NAVAIR Thermal Fluids

Fall 2009 – Tom Merrill, Faculty Advisor

- **NAVAIR** – provides all launch and recovery technologies for the Navy

- **Collaboration** – Work with NAVAIR Engineers in Lakehurst, NJ

- **Opportunity** – If NAVAIR or other defense industries are of interest, this may be a good start.
Compressed Gas Modeling

- The Navy services compressed cylinders containing oxygen and liquid nitrogen. Gas fill temperatures are not well predicted.

- Predicting accurate fill temperatures helps improve safety conditions and equipment reliability
Clinic Preview

• Anticipated Activities:
  • Working with NAVAIR engineers to understand and define the problem
  • Background review, including fundamental thermal fluids
  • Gas behavior model development and comparison with field data
  • Model refinement and delivery to NAVAIR.

• Seeking Team Members With:
  • Thermal fluid science interest, with attention to detail
  • Computer Programming Skills
  • Good communication skills, written and oral.
  • Tenacity