

Forward Focus

Montana Manufacturing Extension Center

SPRING 2004

New Tools Help Steer Boatbuilders Course

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Growing up around Glacier Park where his family ran a 45 ft. tour boat on Two Medicine lake for more than 30 years, Jason Cajune came by his love of water and watercraft naturally. Maintenance of Glacier's fleet of boats, built as far back as the 1920s, was also part of the business, so it came as no surprise when Jason and his wife Vedra began building driftboats out of their garage in Whitefish in 1997.

Today Montana Boatbuilders, Inc., is located near Livingston, Montana, in the heart of river fly fishing territory—the free flowing Yellowstone, the mighty Missouri, the famed Madison, the Big Horn, and Big Hole to name a few.

“We moved to Livingston in 1998 to be more centrally located and closer to larger markets,” Jason said. “Our main product is driftboats for river fly fishing, and we're in the middle of fly fishing world here.”

Montana Boatbuilders first carved its niche in high-end driftboats with a hybrid construction composite that makes a traditional wooden boat stronger, lighter weight and lower maintenance. The technique



The 300 lb. Kingfisher model driftboat has a honeycomb Kevlar-reinforced bottom panel, mahogany and fiberglass reinforced side panels, and nearly 10 cu. ft. of dry storage space. Photo courtesy of Montana Boatbuilders

uses marine grade plywood for the hull in conjunction with Kevlar-sheathed polypropylene-honeycomb material and other high-tech marine technologies, some borrowed from the aircraft industry. A number of coating techniques and finishes go into completing a boat with durability and lasting beauty.

“These boats are amazing,” says MMEC field engineer Al Deibert, who oversaw a recent project with the company.

They are customized to include higher end wood-working components for the dry boxes (for storage), seats, and other bells and whistles. These are made

from white oak, mahogany, and sometimes fir. The company also makes duck hunting boats and small sporting boats. See www.montanaboatbuilders.com

With five employees, it makes about 12-15 customized units per year with an average sell-

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Get Started: Five-S

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Simms: Innovative & Lean

SAVE THESE DATES

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Director's Comment... OPERATIONAL EXCELLENCE

Recently, I had the privilege of visiting the Air Force Materiel Command's F-15 Depot at Robins AFB in Warner Robins, Georgia. The crew at the depot have been applying advanced LEAN concepts to the re-manufacture of the F-15 Eagle. In fact, they've pioneered techniques required in the more complex rebuilding operations. They currently overhaul about 120 birds each year.



I was very impressed by what I saw and heard. My first reaction upon walking into the hanger was "wow." Not just because it's impressive to see more than half a dozen F-15's parked in one spot – but because of the clean, quiet, well-lit, very Lean space. It was exciting to see the success.

I have read a great deal about the advanced Lean concepts being developed and applied at Robins AFB. An excellent article, entitled "Lean Takes Root at Warner Robins AFB," was published in the November 16, 2001 issue of *Manufacturing & Technology News* (M&T News). The article's author noted that, "Lean operations have been introduced initially in the F-15 wing shop and the savings last year alone were a reported \$8 million." A very small amount compared with current achievements!

Can you guess what their major bottleneck is? (Hint: it's the major bottleneck for most Lean manufacturing operations.) Answer: Suppliers!

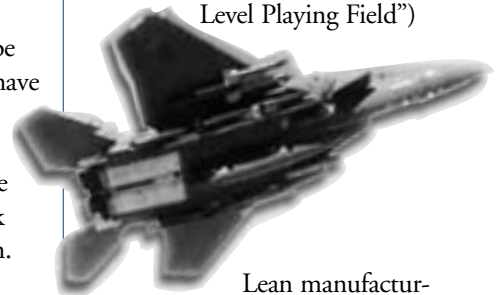
A recent M&T News piece confirms that, indeed, small aerospace suppliers have been slow to adopt Lean initiatives. It cites a Government Electronics and Information Technology

Association study that estimates that while more than 60 percent of prime contractors incorporate Lean techniques, fewer than 15 percent of second and third tier suppliers have. If, as estimates state, the little guy is 70 percent of the cost of a weapons system, prime contractors will be attracted to companies that have greater productivity and efficiency. Small companies struggling to stay competitive can no longer afford to think they're efficient without Lean.

As a supplier, you must take steps to become more efficient, Lean, and responsive. You must do all that you can to de-commoditize your products through customer focus, innovation, and adding a strong service component.

Here at the Manufacturing Center, we are forging relationships with the Montana Aerospace Development Association (MADA) and MSU TechLink to assist companies working in the aerospace industry. Our field staff can help with efficiencies, manufacturability, and systems to improve productivity and help get innovative products out the door faster, cost effectively, and with dependable quality.

The same competitive issues and supply chain dynamic hold true for other industries, as well. Harley-Davidson CEO Jeffery Bleustein drove the point home when he told M&T News that operational excellence is a "never-ending pursuit" that manufacturers must continue to remain competitive. He said that to be successful, U.S. companies must leverage new technologies, innovative design, and unique marketing approaches. (M&T News, April 2, 2004, "Not Even Harley-Davidson Can Penetrate China's Market: Let's Have a Level Playing Field")



Lean manufacturing can jump-start operational excellence – MMEC can help.

Also, consider attending *Compete Smart* – our premier conference for manufacturers. It's set for October 7 & 8 in Bozeman. Over two days, you will have an opportunity to connect with top dogs from Montana companies to explore collaborative ideas, learn more about sharpening competitive edge, and hear from three companies about how they grow and provide jobs right here in Montana. I hope to see you there.

Steve Holland
MMEC Director

The 5-S System: Clean up Your Act!

By Dale Detrick,
MMEC Field Engineer

Manufacturing products in a high-volume production shop, or a job shop like most of our shops here in Montana, still requires some of the disciplines that Mother taught you. “Hang up your pants; put your shoes in the closet...” You remember those admonitions?

Well, manufacturing requires the same discipline if we want to be productive and efficient at what we do.

I travel around the eastern part of Montana and get to see lots of manufacturers. Most, if not all, can be helped by a simple technique that we call “5S.” The five “S’s” are five words to guide us in our daily work. They are *Sort, Set in Order, Shine, Standardize,* and *Sustain*. Simple, you say! In fact, it is simple, but it takes some real guts to implement. Let’s quickly review the five words beginning in “S” and see how they apply to your business.

SORT – Sort through all that stuff under your bench and on top of your desk, and throw out all of those items, things, papers that do not pertain to the job you are trying to do. That means EVERYTHING. I know you kept that box of goodies from a job that happened last year because you didn’t want to have to go find all of those things again when the job came back – which it hasn’t

done yet – but those things are still there and in your way EVERY DAY. So, you need to sort things out and throw things out until the only things on your desk or on your bench are those things that will allow you to do the job you are asked to do today.

SET IN ORDER – Now, take all of those things that you need and make places for them. Hang the pliers on a set of hooks; put the pencils in a holder; put the tools on the wall, outlining around them so you know when they are not there; and put the papers in marked baskets that identify them to a project – get the idea? How many times have you had to look around the shop or the office for a wrench or stapler that you need? The time that you take looking for something that is not in its place is non-value added time – wasted time. Put your tools and materials in order so they are easily accessible and at hand. After all, wasted time is wasted money.

SHINE – This means just what it says. Clean and paint the shop floor. Wash the walls down and clean up your toolbox. How many plants have you been in where the floor is clean and things are tidy? It’s pretty impressive and always creates a good image. Not only that, it is



a place where you like to come every day and work every day. You will feel better about the place you work in, and your customers will feel more confident in your ability to respond to their needs.

STANDARDIZE – Make the efforts on the first three S’s part of your daily routine. If you hang up tools, mark the locations so everyone will know where the tools go. Mark the floor so you know where that barrel of cleaner goes; mark the aisles so your visitors know where to safely walk; make time each day to clean the floor and pick up from the job at hand; and identify things with colors so everyone in the shop can use the facility efficiently. Make housekeeping a standard part of your day!

SUSTAIN – Don’t let the efforts of the day prevent you from doing the chores that will make tomorrow a better day. Sustain your efforts by having conversations about daily tasks and how to improve them. Don’t let junk and things that distract and create clutter creep into your workspace. Sustain and build on your efforts to make your manufacturing plant a world-class place to work and visit – and purchase products from.

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Rehberg Visits West Paw Design

Congressman Denny Rehberg recently toured West Paw Design just east of Bozeman where he saw how a high quality herb grown in northwestern Montana has become a value-added agricultural product. He also heard how West Paw's new Hurley pet toy line was successfully launched as a result of collaboration between two Gallatin Valley firms.

West Paw is a pet toy and pet bed manufacturer selling to retailers around the world, www.westpawdesign.com.

The ideal qualities of catnip grown on the Steve Simonson farm near Thompson Falls attracted the interest of West Paw buyers last year: high nepetalactone content (that draws a cat's interest), certified pesticide-free, visually appealing with less "stemmy" content. The herb is used in toys for feline friends and packaged and sold separately. West Paw uses and sells over 5 thousand pounds of catnip annually. It is grown by Simonson exclusively



Spencer Williams (left) tells Congressman Denny Rehberg about a value-added agricultural product used by pet toy/pet bed manufacturer West Paw Design in Bozeman.

for West Paw Design on 150 acres of farmland. Simonson is also an herbal tea grower and owns Big Sky Tea Company in Thompson Falls.

West Paw's collaboration with other Montana companies does not stop with catnip. President Spencer Williams recently melded a partnership with Quake Industries, an injection molding company in Belgrade, Montana,

to help launch a new interactive dog toy line. West Paw's injection molder is housed 10 miles down the road at the Quake facility, and Hurley products are run by trained Quake operators, adding capacity at Quake and keeping production costs down for West Paw.

For Montana companies, such collaborations are a win-win situation.

Value Added

AGRICULTURE

.....
*It's more than
you might think*

.....
IT'S
MANUFACTURING

Make Connections Using MMIS Online Directory



Here's a great online tool for you! The Montana Manufacturers Information System (MMIS) at www.mmis.umt.edu. Get your information added to this growing directory of Montana manufacturers. MMIS now

features password-protected access that allows you to add or change your own company profile. This feature became live in March and adds to a great supplier resource, marketing tool, and contact list for you to build more connections across Montana. MMIS can record and display in-depth information about a manufacturer's products and capabilities – you decide. Currently the system

has 1200 manufacturers listed, primarily in the areas of wood products, machinery, equipment, instruments and various light manufacturing sectors, but more are coming. To get your company added to MMIS, get a password, and learn more, contact Bob Campbell at 406-243-4009 or bob.campbell@business.umt.edu.

www.mmis.umt.edu

SIMMS Leads by Innovation and Lean Integration

By Deborah Nash, MMEC

If you're passionate about fishing, Simms Fishing Products specializes in gear that you will need to stay comfortable and dry. From the wide variety of waders they manufacture to technical apparel and accessories, Simms products are designed for customers committed to their sport, regardless of weather conditions.

Simms, founded in the early 1980's by John Simms, a Jackson Hole fishing guide, is the only factory still manufacturing waders in the United States. The company has been headquartered in Bozeman, the center of Montana's prime blue-ribbon trout fishing country, since 1993.

"Through constant innovation, workplace efficiency, and top-notch design and quality, Simms stays ahead of foreign competitors," according to MMEC Field Engineer Al Deibert.

Simms has chosen to develop products based on their mission – to provide the highest quality products for all price-points in which they participate. From their cutting edge G3 Guide® Stockingfoots to their entry-level Freestone Waders, Simms waders use advanced technologies and fabrics. All waders are designed, manufactured, and tested in their Bozeman facility. The company outperforms its primary competition, according to a November 2003 Apparel magazine article which featured Simms' recent operation enhancements.

Through efficiency gains and strong manufacturing management, our team is able to compete effectively in world markets against low-cost Asian labor," K.C. Walsh, President of Simms, said, crediting his staff.

To retain its competitive edge, Simms began re-engineering some of its processes to allow the

company a faster, more efficient transition from innovation to production. The company-wide transformation blends internal experience with outside expertise. Apparel specialist Gene Barbee, a consultant to the international sewn products industry for 25 years, and Al Deibert, a sewn products expert and field engineer from the Montana

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Matt Bentle explains the unique qualities of Simms products.

.....
Intellectual property theft is a serious international trade problem. Counterfeited or "fake" products make up about 8% of world trade.

—statistical data from International Chamber of Commerce

.....

Think About it!

“Successful companies get what they focus their energy on.”

—Coram Healthcare, on Strategic Repositioning



Pattern layout maximizes cuts from high-tech fabric at Simms.

Simms

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Manufacturing Extension Center, were instrumental during this transition.

“Al has been a valuable resource at Simms by bringing his fresh perspective and new ideas to our team,” expressed Matt Bentle, Simms Production Manager.

Fostering innovation and outside expertise is the most cost effective, efficient means of achieving and sustaining competitive advantage, according to Sam Miller and Gina Catalano, strategic re-positioning champions and MMEC colleagues from the Wisconsin Manufacturing Extension Center (WMEP). Innovative organizations, they observe, are typically leaders in their industry – like Simms.

Applying Lean Practices to Simms

To understand and manage change, Simms sent key Operations & Production employees through MMEC’s Lean Manufacturing workshop and Value Stream Mapping training to learn to apply the concepts directly to a production process.

“MMEC worked with us to incorporate our needs into lean methods. This was critical because different factories offer unique Lean opportunities and process improvements. With this in mind, we continue to encourage all employees to focus on process improvements through individual incentive programs and team based problem solving groups,” stated Robert Gibson, Simms Director of Operations.

Simms also rearranged its production floor to reduce materials handling. “Supermarkets” were set up for quick access to small parts and subassemblies for each workstation. Visual kanbans are used throughout production to signal demand flow to upstream operations.

Al Deibert, MMEC Field Engineer, worked closely with Donna Vincent, Simms’ sewing supervisor, on Design For Manufacturing (DFM). This was another Lean Best Practice which reduced the number of steps in assembling waders by 10 percent.

In addition, lean processes have generated measurable improvements for the company with regard to fabric utilization, material handling, throughput,

SUCCESSFUL RE-POSITIONING

- ◆ Identify what you do well
- ◆ Recognize that success involves change — leadership and support
- ◆ Discover real customer needs/ preferences
- ◆ Develop a culture around customer focus (stay exceptionally close to your customer)

Companies good at all these elements can continue toward growth and profitability – are often leaders in their industry.
—WMEP

and inventory reduction without sacrificing shipping performance. Some notable operation improvements include reducing work-in-process (WIP) inventory by 30 percent and throughput from 17 days to 2.5 days.

Most of the process improvements not only made Simms a more efficient factory, but also rewarded employees in terms of productivity, quality, and earning potential.

Simms – The Best Keeps Getting Better

Simms has received numerous awards and recognitions for superior design features and high quality in its products as well as business excellence.

A few highlights:

2004 “Gray’s Best 2004”
from GRAYS SPORTING
JOURNAL for Simms G3
Guide™ Stockingfoots.

2003 Export Marketing
Program Award, Montana
Governor’s Excellence
recognition program

2003 Editor’s Choice Awards
2003: Best of the Best”
for Simms G3 Guide™
Stockingfoots from FISH
ALASKA

2003 Governor’s Safety
Award, Montana Safety
Conference

2003 Safety & Health
Achievement Recognition
Program (SHARP) cer-
tification from Montana
Safety Bureau.

The Culture

Simms averages an employee base of approximately 80 people. Everyone in production has the additional earning potential that is associated with the internal efficiency program.

According to Eli Vroom, who has worked for Simms for four years and now works in production under the efficiency system, “It has definitely made people more aware and responsible for what they do on the clock. It builds a healthy competitiveness between employees when you see others around you working at high productivity levels.”

“With this system, entry level employees learn fast that quality levels can affect everybody in the plant, and it plays a part in compensation,” Bentle added. “Quality output is a payback for everybody.”

Communication at Simms is also important to performance and the Lean transition. The management team uses posted charts which are updated daily and also documented goals to assist with production performance. Every team from the Operations Department participates in a quarterly Operations Review presented to the company. Every supervisor, team leader and manager from the group is required to present information about team progress.

“Robert initiated operations reviews and employee presentations. He is doing an outstanding job of keeping the Lean transformation and continuous



Al Schroeder uses visual controls in the warehouse kanban system to signal production demand.

improvement efforts moving forward,” Deibert noted. “It’s about accountability, employee involvement, innovating, training, and maintaining a quality staff. It has really worked well at Simms.”

One of our company goals is to be “the employer of choice in the valley, providing a safe, clean, well-lit environment,” said Cheri Decker, Director of Human Resources.

An ergonomics program to keep employees from having strain injuries was implemented with help from MMEC. It includes five one-minute stretch periods during a shift where each employee gets up from the workstation and stretches at musical intervals. This helps alleviate repetitive strains and muscle fatigue. Additionally, in more intense fabric handling areas, workers are rotated to other tasks throughout the day.

SHARP Certified

Simms is very proactive when it comes to commitment to safety. In 2003, they earned the

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YOUR
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Simms

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SHARP (Safety and Health Achievement Recognition Program) certification. This federal/state program recognizes small employers that operate an exemplary safety and health management system. Only seven Montana companies have achieved this safety status.

“SHARP indicates that you are above and beyond OSHA requirements,” according to Decker. “At every level of the company, programs have been implemented.”

Overall, Simms Fishing Products continues to supply its customers, in more than 20 countries, with innovative, high quality products from a Montana facility that is committed to continuous improvement.

“Amazing innovation goes on here and marketing and management make it all possible. Simms has an incredible crew coming up with great, complementary products. Here, everybody is impassioned about it, excited when new products are introduced,” Deibert said. “That’s a great thing to see.”

Robert Gibson summed up the recent accomplishments by saying, “We have a great team here in Bozeman... a team that understands how important it is to lead our industry rather than follow. It is that mindset that drives all of us to achieve more efficiency, higher quality, and customer focus.”

Simms Fishing Products is located at 101 Evergreen Drive, Bozeman, MT 59715; 406-585-3557. Visit www.simmsfishing.com

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FOR
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Call us at:
1-800-MEP-4MFG

Safflower Product Expansion

Jerry and Mike Bergman, owners of Safflower Technologies International (STI), a MonDak-based company in eastern Montana, recently attended two international food shows, one in Canada and one in Japan. They are working to expand markets for their high oleic and high linoleic safflower oils and seed. STI works closely with Montana State University’s Eastern Agricultural Research Center in Sidney, which developed the Montola 2004 seed, and Montola Growers, Inc. in Culbertson, which crushes and refines its oils.

Development in Belgrade

Neal Ganser, founder of Corbond Corp., a spray-on insulation company in Belgrade, announced expansion plans for a former Con-Agra/UAP property there. It will be moving part of its manufacturing process in from California and expects the new plant to be open in 2005.

MFG News

It will provide six new jobs. A retail space and condominiums may also be developed on the property.

WTO Case

The U.S. filed its trade case against China with the World Trade Organization in mid-March. The case is over China’s tax policy on integrated circuits placing U.S. manufacturers at a disadvantage. The National Association of Manufacturers (NAM) supported the move.

ISO to Aid Security

The International Standards Organization (ISO) has developed new guidelines to protect freight containers from tampering, according to the March 19 Manufacturing & Technology News, applicable to mechanical seals. The seals will allow customs officials, manufacturers, and users of freight containers to ensure integrity as they move through the supply chain (ISO/PAS 17712:2003) cutting

re-inspection of every cargo container moving between ports.

Competitiveness Issue

Most small aerospace industry suppliers have not adopted lean production and management techniques despite Lean’s proven ability to improve a company’s financial and operational performance, according to a new study from the Government Electronics and Information Technology Association (GEITA). More than half of prime contractors, on the other hand, have implemented the Lean business model. Why the disparity?

“Small suppliers have their hands full, and they think they’re efficient without it. It is one of the reasons they’re having difficulty” maintaining their competitiveness,” according to one of the study’s co-authors in a March 8 article in Manufacturing & Technology News.

Latest MS Technology Innovations to Tour Montana

Microsoft™ will bring its Mobile Technology Center to Montana during the first week in May so that busy executives and business users can try out the latest business technology practically at their doorsteps. The 27-foot van is filled with computers loaded with the latest software, a large display screen, a complete point of sales system and other equipment. This traveling van will demonstrate the technology that can assist businesses in saving time and money by increasing their productivity and efficiency. As it crosses Montana, the *Microsoft Across America* road show is teaming with local certi-

fied partner, Business Microvar, Inc, a Billings-based information technology provider who helps local businesses acquire Microsoft products and integrate them into their business operations.

The Mobile Technology Center will set up at various locations in its stops throughout the week.

Montana schedule

May 3	— Kalispell
May 4 & 5	— Missoula
May 6	— Bozeman
May 7 & 8	— Billings

Local business people will be able to visit the van and

gain some hands-on experience to help them evaluate Microsoft's latest programs for assisting them in running and organizing their businesses. Demonstrations of a variety of Microsoft applications will illustrate the simple to use, quick to learn systems.

The Mobile Technology Center is coming to Montana as part of the 18-city, 4,000-mile Microsoft Across America tour of the western United States. Tour schedule and additional information is available at www.microsoft.com/acrossUSA.

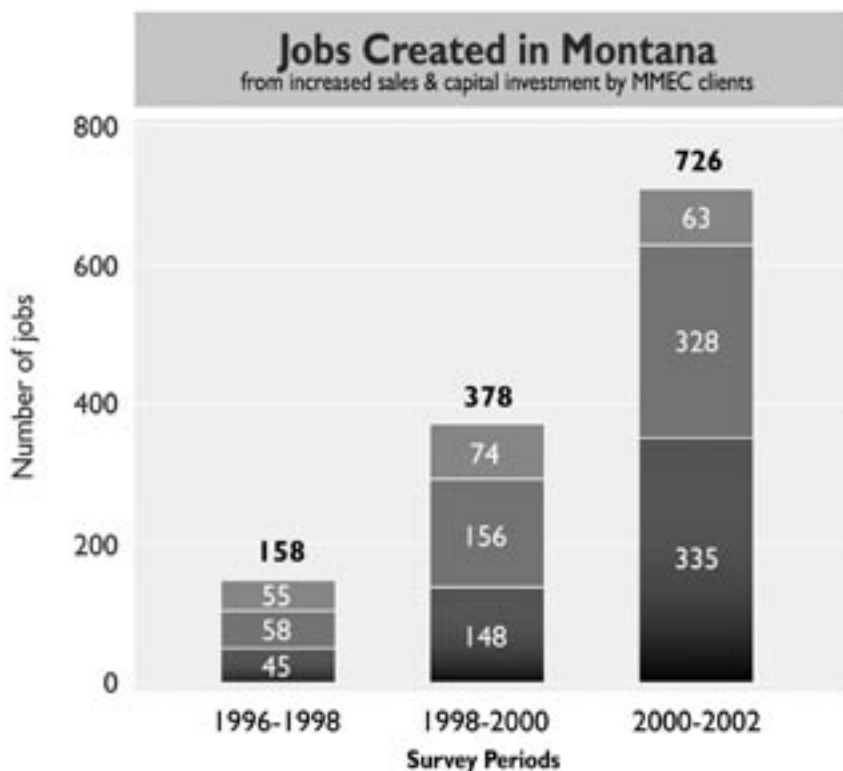
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MMEC a Plus to Economy



MMEC client surveys show that as a result of MMEC direct services, new manufacturing jobs were created and retained during the period July 2000 –June 2002. Increased production and sales created a broader business impact totaling \$44.3 million. These increases added almost \$1 million to the state tax coffers.

—Independent survey,
UM Bureau of Business
& Economic Research

* New jobs calculated by BBER using IMPLAN inter-industry multipliers used by Research Analysis Division of MT Dept of Labor & Industry from client survey responses. Retained jobs from direct client responses.

Think About it!

“Don’t be surprised when your consultant provides insight; you should expect it.”

—Bob Rosner
Author of
Working Wounded

Boatbuilders

(continued from page 1)

ing price of \$10,000. The typical buyer is male, between 40 and 60, and may have recently moved to Montana from other locales.

The equipment for boat building lends itself nicely to custom boat repair, and soon Montana Boatbuilders was refurbishing traditional wood construction and full fiberglass refinish. It also does complete restructuring of a boat when needed.

More recently, the company added boat kits for several of its more popular models, the Freestone, the Freestone Guide, and the Osprey, in a variety of sizes. The main pieces for the boats are cut on a CNC machine, packaged, and sent to customers across the U.S. who like to build and are more budget conscious. Buyers for kits are very different from those buying the custom work, opening up a wider customer base.

“They are more likely to be college students or a father and son team building one in their garage. The kits are shipped to places like Michigan, California, and all over,” Jason said.

As business expanded, he began to see more need for efficiencies in the operation and turned to the Montana Manufacturing Extension Center and University Technical Assistance Program for help. The company now has a work instruction document that enables it to evaluate materials usage and time tracking. It is helping them realize cost and time efficiencies. “MMEC/UTAP engineer Brian

Pendergast was the picture of professionalism in his work with us, and he saved us thousands of dollars with the in-depth documents that we use everyday,” Jason commented.



Brian Pendergast

“When we first got started, my wife and I were doing everything— building, bookwork, and brochures. Suddenly we had a waiting list and had to hire and train on construction. We were in production mode overnight and found that we had no idea how long processes took us, what amounts of material we were going through, and tools. We hired our first employee about four years ago and have added one per year since. The last two years we’ve been trying to get more efficient.

“I took the MMEC Lean Manufacturing workshop and have started to try to implement some of those strategies. It’s an ongoing process, and I’m really still at the 5-S steps. (*Sort, Set in Order, Shine, Standardize, Sustain It*). Brian took on the monumental task of evaluating our processes from milling raw wood and making finished pieces to composite fiberglass lay-up, and coating and finishing work.”

These involve as many as 300-400 steps for building a custom driftboat, a process that takes from four to six months. The MMEC/UTAP engineer separated them into various sub-assembly processes to facilitate tracking

time requirements at each step. Using Microsoft Excel, Brian built a database and spread sheets the company uses as a management tool to further track information and compare with the different products.

Asked if he was surprised by the involved processes and time it takes to build a unit, Brian said, “These boats are beautiful, in a class by themselves. I am not surprised by the amount of effort that goes into them. But when you are not building in high volume, it is sometimes difficult to spot inefficiencies.” Brian is building a wooden canoe and understands the painstaking effort to construct a fine craft.

“What we did was standardize their task sheet, looking at materials and time usage so each step can be compared against another project,” he explained. The employees already logged each step as it was completed, but entries were hand-written and not broken down by subassembly sequences. As one piece cured, they could work on any number of different things; but for new employees, not knowing the next step in a process might hold up completion. The standardized sheets help them with the question, “What do I do next?”

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State Chamber Offers New Health Benefit

The Montana Chamber of Commerce launches a statewide health benefit program for its members beginning May 1, 2004.

Montana Chamber Choices (MCC) will be available to small employers with two to 50 employees who are members of the State Chamber of Commerce and/or participating local chambers.

Montana Blue Cross Blue Shield is partnering with the Montana Chamber on the plan which has several options for employers to consider. Chamber members should contact their Blue Cross Blue Shield agent to inquire about Chamber Choices or contact 1-800-447-7828-Ext. 8965 for an agent in their area.

Boatbuilders

(continued from page 10)

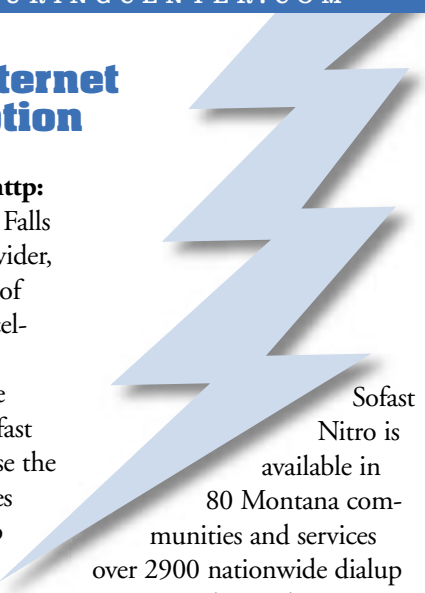
MMEC/UTAP also prepared a bill-of-materials tool, based on each task in a subassembly. Ten subassemblies are involved, each requiring materials and manipulation of those materials to make a boat.

Having this management tool makes it easier to visualize what materials are similar throughout the process. It shows cost differences when changing the type of seats, for instance, and makes billing for custom work much simpler. The spreadsheet tallies direct materials cost for each step.

"We can use them to see if we're making money at our price or not and maximize the use of our tools and team," Jason said. "For exam-

Speedier Internet Access Option

Sofast Communications, <http://www.sofast.net>, a Great Falls based Internet Service Provider, announces the availability of its new dialup Internet accelerator, Sofast Nitro. The addition of the new service will allow customers of Sofast Communications to browse the web at speeds up to 5 times greater than normal dialup connection speeds without the need for additional equipment. It uses proprietary technology, including compression, caching, smart routing, persistent connections and other technological means. Pricing is competitive and less expensive than the costly Satellite Internet alternative.



Sofast Nitro is available in 80 Montana communities and services over 2900 nationwide dialup access numbers. The company currently offers business class, high-speed, broadband Internet access to over 50 percent of Montana's population, according to its February press release. It is the first Montana-based service provider to offer nationwide dialup Internet access.

ple, some of the seats we build are time consuming, complicated pieces of furniture. They have to be furniture quality and boat grade, i.e., waterproof and UV resistant. The MMEC/UTAP work helped me see what materials were used and the time it took. It showed that my pricing was good. It became the benchmark for other seat projects.

"We have cut hours on a typical boat by 25 percent based on knowing the processes, tracking time and parts use more efficiently. The comparative data helps in manufacturing processes, taking less time to do the same thing. The biggest thing in conjunction with Lean and

the sheets Brian made is that we don't stockpile parts like we used to. We're using more the pull/Kanban concept."

Jason's greatest reward in the business comes from seeing a customer pick up the driftboat he's been dreaming about and waiting months for.

"It's great. They are very excited," he said, looking forward to his next delighted customer and continuing growth and prosperity for his company. "It's also great to be able to live here in Montana in an area we love and use our product on the rivers. My family goes out and floats on our days off."

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Quality Groups to Feature Six Sigma in May

May 10 A joint Montana Council for Workforce Quality and the Montana Chapter of American Society for Quality (ASQ) conference in May will feature Six Sigma Quality. The one-day conference will focus on how Six Sigma fits into a quality program for both service and manufacturing companies. It will also cover tools any organization can use for analyzing data, analyzing problems, and decision-making to lower costs and improve quality. The event will be held on May 10, 2004, at MMEC in Bozeman. Registration is \$25.00 and includes lunch. To register, contact jsmith@nutritionallabs.com or call MMEC at 406-994-3812. Use "ASQ Spring Conference" in email subject line. ASQ members must register by April 30, 2004; open seats will then be

available to anyone on the non-ASQ waiting list. Pre-registration required.

ISO Auditors

June 16-17-18 MMEC is offering ISO Internal Auditor Training in Bozeman June 16-18. The three-day event will include hands-on audit exercises at Big Sky Laser Technologies. The workshop will be held at the MMEC Conference Room, 960 Technology Blvd. On-line registration will be available soon at www.mtmanufacturingcenter.com.

Exporter/Lender Seminar in Missoula

May 20-21 The Export-Import Bank of the United States (www.exim.gov/index.cfm) announces a special Ex-Im exporter/lender seminar to be held at the Montana World Trade Center

on the University of Montana-Missoula campus on May 20 and 21. The first half-day session is for current and potential exporters to learn more about small business exporter services like its small business insurance program and financing to help attract export sales. This information is particularly timely with the approach of a sales opportunity during the 2008 Olympics in China.

The second full-day is the lender portion of the program to introduce bankers and lending agencies to the Ex-Im program. Exporters may attend either the half day or the entire seminar. Lenders are encouraged to attend and network both days. Cost is \$49 for the exporter seminar or \$119 for the full two-day seminar. MWTC is an official City/State Partner of the United States Ex-Im Bank. For more information, contact MWTC at 406-243-6982.



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