

OPENING STATEMENT  
**Ranking Member Donna F. Edwards (D-MD)**  
**of the Subcommittee on Space**

House Committee on Science, Space, and Technology  
Subcommittee on Space  
*“Next Steps to Mars: Deep Space Habitats”*  
May 18, 2016

Thank you, Mr. Chairman, for holding this hearing on *“Next Steps to Mars: Deep Space Habitats”*. Our Committee and Subcommittee have actively been examining aspects of the humans-to-Mars goal as well as how to implement it, and I’m looking forward to continuing the discussion this afternoon.

I’d also like to welcome our distinguished panel of witnesses. It is a rare opportunity to have NASA, industry leaders, and a best-selling author together to discuss the opportunities and challenges involved in sending humans to Mars.

And the fact that we will discuss today one of the critical elements needed to send humans to Mars—habitats—reflects the current situation that achieving the humans-to-Mars goal is no longer a question of “if” but rather a question of “when”.

The “when” will, in part, depends on public support, and I’m glad that Mr. Weir is here today to provide his perspectives on how popular media, such as books and movies, can help further public support for the goal of sending humans to Mars.

Other questions we need to address are, of course, how do we get there and what do we need to be working on now in technology development, research, and mission demonstrations if we are to achieve the goal?

This afternoon’s hearing will focus on the habitats and habitat systems needed to protect a crew from the harshness of space during deep space missions. Habitats will need systems to provide clean air, water recovery, climate monitoring and control, and a means for food production. They will also need to provide for fire safety within a closed environment, crew exercise, onboard medical services, and the ability to provide safe haven from solar particle storms and cosmic galactic rays that pose risks to crew health and mission operations. So, I’m anxious to hear from our panelists about the concepts for addressing these challenges and the status of work to date on habitation systems.

Finally, getting humans to Mars will require much more than overcoming the technical challenges of developing habitation systems. It will require national commitment, sustained support, and resources over multiple decades. Public excitement, anticipation and engagement in sending humans to Mars will also play an important role in determining the extent to which the nation prioritizes this goal.

I'm pleased, Mr. Chairman, that we also have the opportunity today to discuss how we can stimulate and leverage public engagement in the goal of sending humans to Mars.

Again, I'd like to thank our witnesses for being here and I look forward to your testimony. Thank you Mr. Chairman, and I yield back.