

Mechanical:

- New engine mounts and mechanical systems have been designed and built to accommodate the larger engines (pumps) in the new payload
 - A shortened crankshaft will allow for the bigger engine to fit in the allotted space
- Mechanical design of the payload frame is in process to accommodate this system as well as optimize the mechanical setup of the previous experiment
- New options for the solenoid valves are being researched; noting that the higher the Cv number for the solenoid valve is the efficiency of flow is through the valve
- The larger Tigre Engine, pulled it apart and Dicronited (lubricated it).
- Threading the air intake port will allow for a custom barb fitting to secure an air tight fit
- The motor mount for testing is completed
 - A 6"x12"x1/4" aluminum plate will be used for testing, and the plumbing for the new filter assembly system will be determined and bought after the solenoid(s) come in.

Biological Analysis:

- Preliminary culturing experiments are underway to attempt to optimize conditions for the recovery of airborne microorganisms
- Research is underway concerning the epifluorescent dyes to be used for the enumeration of the sample