

Date of Hearing: April 9, 2013

ASSEMBLY COMMITTEE ON JOBS, ECONOMIC DEVELOPMENT AND THE ECONOMY

Jose Medina, Chair

AB 737 (Fox) – As Amended: April 3, 2013

SUBJECT: Governor's Office of Business and Economic Development: unmanned aircraft systems: test sites

SUMMARY: Requires the Governor's Office of Business and Economic Development (GO-Biz) to prepare and submit a proposal for an unmanned aircraft test site to the Federal Aviation Administration (FAA) on or before May 6, 2013. Specifically, this bill:

- 1) Finds and declares, among other things, that:
 - a) California has sustained significant jobs losses in the aerospace manufacturing subsector with payrolls dropping 65.9% between 1990 and 2012, as compared to 34.6% decrease in the rest of the U.S. 2010 employment in the aerospace industry totaled 109,700 jobs paying \$10.7 billion in wages.
 - b) Federal Aviation and the Modernization and Reform Act of 2012 calls for the designation of six test sites within the U.S. The expanded use of unmanned vehicle systems has the potential of creating 100,000 jobs.
 - c) California has the potential for a successful proposal based in its highly developed aerospace industry, skilled workforce, network of education and research institutions, and a tradition of innovation and entrepreneurship. The development of a coordinated proposal can only be achieved by bringing the necessary stakeholders together.
- 2) Requires GO-Biz to prepare and submit a proposal by May 6, 2013 to establish a FAA designation in California.
- 3) Authorizes GO-Biz to consult during its application preparation with the Governor's State Military Council and other relevant entities including, but not limited to: the Office of Planning and Research; the Military Department; Department of Veteran's Affairs; Employment Development Department; Department of Transportation; representatives of the aerospace industry; all other applicants for a California-based test site; local governments; and, education and training entities.
- 4) Requires GO-Biz to coordinate with any local government that submits a proposal to establish a test site to the FAA.
- 5) Includes an urgency clause.

EXISTING LAW establishes GO-Biz within the Governor's Office for the purpose of serving as the lead state entity for economic strategy and marketing of California on issues relating to business development, private sector investment, and economic growth. GO-Biz also serves as the administrative oversight for the California Business Investment Service and the Office of the Small Business Advocate.

FISCAL EFFECT: Unknown

COMMENTS:

- 1) Framing the Policy Issues: The FAA has announced the designation of six national test sites for unmanned aircraft systems. Two, potentially competing, applications have already been submitted. As California is home to a large segment of the national aerospace industry, a federal test site ensures the continued relevance of this important industry sector in the state. Failing to receive a designation would support the development of competing aerospace innovation centers within the state.

This bill calls on GO-Biz, as the state's economic development leader, to prepare and submit a third application which successfully brings key stakeholders together and increases California's chances in receiving one of the six test sites. The analysis provides greater detail on the federal test site mandate and how unmanned aircraft systems could affect the California economy.

- 2) Federal Aviation Administration Modernization and Reform Act of 2012: On February 14, 2012, President Obama signed the Federal Aviation Administration Modernization and Reform Act of 2012, which mandates the integration of civil unmanned aircraft systems (UAS) into the national airspace. Prior to this act, unmanned aircraft systems were strictly regulated and effectively banned from civilian usage.

The act mandates that six test sites be established in order to develop and enhance the technologies needed to achieve a safe and routine operation of civil unmanned aircraft systems in the national airspace system. As described by the FAA, the purpose of the test site program is to:

- a) Address both civil and public unmanned aircraft systems;
- b) Designate safe airspace for integrated manned and unmanned flight operations in the national airspace system;
- c) Develop certification standards and air traffic requirements for unmanned flight operations at test ranges;
- d) Coordinate with and leverage the resources of the National Aeronautics and Space Administration and the Department of Defense;
- e) Ensure that the program is coordinated with the Next Generation Air Transportation System; and
- f) Provide verification of the safety of unmanned aircraft systems and related navigation procedures before integration into the national airspace system.

The FAA has received 50 bids representing 38 states, including two from California, for one of the six test site designations.

- 3) Testing Site Application Timeline: The application process is composed of seven volumes regarding different requirements of the application, with the last volume due on Monday, May 6, 2013.

FAA Unmanned Aircraft Systems Testing Site Application Schedule	
Scheduled Event	Date Due
Screening Information Request released by the FAA, outlining the testing site requirements and application process	Released Thursday, February 14, 2013
Volume I: Identification of Applicant	Due Wednesday, March 6, 2013
Volume II: Screening Information Request Compliance	Due Thursday March 28, 2013
Volume III: Ground Infrastructure, Research Objectives and Airspace Use	Due Thursday, April 11, 2013
Volume IV: Safety	Due Thursday March 28, 2013
Volume V: Experience	Due Thursday, March 28, 2013
Volume VI: Risk Consideration – Planned Team Composition and Capability	Due Thursday March 28, 2013
Volume VII - Economic Impact	Due Monday, May 6, 2013
Release of FAA developed privacy strategy	Scheduled for Tuesday, June 11, 2013
Issuance of Other Transaction Agreements designating the 6 test site selections	Scheduled for Tuesday, December 31, 2013

4) Evolution of the Civilian UAS Market: While the military is at the forefront of adopting drone technology, rapid enhancements in recent technology have brought to light the utility of civilian drone usage. Important civilian applications for drones include:

- Wildfire mapping
- Agricultural monitoring
- Disaster management
- Thermal infrared power line surveys
- Law enforcement
- Telecommunications
- Weather monitoring
- Aerial imaging/mapping
- Freight transportation
- Environmental monitoring
- Oil and gas exploration
- Television news coverage, sporting event coverage, moviemaking

The primary market for civilian UAS usage is agricultural monitoring. UAS technology is especially suited for precision agriculture. A variety of imaging technologies can be used to scan for plant health problems, track growth rates and hydration, and detect pests. UAS technology can also be used for selective application of pesticides, simultaneously increasing the efficiency of pesticide usage and decreasing environmental impact. UAS technology is already widely used in Japan.

Public safety will also be a significant market driver; however, the agriculture market is estimated to be at least 10 times bigger than the public safety market. These two market segments are estimated to make up roughly 90% of future civilian UAS purchases.

5) Aerospace and the California Economy: California is the nation’s aerospace industry leader. In 2010, the aerospace manufacturing industry was responsible for 109,700 jobs within California, predominantly in Southern California, and paid wages totaling \$10.7 billion annually. The aerospace industry has maintained a sizeable presence within California, fueled by the presence of suppliers and

a pipeline of highly educated workers from in-state universities, but over the last two decades this industry sector has experienced significant sustained job loss.

- 6) UAS Manufacturing and the California Economy: UAS integration into the national airspace system is projected to begin in 2015. According to a 2013 Economic Impact Report released by the Association for Unmanned Vehicle Systems International, in the decade following the integration date, the UAS industry will create over 100,000 jobs and over \$82 billion in total economic impact in the U.S. California is projected to be the lead beneficiary of this growth, projecting \$14.3 billion in economic impact and the creation of over 18,000 jobs.
- 7) Related Legislation: The following is a list of related legislation.
 - a) AB 1326 (Gorell and Bradford) Unmanned Aerial Vehicle Manufacturing: This bill provides manufacturers in the unmanned aerial vehicle industry (UAV) with 3 incentives: (1) an exemption from the sales and use tax for manufacturing equipment; (2) a tax credit for qualifying wages and new hires; and (3) an exemption from the sales and use tax for construction of UAV manufacturing facilities. Status: Scheduled to be heard by the Assembly Committee on Revenue and Taxation on April 22, 2013.
 - b) AB 1327 (Gorell and Bradford) Privacy Rights: Unmanned Aerial Vehicles: This bill bans all public agency UAV usage except for searches supported by a warrant, existence of imminent threat to public safety or other time-limited emergency situations, geological inspections, inspection of state parks, traffic investigation, and fire-related activities. Forbids private parties from using UAV surveillance in secret, and provides a cause of action for affected parties. Status: Referred to the Assembly Committee on Public Safety, hearing date not yet set.
 - c) AJR 6 (Fox) Unmanned Aircraft Systems: This resolution calls upon the Federal Aviation Administration to consider California for 1 of the 6 planned test sites for the implementation of civil unmanned aircraft systems into the national airspace system. Status: Scheduled to be heard by the Assembly Committee on Transportation on April 15, 2013.
 - d) SB 15 (Padilla) Aviation: Unmanned Aircraft Systems: This bill states that it is the intention of the Legislature to establish appropriate standards for the use of civil unmanned aircraft systems that minimize and retain current privacy standards. Status: Referred to the Senate Committee on Rules on January 10, 2013.

REGISTERED SUPPORT / OPPOSITION:

Support

City of Palmdale

Opposition

None received