**Final Report (Close-Out Memo)**

**Date: 5/24**

**written by:  Elijah Widener Ferreira**

Use Case Name (Spreadsheet Title): Summarize review of research papers on reliability analysis

Team Member: Elijah

Reviewed by: Anastasia Rae, Manoj Jha

**Use Case Description**: This use case focuses on reviewing and summarizing a research paper titled "Dynamic predictive maintenance for multiple components using data-driven probabilistic RUL prognostics: The case of turbofan engines". The paper proposes an end-to-end framework for predictive maintenance of complex systems, such as aircraft turbofan engines, by using a CNN, the paper is able to view data-driven probabilistic remaining useful life (RUL) prognostics.

**Conclusions and Future Works:**

The research paper "Dynamic predictive maintenance for multiple components using data-driven probabilistic RUL prognostics: The case of turbofan engines" presents a comprehensive framework for predictive maintenance of complex systems, such as aircraft turbofan engines.   
   
This methodology and process can in theory be repeated on any type of machinery.

The immediate next step is to replicate the results from this paper as explained in the document titled, “Gameplan Turbofan” in my github repo.  So far, the dataset has been acquired, and curation of the dataset has been started using python.