The CMX…Improving Performance On and Off the Slopes

By Deborah Nash, MMEC

Need often drives innovation; passion takes it to the next level. The power of it continues to surprise Mark Hoffman, who designs and manufactures the Crazy Mountain Xtreme (CMX), a lightweight, high performance snowmobile built for mountain powder riding.

“When I ride [the latest model], I smile, thinking we managed to make it better yet again. I don’t know how we did it, but we did!”

His continuing innovations to the CMX keep customers coming back for more, with over half being repeat customers.

Mark and a friend began custom designing their own sleds after coming back empty-handed from the first World Snowmobile Expo held in West Yellowstone back in 1991.

“There was nothing there for us. We came back home disappointed, with money in our pockets,” he reflects. “We decided we would have to build our own if we were going to have machines suitable for mountain powder. Factories just didn’t build machines for what we wanted them to do.”

The first were built from scavenged parts. In 1993, Mark built another, this time using all new parts. That sled was featured in a “Modstock Competition” magazine in the winter of 1995, and the phone started ringing. Mark has been building sleds to order ever since at Crazy Mountain Motorsports, which he owns and operates with his wife Vicky in the farming community of Clyde Park.

The couple closed their general repair business there in the winter of 1996–97 to focus on building sleds.

Innovative

The CMX features good power to weight ratio, balance, and exotic materials such as titanium, Chrome Moly, carbon fiber and other sophisticated materials right down to the wiring. These materials and Mark’s passion for continuing innovation on the CMX greatly enhance the snowmobiling experience for his customers.

When riding mountain powder, less weight is critical for both flotation and better performance, Mark explains. For that kind of riding, you need more track on the ground. The CMX is the answer.

In 1999, Crazy Mountain developed a great aftermarket belt drive system that is also available in a kit for other machines to replace chain case drives. It is significantly lighter than those systems and the direct-drive systems typically used in the industry.

Another innovation is an off-side throttle, and new this year are a special track improvement and different seat. The track improvement, suggested by the Hoffman’s son, Kamron, decreases rolling resistance and offers other advantages like better sled cooling, less snow build up and efficiency gain. “CMX” is etched into all product innovations. All are added to help customers rip down a trail and through rugged terrain with ease.

“Our machines add to the fun factor. They are designed for horsepower craving, adrenalin junkies,” Vicky says with a grin, adding, “But you don’t have to be an excellent rider or ‘crazy’ as some infer from our name (depicting the beautiful mountain backdrop to their community). The CMX makes everything easier.”

Tapping Others

A trained machinist, Mark thrives on creating and building things. “I don’t want to give up the hands-on in business; it is therapy for me,” he declares. As an avid rider, he calculates and designs for precise performance needs easily.

Manufacturing efficiency, on the other hand, has not come as naturally. A recent improvement using point of use storage (POUS), where materials and tools are set up right at the workstations, was not (continued on page 4)
An Eye Opener

The Director of the Bureau of Business and Economic Research (BBER) Paul Polzain, invited me to be part of the 31st annual Economic Outlook Seminar this year. I was honored as the Bureau was founded in 1948 and has a rich and respected reputation.

The half-day sessions are founded on different themes each year. This year it was “regulation” and “Montana’s Legal Environment. Are We Open for Business?”

The sessions include presentations on the outlook for Montana’s basic industries. In fact, you will find a copy of the proceedings of the Manufacturing Outlook in the center of this issue, which BBER generously allowed us to reprint from the BBER Economic Outlook magazine.

As the luncheon speaker, I was intrigued to explore the topic of regulation. After all, we talk about it all the time—usually in the context of “burdensome” or “irritating” regulation. Regulations—usually in the context of “burdensome” or “irritating” regulation. Regulations are the rules and proposed rules each Federal agency expects to issue during the next six months—a total of 4,266 regulations at various stages of implementation throughout the 50-plus federal departments, agencies, and commissions. Up to 25% of the way through the previous year. Of those:

• 157 were considered “economically significant” with at least $100 million in economic impact. Those rules would impose at least $12.7 billion yearly in future off-budget costs.

• Five agencies wrote 1,073 rules, nearly half of the 4,266 (Treasury 530, EPA 401, Department of Transportation 365, Homeland Security 58, Department of Agriculture 139).

• Regulatory costs for all exceed all corporate pre-tax profits, which totaled $665 billion in 2002.

• Of the 4,266 regulations, 893 would affect small business.

The average cost of compliance for small and medium-sized corporations to comply with the tax code’s $5.5 million words (more than seven times longer than the Bible) is $7,245 for every $1,000 in taxes they pay.

Most notable was a 2001 Office of Advocacy of the Small Business Administration release stating that the US manufacturing sector shouldered $14.7 billion of the $497 billion in estimated economic impact. Those rules would impose at least $12.7 billion yearly in future off-budget costs.

The Phase 1 established the technical feasibility of the seed dissector, focused on developing patented seed dispersal technology of counter-rotating and combing drum that “plucks” the ripe seed of native grasses and other plants while leaving the rest of the plant intact. Native grass seeds ripen at differing times and have other characteristics that make them difficult to harvest. The Arbuckle team estimates there are over 100 native grass species in Montana that would be suitable for the PCS.

The PCS also wouldn’t have happened without the excellent advice from the Montana Small Business Innovative Research (SBIR) program.

By Deborah Nash

Entrepreneurial Montanans are reaping the rewards of innovation support from the Montana Small Business Innovative Research (SBIR) program at the Montana Department of Commerce. Arlbeck Ranch Inc. Billings is one such company working to develop an indigenous native grass seed harvester. Since the accompanying sum of 2004 photo, the Phase I SBIR prototype of the Arbuckle Native Seed Harvester is shown just a short month after project approval. The Phase I established the technical feasibility of the seed dissector, focused on developing patented seed dispersal technology of counter-rotating and combing drum that “plucks” the ripe seed of native grasses and other plants while leaving the rest of the plant intact. Native grass seeds ripen at differing times and have other characteristics that make them difficult to harvest. The Arbuckle team estimates there are over 100 native grass species in Montana that would be suitable for the PCS.

Ten of the 4266 regulations, 893 would affect small business.

The average cost of compliance for small and medium-sized corporations to comply with the tax code’s $5.5 million words (more than seven times longer than the Bible) is $7,245 for every $1,000 in taxes they pay.

Most notable was a 2001 Office of Advocacy of the Small Business Administration release stating that the US manufacturing sector shouldered $14.7 billion of the $497 billion in estimated economic impact. Those rules would impose at least $12.7 billion yearly in future off-budget costs.

The Phase 1 established the technical feasibility of the seed dissector, focused on developing patented seed dispersal technology of counter-rotating and combing drum that “plucks” the ripe seed of native grasses and other plants while leaving the rest of the plant intact. Native grass seeds ripen at differing times and have other characteristics that make them difficult to harvest. The Arbuckle team estimates there are over 100 native grass species in Montana that would be suitable for the PCS.

The PCS also wouldn’t have happened without the excellent advice from the Montana Small Business Innovative Research (SBIR) program.

By Deborah Nash

Entrepreneurial Montanans are reaping the rewards of innovation support from the Montana Small Business Innovative Research (SBIR) program at the Montana Department of Commerce. Arlbeck Ranch Inc. Billings is one such company working to develop an indigenous native grass seed harvester. Since the accompanying sum of 2004 photo, the Phase I SBIR prototype of the Arbuckle Native Seed Harvester is shown just a short month after project approval. The Phase I established the technical feasibility of the seed dissector, focused on developing patented seed dispersal technology of counter-rotating and combing drum that “plucks” the ripe seed of native grasses and other plants while leaving the rest of the plant intact. Native grass seeds ripen at differing times and have other characteristics that make them difficult to harvest. The Arbuckle team estimates there are over 100 native grass species in Montana that would be suitable for the PCS.

Ten of the 4266 regulations, 893 would affect small business.

The average cost of compliance for small and medium-sized corporations to comply with the tax code’s $5.5 million words (more than seven times longer than the Bible) is $7,245 for every $1,000 in taxes they pay.

Most notable was a 2001 Office of Advocacy of the Small Business Administration release stating that the US manufacturing sector shouldered $14.7 billion of the $497 billion in estimated economic impact. Those rules would impose at least $12.7 billion yearly in future off-budget costs.

The Phase 1 established the technical feasibility of the seed dissector, focused on developing patented seed dispersal technology of counter-rotating and combing drum that “plucks” the ripe seed of native grasses and other plants while leaving the rest of the plant intact. Native grass seeds ripen at differing times and have other characteristics that make them difficult to harvest. The Arbuckle team estimates there are over 100 native grass species in Montana that would be suitable for the PCS.

The PCS also wouldn’t have happened without the excellent advice from the Montana Small Business Innovative Research (SBIR) program.

By Deborah Nash

Entrepreneurial Montanans are reaping the rewards of innovation support from the Montana Small Business Innovative Research (SBIR) program at the Montana Department of Commerce. Arlbeck Ranch Inc. Billings is one such company working to develop an indigenous native grass seed harvester. Since the accompanying sum of 2004 photo, the Phase I SBIR prototype of the Arbuckle Native Seed Harvester is shown just a short month after project approval. The Phase I established the technical feasibility of the seed dissector, focused on developing patented seed dispersal technology of counter-rotating and combing drum that “plucks” the ripe seed of native grasses and other plants while leaving the rest of the plant intact. Native grass seeds ripen at differing times and have other characteristics that make them difficult to harvest. The Arbuckle team estimates there are over 100 native grass species in Montana that would be suitable for the PCS.

Ten of the 4266 regulations, 893 would affect small business.

The average cost of compliance for small and medium-sized corporations to comply with the tax code’s $5.5 million words (more than seven times longer than the Bible) is $7,245 for every $1,000 in taxes they pay.

Most notable was a 2001 Office of Advocacy of the Small Business Administration release stating that the US manufacturing sector shouldered $14.7 billion of the $497 billion in estimated economic impact. Those rules would impose at least $12.7 billion yearly in future off-budget costs.

The Phase 1 established the technical feasibility of the seed dissector, focused on developing patented seed dispersal technology of counter-rotating and combing drum that “plucks” the ripe seed of native grasses and other plants while leaving the rest of the plant intact. Native grass seeds ripen at differing times and have other characteristics that make them difficult to harvest. The Arbuckle team estimates there are over 100 native grass species in Montana that would be suitable for the PCS.

The PCS also wouldn’t have happened without the excellent advice from the Montana Small Business Innovative Research (SBIR) program.

By Deborah Nash

Entrepreneurial Montanans are reaping the rewards of innovation support from the Montana Small Business Innovative Research (SBIR) program at the Montana Department of Commerce. Arlbeck Ranch Inc. Billings is one such company working to develop an indigenous native grass seed harvester. Since the accompanying sum of 2004 photo, the Phase I SBIR prototype of the Arbuckle Native Seed Harvester is shown just a short month after project approval. The Phase I established the technical feasibility of the seed dissector, focused on developing patented seed dispersal technology of counter-rotating and combing drum that “plucks” the ripe seed of native grasses and other plants while leaving the rest of the plant intact. Native grass seeds ripen at differing times and have other characteristics that make them difficult to harvest. The Arbuckle team estimates there are over 100 native grass species in Montana that would be suitable for the PCS.

The PCS also wouldn’t have happened without the excellent advice from the Montana Small Business Innovative Research (SBIR) program.
Crazy Mountain Xtreme (continued from cover)

Instructive Mark contends that everyone has a mindset that affects how they do things. “Mine was that a toolbox is for tools. So that’s where we kept them. We spent a lot of time running back and forth across the shop for tools,” he says. “Now we think work station, and our parts and tools are kept at the appropriate work station.”

POUS, recommended by the Montana Manufacturing Extension Center (MMEC) as part of a Lean Manufacturing approach to business, can decrease production time by eliminating excess part searches and material handling. It simplifies physical inventory tracking, storage, and handling. Crazy Mountain often taps the expertise of MMEC and its University Technical Assistance Program engineers, saying their experience helps to break those “mind sets” that can hinder productivity.

Students in MSU College of Engineering senior design classes have also contributed to process improvements at the firm, helping set up a logical inventory numbering system that uses letter combinations to represent the myriad parts in relationship to build stages.

Cellular Manufacturing

Last year, MMEC/UTAP performed a value stream mapping analysis at Crazy Mountain, developing a conceptual design for a future facility that will incorporate the goals of the client. The analysis illustrates the current state of operations and identifies areas for improvements using Lean. A manufacturing cell for rear suspension work, set up where hundreds of parts are used, has improved productivity by 50 percent. Additional cells will maximize space for increasing production and help prepare for expansion that includes a show room.

The dream of adding to the facility is, of course, weather dependent. With the low snowfall in recent years, it’s been more of a survival time, Mark notes. When customers drop by, the talk undoubtedly turns to the weather, early snows being a good indicator for the season along with trepidations about a possible shift in the jet stream. A good snow year will be good for business.

To help weather low snow seasons, the Hoffmans and employee Brent Smith attended an MMEC Lean Manufacturing class several years ago to learn more about cutting wastes and improving process flow using value stream mapping. “Having all of us attend was important because now we all understand what we’re trying to accomplish, and Brent has contributed ideas on procedures and improvements that are helping,” Mark said.

“It’s amazing how we have refined procedures, improved quality and are making our orders faster since adopting Lean principles. MMEC/UTAP really helped us get organized.”

“They have greatly improved our professionalism,” Vicky adds. Today, Crazy Mountain builds six sleds at a time, creatively using old hospital beds as lifts for flexible access to physical build points that start with the chassis, track, and belly pan. Inspired by Lean class learnings & project work, the crew designated time this summer for workplace organization, the 5-S (sort, set in order, shine, standardize, & sustain). They have tossed accumulated but outdated items and initiated a “cleaning shop” sale on the company website www.crazymtn.com.

“We’ve definitely learned how to utilize space better,” the couple says. One design challenge MMEC worked with the company on several years ago was the tail light assembly for the CMX.

The early design used an incandescent bulb and bulky wiring that was difficult to install and required occasional repairs for customers’ machines. MMEC Field Engineer Mark Shyne and a University Technical Assistance Program (UTAP) engineer did some research into a design improvement using LED arrays and recommended several local design companies that could build and supply the parts. Advanced Electronics Designs in Bozeman was selected, and that tail light configuration is working very well.

The array fits into the sleek bumper rather than on the rear of the seat as in other brands. The change not only looks sharp but adds greater field reliability.

“MMEC is such a valuable resource. Every time we’ve needed help with something, MMEC has helped us or put us in connection with someone who can,” Mark says about his efforts toward continuously improving operations and the CMX.

“When our customers ride with bad- dies who are on [traditional brands], that’s when everyone can see the performance difference, even over stock brands that have modifications. Our customers are very loyal, dynamic and fun to be around. We have made some wonderful friends through the business,” Vicky states with pride.

Got Leftovers?

Find it, give it away, buy-sell-trade on the Montana Material Exchange!

Leavers have a way of taking over space not only in the refrigerator but also in your business or warehouse. Whether it’s packing peanuts, pallets, chemicals, construction materials, or something else entirely, the Montana Material Exchange (MME) provides an opportunity to unclutter, whether it be surplus or used, industrial by-products or anything that you save on disposal costs. And it can help you in your 5-S initiative (sort, set in order, shine, standardize, & sustain) that’s when everyone can see the performance difference, even over stock brands that have modifications.

Crazy Mountain Motorsports was the first to offer a belt drive system (CMXDS) as standard equipment as well as offer it in kit form for upgrading older heavy chain case drive systems on other machines.

reduces assembly problems and improves quality. Assembly now takes minutes, cutting the time by half an hour per unit using a much less bulky wiring assembly and creates happy customers, since LEDs don’t burn out.

To find out more, contact the Mike Vogel or Cali Morrison at 406-994-3451 or via email at mvogel@montana.edu or cmorrison@montana.edu.
Montana’s Manufacturing Industry

(Reprinted with permission from BBER 2006 Outlook publication)

by Charles E. Keegan III, Thail Dillion, and Robert Campbell

Following three years of declining production, sales, and employment, Montana’s manufacturing industry saw improvement both in 2004 and 2005. The sector currently:

- Employs over 25,000 people
- Produces approximately $1 billion in output annually, and
- Accounts for over 20 percent of Montana’s economic base.

After a 1 percent increase in 2004, average monthly manufacturing employment was up approximately 1 percent in 2005 as well. Over half of surveyed Montana manufacturing firms reported increased profits, with another 10 percent indicating profits equal to 2004. Sales were up for 67 percent in 2005, and production increased for 60 percent. The increased manufacturing activity in Montana can be attributed primarily to a continued strong U.S. economy, even with dramatically higher energy costs and the impacts of several major hurricanes.

A number of factors prevented a better performance by Montana manufacturers in 2005:

- Virtually all of surveyed Montana manufacturing firms reported their plants being negatively affected by high energy prices in 2005, with higher raw material, operating, production, and transportation costs being the most common consequences.
- Labor availability continues to be a problem. Not only do firms have difficulty recruiting and retaining skilled workers, they also have difficulty attracting quality employees and cost continued to be a problem in 2005. This is especially the case for the wood products industry (see pages 27-28 in BBER Outlook publication), but shortages and higher prices for items such as steel, plastics, and concrete made this problem more universal.
- Additionally, freight availability (and now also cost) is still an issue, especially for those firms shipping primarily out of state. Manufacturers expressed concerns over the availability and cost of both truck and rail transport.

Montana’s manufacturing industry has not always been faced with as many challenges as it is today. There was substantial growth in the industry throughout the 1990s, a decade in which Montana manufacturers added over 2,000 jobs, reaching a peak of over 27,000 workers. This increase was followed by a rapid decline that continued through 2003, when employment fell back under 25,000 workers. After suffering job losses during the “manufacturers’ recession” in 2001, firms throughout the nation continued to cut back through 2003. Job losses in Montana were proportionately less than in the nation as a whole in 2002, but proportionately higher in 2003.

In 2005, over half of surveyed Montana manufacturing firms reported increased profits...
Outlook: 2006 and Beyond

The U.S. economy is projected to remain strong in 2006, with global economic conditions expected to weaken slightly. However, a weaker U.S. dollar may aid a number of Montana manufacturers. In line with these expectations, Montana manufacturers have a fairly optimistic outlook for 2006. Over half of the manufacturers responding to our survey (Montana manufacturers with 20 or more employees) expect improved conditions, while 41 percent think 2006 will turn out about the same as 2005, leaving only 6 percent who foresee worsening conditions. Fifty-seven percent expect to keep their workforce at the same level in 2006, while a full 79 percent foresee an increase. Fifty-one percent of firms expect higher profits in the coming year, with 40 percent expecting them to stay the same as 2005. Given that 2005 exceeded expected production, sales, and profits for surveyed manufacturers this reflects a generally optimistic outlook for Montana manufacturing.

When manufacturers were asked to rate a list of issues in terms of general importance to their business, 97 percent of respondents rated energy costs as important, followed by the availability of qualified workers and health insurance costs, both important to 95 percent of respondents. Workers’ compensation rates were important to 92 percent. As in previous years, surveyed manufacturing firms highlighted several issues that will influence their operations in the coming year. By far, the biggest concern for 2006 is the cost of energy, including fuel, gas, and electricity. There seems to be little optimism here; though, as only 10 percent foresee a reduction in natural gas prices, and a mere 2 percent predict electricity prices will go down (see sidebar).

The future of energy costs clearly colors expectations for manufacturing performance in the coming year. Along with labor shortage and transportation problems, it can make it difficult for the industry to be competitive in Montana. However, with some energy prices showing decreases and the U.S. economy projected to remain strong or even strengthening further, there is good reason for a positive outlook. Lowered energy costs would ripple through all parts of manufacturing, improving many of the issues that were problematic in 2005, such as the cost of raw materials, freight, and production. The quality of optimism, with over 20 percent anticipating the prices of gasoline and diesel prices. Still, price increases were anticipated by 40 percent for gasoline and by 43 percent for diesel. For fuel oil, 52 percent of respondents expect prices to go up, while 15 percent anticipate a price decrease.

Table 3

| Energy Prices | “Compared to [prices in Nov. 2005], what do you anticipate will happen to energy prices in 2006?” |
|--------------|-------------------------------------------------------------------------------------------------
| Fuel Oil     | 52% 33% 15%                                                                                     |
| Electricity  | 55% 43% 2%                                                                                      |
| Natural Gas  | 71% 19% 10%                                                                                    |
| Gasoline     | 46% 39% 21%                                                                                    |
| Diesel       | 43% 35% 22%                                                                                    |

Energy Issues
Survey recipients were asked their expectations at the prices of various types of energy. (Table 3) Respondents were the least optimistic with regards to the price of natural gas. Close to three-quarters (71 percent) anticipate further increases in this area, while only 10 percent anticipate price decreases. Respondents expressed low optimism regarding electricity, with 55 percent expecting a price increase and 43 percent expecting prices to remain at the current levels. Gasoline and diesel inspired the highest level of optimism, with over 20 percent anticipating the prices of each to go down. However, the survey was administered during peak gasoline and diesel prices. Still, price increases were anticipated by 40 percent for gasoline and by 43 percent for diesel. For fuel oil, 52 percent of respondents expect prices to go up, while 15 percent anticipate a price decrease.

Manufacturing News
Innovative Instruments World-renowned guitar maker Gibson Montana (www.gibson.com) announced the launch of six new Gibson acoustic models this year. The growing company took center stage at the Winter NAMM convention held in Anaheim, Calif., in January with some of the most innovative new models every presented. These fine instruments are handcrafted at the Gibson Acoustic Division in Bozeman, Montana.

Brand on Product Bacterin International in Belgrade recently released its first medical device carrying the Bacterin name brand. The device, Vwound Drain, drains excess fluid from the body after surgical procedures. Bacterin previously worked only with other companies to produce medical devices. It created and branded the Vwound Drain way as a diversity revenue sources, according to a recent Bozeman Daily Chronicle article quoting Investor Relations and Marketing Manager Molly Mason. Bacterin plans to release another drain, the Eluta Wound Drain featuring an anti-microbial coating, later this year.

Exports Increase Exports of industrial machinery, Montana’s leading manufactured export, increased by 78 percent in 2004 (latest available data) to $10.3 million for the year while shipments of inorganic chemicals rose to $75.3 million, an increase of 143 percent.


Early Fire Season Neptune Aviation in Missoula has sent several tankers south over the New Year to fight tough wildfires in Texas and Oklahoma, according to a Missoulian article. The Neptune tankers were dispatched by the National Interagency Fire Center in Boise, Idaho.

Name Change The food business incubator known as the Mission Mountain Market has changed its name to better denote the increased services available within the new Mission Mountain Food Enterprise Center (MMFEC).

Labor Available Cable Technology, Inc. recently opened a site in Great Falls citing available labor as a key reason. The firm is shifting most front-office, sales, engineering, quality control and large quantity manufacturing from Kalispell.

Got News? Send us your company news briefs using MFG News in the subject line to dsnash@coe.montana.edu.

Help with our MAILING LIST MAKEOVER MMEC is updating its MAILING LIST and customer database. Over the next few months, we will be contacting you for an update on your company contact information to keep the quarterly manufacturing newsletter Forward Focus, future training dates, and conference information reaching you in a timely manner. Your contact information is stored on a secured system and is not rented or sold. We value your time and your trust and want to keep you informed about manufacturing news and events in Montana. So, please, don’t hang up when we call.

New Face in UTAP

Clint Finlayson recently joined the crew of the University Technical Assistance Program at the Montana College of Engineering. He is working toward an advanced degree in Industrial and Manage ment Engineering after earning a Bachelors degree in Industrial Engineering from MSU in December. UTAP is supported by the Economic Development Administration, U.S. Department of Commerce, through its University Centers Program.

Montana Manufacturing Center

Exporting Award Winners Announced
Governor Brian Schweitzer joined with Kim Wild, Chair of the Montana District Export Council, and members of the Montana District Export Council in honoring three statewide winners of the Montana District Export Council’s Governor’s Excellence in Exporting Awards for 2005.

Exports are an important and growing segment of Montana’s economy. The value of Montana exports exceeded $84.2 million in 2004. The 2005 Exporter of the Year was awarded to Pasta Montana in Great Falls. Export Marketing Program excellence was awarded to Quake Industries in Belgrade. Also receiving an award as Export Advocate was Carey Hester of the Montana Department of Commerce.

Pasta Montana, www.pastamontana.com, the state’s largest manufacturer of dried pasta, received recognition for its significant contributions to the state and local economy by the export sale and marketing of its product. In the past eight years, pasta exports from the state of Montana grew from under $22,000 to $16.1 million. Dried pasta now ranks as the 35th largest export commodity from the state. The company employs approximately 75 people.

Quake Industries, http://quakeinc.com, was recognized for excellence and effectiveness in its efforts to develop and increase export sales of its shooting sports slings for rifles and bows, accessories and hunting equipment. With 21 employees, it currently exports to 22 nations worldwide. Nearly all annual revenue is comprised of business from outside of Montana, reinforcing the Belgrade economy with over $1 million of new money per year.

Export Advocate Award winner Carey Hester of Helena initiated and developed technical training for Montanans through a series of export workshops after realizing that companies needed more than information and counseling to effectively compete in global markets. He is the Senior International Trade Officer with the Montana International Trade & Relations Bureau.

For more information on Montana exports go to www.exportmontana.com.

8

A survey of 222 Montana manufacturers employing 20 or more employees and select small firms of which 80 percent responded.

The change from the Standard Industrial Classification (SIC) system to the North American Industry Classification System (NAICS) has made it problematic to provide consistent and continuous time series data for employment and labor income. Numbers for years prior to 2001 are based on the old SIC system, while the more recent figures are based on NAICS.
Deciphering the New Manufacturers Deduction

by David L. Gilmer, CPA
Guest Writer

The American Jobs Creation Act of 2004 passed some time ago, but we are just now seeing and dealing with some of its benefits. One provision provided manufacturers’ deduction as a result of the international turmoil over the United States’ export subsidies. Although prior regulations concentrated on exporting goods by providing export tax benefits, the new bill provides many benefits to American manufacturers that are not participating in the global market. Many other industries will reap benefits including agricultural, construction, motion picture, publishing, auto rental and leasing, and engineering and architectural services.

In reading material covering the new deduction, it is apparent that the most important and difficult part of taking advantage of the deduction is in learning all the definitions. The next step is gathering the data in order to calculate the deduction. Here are a few highlights of how the deduction will work.

The deduction is being phased in based upon a percentage of the lesser of Qualified Production Activities Income (QPAI) or Taxable Income. The percentage for 2005 and 2006 is 5%, in creeping to 6% for 2007 through 2009, and peaking at 9% for 2010 forward. If you have negative QPAI or Taxable Income (a loss), you will not get the deduction.

The deduction does not prevent getting the deduction, you can proceed to calculating the deduction. As mentioned, the lesser of the QPAI or Taxable Income is multiplied by the applicable percentage. But what is QPAI? QPAI is your domestic production gross receipts reduced by the costs of production. Other deductions, expenses and losses directly allocable to such receipts, and a portion of deductions, expenses and losses not directly allocable to such receipts (overhead). Those receipts include the sale or exchange, or lease or rental, of qualified production property that was manufactured, produced, grown or extracted by you or your company in whole or in significant part within the US. This also includes selling qualified films you produced, selling electricity, natural gas, or potable water you produced, construction activities, and engineering or architectural services performed on foreign construction projects located in the US. Retail sale of food and beverages are not allowable receipts for the deduction.

You must also consider who exactly has the businesses and owners of businesses in determining which entity is entitled to the deduction. This applies in situations where companies hire independent contractors to perform construction or other activities on their behalf. So what do all these definitions, calculations and rules mean to you? Well, you should start by setting down with your tax advisor and going item by item to determine whether or not you qualify for the deduction. Then, it will be a matter of determining how to gather the information needed to calculate and verify the appropriate figures. Expect these activities to be detailed and time consuming for the first year. While calculating the deduction could amount to keeping a second set of books, depending on your situation, the deduction may be well worth the extra cost and effort.

David L. Gilmer, CPA of Junkermier, Clark, Campenella, Stevens, PC, has worked in the Missoula office for seven years and serves a variety of business and individual tax clients. He also performs operational audits for financial institutions.

The deduction is being phased in—peaking at 9% for 2010 forward. Montana manufacturers helped shape this new bill by participating in focus groups organized by Senator Max Baucus in response to the export subsidy turmoil.
5th Annual Montana SBIR Conference...

“Got Networking?”

Successful business owners point to networking as one of their most valuable tools. If you have no network, it’s time to get started. If your network is started, it’s always a work in progress!

The Fifth Annual Montana State SBIR Conference is all about Networking!
March 21 and 22 at the Holiday Inn in Missoula

See full conference details and online registration at: http://www.medamembers.org/sbiragendamarch06.html

Pre-Conference activities start at 10:30am, March 21, and feature three target-ed mini-workshops-STTR Funding, Getting Started in the SBIR Program, and Intellectual Property Strategies. Or, arrive at 3:00 p.m. to join a tour of Bee Alert, an award-winning Missoula SBIR company that is training bees to locate IED and other explosive devices.

The pre-conference day concludes with a 5:30 p.m. registration and networking session, where you can view tradeshow exhibits and engage in deal-making or tip-swapping with other Montana entrepreneurs.

“Got Networking?” keeps rolling at 7:30 the next morning. You will hear from three of the top 10 federal prime contractors as well as federal agency program managers from USDA, DoD, and NASA. Get energized by our inspirational lunch speaker, and then learn about new opportunities in the commercial and research track breakout sessions.

Sign up now! http://www.medamembers.org/sbirregister.html

Forward Focus is a Newsletter for Montana Manufacturers Published Quarterly

SEND NEWS BRIEFS For the MFG NEWS!

Feel free to contact MMEC about manufacturing topics or issues that concern you and send your company news briefs to dnash@coe.montana.edu

Call MMEC 406-994-3812 or 1-800-MEP-4MFG

MMEC Mission
To Help Manufacturers To Be
More Successful

To Visit Your Area MMEC Field Engineer
Call 406-994-3812

We Can Help!

Montana State University
2310 University Way, Bldg 2
P.O. Box 174255
Bozeman, MT 59717-4255

Nonprofit Organization
U.S. Postage
PAID
Permit No. 165
Great Falls, MT 59403

Please Route To:
- CEO
- Owner
- Production Manager
- Development Officer
- Quality Manager
- Sales Manager
- Safety Officer
- Office Supervisor

a NIST | Network | MEP | Affiliate