OPENING STATEMENT Ranking Member Ami Bera (D-CA) of the Subcommittee on Space

House Committee on Science, Space, and Technology Subcommittee on Space "An Update on NASA Commercial Crew Systems Development" January 17, 2018

Good morning, and welcome to our distinguished panel of witnesses. Thank you Mr. Chairman for holding this hearing to receive an update on NASA's commercial crew systems development activities. Today, we are focusing on low-Earth orbit and the transition to a new model in which industry, in partnership with NASA, is developing commercial human spaceflight transportation services to provide NASA with crew transportation to and from the International Space Station.

Since being awarded firm-fixed-price contracts in 2014 for the development of commercial crew systems, Boeing and SpaceX have made measurable progress towards the goal of conducting uncrewed and crewed test flights. Those test flight demonstrations are critical before NASA can certify the systems' safety. Mr. Chairman, while Boeing's and SpaceX's crew systems take advantage of the nation's important human spaceflight heritage, both providers' capsules, ground systems, and even space suits will feature innovations that advance our nation's leadership in human spaceflight. In addition, the knowledge acquired from the Commercial Crew Program's partnerships can inform how NASA structures future partnerships, such as those that may support human exploration beyond low-Earth orbit.

As excited as I am about the future of commercial crew and commercial space activities, let me be clear. The development of new human-rated spacecraft is not easy and carries significant risk. There are stringent requirements for both human-rating and ISS proximity operations that must be met. NASA needs to assess whether the providers' approaches to meeting these requirements are acceptable, or if not, whether it will accept additional risks.

There is much anticipation for commercial crew activities as the U.S. looks to end its reliance on Russia as the sole means to transport NASA crews to and from the ISS, establish commercial human spaceflight services that may eventually support future commercial activities in low-Earth orbit, and allow NASA to focus its efforts on the human exploration of deep space. These goals will not be realized without the confidence that such systems are safe. Decisions that jeopardize safety in an effort to meet schedules typically do not end well. That painful lesson was learned from the *Challenger* and *Columbia* Space Shuttle accidents.

In its recently released 2017 Annual Report, the Congressionally-chartered Aerospace Safety Advisory Panel, which is represented here today, stated, "*This is a time when it is important to retain focus on program details; to maintain a sense of urgency while not giving in to schedule pressure; and to continue with program plans without neglecting, shortchanging, or deleting planned content. Important decisions are facing NASA leadership in certifying those platforms for human space flight that should be based on a strong foundation of test and engineering data.*" So, I hope that today's hearing will provide us with the opportunity to examine important issues regarding the development and status of commercial crew systems including:

- How NASA will ensure that commercial crew development is not subject to "schedule pressure" that could jeopardize crew safety;
- How NASA will ensure continued U.S. access to the ISS if commercial crew providers are delayed in achieving certification; and
- What steps NASA and the commercial providers are taking to minimize the risk to crews flying on these new spacecraft, as called for by the Columbia Accident Investigation Board.

In closing, I look forward to today's testimony and I yield back.