



# If You Legislate It, They Will Come: Using Incentive-Based Legislation to Attract the Commercial Space Industry

By P. J. Blount



In June of 2008, Orbital Sciences Corporation selected the Mid Atlantic Regional Spaceport (MARS), on the coast of Virginia, as the base of operations for the development of its Taurus II launch vehicle. This selection came after stiff competition between Virginia and Florida to woo the aerospace company into bringing its operations within their borders.<sup>1</sup> During the competition, both states touted their legal regime as being favorable to the aerospace company, and both states boast enticing and extensive space industry-specific laws. These types of laws are a relatively new innovation.

The United States has the most developed space law system in the world, with the federal regulation of space activities often dealing with issues of safety, technology security, and the fulfillment of international obligations. Federal statutes and regulations were, until recently, the only rules governing space activities in the United States, but now individual states are developing their own sets of rules that will work in tandem with the federal system. These laws are not in the traditional regulatory category that is found at the core value of the federal regime; instead, they are predominately incentive-based rules that have, as their core, the value of giving support to the industry instead of regulating it. States have recognized the economic benefits that can be gained from courting the high-tech, high-salaried field of aerospace technology and are eager to get a piece of the pie.

These incentives, which come in a variety of forms, are similar in purpose to any industry-specific incentives that states have traditionally used to encourage economic growth. In fact, aerospace companies can often avail themselves of general industry incentives that states already have in place to encourage industrial development. For example, Alabama, through the use of tax incentives, was able to ensure that Boeing's Delta IV manufacturing facility was located in the state. The package, which was made up of nonspace-specific incentives, was "estimated to have totaled some \$150 million."<sup>2</sup> States can couple these general incentives with industry-specific incentives to create packages that are very beneficial and enticing to the companies involved.

As the Alabama example demonstrates, the use of general industry incentives can be quite effective. Industry-specific incentives, though, can help a state target a specific industry and actively pursue its development within the state's territory. States are now beginning to develop incentives that target the commercial space industry and are pursuing creative ways to entice this growing

sector. Currently, these sorts of legislative efforts have been geared towards four types of incentives: (1) space authorities; (2) spaceport initiatives; (3) tax incentives; and (4) liability legislation.

## Space authorities

One of the most widely used incentives is the establishment of a space authority within a state. These authorities have been created in numerous states, including Alaska, California, Florida, New Mexico, Oklahoma, Virginia, and others. Such organizations serve as advocates for the space industry and often function under a state's executive branch.<sup>3</sup> Also, they often have specialized powers that enable them to assist the space industry within the state.

The two best examples of this type of entity can be found in California and Florida. The California Space Authority is a nonprofit organization that, under California law, contracts with the state to assist the California Business, Transportation and Housing Agency "in its administration of space enterprise economic development activities."<sup>4</sup> Under the California Space Enterprise Development Act, the Authority has a number of powers that can be defined in its contract with the state. Among those powers is the ability to pursue private and federal grants relating to space enterprise activities, to develop a strategy for space enterprise within the state, and to advise the secretary of the Business, Transportation and Housing Agency.<sup>5</sup> The Authority also serves as an advocate for legislation beneficial to the space industry in California and administers state grants related to space enterprise.<sup>6</sup> Being a nonprofit entity, the Authority lacks many of the governmental powers given to other space authorities, but this does allow it to be an organization made up of interested parties who, in turn, get a vote in what policies the California Space Authority will advocate.

Space Florida's purpose is to "foster the growth and development of a sustainable and world-leading aerospace industry in this state."<sup>7</sup> In pursuing this purpose, Space Florida shall "promote aerospace business development by facilitating business financing, spaceport operations, research and development, workforce development, and innovative education programs."<sup>8</sup> Among the powers given to Space Florida are the ability to lend money for its purposes, to issue revenue bonds, and to

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"[o]wn, acquire, construct, develop, create, reconstruct, equip, operate, maintain, extend, and improve" infrastructure vital for space activities including launch pads, spaceports, and other facilities.<sup>9</sup> This revenue-gaining ability coupled with the ability to enhance the infrastructure that the space industry relies on can be a great boon to space companies. In particular, smaller start-up companies benefit by being able to gain access to such facilities.

A significant difference between Space Florida and the California Space Authority is that Space Florida is a state entity, which pursues the development of the space industry for government purposes, whereas the California Space Authority is a nonprofit organization that pursues the interests of its members. It seems though, at the time being, that state and commercial interests for this particular industry seem to be aligned. In fact, these two authorities both serve as strong advocates for the space industry, and have been known to work together. For example, in April 2009 they joined together in Washington, D.C., to lobby for federal space reform, addressing such issues as export controls, commercialization, and FAA licensing.<sup>10</sup> A dichotomy between the two models may be realized in the future if there is a shift in the interests being pursued by the groups involved. One could hypothesize that in the wake of an accident a state may be inclined to pursue greater regulation that the industry might not find beneficial.

### Spaceport incentives

The existence of a spaceport can be a very strong pull for a space company. In particular, this is vital infrastructure for companies engaging in space transportation activities. Additionally, those industries that are building components of launch vehicles, satellites, or other space technologies may want to be close to their customers in the launch industry. Many states such as California, Florida, Virginia, and Texas have these sorts of facilities as a result of government activity that occurs within the state. There is now a push, though, to create commercial spaceports, and states are playing an active role in encouraging the development of these spaceports within their territories.

Probably the most high profile of the commercial spaceports is Spaceport America in New Mexico. This spaceport has been particularly effective in contracting with commercial space companies including Virgin Galactic, which plans to launch its suborbital space tourism flights from the complex.<sup>11</sup> The spaceport itself is a private venture, yet it garners much state support. This is especially so since it was included by New Mexico Governor Bill Richardson as part of his plan to enhance economic growth in New Mexico. The New Mexico legislature set up a space authority with the 2005 Spaceport Development Act,<sup>12</sup> and in 2006, the legislature created a statutory source for funding of the spaceport.<sup>13</sup> This funding came through the creation of regional spaceport districts. This legislation allows counties to create a regional

spaceport district and to raise revenue through the use of a local option sales tax for the district. Two counties are currently part of the Spaceport America regional spaceport district, which gives additional support to Spaceport America. A board for the district was appointed that has the ability to issue bonds to raise capital as well as the power to contract "financing, planning, designing, engineering and construction of a regional spaceport."<sup>14</sup>

Other states have similarly entered the spaceport business. In early 2009, Hawaii passed a bill that appropriates funds for the Department of Business, Economic Development & Tourism to apply for "a spaceport license from the Federal Aviation Administration."<sup>15</sup> According to the Hawaii legislation, this initiative is part of the state's desire to develop a space tourism business.<sup>16</sup> Additionally, both Oklahoma and Wisconsin have enacted legislation creating space authorities with the specific task of establishing spaceports.<sup>17</sup>

Even states that have established spaceport infrastructure are attempting to improve it and make it more accessible to commercial actors within the state. For example, Space Florida contracted to lease Space Launch Complex 36 and Space Launch Complex 46 from the U.S. Air Force, and is currently seeking a launch facility license from the FAA with the purpose of encouraging commercial spaceflight activities.<sup>18</sup> Additionally, MARS in Virginia recently (and unsuccessfully) sought to have specialty vehicle license plates made that would raise funds for the spaceport.<sup>19</sup> California has also adopted legislation that requires the California Space Authority to serve as the Authority for the purpose of designating spaceports around the state.<sup>20</sup>

Because spaceports are a prerequisite to a healthy space transportation industry, states will have to compete in order to provide the most desirable facilities. The legal regime that is in place to support this valuable infrastructure will have to be adequate to keep the facilities updated and desirable to the space transportation industry.

### Tax incentives

One of the most traditional means of encouraging industry growth is to offer tax incentives. Easing a corporation's tax burden can increase its profits and, needless to say, such initiatives are highly attractive to corporations. This can be a powerful tool in helping to bring particular industries into a state. The space industry version of these sorts of measures is referred to as a Zero G, Zero Tax bill. Federal versions of this type of law have been introduced numerous times but have been unsuccessful. State versions, on the other hand, have a smaller legislative hill to climb, and at least two have been enacted.

In 2008, Virginia passed a Zero G, Zero Tax bill, which gives tax incentives to two types of space activities.<sup>21</sup> According to the bill, which applies to tax years beginning in 2009, there will be no taxation on profits made from launching private individuals into space (or simulating the launch for training purposes) or on profits made

from "resupply services contracts for delivering payload . . . entered into with the Commercial Orbital Transportation Services [COTS] division of the National Aeronautics and Space Administration [NASA] or other spaceflight entity."<sup>22</sup> These two types of activities are very specific to Virginia. The human spaceflight designation is in response to the V-Prize, a contest similar to the X-PRIZE with the purpose of encouraging the development of transatlantic human spaceflight. The second designation is for activities undertaken under NASA's COTS, and applies only to Orbital Sciences, which won a resupply contract through the COTS program.<sup>23</sup> To qualify, these activities must occur from a spaceport or airport in Virginia. It should also be noted that the statute dovetails with federal legislation, since definitions found in 49 U.S.C. § 70102 (part of the federal regime for regulating commercial spaceflight) are applied.

Florida has enacted a similar measure. The Florida statute adds commercial spaceflight companies to an already existing list of companies that received tax refunds.<sup>24</sup> Florida's act gives a tax refund for jobs created in Florida for specific industries that now include the commercial spaceflight industry. The differences between the Florida and the Virginia law are substantial. While both statutes are focused on enhancing the economy of the state, Florida's tax incentive is directly related to an increase in economic activity in that it is triggered by job creation. On the other hand, Virginia's act, while meant to bring industry into the state, is not necessarily triggered by an increase in economic activity. Instead, it is triggered by industry-specific behavior. It might be assumed that Virginia's act may be more appealing to commercial space transportation companies since it is activity based, but it should be remembered that the Virginia statute applies to a much narrower group of activities within the space sector than does the

Florida statute. Virginia's statute was most likely instrumental in winning the competition for Orbital Sciences, but Florida's will appeal to a broader range of companies.

### Liability legislation

The promulgation of the Human Spaceflight Requirements by the Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST) was a significant event for the emerging human spaceflight industry.<sup>25</sup> These regulations served to limit liability of commercial spaceflight operators to human spaceflight participants in the event of an accident. The regulations acknowledge that spaceflight is an inherently dangerous activity and that participants should enter into it with informed consent of the dangers involved and little expectation of its safety. The theory was that in treating spaceflight activity in this manner, the federal government could avoid constraining the spaceflight industry with overly restrictive regulations.

Soon after these regulations were passed, Virginia,<sup>26</sup> and then Florida,<sup>27</sup> both passed similar legislation in order to protect spaceflight operators from further liability that might exist under state law. While the effect of these regulations is similar to the federal legislation, the intent behind passing such measures is different. These statutes were implemented as part of a concerted effort to bring spaceflight operators into the states. The protection of the industry is the mechanism that these states have chosen to bring in the industry.

This particular type of incentive may be the most high profile of the four types of incentives addressed in this article due to its relationship to the high-profile space tourism industry. Currently, California, New Mexico, and Texas all have pending spaceflight participant liability legislation. However, this particular incentive does raise some legal questions, primarily, "What is informed consent?" The question of how far a company must go in

order to fulfill these requirements is open-ended, and may vary from state to state depending on how states have interpreted similar disclaimers (often found in the area of extreme sports).<sup>28</sup> Another question to be addressed is the potential for conflict of the provisions with the International Traffic in Arms Regulations (ITAR), when a foreign spaceflight participant might want to be informed about technology that is protected under terms of ITAR. If an accident occurs and this person was not informed about this technology, a court could find that the participant did not provide informed consent. It should be noted, however, that Bigelow Aerospace was recently awarded a commodity jurisdiction decision from the Directorate of Defense Trade Controls (DDTC) that stated that spaceflight participants would not be subject to ITAR licenses,<sup>29</sup> but since this decision is not publicly available it is impossible to say whether it addressed the issue of informed consent or not.

This particular type of incentive, while it attracts considerable media attention, will only be appealing to a small fraction of the industry that engages in human spaceflight activities, and many states may find it a poor fit for the market for which they are able to compete.

### Conclusion

There are numerous studies pointing to the possibility that commercial space activities can have significant economic impact. A state's ability to cater to these industries could be critical in ensuring that a given state will attract these companies along with the high-tech jobs that they bring. States able to effectively use these sorts of tools may be able to realize the economic benefits of a space industry within its borders. Furthermore, states will have the added bonus of gaining the prestige of having high-profile companies operating within their borders. It is important to note that not all states will be suited geographically for commercial space activities.

Space transportation requires certain physical attributes to minimize the risk of injury to individuals or damage to properties. If a state does not possess these specific geographic attributes (i.e., on a coast, or with a large sparsely populated area), then it stands to reason that that state will have difficulty attracting the commercial space transportation industry no matter what legal incentives are in place. These states may be able to compete for space companies not focused on transportation systems, such as those in the satellite development industry.

If predictions turn out to be true, and commercial space becomes a viable and lucrative industry, then states may begin to adapt more creative and innovative mechanisms to attract aerospace companies. Who knows, the next space race may be between California and Florida and Texas and Virginia and . . .

#### Endnotes

1. Official Site of the Governor of Virginia, News Release, Governor Kaine Announces 125 New Jobs for Virginia: Orbital Sciences

Corporation to Invest \$45 million for Assembly and Launch Infrastructure of New Rocket in the Commonwealth (June 9, 2008), <http://www.governor.virginia.gov/MediaRelations/NewsReleases/viewRelease.cfm?id=679>.

2. FAA/AST, STATE SUPPORT FOR COMMERCIAL SPACE ACTIVITIES 11(2009).

3. *Id.* at 7.

4. CAL. GOV'T CODE § 13999.2 (2009).

5. *Id.*

6. *Id.*

7. FLA. STAT. § 331.302(1) (2009).

8. *Id.*

9. *Id.*, § 331.305.

10. Space Florida, Space Florida Joins the California Space Authority in Washington D.C. to Promote Federal Space Reform (Apr. 16, 2009), [http://www.spaceflorida.gov/news/4\\_16\\_09.php](http://www.spaceflorida.gov/news/4_16_09.php).

11. Along with Virgin Galactic, Spaceport America provides facilities to UP Aerospace, Lockheed Martin, Payload Specialties, the X-PRIZE Cup, and Microgravity Enterprise Inc. See <http://www.spaceportamerica.com/whos-here.html>.

12. N.M. STAT. §§ 58-31-1-58-31-17 (2008).

13. Regional Spaceport District Act, *codified at* N.M. STAT. §§ 5-16-1-5-16-13 (2008).

14. *Id.*, § 5-16-10.

15. H.B. 994, 25th Leg., Reg. Sess., § 2 (Haw. 2009).

16. *Id.*, § 1.

17. See generally Oklahoma Space Industry Development Act, OKLA. STAT. tit. 72 (2009) and Wis. Stat. §§ 114.61-114.78 (2008).

18. Space Florida, FAA Office of Commercial Space Transportation Approves

Consolidation of Space Florida's Launch Site Operators License (Feb. 17, 2009), [http://www.spaceflorida.gov/news/2\\_17\\_09.php](http://www.spaceflorida.gov/news/2_17_09.php).

19. S.B. 817, 2009 Sess. (Va. 2009).

20. CAL. GOV'T CODE §§ 13999.2, 13999.4 (2009).

21. VA. CODE ANN. §§ 58.1-322 and 58.1-402 (2009).

22. *Id.*

23. This exemption would apply to SpaceX, which also received a resupply contract through COTS; however, SpaceX chose to base its operations in Florida.

24. FLA. STAT. § 288.1045 (2009).

25. 14 C.F.R. § 460.1 *et seq.* (2008).

26. VA. CODE ANN. §§ 8.01-227.8-8.01-227.10 (2009).

27. FLA. STAT. § 331.501 (2009).

28. See generally Tracey Knutson, *What Is "Informed Consent" for Space-Flight Participants in the Soon-to-Launch Space Tourism Industry?*, 33 J. SPACE L. 105 (2007).

29. *Freedom to Fly*, ECONOMIST.COM (Apr. 22, 2009), [http://www.economist.com/science/tm/displaystory.cfm?story\\_id=13525115](http://www.economist.com/science/tm/displaystory.cfm?story_id=13525115).

## FNC Case Note

States and Canada, respectively. The court ruled that the presence of evidence somewhere on the North American continent is insufficient to justify the use of California's limited judicial and jury resources.<sup>7</sup> The court also rejected plaintiffs' argument that California has an interest in deterring future accidents, holding that "inasmuch as defendants are not California corporations, California has little interest in keeping the litigation in this state to deter future wrongful conduct."<sup>8</sup>

Finally, the court's decision in *Guimei* clarifies the applicable standard of review in cases where a plaintiff has alleged that an alternative forum is unsuitable because it may not offer an adequate remedy. Plaintiffs argued that review should be de novo, but the court disagreed. Following *Stangvik*, the court ruled that the trial court's factual findings as to the suitability of the Chinese forum should be upheld if supported

by "substantial evidence."<sup>9</sup> In doing so, it underscored the difference between cases such as *Guimei*, where the suitability determination required analysis of an extensive factual record by the trial court, and cases in which the suitability determination can be resolved entirely as a legal question (such as where the only issue is whether defendants are subject to jurisdiction in the foreign forum).

Given the penetration of American goods into the markets of developing countries, and the size of U.S. damages awards, cases such as *Guimei* are being brought in U.S. courts with increasing frequency. As the court noted in *Guimei*, the plaintiffs' choice of forum was motivated by the prospect of a sizable recovery: "there could be no other reason."<sup>10</sup> The *Guimei* opinion reinforces that plaintiff's forum choice can and should yield to a proper FNC challenge even if plaintiffs

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would receive a lower recovery in a foreign court. The opinion also recognizes that a U.S. court should be very reluctant to find that the judicial system of another sovereign nation—particularly one as large and sophisticated as China—is "too corrupt" or "incompetent" to afford basic justice to its own citizens. In so holding, the decision strikes a wise balance, which may help to deter the filing of future U.S. lawsuits that more appropriately belong elsewhere.

#### Endnotes

1. *Guimei v. General Electric Co., et al.*, No. B201016 (Feb. 26, 2009).

2. *Op.* at 14.

3. 54 Cal. 3d 744 (1991).

4. *Chong v. Superior Court*, 58 Cal. App. 4th 1032, 1038 (1997).

5. *Op.* at 8.

6. See *id.* at 8-10.

7. *Id.* at 14-15.

8. *Id.* at 15.

9. *Op.* at 7; *Stangvik*, 54 Cal. 3d at 754.

10. *Id.* at 15.