
SENATE COMMITTEE ON EDUCATION

Senator Benjamin Allen, Chair

2017 - 2018 Regular

Bill No: SB 1356 **Hearing Date:** April 18, 2018
Author: Wilk
Version: April 2, 2018
Urgency: No **Fiscal:** Yes
Consultant: Brandon Darnell

Subject: California Community Colleges: Antelope Valley College: Aerospace Institute

SUMMARY

This bill appropriates \$500,000 to the Chancellor of the California Community Colleges (CCC) for allocation to Antelope Valley College for support of a yet-to-be-established Aerospace Institute.

BACKGROUND

Existing law:

- 1) Establishes the CCC under the administration of the Board of Governors (BOG) of the CCC and requires the board of governors to appoint a chief executive officer, to be known as the Chancellor of the CCC. (Education Code §
- 2) Requires the BOG of the CCC to provide leadership and direction in the continuing development of the CCC as an integral and effective element in the structure of public higher education in the state, which at all times must be directed to maintaining and continuing, to the maximum degree permissible, local authority and control in the administration of the CCC.
- 3) Requires the BOG of the CCC, in consultation with community college districts and other interested parties, to provide general supervision over community college districts, and in furtherance of those purposes, to perform certain functions, including reviewing and approving all educational programs offered by community college districts and all courses that are not offered as part of an educational program approved by the BOG of the CCC.

ANALYSIS

This bill:

- 1) Appropriates a sum not to exceed \$500,000, that is equal to the amount of private contributions that Antelope Valley College has received for support of the Aerospace Institute, without regard to fiscal years, from the General Fund to the Chancellor for allocation to Antelope Valley College.

- 2) This bill requires the Chancellor of the California Community Colleges to allocate funding if he or she determines that both of the following have occurred:
 - a) An Aerospace Institute has been formally established by, and to be located at, Antelope Valley College.
 - b) Antelope Valley College has received private contributions for support of the Aerospace Institute in an amount that, when combined with the sum appropriated by the State, is sufficient to fund the operation of the Aerospace Institute for at least one academic year.
- 3) States legislative intent that, after its first academic year of operation, the Aerospace Institute will be funded by private contributions matched by state funds of up to \$500,000 in any fiscal year, provided through an appropriation in the annual Budget Act.

STAFF COMMENTS

- 1) ***Need for the bill.*** According to the author, “California’s aerospace industry directly supplies over a half-million mortgage paying jobs in California with industry average salaries over \$100,000. The industry does over \$61 billion in economic activity within our states boundaries. Its historical, cultural and economic contributions to the state are indisputable. But, in some regions where the industry typically thrives there has emerged a massive problem that has the potential to inflict permanent damage to the stability of this industry in California.

Aerospace companies depend on highly skilled staff to research, develop, design and assemble the worlds most advanced technology and engineering efforts. But when the workforce they need is not available to them they suffer and, if the problem persists, they move to areas where the employee pool is deeper and more accessible. This is what we want to avoid by developing the workforce right here in California by establishing an Aerospace Institute in the heart of California’s aerospace industry, the Antelope Valley.”

- 2) ***Aerospace Institute.*** This bill requires funds to be appropriated to Antelope Valley College if an Aerospace Institute has been formally established at that college, and if sufficient private funds have been received. It appears that an Aerospace Institute does not yet formally exist at Antelope Valley College. According to the author, the institute “would bring industry experts, academic and research leaders, in engineering, physics, and other sciences, and students at the graduate level, together in one place. They would have access to the most advanced aerospace facilities in the world at Lockheed Martin, Northrup Grumman, Edwards Air Force Base, and the plethora of other industry leaders in the high desert.”

According to the website of the Antelope Valley College, it offers the following degrees and programs in fields that are related to the aerospace industry:

- a) A Bachelor’s of Science Degree in Airframe Manufacturing Technology, with curriculum addressing airframe manufacturing, aircraft fabrication

(structures and composites), electronics, and welding.

- b) Career technical education programs in:
 - i) Aeronautical and Aviation Technology consisting of three components: general aircraft maintenance, aircraft airframe and aircraft powerplant. Antelope Valley College is one of the few community colleges in the United States offering composites fabrication and repair. This Airframe and Powerplant Technician Program is certified by the Federal Aviation Administration.
 - ii) Electronics Technology.
 - iii) Aircraft Fabrication and Assembly.
- 3) Report on aerospace industry in California. In March 2016, The Los Angeles County Economic Development Corporation, as part of its industry cluster series, published a report, *The Changing Face of Aerospace in Southern California: the Future is Now*, about the status and future of the aerospace industry in California. The report focused on various aspects of the aerospace industry, including jobs and training. Importantly, the report revealed:
 - a) The highest number of future openings in the aerospace industry in California will be found in occupations related to production, such as inspectors, assemblers, machinists and technicians, with 2,250 new job openings and an additional 3,380 replacement workers needed over next five years.
 - b) Approximately 53 percent of jobs will be open to workers with a high school diploma or some college or post-secondary education, likely in production-related occupations.
 - c) In order to expand the aerospace industry in Southern California, “a need for a continuous supply of workers, ranging from low skilled to very high skilled, exists. Educational and training programs are highly valuable as they provide paths to careers in aerospace for all skill levels.”
 - d) One of the weaknesses of the Southern California aerospace industry is that “finding candidates with industry experience (an important qualification) is difficult given the lack of internships and many security restrictions.”

The author states that “the institute would be specifically designed to train the next generation of aerospace employees and familiarize some of our brightest young minds with the industry and its benefits so that they go on to pursue jobs with partners they’ll already know on a personal basis.” This would appear to respond to one of the weaknesses identified in the report by exposing students directly to employers in the aerospace industry.

- 4) ***Associated legislative hearing.*** The Senate Education Committee and the Senate Select Committee on Defense and Aerospace held an informational hearing on February 9, 2018, on the topic of *Higher Education's Role in Preparing Engineers for the Aerospace Industry*. Testimony revealed the following themes:
- a) Collaboration between postsecondary education and the aerospace industry exists but is dependent upon individual relationships.
 - b) There is a lack of capacity within postsecondary education to meet the needs of the aerospace industry. According to testimony from a professor of mechanical and aerospace engineering at the University of California, Los Angeles, approximately, 27,000 students applied for 800 engineering slots.
 - c) The aerospace industry, particularly those working on defense projects, requires employees to receive a high-level security clearance that is very difficult to achieve (in addition to a lengthy approval backlog of 18-24 months).
 - d) Some postsecondary institutions would like to more easily loan faculty to companies in the aerospace industry.
- 5) ***Considerations for the committee.*** This bill continuously appropriates \$500,000 from the general fund for purposes of the institute if certain conditions are met, including that the institute actually be established and that it receives matching private funding that, together with the \$500,000 state funding, is sufficient for the first year of operation. However, *the committee may wish to consider* whether it's clear that costs associated with the institute necessitate a \$500,000 continuous appropriation. Additionally, *the committee may wish to consider* whether an aerospace institute is a funding priority for the Legislature at this point in time.
- 5) ***Related and prior legislation.*** ACR 145 (Lackey, 2018) declares the Legislature's support for the creation of a California Institute for Aerospace in southern California's Antelope Valley. ACR 145 is pending on the Senate Floor.
- AB 240 (Lackey, 2017) requested the Regents of the University of California (UC) to establish the California Institute for Aerospace. AB 240 was held in the Assembly Appropriations Committee.
- AB 427 (Muratsuchi, 2017) would have established the California Aerospace and Aviation Commission for the purpose of serving as a central point of contact for related industries and to support the health and competitiveness of these industries in California. AB 427 passed the Assembly but was never heard in the Senate.
- AB 2600 (Lackey, 2016) requested the Regents of the UC to establish the California Institute for Aerospace. AB 2600 was held in the Assembly Appropriations Committee.

SUPPORT

California Chamber of Commerce
California Manufacturers & Technology Association
Computing Technology Industry Association

OPPOSITION

None received

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