

Executive Summary

Bombardier is an international multi-billion dollar company whose Toronto branch allowed students of the AER 1601, Aerospace Engineering and Operations Management, class access to the Dash 8 Q-400 line to help provide a fresh and outside perspective on issues being experienced by the Operations and Final Assembly line of the Q-400 program. Team 3 was tasked with the challenge of developing and integrating a visual management system with one of the two labour tracking systems currently in use in the Operations department, the Crew Load Chart (CLC) and the Final Assembly Tracking System (FATS).

At first, this project seemed to be purely technical in nature; choose one of the two tracking systems and integrate a visual management system and develop/propose a software process that would visualize the data currently being produced by whichever system was chosen. But, as the project progressed, it was observed that this was more of a strategic/managerial project as the reason for having two tracking systems is a result of a non-efficient and sub-standard work culture.

One of the most egregious cultures that was/is being tolerated were/is the widespread lack of communication as it was later found, two weeks till the project deadline, that the FATS is actually capable of all, and more, the features that the team was supposed to develop but because of the appropriate people did not receive the memo of the FATS it was deemed useless and a new system was developed and implemented, the CLC.

This paper will go into more detail about the approach the team took to arrive at their conclusions, the findings and observations, the analyses performed, proposed short and long term solutions, and an implementation plan for both solutions.

Furthermore, the team would like to highlight that the project experienced a period of limited to no communication with the Bombardier point of contact, Monique Johnson, and lost about two weeks of valuable time. Also, it should be noted that the project would have progressed even faster had a more appropriate point of contact with more FATS expertise been chosen. The team spent months learning all the issues and limitations of the FATS, which was still limited, but in one hour and a half session two weeks before the deadline with a previously unknown Methods Specialist, Scott Scheibler, the team learned all about the functions, capabilities, history of the FATS, and more that the point of contact simply could not provide as most of the information gained was new to her as well. Overall, this was a successful project, regardless of a few hiccups along the way.