



RESEARCH PROJECTS

Combustion Lab Organizational Assessment and Implementation – Phases 1 and 2

Services Provided: Strategy Development and Process Improvement

The Challenge: The Aerospace Engineering Combustion and Fluid Mechanics Laboratory (“Combustion Lab”) is a state of the art research facility located on Georgia Tech’s campus. The facility hosts approximately seven faculty members, 10 research engineers, 50 graduate students, and 20 undergraduate researchers. The lab is unique at Georgia Tech in that the researchers share equipment and laboratory space to conduct research projects. The size and complexity of the lab’s projects have grown significantly since the group moved into its current facility ten years ago, which has presented a challenge to the Combustion Lab’s unique operating model. As a result, the Combustion Lab’s leader asked GTSC to conduct an organizational assessment and provide recommendations to more clearly define organizational roles and responsibilities, increase collaboration, and enhance career development opportunities for lab personnel.

GTSC Contribution: The foundational assessment was conducted over a six-month period. An advisory team made up of representatives from the lab’s major constituencies reviewed the proposed approach, confirmed interim findings, and reviewed recommendations. GTSC contributions included:

- Defined the lab’s current state using interviews and an online survey of current and former lab members
- Established a common set of categories for lab equipment to determine how equipment would be used and by whom
- Provided benchmarking data on the policies, leading practices and resources used in other Georgia Tech and non-Georgia Tech labs
- Identified a campus resource for monitoring training and access to shared lab equipment

Impact/Value/Outcome: GTSC provided a total of 12 recommendations, along with a rationale for each recommendation and a recommended approach for implementing each recommendation. An evaluation of the services provided by GTSC brought value by:

- ✓ Engaging a broad range of stakeholders on the Combustion Lab
- ✓ Bringing a neutral and innovative perspective/external “eyes”
- ✓ Raising issues and clearly communicating across the range of stakeholders
- ✓ Providing a detailed report that outlined observations, recommendations, and detailed supporting content to develop an implementation plan/road map
- ✓ Advising lab leadership on the best methods for communicating change, gaining lab member buy-in, and facilitating the implementation of recommendations.
- ✓ Developing a detailed implementation plan. Nine of the twelve recommendations were implemented.