilots, dispatchers, mechanics or air traffic controllers to the definition of “qualified business” as part of the Enterprise Zone Program.

Adding this definition to the Enterprise Zone program will assist in the efforts to expand our Aerospace development activities and help secure a regional flight training facility in Hawaii. Currently all advanced flight training is done at facilities located in other parts of the country, creating an opportunity to build local capacity and meet the needs of hundreds of pilots and crews that need regular recurring training at simulator facilities.

We believe this bill will greatly assist in efforts to locate such a program here in Hawaii, creating new high paying jobs, diversifying our economy and lowering the cost of local air crew training. These facilities could also bring foreign aircrews to Hawaii for training as well, adding to the economic benefits of the program.

Enterprise Honolulu, the Oahu Economic Development Board, supports **SB 1299**.

Sincerely,

John Strom

VP Director of Business Development & Technology



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HONOLULU

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FEB 24 2009 1:40pm  
File: SB 729  
LINDA LINGLE  
GOVERNOR  
THEODORE E. LIU  
DIRECTOR  
MARK K. ANDERSON  
DEPUTY DIRECTOR

February 24, 2009

To: The Honorable Carol Fukunaga  
Chair, Senate Committee on Economic Development & Technology

From:  Theodore E. Liu 

Subject: Economic Impact of Advanced Flight Simulator Training Pursuant to SB 749 and SB 1299

Per your request for impact projections associated with an advanced simulator training facility, we have prepared the attached analysis, based on information provided by Mr. Ramsey Pederson and as presented in reports associated with SB 749 and SB 1299.

We hope this analysis proves helpful. If there are any questions, please do not hesitate to call me or have your staff contact our Research and Economic Analysis Division at 586-2466.

# Impacts of an Advanced Flight Simulator Training Center

## (Pursuant to SB749 and SB1299)

### Summary

DBEDT has been asked to estimate the economic gains associated with an advanced flight simulator training center, which would be incentivized through SB 749 and SB 1299. This analysis focuses on the primary mission of the center to train new commercial pilots for certification, which is estimated at about 75 trainees per year on average. However, there are other sources of revenue to the training center that cannot as yet be estimated with confidence. One of these is recurrent training of pilots by airlines, particularly Hawaiian airlines. Depending on airline participation this could include around 200 pilots per year utilizing the center's simulator. Another source of revenue is the use of the simulator to train Hawaiian Airline pilots on the newer Airbus aircraft the airline is expected to purchase. That training would likely be incorporated into the purchase of the equipment, but the number of aircraft and their introduction into the Hawaiian fleet is not year clear.

Based on assumptions and methods discussed in this report, our estimates of the total impacts generated by the training of new pilots by the center are summarized in the table below.

**Summary Table, Total Economic Impacts**

	Units	First-Year	Second-Year/Annual
<b>Output impacts</b>			
Direct (excluding imported)	\$M/Year	5.0	5.5
Direct & Indirect	\$M/Year	7.1	8.0
Direct & Indirect & Induced	\$M/Year	9.9	11.7
<b>Total job impacts</b>			
Direct	Jobs/Year	30	37
Direct & Indirect	Jobs/Year	44	57
Direct & Indirect & Induced	Jobs/Year	66	75

Source: DBEDT

As the table shows, there are significant impacts in the first year and these will increase in the second and subsequent years as the center moves into operational mode. First year impacts represent the construction phase. It is assumed that all construction funds are supplied from the private sector outside Hawaii. The construction of the center is estimated to directly generate \$5 million in economic output (a concept that roughly corresponds with sales revenues). About 30 jobs will be generated directly in the

construction phase. However, secondary impacts from first-year construction (called indirect and induced impacts) will occur as the spending flows through the economy. This will likely generate an additional \$4.9 million in output in the first year (for a total of \$9.9 million) and 33 more jobs (for a total of 66). In total, nearly \$10 million in additional output and 66 new jobs can be expected from first-year construction activity.

In the second and each subsequent year, operational expenditures of the center are estimated to directly generate \$5.5 million in additional output per year and 37 jobs. Again, as expenditures circulate in the economy, indirect and induced impacts will increase total output to nearly \$12 million per year and support a total of 75 jobs.

## Basic Information and Assumptions

This report is based on the following assumptions and information found in the report attached to SB1299 (SB 1299, SD 1, SSCR 212), other information provided to the Senate Committee on Economic Development and Technology, as well as technical assumptions related to the methodology. The parameters of an aviation flight training center are complex and DBEDT has interpreted the information provided the best it can within the short period provided to develop these estimates of economic impact.

1. The program will generate \$5 million additional construction expenditures from new private external sources, outside of Hawaii. The project will utilize Hawaii construction firms and labor, and will be completed within one year (corresponding to year one in the data tables).
2. The program will be fully operational in the second year and beyond (second year/annual in the data tables) with 75 students per year. It is assumed that 75 percent of the students will be from overseas and 25 percent Hawaii residents. The program training center will employ a staff of 37 (representing direct jobs created).
3. Average revenue per student will be \$60,000 per year. This is the estimated yearly revenue for a 16 month training period costing a total of \$85,000 for a complete certification package.
4. Other expenditures (including rent for housing) are assumed to be \$20,000/year per non-Hawaii student and \$8,000 per year for Hawaii students (which excludes rent)
5. The full cost of students' training is covered and there are no in-state subsidizes.
6. Aircraft, parts, and devices are imported from outside Hawaii, therefore investment in those inputs have a negligible economic impact on Hawaii.

The assumptions are summarized in Table 1.

**Table 1. Assumptions**

	Units	First-Year	Second-Year/Annual
New Construction	\$M	5.0	
# of Student	Students/Year		75
Revenue/Student	\$/Year		60,000
Total Student Revenues	\$M/Year		4.5
GET Rate	%		4.0
Total Annual GET on Revenue	\$		180,000
Other expenses/non-HI student	\$/Year		20,000
Other expenses/HI student	\$/Year		8,000
Share of HI students	%		25%
Total Other PCE of Students	\$M/Year		1.3

M=millions

## Methodology and Estimated Impacts

The total output gains (which roughly correspond with sales revenues in the economy) and impacts on total jobs can be estimated based on the assumptions above and the 2005 State Input-Output Model.

The overall economic impacts of the ongoing, new pilot training by the center stem from three sources of expenditures:

- (1) One-time impacts of the \$5.0 million construction expenditure,
- (2) Impacts of the \$4.5 million annual student revenue, and
- (3) Impacts of the annual \$1.3 million personal consumption expenditures (PCE) from both Hawaii and non-Hawaii students.

For gains in both output and total jobs, three types of impacts are estimated;

- 1) *Direct impacts* are the initial expenditure on the industry providing the good or service (in this case construction for the first year and educational services thereafter).
- 2) *Direct and indirect impacts* include the direct impact plus the upstream impact on industries that supply goods and services to the directly-impacted industry. These are estimated based on the *Type I Multipliers* from the 2005 State I-O Model.
- 3) *Direct, indirect and induced impacts* include the impacts above, plus the impacts of personal consumption expenditures made by employees of those direct and indirect industries. This spending helps create additional output and employment in a range of other industries and is labeled as a Type II impact. These expenditures are captured by combining the Type I multiplier results with the Type II Multiplier results from the 2005 State I-O Model.