**EXPLORAVISION PAPER REQUIREMENTS**

* **Present Technology:** Give an overview of the present form of the technology, including some scientific principles involved in how it functions. Define a key challenge or limitation of this present technology that you will address in your ExploraVision project.
* **History**: Research and describe the history of the technology from its inception.
* **Future Technology**: Describe the team's vision for what this technology will be like in 20 years — including scientific principles involved in developing the technology.
* **Breakthroughs**: Research and describe breakthroughs that are necessary to make the future technology design a reality. Why doesn't this future technology exist today? Choose one of your required breakthroughs and describe a research project that would have to be planned and carried out to test your ExploraVision project. If possible, include the kind of data or measurements that would be collected in the investigation.
* **Design Process**: Describe three alternative ideas or features the team considered for this ExploraVision project. The ideas and features should be directly related to the project, not a list of other projects you may have submitted. Describe why the team rejected each feature and idea in favor of the ones in the submitted ExploraVision technology. Describe how your future technology feature is better than the rejected design feature.
* **Consequences**: Recognizing that all technologies have positive and negative consequences, describe the potential positive and negative consequences of the new technology on society. Tip: The Future Technology, Breakthroughs, Design Process and Consequences sections are the most heavily weighted when assigning points in the judging. Therefore it makes sense to devote at least two-thirds of the description to these areas.