G-Chaser Science Summit

Team Name:
• Project Aether: The Advanced Communications Spectroscopy Payload

Team PI(s):
• Dr. Romero- Talamas

Student Representative(s):
• R. Pierce Smith
• Christopher Murray
• Samuel Lawson
• Dean Zinetti

Mission Statement:
• Our mission is to observe the effects of the Aurora Borealis on the atmosphere while
testing the performances of a custom modified Aerogel thermal insulation and Iridium’s
data rates.

Instruments/Deck:
• Spark Gap
• Spectroscopic Camera
• Modified Aerogel Thermal Insulation
• Multi- Layered Insulation
• Thermistors
• Raspberry Pi 3
• Iridium Modems/Antennas
• 0.1-2000MHz RF Wideband Amplifier
• Half Deck

Desired Launch conditions:
• Clear Skies
• Would like an Aurora
• Iridium Coverage
• Trajectory: Up and Out

In-Flight Conditions:
• Shell and nose cone release at 50 km
  o Shell deploy as early as possible