ABSTRACT

With growing popularity for commercial air travel and aerial military operations comes an increase in demand for innovative, technological solutions of aircraft system components. As OEM sales of these components rise, this creates a burden on the aftermarket side of the business when these parts and systems require service in order to continue functioning properly. Parker Aerospace, Fluid Systems Division, and its Product Support Team are experiencing this growth burden and want to reconfigure necessary means within the layout to succeed in accommodating new program areas on the aftermarket side. During this process, cost reduction opportunities will be explored and a systematic approach to facility design will be used. In this approach, the departments are initially defined before the relationships between them are to be analyzed. Space requirements are also recorded. Once these steps are complete, alternative layouts are constructed and analyzed before a final layout is chosen.

This systematic approach provides a fully analyzed facility design, taking into consideration the needs of the customer, the constraints of the company, and the total cost of implementation. Moreover, the increase in revenue due to new program areas along with cost savings provided by the layout is presented to show the economic justification of the facility redesign. Once the required steps of the facilities systematic approach are complete, the appropriate upper management at Parker Fluid Systems Division must be convinced before signing off on all necessary paperwork and eventually becoming implemented.