**Research Question (And Mission Statement):**

Can a MEMS based IMU be used to create a maritime navigational aid, for use in a communication denied environment, with comparable accuracy to other contemporary navigation systems?

**Research objectives**

* To evaluate current day navigation systems and express their relative accuracy as a function of cost
* To establish what factors negatively impact the accuracy of a MEMS / IMU based INS
* To determine techniques that can be used to minimize factors which negatively impact on the accuracy of the INS
* To create a software solution capable of increasing the accuracy of the INS through the use of a combination of minimization techniques
* To build a system capable of determining and tracking a vessels position and displaying the obtained information in a format deemed suitable for navigation

**Requirements:**

* **Navigational Requirements**
* **Drift Correction Software Requirements**
* **UI & Metric**

**Require – Error source research and theory section**