OPENING STATEMENT Ranking Member Eddie Bernice Johnson (D-TX)

House Committee on Science, Space, and Technology Subcommittee on Space "Planetary Flagship Missions: Mars Rover 2020 and Europa Clipper" July 18, 2017

Good morning. And welcome to our witnesses. I look forward to your testimony. Mr. Chairman, thank you for holding this hearing on planetary flagship missions.

Through our investments in NASA's planetary science program, NASA has been able to explore every planet in the solar system, as well as Pluto; continuously operate missions at Mars for the past two decades; and discover an expanding realm of potentially habitable bodies both within and beyond the solar system. With each discovery, NASA is advancing knowledge, pushing technological boundaries, and inspiring future generations to pursue science and technology education and careers. That is why I have often referred to NASA's science program as one of America's crown jewels. And, as we will hear this morning, even more exciting planetary science missions lie ahead.

As I speak, NASA is developing two planetary flagship missions. The Mars 2020 rover will assess the habitability of Mars and look for signs of past life. In addition, the Europa Clipper mission will investigate the ice shell of Jupiter's moon Europa and its underlying ocean, helping scientists to assess whether it can support life. These, like previous flagships, are very challenging missions. Mars 2020 will drill, collect, and cache samples of Martian rocks and soils, and Europa Clipper must withstand the intense radiation environment of Jupiter. Fortunately, NASA has decades of experience with flagship missions to draw on.

With that in mind, I hope our witnesses can discuss the lessons learned from previous flagships and how we are using that knowledge in developing the Mars 2020 and Europa Clipper missions. Mr. Chairman, a discussion of flagship missions would be incomplete without mentioning the importance of balance in mission sizes—a critical element of a robust portfolio that both the National Academies and NASA Authorization Acts have repeatedly emphasized.

To that end, I am pleased that this morning's discussion will also include smaller, Discovery-class missions, and their role in maintaining a productive and balanced planetary science program. Looking ahead, opportunities for new and exciting planetary science missions abound. Maintaining balance will take discipline among NASA, the scientific community, and Congress. Before I close, I want to take a moment to thank the talented, dedicated and committed workforce of NASA and its university, industry, and international partners. Our nation's inspiring achievements in planetary science would not be possible without you.

Thank you, Mr. Chairman, and I yield back.