



*Scan Eagle Unmanned Aerial Vehicle*

- Identify material rated at or below  $-40^{\circ}\text{C}$  to replace existing fuel and pitot lines
  - Develop a solution for keeping engine temperature above  $140^{\circ}\text{C}$  and below  $180^{\circ}\text{C}$
  - Establish and approach for eliminating wing icing during flight
  - Use an environmental chamber to validate solutions
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- Scan Eagle is currently in use by the US Navy
  - Current Scan Eagles are restricted by environmental constraints
  - Develop and implement solutions for flying Scan Eagle in the Arctic
  - Validate solutions
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- Research will have an immediate operational impact for the US Navy
  - This capability is a known requirement for Naval Special Warfare
  - This research provides students with relevant and unique advanced education and research in accordance with NPS mission statement
  - Research provides a source for unmanned systems employment concepts for operations as per the specific CRUSER Goals