

## **Robo-Ops Live Stream Requirements** Live Stream Codes are due May 7, 2016.

Teams are required to provide NIA with the Live Stream of their on-board camera feed. The rover(s) must also have an on-board microphone capable of transmitting audio data back to their home university Mission Control. Teams are required to have audio streaming, along with their visual Live Stream, up and running for the public to hear during their competition run.

Teams are required to provide NIA with the ability to live stream – that is, broadcast in real time – the viewpoint of each team's rover as they make their way through the NASA JSC Rock Yard. In essence, the viewer should be able to **see and hear** what your Mission Control sees and hears during the competition, via the on-board camera and microphone.

**NEW THIS YEAR:** Teams will be required to display split screens on their Live Stream: one that shows their Mission Control Center throughout their run, and the other to show the camera feed from the rover.

NIA will compile each team's live stream feeds and house them on a single webpage within the Robo-Ops website. This live stream will be made available to the public during the competition, and teams are required to share the webpage via their networks as well (i.e., blog or social media page), etc. In the past, teams have even reserved auditoriums at their colleges, inviting classmates to view the live stream as a group.

Teams should be prepared to conduct a brief test of their audio and live stream capabilities on the first day of the Robo-Ops Competition (test day). Teams are required to **RECORD** the livestream and provide the recorded footage to NIA for future use. Recordings must be emailed to <u>rascal@nianet.org</u>.

Teams may use livestreaming software or one of the following websites to host their livestream:

- Youtube
- UStream

Teams should provide NIA with one of the following types of code for NIA to embed on a dedicated live stream page:

- Iframe
- Object
- Java

Please do NOT send the following types of files or use the following websites:

- Twitch.tv
- Applets
- Windows Media
- Jar Files

The following is an example of one kind of appropriate script that a team may submit. The value name bolded below should be unique to each team.

```
<iframe width="560" height="315" src="https://www.youtube.com/embed/4mWN3L2KP0c" frameborder="0" allowfullscreen></iframe>
```