OPENING STATEMENT Congressman Marc Veasey (D-TX))

House Committee on Science, Space, and Technology Space Subcommittee "The Commercial Launch Industry: Small Satellite Opportunities and Challenges" April 19, 2016

Good morning, and welcome to our distinguished panel of witnesses.

I want to thank Chairman Babin for calling this hearing.

Before I begin, Mr. Chairman, I wish to note that we received the final witness testimony statements and the Hearing Charter less than twenty four hours ago. This has made Member and staff preparation needlessly difficult. In the future, I hope that we can receive testimony and the hearing charter in a more timely manner.

Now, as a Texas member, ensuring the continued growth of the space industry and addressing the challenges within emerging sectors such as the commercial launch industry, remain incredibly important to me and my fellow committee members.

Thanks to the Johnson Space Center in Houston, Texas has long been a leader on space issues. Now, as we move forward with commercial space flight, Texas is positioned to be a leader yet again with a growing presence of commercial test and launch sites in Texas.

Companies like Blue Origin and SpaceX are laying the groundwork for innovation and helping to inspire the next generation of scientists and engineers with their latest test sites in West and South Texas.

The work of the private space industry is helping change the landscape for satellite launches by greatly driving down the cost of delivering a payload safely to space.

Small satellites, also known as smallsats, are contributing to the emergence of new start-up companies that aim to provide rapid turn-around in services and technology advancement to improve and expand services at a lower cost, especially in the area of Earth observation and data provision.

U.S. leadership in this emerging industry has the potential to both create jobs and economic growth for the nation and to serve as an important source of U.S. innovation in an increasingly competitive and changing global marketplace.

Additionally, universities and government agencies are exploring the increased use of smallsats for research, education and training, technology development, and conduct of government operations.

One of the major challenges smallsat users face, after developing and building the spacecraft, is finding a way to put the spacecraft in space, and to do so in an affordable and reliable manner.

Today, options for placing a small payload in space include

- 1. Using dedicated small launchers,
- 2. "ridesharing" as a secondary payload on a launch primarily conducted for another purpose,
- 3. being a hosted payload on a commercial satellite, and
- 4. being ejected from a commercial dispenser mounted on the International Space Station.

Unfortunately, smallsat users and operators are often constrained in their choice of launch options due to individual requirements, available budgets, and the unique characteristics of each option. As a result, smallsat users and operators must make tradeoffs between factors such as affordability, schedule, risk, and orbital placement.

For example, since the primary payload customer dictates launch conditions, users and operators of small satellites launched as a secondary payload have no control on either the launch schedule or the destination orbit of the launch vehicle. And while secondary payload customers must accommodate any delay by the primary payload, they benefit from the lower launch costs.

On the other hand, smallsat customers who place a premium on when the launch must occur and into what orbit the satellite needs to be placed may opt to launch using a dedicated launch vehicle--despite that option's higher costs.

So it is not surprising that a number of providers are seizing on this opportunity to offer additional launch options to meet existing and projected demand by smallsats.

Two recent proposals have been made.

The first is to allow the Air Force to make its excess Intercontinental Ballistic Missile motors available for purchase and later use in commercial launches.

The second is to facilitate U.S. commercial satellite operator access to Indian launchers.

I hope that we can have an objective discussion with the panel on the pros and cons of these proposals, and identify possible unintended consequences as well. Such a discussion is

critical because both of these proposals are likely to require changes in statute and policy, which this committee would have jurisdiction over.

However, we also need to hear from the relevant government agencies, and I hope, Mr. Chairman, that we will have the opportunity for a future hearing at which we can get the perspectives of the affected federal agencies.

In closing, it is clear that we need a thoughtful discussion of these complex issues, one that will enable the U.S. to capitalize on the innovation and job creation that is sure to come from designing, building, and using this exciting technology.

Thank you, and I yield back the balance of my time.