

Extend the Learning Period and Preserve Informed Consent

The “Learning Period” defined in 51 U.S. Code § 50905¹ should be extended for at least another eight years, and the informed consent regime should be preserved indefinitely.

The “Commercial Space Launch Amendments Act of 2004” (49 USC 70105 (2004)) contains two crucial elements necessary for continued innovation in human space flight. These are the so-called “*learning period*” and the *informed consent regime*.

The Learning Period

The first element is a limited moratorium on the FAA’s ability to promulgate regulations regarding the health and safety of spaceflight participants and crews of commercial spacecraft. While sometimes called a “moratorium” on regulations, it is only a partial restriction: the law ([51 USC 50905\(c\)\(9\) \(2004\)](#)) still allows the FAA to issue regulations in the event of a serious or fatal injury during flight, or an incident that posed a “high risk” of causing such an injury. This moratorium is referred to as the “learning period”. ***The Alliance and its member organizations support extending the Learning Period for at least another eight years.***

Informed Consent

The second element is referred to as the “informed consent regime” which allows license holders to fly space flight participants and crew on licensed vehicles *for compensation* without requiring certification by the Federal Government that the vehicle meets “commercial air travel” safety rules. Without the informed consent regime no rocket could carry paying passengers until they could prove the rocket was as safe as any commercial airline even though commercial passenger travel had over two decades of little to no regulations for compensated passenger travel at the dawn of commercial aviation. ***The Alliance and its member organizations support preserving the informed consent regime and, wherever possible, encouraging the FAA to promulgate voluntary standards rather than regulations.***

Simply Not Ready

When passed originally in 2004 there was every expectation that the company behind the winning XPRIZE² flight (which eventually became Virgin Galactic) would begin passenger service almost immediately. In reality, the task proved to be more complex than anyone

¹ 51 U.S. Code § 50905(c)(9). United States Code, 2012 Edition, Supplement 3, Title 51 - NATIONAL AND COMMERCIAL SPACE PROGRAMS.

<https://www.govinfo.gov/app/details/USCODE-2015-title51/USCODE-2015-title51-subtitleV-chap509-se-c50905>

² The Ansari XPRIZE. October 4, 2004. <https://www.xprize.org/prizes/ansari>

thought at the time. This, coupled with the 2008 financial crisis, delayed the first flights of commercial launch vehicles to 2021³, far beyond original expectations. The learning period should be extended until 2029, at a minimum, **to allow the originally expected 8 years of revenue flight experience to take place and allow the government to learn more about these systems.**

It's plainly obvious that commercial spaceflight has little in common with commercial aviation today, whether common carrier or other compensated flight. In reality, **the commercial spaceflight industry is not yet capable of being a common-carrier transportation service.** Spaceflight is not a technologically mature and static industry with a high expectation of customer safety. It has only a few years of operations, rather than a century of operations (aviation, automobiles, railroads, passenger ships). **Spaceflight is an experimental, voluntary, and risky experience that requires the informed consent of customers, including the federal government taking no responsibility for the safety of the experience.**

While it is not yet safe for the general flying public, it is also very different from the expensive and infrequent government approach to human spaceflight, where analysis provides “comfort” but not real safety, as opposed to 10s, then 100s, then 1000s of commercial flights with ever-improving designs, operating practices, and safety while carrying fully informed and consenting participants.

The learning period is modeled on the early unregulated period of commercial aviation when innovators rapidly improved technology and practices and consensus industry standards emerged. Regulations were only needed (and actually pursued by the industry) when it became clear some operators were ignoring standards and hurting the industry as a whole. Even then, regulations were limited to proscribing proven unsafe practices rather than imagined practices with no supporting flight data. **The FAA has the authority to publish occupant safety regulations today,** based on either an accident or even an incident that could have led to an accident. At least one accident has occurred (Virgin Galactic), but the FAA has not chosen to regulate or even publish an advisory circular. There is no need for additional authority when the FAA hasn't used the authority they already have.

Risk-taking is Uniquely American

Americans have always been risk-takers. We routinely make sports of dangerous activities such as cave diving and sky-diving. Participants may be injured or even killed, but still, people participate with enthusiasm. Space travel is still comparable to an “extreme sport.” It requires hours of high-G and zero-G training, experience with danger and stress, and training for emergency situations. Both the informed consent regime and the learning period should not only be preserved but should be embraced and extended as one of the key enabling factors that put America into space to begin with.

³ Cao, Sissi. “Every Space Tourism Package Available in 2021 Ranked: From \$125K to \$60 Million”. 2021 <https://observer.com/2021/11/commercial-space-travel-roundup-spacex-blue-origin-virgin/>