

Project Charter

Project Name: *Aeronautics Management Review*

Date Chartered: *October 2012*

Expected Completion Date: *May 2013*

Team Leader: John A. Jorgensen

Team Goal/Mission:

What is the purpose of the team?

Apply Lean Six Sigma (LSS) principles to a review of the management of the DNR aviation assets and associated expenses. These state aircraft are currently owned and managed by DOA and leased to the department. Aircraft hourly rates are determined by the DOA aviation program and passed along to the DNR. The team's mission is to investigate the efficiencies and effectiveness of managing these aircraft and the impacts to the programmatic costs that both internal and external customers pay. Reduced costs through more efficient and effective management should increase use of the aircraft to support customers programs.

Specifically, in addition to traditional LEAN Six Sigma tools, the team will consider the use of a LEAN supported *Cost of Quality* model to track process efficiencies, as well as the LEAN *Total Predictive Maintenance* tool to achieve process efficiencies.

The scope of the project would include a review of the program and operational efficiencies; cost of the aircraft, using local FAA approved maintenance facilities, reduction in ferry flights required for aircraft maintenance completed in Madison and the annual charges associated with the DNR's Madison storage hangers. The goal would be increased agency and government effectiveness, efficiency and cost savings.

The team will evaluate potential improvements that accomplish the following:

1. Reduce DNR staff time and expense. For example - bringing aircraft from the regionally based hangers to Madison averages 90 to 100 hours of flight time.
2. Improve customer satisfaction. For example - the major concern mentioned by our users is the hourly cost of the aircraft. Reducing the hourly rate would allow all of our programs to use the aircraft more.
3. Evaluate various cost recovery processes to improve effectiveness and efficiency.
4. Simplify processes where appropriate.
5. Ensure that all safety requirements are incorporated into the new process. All FAA, state and insurance requirements must continue to be met.

Measure(s) to be used to determine success:

How will we quantify our progress?

1. DNR staff time is reduced by 5% - **MEASURE:** Compare pre and post improvement flight logs and MX Manager for ferrying flights
2. Improve customer satisfaction – **MEASURE:** Compare results of VOC survey with results of follow-up survey done within 1 year of improvements
3. Reduce cost to users by 10% - **MEASURE:** Compare pre & post-improvement charge back rates and steps removed from process
4. Simplify processes where appropriate – **MEASURE:** Compare pre & post improvement process flow charts to document number of steps removed
5. Ensure safe operations – **MEASURE:** Inspections completed by an approved FAA mechanics & inspector continue to receive passing grades based on FAA standards

Team Members:

Trent Marty, Bureau Director, DNR/Forestry/Forest Protection
John A. Jorgensen, Aeronautics Team Leader
Phil Miller, Lead – Aircraft Pilot/Siren
Bev Paulan, Lead – Aircraft Pilot/Eau Claire
Luke Wuest – Lead – Aircraft Pilot, Oshkosh
Jeff Weatherly (Internal Consultant) – Lake Michigan Area Forestry Leader,
LEAN Professional
John Marx, Bureau Director, Bureau Director, DOA/Wisconsin Air Services
Su DaWalt, DNR - Forestry

Issues to be addressed:

What problems or opportunities will the team investigate?

1. We should investigate whether the uniquely equipped airplanes utilized by the DNR for natural resource work are being administered most effectively and efficiently for operational need.
2. Four of the five locations where DNR work aircraft are based have FAA approved maintenance facilities on the airport grounds. We should investigate whether outsourcing of maintenance at these locations would help meet the measures of this charter.
3. An apparent opportunity for cost savings might be realized if the Madison based aircraft were permitted to lease Hanger space at market rates. Aircraft in Madison are required to be stored in DOA owned hangers. DNR is expected to lease four aircraft hangar spaces, even though our Departmental needs are for two spaces.
4. Designated amounts of the hourly flight rate charged to the DNR work aircraft are placed in reserve accounts for engine, propeller and aircraft replacement. We should investigate whether administration of these accounts should accompany ownership and operational control of the aircraft.

Expected Results:

What will be in place when we are done?

- Rate stabilization
- Reduced cost
- Customer satisfaction
- Safety
- More efficient use of staff time
- Effective cost recovery

Support/Resource People:

Who will we need assistance from besides the team members?

1. Mike Warnke, DNR Forestry Financial Specialist
2. David Greene, DOT Bureau of Aeronautics Director
3. Aviation industry representatives, as required.

Responsibilities and Boundaries:

What areas will the team look at and what areas will the team NOT look at?

1. Team to look at...
 - a. Data and facts
 - b. Comparative cost associated with aircraft maintenance
 - c. Comparative cost associated with aircraft storage/hangers
 - d. Right size the required maintenance – routine (100 hour inspections) vs. heavy (annual inspections & engine replacement)
 - e. Program management additional costs
 - f. Customer needs
2. Team will not look at...
 - a. DOA flights, programs, aircraft and staffing
 - b. DOT flights, programs, aircraft and staffing

05/16/2013



DNR Lean Project - Final Report

Project Name: Aeronautics Management Review

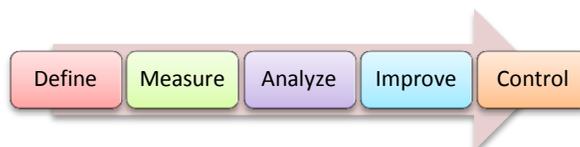
Project Team Leader: John A. Jorgensen, Aeronautics Team Leader

Project Purpose: The team's mission is to investigate the efficiencies and effectiveness of managing these aircraft and the impacts to the programmatic costs that both internal and external customers pay. Reduced cost through more efficient and effective management should increase the use of the aircraft to support customer programs.

Project Team Members: Trent Marty, John Marx – DOA/WI Air Services Bureau Director, Jeff Weatherly, Su DaWalt, Phil Miller, Bev Paulan, Luke Wuest

Summary of Improvements: The following improvements will be implemented as a result of this study.

1. File a DOA-8176 Space Request form to reduce space allocation in the Madison hangar from space for four (4) aircraft to space for one (1) aircraft.
2. Sell the DOA hangar, with option for DNR to lease back space for one (1) aircraft from new owner at competitive rate.
3. For the flight log/billing process, implement program changes (at no cost to the Division of Forestry) to import Excel data to WISMART, removing need for contract with the Data Shop in Janesville, Wisconsin. This program change will be effective at the beginning of FY14.
4. Review/adjust insurance coverages with DOA Risk Management to reduce annual premium costs.
5. Further improvements may result as a bi-product of a joint committee of DOA, DNR, and DOT department leaders to study the viability and sustainability of state aviation. DOA to lead this effort based on the following: (add new committee's charter verbiage here)
6. As part of planning and conversion to the much anticipated Enterprise-wide business system scheduled for July of 2016, along with other Department systems, the flight log/billing process will be evaluated and, as appropriate, incorporated into the new system.



Project Results:

Goal	Baseline	Target	Expected After Improvements	Goal Met?
Reduce DNR staff workload	*388.5 hrs	5% reduction	338 hrs or 13% reduction	Yes
Improve customer satisfaction	4.8 out of 5	Improve	Continued high ratings based on pilot's high customer service ethic. *For rate reduction component of this category, see below.	
Reduce cost to users	\$135/hr for single engine aircraft and \$200/hr for Cessna 337	10% reduction	Improvements on hold pending results of joint committee mentioned above.	
Simply processes where appropriate	1) Flight log/billing process – 31 steps 2) Scheduled Maintenance – 16 steps 3) Develop Annual Budget for Aircraft Rates – 8 steps		12 steps (19 steps removed) Results will be based on outcomes of the joint committee mentioned above.	Yes
Ensure safe operations				

Amount of staff time saved per year in hours:

- *Minimally, 50.5 hours annually saved in the reduction of steps in the flight log/billing process.

How will that time be reinvested?: Additional flights to meet department/customer needs and provide additional customer support in administrative areas.

Project Cost:

	Hours	Dollars
Project Team Leader	262.5	\$168.93
Project Team Members	862	\$3988.45
Meeting Costs		\$200.00
Improvement Costs		\$0
Total	1,124.5	\$4357.38

Recommendations for Future Code/Statute Changes: Implement appropriate recommendations of the yet-to-be-formed joint committee on the viability and sustainability of state aviation. Committee to include representatives from leadership of DOA, DOT and DNR.

Lessons Learned:

- Interagency projects need more pre-work, such as a meeting between Secretary’s Office representatives of agencies involved to discuss project goals, side boards, and need for support throughout the supervisory structure. Transparency is key. A joint meeting of those agency representatives with the team leader and agency sponsors or representatives on the team, should follow to outline process and articulate sideboards for implementing interagency change.
- Non-DNR agency sponsors or lead representatives should be included in DNR’s Lean Six Sigma team leader training to provide a firm and consistent foundation for the project.
- Meeting face to face was a critical need for this team.
- Weekly versus bi-weekly meetings would have been beneficial as the project moved into the Analyze phase, to allow more time for the delicate Improve phase of this interagency project.