Alexa Otto Atmospheric Science Course Based Research First Year

## **Initial Set-up and Lab Testing for Flare Testing Project**

Flare testing is being conducted as part of a Research North Dakota funded project to determine the performance of seeding material (ice nuclei) produced by flares manufactured by Ice Crystal Engineering LLC (ICE). In order to test flares, an injection system is required to ensure the particle concentrations are low enough not to contaminate the testing facility, PI Cloud Chamber at Michigan Technological University. This project is currently in the set-up process as construction of the injection system is underway. Once the system is built, lab testing will be conducted to determine the size and concentration of the particles produced. Documenting the performance of the injection system is critical for the next phase of the project which will evaluate the efficiency of the ice nuclei. Determining the efficiency of the flares is critical for the development of products by ICE.