

ForwardFocus

www.mtmanufacturingcenter.com

Montana Manufacturing Center

University Technical Assistance Program

Inside this Issue:

- **3** Truth About Turnover
- **5** Conference Wrap
- **8** Family-Fire-Future
- Plus**
- 8** **Ten-Points for Success**

Marching toward Success One Leg at a Time

By Deborah Nash, MMEC

Entrepreneur Sarah Calhoun of Red Ants Pants LLC, received hurrahs! from 230 conference goers at the recent Compete Smart Manufacturing Conference in Helena after seasoned businessman Bob Ricketts presented her as an example of Montana's bright future.

"It makes my heart happy to have met a young lady like this taking the initiative to get something started," he told the audience as he walked to where Calhoun was seated. "This is the new blood of Montana's economy...This is our future."

Ricketts, CEO of Doctor Down in Polson, was the delightful, surprise entertainer for the conference closing luncheon. He brought Calhoun to the attention of the audience after meeting her just a short time earlier at a conference session. There she had told him of the grand opening of her specialty garment business in White Sulphur Springs coming up that weekend and shared a bit of her story.

Her business, Red Ants Pants, is the first-ever company dedicated to manufacturing workwear for women – specifically, cotton duck work pants. Opening the business was actually the culmination of two years on a fast learning track for Calhoun, who is no stranger to hard work. She has a long-standing personal awareness that workwear has not been made to fit women as she grew up on a farm in New England and later led trail crews in five states across the U.S., from Maine to California, and peeled logs for extra income. She has also instructed



Sarah Calhoun

kids in the backcountry while working for Outward Bound. The experiences exacerbated her frustration with poor fitting work pants, which up until now have been designed to fit men.

Problem Begets Solution

"The problem with women wearing men's workpants is that the pants are cut very straight – without any curves whatsoever," Calhoun explains, "so you have to get a waist size big enough to fit over your hips. And once buttoned, the waist is too big, creating gaps in the back and the dreaded 'plumbers crack' when you bend over."



Poor fit also limits range of motion. Traditional work pants have other shortcomings. Red Ants Pants is fixing that, offering two cuts of work pants, one for women with curves and one for those with a narrow hip but wider waist. Both contain other preferred design elements that, like the name implies, get work done day in and day out without stopping. Calhoun has even defied the traditional single sizing scale used for women's clothing in favor of a waist/length measuring system

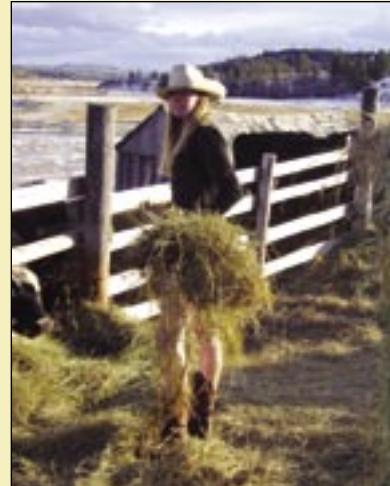
– "straight forward and consistent between styles." And she's already exploring additional fabric options.

Clothing and Community

A look at the company Web site www.redantspants.com will reveal that Calhoun is not just designing and selling workwear for women but working to create connections and community within the world of working women. Her line is currently manufactured in the USA by a women-owned manufacturing center in Seattle and sold and distributed from

her storefront in the small central-Montana town of White Sulphur and through her Web site. There you can learn more about the "Red Ants Challenge" and brand promotion intended to foster fun, community and a sense of comaraderie among wearers and sewers alike.

With assistance from Al Deibert from the Montana Manufacturing Extension Center, she has explored additional in-state sourcing, but hasn't found contractors with the necessary "spendy"



Mari, a typical hard-working Montana rancher, part of clever marketing strategy.

equipment at this time. Deibert also worked with her to understand and make grading (standards used for sizing by the industry) decisions and assisted with cost management, looking at her price/volume

(continued on page 4)

HOME OFFICE

2310 University Way, Bldg. 2
P.O. Box 174255
Montana State University
Bozeman, MT 59717
(800) MEP-4MFG
(406) 994-3812
Fax: (406) 994-3391
mmec@coe.montana.edu

FIELD OFFICES

Billings
Dale Detrick
Big Sky EDA
(406) 869-8414
ddetrick@coe.montana.edu

Bozeman
Mark Shyne
UTAP-MSU
(406) 994-3813
marks@coe.montana.edu

AI Deibert, MilTech
MSU TechLink
(406) 994-7732
aldeibert@coe.montana.edu

Helena
Todd Daniels
MT Department of Commerce
(406) 841-2745
tdaniels@mt.gov

Jim Haider, WIRED
406-461-85843
jhaider@coe.montana.edu

Kalispell
Bill Nicholson
Flathead Regional Business Center
(406) 756-8329
bnicholson@coe.montana.edu

Paddy Fleming, MilTech
Flathead Regional Business Center
(406) 756-0207
pfleming@coe.montana.edu

Missoula
Kreg Worrest
School of Business Administration
University of Montana
(406) 243-6613
kworrest@coe.montana.edu



Essence Invites Bright Future

The national news about manufacturing and international trade may have you feeling a bit pessimistic with manufacturing job losses continuing in some parts of our country, and international trade issues continue to be hot political topics.

Emerson said it better, but where there is chaos, there is opportunity. Manufacturing in Montana has a bright future with its pervasive entrepreneurial and innovative spirit. In Montana, failure is interchangeable with

"didn't try;" and for us, it's not an option. We start and operate small businesses. And small businesses are the source of economic growth, new jobs, and innovation. Montana is the essence of creativity, innovation, and a can-do spirit!

Two exciting things going on at MMEC are poised to fuel that potential. First, we are working to develop and deliver new services well suited for Montana's entrepreneurial spirit. We are working with the National Institute of Standards and Technology's (NIST) Manufacturing Extension Partnership (MEP) to identify the best possible process for developing ideas and then turning those ideas into marketable products quickly and cost effectively. Partnerships are being built with experts such as Doug Hall, founder of Eureka! Ranch (<http://www.eukaranch.com>) and star of ABC's nationally syndicated American Inventor. Eureka! Ranch is the world leader in applying systemic thinking to business growth planning. Doug is excited to be involved. Let me mention, too, that Doug will be the keynote speaker at Compete Smart 2008, our renowned manufacturing conference.

Second is our "WIRED" project. You have probably heard that Governor Brian Schweitzer applied for, and the US Department of Labor awarded to Montana, a \$15 million three-year grant to help develop the bio-products industry in the state's 32 most rural counties. Through the Montana Department

of Commerce, MMEC received nearly \$700,000 of the WIRED funds to devote a Field Engineer full time to these efforts. This is a super opportunity for MMEC and for Montana! But it's only a great beginning.

WIRED lays the foundation for a sustainable economy into the future. On that foundation, we believe we can build a real economic opportunity for Montana's rural areas in this and other industry clusters. There may be a better name for it, but I call it "Distributed Manufacturing". This isn't really a new concept. It harkens back to the earlier days of the Industrial Revolution. Maybe "Cotton Gin Manufacturing" would be a better name.

"But every jet of chaos which threatens to exterminate us is convertible by intellect into wholesome force."

- Ralph Waldo Emerson (1803-1882)

Why? Just as Eli Whitney's contribution of interchangeable parts for muskets gave rise to efficient manufacturing, the development of the cotton gin gave rise to a new "system" for manufacturing, changing the foundation of the U.S. economy. The cotton gin, a labor saving device producing cleaned (value-added) cotton, could be scaled to an appropriate size and replicated in rural regions. Harvested cotton was brought to a "local" gin for processing. The cotton, waste material and by-products, such as cotton seeds, could be shipped to other facilities for further processing or disposed of locally.

In the years since Eli lived (1765-1825), we have scaled up the size of manufacturing plants, developed transportation and distribution systems, and centralized production in large, automated factories; mammoth systems well suited for large markets and more

(continued on page 9)

Hiring Smart... The Truth about Turnover

Having trouble finding new hires or keeping the ones you do hire? It may be your hiring practices, according to Steve Wilson, Willow Creek Consultants, Hayden, Idaho.

He quotes management guru Peter Drucker's observation that "up to 66 percent of your company's hiring decisions will prove to be mistakes in the first twelve months" and says other studies on traditional hiring processes show similar findings.

By contrast, "Nearly every business system has seen revolutionary technological change, yet some still hire employees the way they did 30 years ago," Wilson points out. "One of the reasons companies don't change their hiring process is they often don't realize how much their people problems are costing them."

Wilson and his wife Vicki have 35 years of combined human resource experience. They presented a workshop on "The New Art of Hiring Smart"



Steve Wilson

during the October Compete Smart conference in Helena. As employers and consultants on hiring, the pair have developed an approach that changes the success rate for hiring from 33 to 80 percent.

Success is measured in terms of getting a highly productive, reliable worker. Some employers think turnover is a great way to keep employment costs down. Not true, says Wilson. Even keeping marginal performers is very costly for a business. And keeping current employees in positions that don't fit is also counter-productive. He suggests re-evaluating their strengths and placing them in more suitable roles.

Sticker Shock

Paying attention to your hiring practices in the first place can eliminate many problems. And while there can be lots of reasons for turnover, understanding the true cost is important. Here's

how and why.

To take a look at your turnover, he advises, count current employees and then the number of Form W-2s issued. The difference is the number not working for you today. If you have 30 employees and 40 W-2s (40-30=10), take the difference and divide by current employees to calculate your turnover rate ($10/30=33\%$ turnover).

An analysis of 15 independent turnover cost studies (www.sashacorp.com/turnframe.html) conservatively calculates that the cost to replace an \$8/hour employee is \$5,505! And that doesn't include intangibles like lost customers, low morale or reduced productivity," Wilson says. Multiply that figure by the 10 in the example above, and the cost is huge — \$50,000.

"Despite this staggering amount, many companies spend more time on selecting a new computer than they do on selecting a good employee!" Wilson states.

(continued on page 9)



Uhl was an Airman in the U.S. Air Force and has experience in the service department and on the engine/transmission assembly line for BMW in Germany.



August Uhl

He also has experience in the financial industry. He recently moved to Bozeman from Maui, Hawaii.

Montana Manufacturing Extension Center (MMEC) is an outreach and applied research center in Montana State University's College of Engineering. MMEC provides direct business and engineering expertise and training to companies and start-ups that are trying to establish or develop new uses for such sustainable bio-products. WIRED will foster a sustainable rural economic cluster and it will also enable Montana to participate in the national strategy to reduce petroleum dependence.

Haider, Uhl Join MMEC for WIRED Effort

Jim Haider, PE, has joined the staff of the Montana Manufacturing Extension Center. He will serve as the Workforce Innovation in Regional Economic Development (WIRED) sponsored Field Engineer to work with private companies and their employees to aid in



Jim Haider

the development and expansion of the bio-products and renewable energy industries within the designated counties (32) and Indian reservations (6) of the WIRED program. His efforts will be focused on developing and delivering client-driven training to increase manufacturing production efficiency and employee skills.

He will be joined by G. August Uhl (pronounced Yule) who will assist with event coordination and support for program delivery. Uhl works from the MMEC home office in Bozeman.

"We look forward to the opportunity

Red Ants Pants (continued from cover)

mix and other issues to help her price her product correctly.

"It's very common for niche manufacturers to undercharge compared to the value they are producing," Deibert says. Looking at costs and competing niches helps put it into perspective.

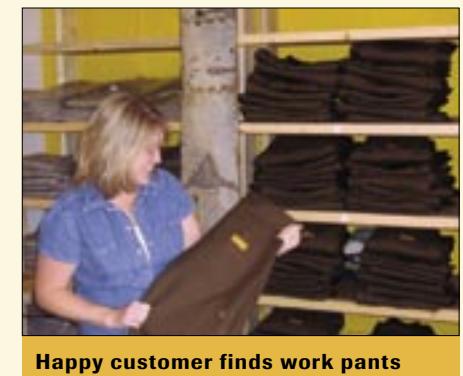
Following Ten-Point Plan

Asked how she felt being singled out at the conference luncheon, Calhoun said, "It was fantastic. I met Bob at Al's cost sensitivity session. The whole conference was excellent. I liked the sense of being part of something much bigger."

She attended Compete Smart as part of a continuing effort to gain background in business and finance, which she admits has been a several year self-study that started off with a chance meeting at a local coffee shop where she was reading a book on how to start a business.

Even before she heard the "Ten Point Plan for Success" presented by plenary conference speaker Darrell Miller from Marks-Miller Post and Pole, the young entrepreneur had began intuitively applying several success tenets from the presentation. Starting her business right, Calhoun has embraced and learned from competition and has begun involvement in trade associations and with industry experts and groups that have outdoor interests and a need for her product. She recently attended an experiential learning conference where market potential for her product is evident and is currently exploring trade show opportunities. She is also strives to make her company name consistent with quality.

Miller, co-owner of a successful 30-year-old company in Clancy, Montana, had advised listeners not to view competitors in the industry as enemies but rather as resource because "we are all in the same boat." There is great value in



Happy customer finds work pants that fit.

sharing ideas and garnering help to deal with issues faced within the industry, he said. "Competition is beneficial," he added, "It keeps you on your toes and helps ensures stability. More importantly, lifelong friendships often evolve." (See related Ten-Point Plan on page 8)

"When I got the idea to develop women's workwear," Calhoun recollects, "I didn't even know what a business plan was...I had an idea and naïve optimism. If not so naïve, I never would have had the courage to jump in."

Learning from Industry Specialists

At the fateful coffee shop encounter, she met Richard Siberell, a designer who has had a 20-year career with Patagonia, the now renowned garment company. Meeting him that day is what made her decision, she says. "He was the voice of experience telling me I was onto something big and to go for it. I thank him for that and for all the help along the way."

To learn more about the process of manufacturing, she attended an MMEC Lean Manufacturing workshop last year. And Deibert, from MMEC, put her in touch with more colleagues

in the garment and outdoor industries, leading to the sourcing that has helped move her dream forward.

"Learn from people who are doing," Deibert recommends. He has maintained a network of friends and colleagues from his experiences and consulting in the sewn products/outdoor gear industry.

Calhoun has been in touch with a number of experts including Jim Markel of Red Oxx Manufacturing in Billings who uses a direct sales model like hers, and Mark Terwilliger at Simms Fishing Products, the world's leading manufacturer of premium quality fishing gear,

located in Bozeman. As sourcing manager at Simms, Terwilliger is in charge of all the sourcing operations, monitoring fabric trends and production, etc.

"Mark has been a phenomenal mentor," Calhoun says. He helped her find a quality sewing factory that would accept small runs and provided the quality and inspection she requires.

Knowing he had experience with the firm gave her much-needed confidence to build the relationship.

Terwilliger, in particular, reaffirmed for her that it's okay to be very assertive, "which has been very important."

It's important, as an owner, to be able to say what you want, what you expect to get, and that you are willing to pay for important extras, Terwilliger explains. "I told her to always be firm but fair. As contractors, factories work for us. But they are the experts and might have a better idea, so listen to what they say. But be assertive if you feel strongly about a design element."

It's important to do it in a professional manner so both parties walk away feeling good. "I look at it as a partnership. And a partnership definitely can be long term," Terwilliger says. "The more they help you, the more you grow your sales."

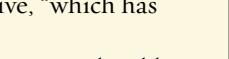
Calhoun's mentors have taught her the industry lingo, the process of working with contract manufacturers, how to talk about the specifications, quality expectations, and what the standards are for the industry. She received tips on the sampling process with a prospective vendor and how to do final signoff. Sampling involves having a prospect sew a single unit, evaluate and correct; arranging a sampling of ten, correct; and then



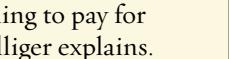
Shop is registered historic site - built in 1880, originally a saddle shop.



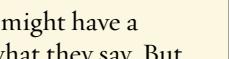
Shop is registered historic site - built in 1880, originally a saddle shop.



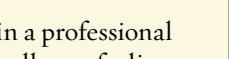
Shop is registered historic site - built in 1880, originally a saddle shop.



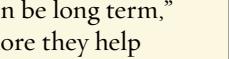
Shop is registered historic site - built in 1880, originally a saddle shop.



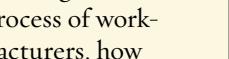
Shop is registered historic site - built in 1880, originally a saddle shop.



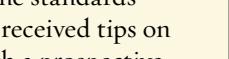
Shop is registered historic site - built in 1880, originally a saddle shop.



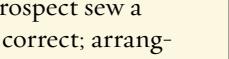
Shop is registered historic site - built in 1880, originally a saddle shop.



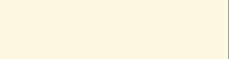
Shop is registered historic site - built in 1880, originally a saddle shop.



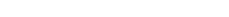
Shop is registered historic site - built in 1880, originally a saddle shop.



Shop is registered historic site - built in 1880, originally a saddle shop.



Shop is registered historic site - built in 1880, originally a saddle shop.



Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.

Shop is registered historic site - built in 1880, originally a saddle shop.</p

Compete Smart Conference Wrap-Up (continued from previous page)

for about \$3 million.

Jim Wright, Vice President of Manufacturing at Semitool, explained that in contrast to most of the company's competitors, Semitool is a vertically integrated company. They make most of their own equipment in-house in order to improve speed-to-market, control quality and give them flexibility.

"We have to have a culture that embraces change. Most of the employees in Montana are very competitive in the world," he said. "Our product development takes days and weeks, while our competitors take months and years. We don't take change lightly."

Wright explained the magnitude of change faced by his industry with the example that two years ago 32 megabytes of memory cost \$26 or about 81 cents per megabyte. Today, that memory comes in 1000 megabytes at about 3 cents per megabyte. "We have to keep up with that rapid pace of change," he said.

They maintain close interaction with customers, viewing "their problems as our opportunities," said Wright. "Rapid change means incidents of failure from which we have to just learn and go on." Once every six months they conduct a survey of their customers to identify problems. They then take the top three complaints and fix them, said Wright.

The extreme strategies of Semitool has helped the company increase sales from \$120 million in 2002 to \$250 million in 2006. Over the next ten years they hope to double their share of less than one percent of a \$62 billion industry, to a full one percent, said Wright.

Extreme circumstances forced changes at Diversified Plastics Inc., Missoula. A fire in the plant a couple years ago, while



Conference goers tour Helena College of Technology

understood one day when he heard him say, "We can do anything, absolutely anything, but if it's impossible, we are going to need two more days."

The challenge of hiring attitude was recognized by everyone as becoming extreme, given the increasingly tight labor market. And yet many employers are using the same methods they did 30 years ago, said Steve Wilson, Willow Creek Consulting. Extreme new approaches are necessary for a business that wants to grow because keeping marginal performers means a loss of productivity, he pointed out.

His advice: when advertising for a position keep the requirements to a minimum so as to broaden the possibilities for applicants. When hiring for attitude years of experience and education may not be as important as attitude and talent. One cannot teach attitude,

a devastating blow on one hand, was an opportunity to start over on the other. Adapting Lean Manufacturing processes, said company owner Brad Reid, have expanded capacity by \$10 million and postponed the necessity for a 10,000 square foot expansion.

"You can't attempt a makeover, without people," said Reid, who added that his company is "all about people." Reid said he has learned that the best way to lead "is by serving." "People will follow you," he said. "We get a hundred percent out of our people without pushing them. It is really powerful. I would be happy with 90 percent and I get 110 percent."

Good leadership and good attitudes make all things possible, said Reid, who learned much from his father who founded the company. Reflecting on what he learned about attitude from his father, Reid said he finally



Problem solving workshop scene

but employees with a good attitude are trainable.

Look closely and evaluate employees carefully, Wilson advised, because sometimes employees are not matched to the right job. There are tools to screen for aberrant behaviors and still comply with accepted hiring standards.

"There is no such thing as reasonable turn over," said Wilson. A conservative estimate to replace an employee is \$5,505, a more realistic one is probably \$8,000. So it's worth the effort of going the distance and hiring the right employees and retaining them once they been hired. "I'm always amazed," said Wilson, "Most companies spend more time and resources to pick a copier than in hiring employees."

Evelyn Pyburn is Publisher and Editor of Big Sky Business Journal, Billings, MT, dedicated to "The Spirit of Commerce – the Great Bond of Union Among Citizens," www.bigsbybusiness.com. She has attended and provided news coverage for all five Compete Smart conferences held in Montana since 1998.



Kreg Worrest & Paul Hutter prepare materials for problem solving session

Family – Fire – Future, the Essence of a Business Makeover

By Evelyn Pyburn

Reprinted from www.bigsbybusiness.com

"Just one word, 'plastics.'"

Brad Reid's father, Rod, took that investment advice, from the movie "The Graduate," seriously. Because of that Brad is the second generation owner of Diversified Plastics, Inc. in Missoula, a business that has had more than its share of challenges.

Diversified Plastics is a family business, one that has successfully negotiated a transference from one generation to another, as well as having undergone a "makeover" that has escalated its productivity and capacity to an extent that it will undoubtedly continue to serve the next generation of this entrepreneurial family.

Reid spoke at length about family doing business together during the Compete Smart Conference in Helena, produced by the Montana Manufacturing Extension Center (MMEC), the theme of which was "Extreme Makeover." But the successful transition of the business from one generation to another, and negotiating other up-and-downs of family dynamics, was only part of their "makeover." A fire two years ago thrust the enterprise into an unexpected "makeover," one that might have destroyed the business were it not for a lot of expert assistance.

"You can't attempt a makeover, intentional or not, without good people,"

said Reid. A good contractor and good banker are helpful. And, a good insurance policy — one that provides "business interruption insurance" — is also a necessity, said Reid, adding that he had no trouble giving his insurance company, Payne Financial, Cincinnati, a "plug," for the way in which it came through. In addition, there was the assistance the company received from MMEC and field engineer Kreg Worrest, who shortly after the devastating fire had the courage

to say to Reid, "This is a good time to really start over."

Reid credited "Lean Manufacturing," a system of production taught by MMEC, for helping to increase his company's capacity to \$10 million, and postponing the necessity of a planned 10,000 square foot expansion.

Reid's father, a salesman of steel components, started Diversified Plastics in 1976 after cashing in a \$10,000 life insurance policy. He started making plastic sprockets and other products in his

garage. By 1980 it was a true family business with siblings and in-laws all working in the business. But, it wasn't easy, explained Reid, who lauded his father's patience and understanding.

"Dad always swore that he would sell the business if it was going to destroy the family," said Reid. "He never got angry at business. He kept emotions out of it." In any disagreement, said Reid, his father always insisted that "we are going to be in the room until everyone is hugging."

The business grew, including a second location in Seattle. In 1998, the com-

pany reached its first annual sales of \$1 million. The family grew, and so did the issues. The Seattle location spun off into a separate entity owned by Reid's sister and her husband.

In 1999, Reid purchased the business from his father. At the time, he said, he had concluded that he didn't want his business to be a family business. But he has since changed his mind. "There are things that I didn't understand then, that I do now," he said.

Today, Brad's wife, Wendy, is part the business. "I didn't want two separate lives," he said, "I want a family business. And I hope all of our children are part of the business some day." "When we have arguments, and we do," said Reid, "we still go by the practice of staying in the

A fire two years ago might have destroyed the business were it not for a lot of expert assistance.

room until we are all hugging."

Diversified Plastics has doubled in size over the past three years, with \$2.5 million in annual sales. With five automated-molding machines in place, the company has been growing at the rate of 22 percent a year, reported Reid.

Reid is optimistic that with the people he has in his business it will continue to grow. "You lead by serving," said Reid, explaining that by following that rule, "You get 100 percent out of employees without pushing them. It is a very powerful. I want only 90 percent and I get 110 percent."

"There are a lot of people at work who have their best friend there," he continued, referring to information the group had just gleaned from an earlier seminar about how successful businesses are found to be places where employees often make best friends.

Darrell Miller Ten-Point Plan for Success

"I don't believe in luck," Darrell Miller told attendees of the recent Compete Smart Manufacturing Conference. Miller and his wife, Karen, and partners, Gary and Debbie Marks, own Marks-Miller Post & Pole, Inc., a 30-year-old business in Clancy, Montana.

Owning your own business is not easy, said Miller, adding that "some things are out of your control" — at which point he displayed a picture of their entire facility under a flood in 1981. Despite such setbacks, following his ten-point plan should result in business success, he said.

Define success: What it is to you; whether financial or other, it has to be very clear in your mind.

Maintain quality: Produce a high quality product and price it accordingly; most competitors will be at low price. Find a niche and make your name consistent with quality; it will pay off.

Control growth: Be patient; resist the temptation to take orders beyond your capabilities.

Diversify: Be very careful with this; slow, steady; helps sustainability.

Adapt & change: Don't jump the gun but be ready for change as it's an ever-evolving marketplace.

Resist stagnation: Very easy to become complacent; always look for a better way to do things.

Embrace competition: It is beneficial; keeps you on your toes; ensures stability.

Join trade associations: Don't view competitors as enemies; we are all in same boat; share ideas and best practices; extra benefit in dealing with issues in your industry...lifelong friendships can develop.

Be optimistic: choose to be victim or learn from an experience; bottom line is attitude; choose how to live life.

Develop loyal employees: Your most important asset. Bad relationships absorb all your time and energy; it's up to you to create the loyalty — wage and benefits are not enough. Praise employees; involve them in decision making; respect their ideas; show interest in person lives; let them know you appreciate what they do for you.

Point 11 — HAVE FUN: Do what you enjoy; without personal satisfaction, you won't be successful.

(Editor's Note: Taken from a plenary presentation entitled Montana Company Leaders – eXtreme Challenges, Compete Smart Conference 2006. Darrell Miller is co-owner of Marks-Miller Post & Pole in Clancy, MT)

Product to Fly with President



Helicopters that regularly fly the President of the United States from place to place will soon carry the high quality medical transport bedding system manufactured by Polson, Montana company, Doctor Down. The prestigious order for six "Rescue Wraps" was announced at the recent MMEC Compete Smart conference by Bob Ricketts, Doctor Down CEO, who was the featured speaker and entertainer at the closing luncheon. His company also has the distinction of being MMEC's 1,000th project recipient, receiving assistance from MMEC and its partner program MilTech since last year when orders for its products began to snowball.



Additional Conference Sponsors:
Montana-Dakota Utilities, Dell, Gateway, Computrac, Allied Waste Services, MT Dept. of Environmental Quality, AZ & Company, D.A. Davidson, Helena Community Credit Union

Hiring Smart (continued from page 3)

And in today's hiring environment, with limited candidates even applying, a robust selection system is imperative.

The "New Art of Hiring Smart," a systematic hiring process that embraces the latest technology approved by the U.S. Department of Labor, takes the guesswork out of hiring good employees.

"It's easy to implement and doesn't cost a lot of money. Much of it is free," Wilson says.

"Using the latest technology in be-

havioral analysis, your job candidate can take the web-based Step One Survey II,

in point, he had the group envision a long-time postal worker going to work in a similar position at UPS — same job skills, different culture. "Think that person will be successful?"

An important next step is to prescreen job applicants for ability to show up for work on time, be substance-free, work hard, and have integrity.

"Having trouble writing a good job description? Wilson suggests the Web site www.onetcenter.org. The site has more than 1,000 free job descriptions that can help you think about your descriptions. "Do your job descriptions address attitudes, or just skills and duties?" he asks.

In today's hiring environment, with limited candidates applying, a robust selection system is imperative.

Experience vs. Attitude

Willow Creek finds that companies place too much emphasis on skills and experience, at the expense of attitude. Those attending the workshop heard that they should limit job descriptions to an emphasis on basic essential skills and more about attitude.

"Combined with the right attitude, your applicant pool will be much larger," Steve Wilson says. "With the right mind-set, the people you hire will quickly develop specific skill in their assigned tasks."

Don't fall victim to the old, but true expression, "We hired for skill, but fired for attitude," he says. Experience alone doesn't mean an employee will easily adapt skills to your culture. As case

a 20-minute online assessment that is instantly scored," he notes. It is highly accurate in predicting critical work behaviors. The cost is less than \$25, and provides a wealth of information about a candidate before the interview.

The candidate report also provides questions that can be legally asked in the interview to explore areas of concern. The assessment calculates "distortion," an indicator of how frank and consistent the candidate was in answering the questions, he explains. You can download a complete sample report at www.willowcc.com, or contact Willow Creek for a free trial assessment.

Willow Creek also offers a down-

loadable 57-question survey for those interested in incorporating attitude into job analysis. It takes about 10 minutes to complete. Return the completed survey and get a job analysis report that shows the characteristics of a successful employee for your company — how they think, their behaviors and interests — a complete description (skills and attitude) of the employee who is suited to your job before you begin the search.

Other important steps are needed for the new art of hiring smart. Wilson highly recommends background screening and warns of a new danger, "negligent hire."

"For \$30 to \$60, with a one-day response, you can have social security number verification, education and reference verification, criminal record check and driving history," he says. "If the job involves handling company money, run a credit history, as well."

Willow Creek offers a number of services to help employers adopt a systematic and effective hiring process to increase the probability of making a good hiring decision from 1 in 3 to better than 8 in 10. For the typical cost of a few hundred dollars per hire, costly hiring mistakes can be avoided, reducing turnover and increasing your profits.

Steve Wilson is president of Willow Creek Consultants, which specializes in teaching companies how to use a seven step system to build a high performance organization. He is also the founder of Mid-States Technical, an INC 500 engineering services firm in the Midwest. www.willowcc.com

Bright Future (continued from page 2)

populated areas. But large factories don't fit rural settings.

So, our vision takes us back to the future. Targeting smaller niche markets with high-value, low-volume products — the antithesis of commodity products — is the key to economic growth in the most rural parts of our state. Today's technology allows us to scale production facilities to the "right size" to fit market needs. Imagine, for example, extracting oil from seeds that are raised within a 50

mile radius of the facility. The valuable oil from several similar facilities could then be shipped to a second Montana facility for further processing and packaged for use in targeted, high-value markets. The offal, or waste products from the crushing operation, stays local where beneficial uses might be found. Opportunity and jobs. There you have it: Cotton Gin Manufacturing (a.k.a. Distributed Manufacturing).

Certainly, there are challenges to the

economic feasibility of developing and implementing such business opportunities. But, thanks to the WIRED grant, we have the resources to begin answering those kinds of challenges as the cluster develops.

Steve Holland, MMEC Director

Manufacturing News

Video to Air in 100 Countries

In November, **TowHaul Corporation**, a Montana company based in Belgrade, was featured on CNBC in a segment for the show, "On the Money."

Job Pool Stirs Excitement in Flathead

Columbia Falls Aluminum (CFAC) is expected to hire 120 workers to start up the second of its five potlines, according to the Daily Interlake in Kalispell. Historically, a large employer in the region, CFAC currently operates one potline and employs about 150 people. The plant has been running the single potline – 20 percent of its capacity – since March 2003, the article said. www.dailyinterlake.com/articles/2006/11/23/news/news02.txt

Symbiotic Business in Superior

Tricon Timber Post and Pole east of Superior is a new business on the site of an old mill that closed in 1994. It joins **DAW Forest Products**, a more traditional mill that operates at the same location. Waste is sent across the lot to the **Eureka Pellet Mill**, which opened two years ago, to create value-added products. www.bigsbybusiness.com

Montana Company's Innovative Technology for Copper Recovery

Proprietary resin technology from **Purity Systems** of Missoula is to be used to recover approximately \$3.0 million of copper in solution in Australia, according to business news from www.matr.net/files/PuritySystemsPR10-18-06 where Redbank Mines announced initiatives to recover copper in solution in the previously mined Sandy Flat operation.

Business Plans \$20 Million Site for Liquid Gases

A \$20-plus million plant that will make liquid nitrogen, liquid oxygen and liquid argon is planned for Lockwood, in east Billings, and expects to be operational in less than 18 months. The new company, **Aspen Air**, will market its product to refineries, hospitals, food and beverage manufacturers and oil wells. The planned facility will include a truck loading station and employ 25-30 people. www.bigsbybusiness.com

Driving Forces across Montana

For a glimpse of the driving forces behind the economies of two distinct regions of Montana, check out October and November articles from **"Montana's Economy at a Glance"** on the Web: www.ourfactsyourfuture.org

Patents Bogged Down

The complexities of today's nanotech and other innovation along with a tight budget has created a processing backlog at the U.S. Patent Office of up to four years, according to Chicago Tribune writer Jon Van. Responding to nearly three-quarters of a million filings in the pipeline, the patent office has hired 1,200 new examiners with another 1,200 to be added in the coming year; relying on industry specialists to cut the learning curve.

—Seattle Times Business Digest, Nov. 27, 2006

ForwardFocus 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

Students Urged to Think Big About Future

Industrial Technology students from Capital High School in Helena toured several manufacturing sites in the Gallatin Valley in November. Students explored some of the largest equipment manufactured in the state when they visited TowHaul Smith in Belgrade.

Engineer Dean DeCock led the group through the plant to see a 300-ton lowboy destined for a surface mining site in South America. He took them through the paint



Students explore the undercarriage of a 300-ton TowHaul lowboy.

facility where a hitch more than 15-feet high was recently coated for such a hauler and on to the building that houses the CNC (computer numerically controlled) plasma cutter. This device is capable of cutting through several inches of plate steel as if it were butter.

TowHaul also manufactures water tank carriers, cable reelers and other massive mining equipment. Its monster equipment was recently featured on the CNBC program "On the Money" with Mike Hegedus. The program was entitled "Big Operations in Big Sky Country."

"I wanted my students to visit actual businesses that are using the same skills, technology, and processes that I am teaching and they are learning in our Welding and Machining program," said instructor Jim Weber.

MMEC Field Engineer Mark Shyne assisted Weber in arranging the tours which included a visit to the Montana State University Simulation Lab in the College of Engineering and to Gibson Acoustic Guitar. A total of 26 students, mostly juniors and seniors, attended.

Outlook Seminars to Explore Becoming Closer Neighbors

A look at factors causing a breakup of Montana's typical economic trends and economic development and trade opportunities throughout Asia will be the featured topics at the 32nd annual First Interstate Bank Montana Economic Outlook Seminar.

The theme for this year's circuit across Montana is "Rising Asia: Becoming Closer Neighbors." The seminars are presented by the UM Bureau of Business and Economic Research. Mansfield professor Philip West, former director of the Maureen and Mike Mansfield Center at the University of Montana (UM), will address issues that come with rapid growth in countries like China, India and Taiwan such as rising living standards, rising consumption and rising environmental problems.

As in the past, the seminar will highlight the latest economic trends and explain the breakup as well as what it all means in Montana's key industries: manufacturing, agriculture, non-resident travel, health care, and forest products.

Bob Brown, senior fellow at UM's Center for the Rocky Mountain West, will present "Perspectives from China" as the

closing luncheon speaker.

All seminars begin at 8 a.m. and run through the lunch hour. Presentations are scheduled for

Helena	January 23
Great Falls	January 24
Missoula	January 26
Billings	January 30

Bozeman	January 31
Butte	February 1
Kalispell	February 6
Sidney	March 6
Miles City	March 7

For costs, meeting place, and registration information visit www.bber.umt.edu or call 406-243-5113.

Red Ants Pants (continued from page 4)

a larger sample; working though the process until both you and the vendor are satisfied with the result to develop a working relationship.

Phenomenal Startup Support

There's something about a small business taking off, that people appreciate; they get really excited, Calhoun says. "The full-on support and encouragement from everybody that I'm on to something good has been phenomenal. When you are struggling on your own, hearing a voice of wisdom really helps."

"It's really inspiring to see someone start a clothing business in Montana; and a woman-owned business; that's huge," Terwilliger notes. "Al [Deibert] and I are friends and talk all the time about manufacturing. It's not easy today... Sarah has the heart of a lion to really do this. Any assistance she needs, she's got it."

In manufacturing, Calhoun is marching toward her dream of excellence, mutual benefit and making the world a better place as she outfits women in harsh working environments with durable pants that fit. Hurrah!

MMEC Advisory Board Members

Steve Anderson

President
Artisan Doors of MT
Kalispell, MT

Robert Gibson

Director of Operations
Simms Fishing Products
Bozeman, MT

Jim Markel, Board Chair

President
Red Oxx Manufacturing
Billings, MT

Pete Smith

President
HCR
Lewistown, MT

Evan Barrett

Governor's Office of Economic
Opportunity
Helena, MT

Ken Green

President
Timberline Tool
Whitefish, MT

Joe McClure

Executive Director
Big Sky EDA
Billings, MT

Corey Stapleton

State Senator
Billings, MT

Robin Béquet

President
Béquet Confections
Bozeman, MT

Larry Hall

President
S&K Electronics
Ronan, MT

Jerry McConnell

President
Spectrum Aquatics
Missoula, MT

Jon Tester

State Senator
Big Sandy, MT

Bob Bergren

State Representative
Havre, MT

Mike Holland

President
HWC Manufacturing
Great Falls, MT

Mary Moe

Dean
MSU College of Technology
Great Falls, MT

Joe Unterreiner

President
Kalispell Area Chamber
of Commerce
Kalispell, MT

Neal Blossom

Technical Director
American Chemet
East Helena, MT

Susan Humble

President
Anderson Steel Supply
Great Falls, MT

John David Pickering Sr.

CEO
Technical Systems Integrators
(TSI)
Missoula, MT

Roy Brown

State Representative
Billings, MT

Chuck Keegan

Director of Forest Industry
Research
BBER/School of Business
Administration
Missoula, MT

Andy Poole

Deputy Director
MT Dept. of Commerce
Helena, MT

MMEC Support Staff

Steve Holland

Director

Margie Jensen

Administrative Assistant

Deborah Nash

Newsletter Editor
Public Relations

Stacey Scott

Business Manager

G. August Uhl

Event Coordinator [WIRED]

UTAP Staff

Clint Finlayson

Engineer

Matthew West

Engineer

Paul Stickel

Engineering Intern

Matthew Hume

Engineering Intern

Carl Coletti

Marketing

Sabrina Burton

Marketing

MMEC Mission

To Help Manufacturers To Be
More Successful

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

We Can Help!

Upcoming Events Across Montana

Gateway to Opportunity Set for Jan 4 in Glendive

The annual "Gateway to Opportunity," an economic development forum, has added an energy career fair along with 25 seminars to help grow business opportunities from value added ag to energy in the region. The event will take place at Dawson Community College. www.dawsoncountedyed.com

COMBINED EVENT: 4th Annual Montana Aerospace Conference and Montana SBIR Conference

February 20-21, 2007, Best Western Great Northern Hotel, Helena, MT. Will include workshops on intellectual property management, ISO, and government accounting; training sessions on marketing and project management; company success stories; a technology exhibition; and lots of networking opportunities. PUT THIS ON YOUR CALENDAR!

Montana Economic Development Summit Set for Apr 30-May 1

U.S. Senator Max Baucus has announced that Microsoft founder Bill Gates and long-time NBC Nightly News anchor Tom Brokaw will headline a fourth statewide Montana Economic Development Summit in Butte on April 30 and May 1 on the campus of Montana Tech of the University of Montana. Baucus organized the first-ever statewide economic development summit in Great Falls in 2000. He held another summit the following year in Great Falls and again in

Billings in 2003. This year's theme is "innovation" and will explore ways to foster the entrepreneurial spirit in Montana and how Montanans can better market their products and ideas. The Montana Economic Development Summit is free and open to the public. As in years past, Baucus said the state's top elected leaders – Gov. Brian Schweitzer, Sen.-elect Jon Tester and Rep. Dennis Rehberg – will be invited to co-host the Summit. *Source: www.matr.net/event-1784.html*

Ag & Construction Expo Jan 11-13

"Big iron and heavy equipment" will be the focus of the fifth Ag & Construction Expo (ACE - formerly the Ag Technology Show) at the MetraPark in Billings on Jan. 11-13. ACE highlights the latest in goods and services available to agriculture, construction, industrial and commercial buyers in this region. ACE has expanded into the industrial markets to showcase and display the latest in high tech products in the market place today. Admission and parking are free. www.brightcatproductions.com

MAGIE Show Jan. 18-20

MAGIE, the Montana Agriculture and Industrial Exposition is a regional trade show for the farming and ranching communities and features products and services from all over the Pacific Northwest, Montana, the Dakotas and Canada. The show is produced by KMOM Radio and has over 200 exhibitors. It features major manufacturers and regional businesses.



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

Please Route To:

- CEO
- Owner
- Production Manager
- Development Officer
- Quality Manager
- Sales Manager
- Safety Officer
- Office Supervisor
-
-

Nonprofit Organization
U.S. Postage
PAID
Permit No. 66
Great Falls, MT 59403