Abstract
The aim of this project is to utilize engineering methodology to develop a practical solution to standardize the billing process of FEAM, an aviation Maintenance and Repair Organization. Currently there is no structured or electronic platform that is fit for purpose to reconcile billing data, restricting visibility and causing major issues throughout the process. Delays due to missing or incorrect information can pose a difficulty in any type of process.

Introduction

Current State Process Maps
Atlas Process Map

Non-Atlas Process Map

Methods I Design I Analysis

Billing Team Delay – Fishbone Analysis
This fishbone diagram depicts all problems currently occurring within the Billing Process. Our final solution derived from the creation of this problems diagram.

Delay Response Times – Graph Analysis
Raw data was collected to measure the response and receive time for lost data needed to be collected by the billing team. Bar in blue are Non-Atlas response times, bars in red are Atlas response times.

Results
Planning forms were created for Atlas and Non-Atlas billing to provide 407 forms with a tab for each airplane that was serviced during a shift. 407 forms include all necessary information needed to create a proper invoice for each type of customer. Both 407 forms are seen to the right.

Conclusion
• The biggest problem in the FEAM billing process is the billing team receiving missing or incorrect information that often results in significant delays.
• We created standardized electronic forms for employees that connects to a database in which all needed information can be accessed.
• These forms combine all the information needed to clarify and streamline the process by reducing errors, minimizing manual steps and redundancies, and increasing efficiency.
• After all forms are submitted, the billing team will receive a report that compiles all required information to create an invoice.
• By designing forms and streamlining each process, we made an effort to create a simple, user friendly, and fast solution that FEAM can implement going forward.

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References
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