Q&A

- Idaho National Laboratory: How much radiation hardening testing did you do with your equipment, how much more do you think you need, and how long do you think the LIDAR system will last?
 - Mitch Pryor: The robots we have put in have yet to break. People study radiation damage at different levels all the time. We have two routes with radiation damage: (1) macro to look at performance differentiation, and (2) modeling with cluster dynamics at the molecular level to receive feedback. It has not been an issue that we did not do radiation hardening testing.
- Idaho National Laboratory: What was the highest radiation ? you saw?
 - Mitch Pryor: 2,500 mg/hour.
- Idaho National Laboratory: How real-time was your LIDAR information?
 - $\circ~$ Mitch Pryor: With it tethered, it was great for real time. With wireless, the delays are more.
- **U.S. EPA:** We had a mine fire and several robots got stuck. I am interested exchanging contact information. Do you employ for emergency response?
 - Mitch Pryor: I am happy to share my card. There are discussions about how we can respond to mining accidents with these systems. It is hard to deploy most robots in emergency situations because it is the first time the robot is deployed. Our robots are used routinely.

Commented [BC1]: Could not catch this word, but it might be easier for you to determine based on Mitch's response.