INTO ORBIT℠ Project Updates

U02 – SOLVE YOUR "SPACE PROBLEM" FIRST 01 August 2018

In many past seasons, the Project directions have instructed teams to "*design an innovative solution that **adds value to society**.*" For the INTO ORBIT℠ Project, your problem is very unique: You must "*identify a human physical or social problem faced during long duration space exploration within our Sun's solar system and propose a solution.*" For this season, to avoid any confusion about just whom your solution should benefit, we have removed the phrase "*adds value to society*" from the Challenge Guide. This is to make it clear that your team **only** needs to worry about finding a solution that helps the people in space affected by your problem. If it happens to also help people on Earth by creating a "spinoff" solution, that's great! However, it's not a requirement. Judges will be notified of this Update so that when they are evaluating your team's solution, they do not expect you to develop an innovation that also solves a problem on Earth.

Also, remember that teams are expected to share their work as part of the *FIRST*® LEGO® League Project. However, we realize that it may not be possible to share your research with an expert in space exploration. That's OK! Remember that you can share your Project with any of the professionals you consulted as part of your research to achieve Accomplished or Exemplary levels on the rubric.

U01 – FINDING HELP 01 August 2018

One of the most frequent questions we are asked about the Project each year is, "How can we find people to help our team learn more about _____" (space, water, animals, nanotechnology, etc.). For the INTO ORBIT℠ Challenge, we realize that not everyone lives down the street from a place that launches rockets!

However, if you will review the Challenge Guide closely, especially pages 16-18, you will see that the "*Ask A Professional*" section lists many more jobs than just astronaut and rocket scientist. In fact, many types of professionals can help your team understand some of the problems involved in long-duration space travel. Health care professionals can help you discover some of the physical problems people confront in space, such as exposure to reduced gravity and radiation. Psychologists and social workers can help you understand some of the social problems people face when they are away from family and friends for long periods of time. Aeronautical, mechanical and electrical engineers can help you appreciate some of the amazing systems that are needed to develop spacecraft capable of keeping crews healthy and safe. You might even consider contacting a teacher at a college or university, or seeing if there is a science center or planetarium nearby. The "*Websites and Articles*" section on page 14 of the Guide has a list of places you can begin looking for assistance.

There are also some starter questions on page 7 of the Guide, and some sample problems listed on page 8. These sections may help you begin your research and select a problem. They may also spark an idea about who you might ask for help. The "*Share with Others*" section on page 9 of the Guide also has some tips about finding support for your team. Presenting your Project to professionals is a great way to share your work!

Judges are aware that teams will be talking to a *wide variety* of professionals during the INTO ORBIT℠ season. So, don't worry, you will not be expected to find your own personal astronaut or rocket scientist!