Lean Event Speeds Mechanics' Logon

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TINKER AIR FORCE BASE, Okla. -- A team from the 76th Aircraft Maintenance Group recently used Lean principles to streamline what was becoming a cumbersome task for Tinker maintenance workers, increase worker satisfaction and possibly save the Air Force significant amounts of money.

Aircraft mechanics are required to log on to computer terminals to provide information on their daily tasks. Data from these Time and Attendance entries is critical and used for unit planning and funding. During the first two weeks of July, there were more than 24,000 of these transactions in the 76th Aircraft Maintenance Group.

Because of the volume of these transactions and their importance, it is a serious problem when workers have to wait in line to use a computer, or wait for a computer to boot-up, before they make a thirty-second entry. Although this may not appear to be a significant problem, the Lean process always looks for ways to eliminate wasted time.

Lean is a method for change that aims to continuously improve processes, no matter how small they may seem. One of the ways this is achieved is through a Rapid Improvement Event. These events are action-oriented, usually last three to five days and are carried out by cross-functional teams.

"The return on investment for the logon Rapid Improvement Event is remarkable. Once deployed, the cost-avoidance projections could potentially save millions," said Maj. Gen. David Gillett, Oklahoma City Air Logistics Center commander.

The 76th AMXG Logon RIE team was formed to focus on the wasted time during logon. They set out to spotlight the issues causing the wait times by documenting the common mechanic's logon process. The team found that mechanics were spending two to four minutes to log on and complete a computer transaction.

"I had no idea that a few minutes here or there would be so significant," one team member said. "Unless you stand beside the users and use a stop watch, you don't realize how all those little periods of downtime can add up."

The team set improvement targets, performed root-cause analysis, and began to develop counter-measures. Equipment reliability is a key to Lean operational performance. The team added checklists to ensure that the proper computer equipment was always available to the mechanics. To speed up the process, they suggested adding new computer terminals, creating dedicated terminals for time and attendance, reconfiguring applications and modifying user profiles. Establishing dedicated terminals for Time and Attendance will remove the need for a Common Access Card to log on, virtually eliminating the wait-time.

"With time saved on logging in, mechanics have been more apt to use Time and Attendance system the way it was intended, making it more efficient for them and the customer," said Missy Gillis, a B-1 mechanic with the 565th Aircraft Maintenance Squadron.

The team tested the success of these combined countermeasures and found that 28,000 man hours could be saved in the aircraft maintenance group alone. "In this case, simply preventing interruptions to production flow and focusing on equipment effectiveness underscores the fundamental value of Lean" said Kelly Butler, deputy director of the Information Technology Directorate.

The project involves reconfiguring twenty-two existing computers, using checklists, and reconfiguring user profiles.

The KC-135 Weapon System will be used as a control. Mechanics' computers will be monitored closely to determine their "up" time and availability. The team will also use software to monitor the computers automatically so that man-hours are not just simply shifted to a different area.

The last of the eight steps, Standardizing the Process, measures and documents a successful process that can be repeated and deployed in other weapon systems.

Source: http://www.afmc.af.mil/news/story.asp?id=123164380