

## Project Charter

**Project Name: Forestry Equipment R&D Center Stockroom**

**Date Chartered: February, 2012**

**Expected Completion Date: July 1, 2012**

**Team Leader: Mike Lehman**

### **Team Mission:**

What is the purpose of the team?

Apply Lean Six Sigma principles to the Forestry Equipment Research and Development Center (LeMay Forestry Center-Tomahawk) stockroom operations. The team's mission is to increase customer satisfaction for all who interact with the stockroom both internal and external customers. The scope of the Lean Six Sigma project would include inventory control, timeliness and accuracy of orders and process simplification.

### **Team Goals / Measures to be used to quantify progress, determine success:**

The team will implement improvements that accomplish the following:

1. Reduce DNR staff time required for the process. **Measure – DNR staff time is reduced by 10% during Order Fulfillment and Inventory Control processes** (compare post-improvement to pre-improvement “process” times).
2. Reduce the amount of time it takes for the customer to receive orders from the stockroom. **Measure – a) 95% of orders for regularly stocked items are ready for shipment before end of next business day, with 95% of those orders received before noon being ready for shipment the same day; b) 95% of orders for regularly stocked items, that are in stock, are ready for shipment before end of next business day, with 95% of those orders received before noon being ready for shipment the same day.**
3. Increase completeness of orders shipped. **Measure – 95% of orders shipped match the order requested** (document number and reason for backorders or returns).
4. Simplify the process. **Measure – Lead Time is reduced by 10%** (document the # of actions taken to simplify the process; in Order Fulfillment process, compare post-improvement to pre-improvement lead times.).
5. Federal, State and program safety requirements are to be addressed and incorporated into the new process, if applicable. **Measure - No Worker Compensation claims for stockroom workers.**

### **Team Members:**

Mike Lehman

Holly Lund

Christer Dahl

Su DaWalt

Jeff Weatherly

### **Issues to be addressed:**

What Problems or opportunities will the team solve?

1. Instill a culture of “Customer service is #1 in everything we do.”
2. Delays in processing orders
3. Accuracy of inventory
4. Organization and cleanliness of stockroom

**Expected Results:** What will be in place when we are done?

- Standard Operating Procedures that will be followed consistently.
- Systems and procedures established to meet all goals identified previously

**Support/Resource People:**

Who will we need assistance from besides the team members?

- Experts in Lean Six Sigma to include Jeff Weatherly, Forestry Division
- Chris Klahn – FFP Grant Coordinator and member of FDAC and FCA
- Nicolle Spafford – Financial specialist and customer
- Jeff Stagg - IT

**Responsibilities and Boundaries:**

What areas will the team look?

- Receiving and processing customer orders (phone, fax, email)
- Picking, packing and shipping orders
- Inventory control

**What areas will the team NOT look at?**

- Operation of equipment production beyond interaction with the stockroom

Reviewed by team leaders March 20, 2012; reviewed by team March 27, 2012. Additional edits were made April 27, 2012. Operational definition of measure for goals have been clarified, and re-clarified on May 12th, and Support/Resource People augmented.



# DNR Lean Project - Final Report

**Project Name:** Forestry Equipment R&D Center Stockroom

**Project Team Leader:** Mike Lehman/Su DaWalt

**Project Purpose:** Apply Lean Six Sigma principles to the Forestry Equipment R&D Center stockroom operations. Increase customer satisfaction with stockroom for both internal and external customers. Areas the project will address are inventory control, timeliness and accuracy of orders, and process simplification.

**Project Team Members:** Mike Lehman, Su DaWalt, Christer Dahl, Holly Lund and Jeff Weatherly

**Summary of Improvements:** See attached Project Opportunity Chart

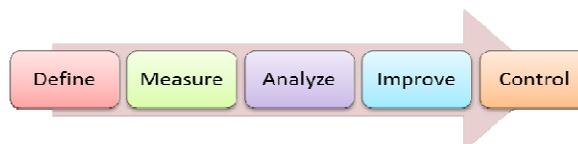
### Project Results:

Goal	Baseline	Target	After Improvements	Goal Met?
Reduce DNR staff workload.	5.3min/line of order	Reduce 10%	4.6min/line of order	Yes
Reduce Lead (delivery time).	54-91% of orders meet goal	95%	No new data available yet	Expected
Improve Customer Satisfaction.	16.5% Back Orders	<5%	No new data available yet	Expected
Simplify the Process.	3+ stock locations	1 location	Completed	Yes
Ensure Staff and Customer Safety.				Yes

### Project Cost:

	Hours	Dollars
Project Team Leader	515	
Project Team Members	1,420	
Meeting Costs		\$460
Improvement Costs		\$27,000
Total	1,935	\$27,460

**Recommendations for Future Code/Statute Changes:** None.



**Lessons Learned:**

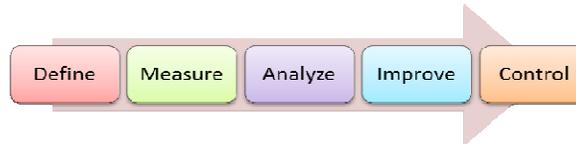
Upper level support is critical and very much appreciated! Very helpful to have someone dedicated to coordination and documentation of project. Very helpful to have someone from outside the project area on the team – fresh set of eyes. The first 3 phases are critical to success (Define, Measure, Analyze). More training for the Improve and Control phases would have been helpful. Areas for improvement next time; Need other workload removed to be able to focus on project, especially for rapid implementation.



# DNR Lean Project - Final Report

## Improve – Brainstorm/Opportunity Chart – Updated 6-27-2012

Issue	Collaboration Needed to Complete	Coordinator	Deadline	Completed	Comments/Status
Develop Communications Plan:		Su with team	6-8-2012	✓	
Customers					Various targets, latest is 8/1/2012
Suppliers					Late June mailing
Customer Satisfaction vehicle					Targeted for mid-April 2013
Invite FDAC to meet @ LeMay					Hosting September meeting
SOPs – update/develop		All	6-23-2012	✓	Control Phase
Staffing – hire LTE(s)	✓	Mike	8-1-2012		
Centralize warehouses with Inventory Control Coordinator		Chris/Holly	6-15-2012	✓	Brainstorm as a group prior to implementation Average estimated time savings – 4 min/order
Install UV film on stockroom windows		Chris	6/15/2012	✓	
Stockroom organization		Chris/Holly	6-27-2012	✓	
5S		All		✓	
Discontinue stocking uniform items		Holly		✓	Holly-contact FLEST on other options for uniforms
Proper equipment		Chris/Holly/Mike			
Phone			6-15-2012	✓	
Packaging			6-15-2012	✓	
Loading/unloading	✓		9-1-2012		1 <sup>st</sup> demo week of 6/18; another to be scheduled
Computer and computer connections			6-23-2012	✓	Mike to contact Ryan/Jeff
Printer/copier/scanner			6-23-2012	PO out	Fax to remain in main building-pick up 4X daily
Investigate inventory barcode scanners	✓		9-1-2012		
Parking Lot Signage		Mike/Chris	6-25-2012	✓	
Main lot, by main entrance, No Parking, Stockroom man-door, Customer Parking, parking for forest ranger & warden, etc.				✓	
Develop timeline for annual processes		Su with team	6-23-2012	✓	
RA process	✓	Holly	6-15-2012	✓	TCM needs to authorize
Form on website	✓		7-15-2012		Fill-able PDF-designed-to be uploaded
FN	✓				
Delegation of PO creation – Simplified bids		Mike/Trent	8-1-2012		
Recommendation for future LSS project		Mike/Su	6-27-2012	✓	
Catalog Updates		Holly	8-1-2012		To be done after inventory shut-down
Website updates	✓	Su	6-23-2012	Denied	
Delegation to update pre-existent web items (catalog, order form, etc)					Forestry is at limit – determine if current process will meet need; re-elevate later if need demands
Resolve conflicting priorities – constancy of purpose		Mike	7-1-2012	✓	Control Phase
Enter reorder points in TCM		Holly	7-15-2012		To do done after inventory shut-down



Automating order placement process	✓	All	7-15-2012		Phase 1– fill-able PDF-designed–need to be uploaded
Evaluate TCM – keep or replace?	✓	All	10-1-2012		
Online ordering – with TCM or replacement		All	10-1-2012		
Check with others			9-1-2012		
Nursery program		Mike		✓	Per Chris Welch – orders and inventory are managed separately
Darwin Rd		Chris			
BSI		Chris			
Grainger		Holly			
Scaffidi		Chris			
Chris Welsh		Su		✓	First contact – 6/4/12-Microsoft has a product – vendor contacted for demo in July
other manufacturers or vendors					