## George R. Ariyoshi 999 Bishop Street, 23<sup>rd</sup> Floor Honolulu, HI 96813

## **TESTIMONY**

February 4, 2011

Re: Testimony in support of SB 112 relating to Space Tourism

Dear Members of the Twenty-Sixth Legislature:

I am writing this testimonial in <u>strong</u> support of SB 112, which provides state support for the environmental studies required to obtain a commercial spaceport license for Hawaii airports from the Federal Aviation Administration.

The effort to establish an international commercial spaceport in Hawaii builds upon the ongoing development of innovative "spaceplanes" that can take off and land at local airports using existing runways that service commercial jet aircraft, but which also employ advanced propulsion technologies to carry satellites, experiments and tourists to space.

Over the past decade, private companies in both the U.S. (e.g., Virgin Galactic, XCOR Aerospace) and foreign nations (e.g., EADS Astrium, Dassault Falcon) have been developing prototype spaceplanes for commercial space transportation. Between 2012 and 2015, at least three and as many as six suborbital spaceplane companies are projected to be in operation worldwide, and the commercial space transport market will be in a major expansion mode - both in terms of the number of people flying suborbitally each year and the number of spaceports working to build market share.

To date, ten states have already obtained or are currently in the process of applying for commercial spaceport licenses to accommodate this anticipated demand. It takes on average approximately three years to complete the spaceport licensing process, including 12 to 18 months to complete the environmental and safety studies required for the license, six to nine months for public review and comment, and an additional six months for the formal license application process with the FAA. Thus, for Hawaii to be "in on the ground floor" when spaceplanes begin operating, we need to initiate the licensing process now.

In contrast with the continental United States and Alaska, Hawaii is in a unique position to support and benefit from spaceplane operations. Situated in the middle of the Pacific, we are ideally located to serve as a node on the soon-to-emerge spaceplane transportation network. In addition, with major airport runways proximal to the ocean, Hawaii can use existing aviation infrastructure to enable the launch and landing of spaceplanes at local airports (the landlocked

state of New Mexico, by contrast, has had to invest over \$200 Million in public funds to build a commercial spaceport that can safely accommodate such operations). And establishing spaceplane operations in Hawaii would bring a new dimension to our visitor industry – space tourism (projected to be a multi-billion dollar industry over the next decade).

Several U.S. and foreign entrepreneurial aerospace companies have approached our State to explore opportunities for launching spaceplanes from Hawaii. Their business plans include initial intra-state flight trajectories (launching from and returning to Honolulu and Kona International airports), with future trans-Pacific flights between Hawaii, Japan, and the continental U.S. Several plans also include development of space-themed education and training centers, proximal to airports, that would provide opportunities for both tourists and local residents to experience "virtual reality" simulations of space flight and exploration missions to the Moon and Mars, as well as "space camp" experiences involving simulated interplanetary space travel.

In order for spaceplanes to launch and land from Hawaii's airports, our State must obtain a commercial space transport license from the Federal Aviation Administration (FAA). Funding requested through this legislation will enable the State's Office of Aerospace Development to conduct the environmental and safety assessment studies required for this license to certify that spaceplane operations can be conducted safely in Hawaii.

Commercial space transport will help drive the "next generation" of global aviation technologies, systems and protocols, and states that engage in this industry from its inception will help establish and mature spaceplane operation centers and flight corridors to be networked worldwide. Hawaii is uniquely qualified to assume a leadership role in this effort for the entire Asia-Pacific region - but only if we act proactively to realize this exceptional opportunity.

As you may recall, the twenty-fifth State Legislature passed a measure similar to SB 112 during the 2009 Session (Act 187). Unfortunately, the previous Administration did not release funding appropriated through this legislation. As such, I would strongly encourage you to pass SB 112 this Session, and will work with our new Administration to encourage its execution.

Thank you for the opportunity to provide these comments.

Jenge Ahryoshi

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