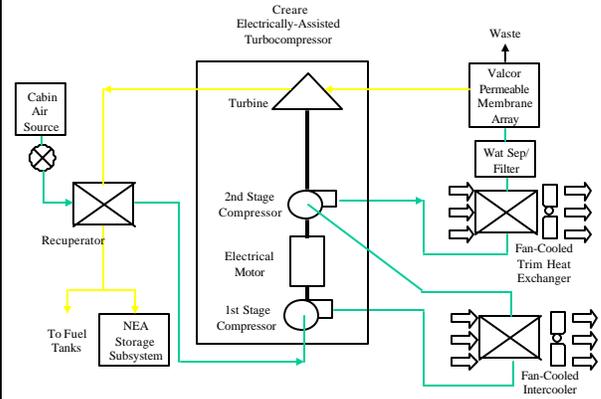


NASA SBIR/STTR Technologies <u>A Small Transport Aircraft Fuel Tank Inerting System</u> PI: Patrick J. Magari/Creare Incorporated, Hanover, NH Proposal No.: 01-A1 02 9179	
<p><u>Description and Objectives:</u></p> <p>SAMI is a fuel tank inerting system that combines semi-permeable membrane air separation technology with Creare’s proprietary turbo-machine and light-weight radiator technology to be sized for use on 737 class aircraft. We have set the following objectives:</p> <ol style="list-style-type: none"> 1. Define the requirements for fuel tank inerting. 2. Determine the available power and bleed air over the flight and ground operational envelope 3. Assess the integration options. 4. Identify the most efficient way to meet the needs of ground inerting after refueling 5. Producing a preliminary system design. 6. Compare the overall benefit of this system to potential alternatives 	
<p><u>Approach:</u></p> <p>In Phase I we will perform a study to optimize an inerting system to meet the requirements and constraints for a 737 sized aircraft. In Phase II we will demonstrate the key components of this system to ready the system for commercial implementation.</p> <p><u>Subcontractors/Partners:</u></p> <p>Valcor Engineering (manufacturers of the present membrane inerting system for the F-22) will be a development partner and eventual manufacturer.</p>	<p><u>Schedule and Deliverables:</u></p> <p>6 month project length Progress Reports after month 2 and 4 Final Report at the end of month 6</p> <p><u>NASA & Commercial Applications:</u></p> <p>Performs fuel tank inerting on the most common size commercial carrier, the 737 class size. This technology is also likely to be the optimum approach for smaller aircraft (e.g., Saab 33 seat commuter) and medium sized aircraft such as the 757.</p>