Local Economy, Company Benefit from Quick Assist

Great Falls is home to the Northwest’s premier directory publisher, NorthWinds Publishing and Printing. The amount of data that passes through NorthWinds’ network every day would fill 15,000 floppy disks, according to its website. Much of it fills the yellow and white pages of your local area directory.

Employees work with lots of data and art to produce the quality telephone directories rolling off its 10-unit web press for companies and telephone cooperatives in eleven states. The 20-year-old company also custom prints and binds other products.

To handle large amounts of directory data in a systematic way, NorthWinds uses specialized software which users access through a main server. The cost to license multiple users (seats) for this type of dedicated software is fairly high, about $10,000 per seat, according to NorthWinds General Manager, Mike Wier.

As the company has begun doing more and more data entry, scheduling conflicts on the server developed, particularly when the more time-consuming tasks of general file clean up, checking for spelling errors, and yellow page ad work were underway. This created pressure from employees to add a seat to the current six, Wier said.

This obvious but expensive fix caused NorthWinds to examine other options like more rigid scheduling of server time or outsourcing its data processing, possibly as far away as India. These not-so-desirable options were abandoned when the company hit on an idea for doing some data entry off-line and then loading the finished work to the software. To do that, a good database would be needed that could load into a spreadsheet and then dump into the directory software.

“We came up with the idea here,” Wier said, “But we needed someone to construct the database.”

Without the in-house expertise needed, he enlisted the Montana Manufacturing Extension Center and University Technical Assistance Program last summer, to craft the low cost solution and end the data entry crunch.

(Cont. on page 5)
Financial Management for the Closely Held Business

Profits are generally the result of carefully managed and controlled business decisions. Yet, many business owners have never had the training necessary to understand the financial basics of running and managing a company. If this describes you or if you’re just looking to “brush up” your financial management skills, the seminar “Financial Management for the Closely Held Business” is just what you need.

Al Deibert, MMEC field engineer, recommends the course to anyone. According to Al, “This is an excellent course on the importance of controlling payables, receivables and asset financing.”

The seminar is presented by BBI Financial, LLC, an organization dedicated to training business owners, managers and entrepreneurs on techniques of financial management and control, which, when implemented, help maximize profits. The course is returning to Montana this spring and will be offered in several locations.

The following topics will be covered:
- Tax Planning Issues
- Cost-Volume-Profit Relationships
- Effective Use of Financial Statements
- Building a Quality Service Culture
- Cash Budgeting and Planning Strategies
- Financing Your Business
- Financial Forecasting

Detailed information on this course content can be found on MMEC’s web site at www.mtmanufacturingcenter.com (See Training & Events).

Spencer Williams of West Paw Design, a Bozeman entrepreneur that attended the course, states, “The content of this course was incredible. The tools provided and examples shared helped me gain a better grasp on how to improve the financial management of my company.”

The first seminar, set for April 24-25 at the Holiday Inn in Bozeman, will be sponsored by Big Sky Western Bank. The seminar is 2 days in length. The fee for the course is $295 (includes lunches). Planning is underway for sponsors to bring this course to Missoula, Great Falls and Billings.

To register for the Bozeman session, contact Ron Ostermiller or Jack Thompson at 587-8111.

P A G E 2
Fall Conference Highlights

At Montana’s fall Compete Smart Manufacturing Conference, the audience got a chance to test the power of teamwork during the keynote address “From Junk Yard Wars... To Factory Floors,” by Greg Long, Junkyard Wars Champ and manufacturer. Two teams of nine people were challenged with putting three balls into a container faster than the other - the catch - all nine on the team had to touch each ball first. Time to beat was the competition’s nine seconds.

On their first try, Team Two cut the time in half only to be bested after several rounds by Team One clocking in at nine-tenths of a second. The lesson – teams can learn from one another; teams should talk to each other. In fact, Long told the audience that to keep pace with the demands from today’s customer, companies need dedicated employees who are comfortable working in a team. And high-energy, results-oriented teams are very effective in making competitive breakthroughs.

He had high praise for the strong work ethic and the great community spirit he has found in Montana.

McConnell spoke from his observations as a corporate manager who has turned companies around in a variety of economic terrains. He told listeners that when it comes to improving the Montana economic environment, the state has its work cut out. He enumerated some of the regulatory and cultural hurdles that businesses here face: high personal income tax, very punitive workers comp rates, and transportation problems; a mindset that resents wealth and a bias toward agricultural and service industries. He had high praise for the strong work ethic and the great community spirit he has found in Montana.

MMEC’s manufacturing conference received excellent news coverage by the CBS television affiliate KPAX in Missoula during the conference. Big Sky Business Journal in Billings also covered the conference with articles appearing in several fall issues; those articles are now available on the BSBJ Web site www.bigskybusiness.com. To read more, click the topic Economy and Business and search for these titles:

- Manufacturing is Montana’s Best “Revival Tool;”
- Bounce Along the Bottom Must Change
- Under Feature News, search:
  - High Energy Teams Score;
  - Montana Manufacturers on Parade.

Participants gather for team competition.

Team collaboration increases performance.

P A G E  3
It’s Not Easy Being Green...

By Deborah Nash

It’s not easy being green." That’s the conclusion Chuck and Deb Hedley of Headwaters Composites, Inc. (HCI) have reached after three years of trying to market their building composite, "Albian," to customers committed to using recycled materials.

"It’s not the marketing feature we thought it would be. It’s not the primary feature sought by clients buying it for countertops and other architectural uses," they said.

After MMEC helped them locate a unique capability right here in Montana for cutting designs into their proprietary product, the couple is excited about marketing it in a different way, tapping its other great properties.

"When MMEC hooked us up with Weber and Sons in Laurel, it really opened up a whole new set of possibilities."

Albian was created while seeking a substitute for Portland cement, using recycled ingredients rather than mineral extraction. It was the outcome of a special research project to develop "green" materials for a building known as the EPICenter at MSU-Bozeman, a project that was eventually sidelined.

"We kind of stumbled across this and recognized its value and unique properties. Then, when the building project fell through, we decided to bring it to market ourselves," said Chuck who has a chemical engineering degree from Montana State University. Currently, a patent is pending for the product named using the first two initials from the names of the Hedley children, Alice, Bill and Anna.

The logical marketing feature was its birthright from almost entirely recycled materials; 99.6% of the product is recycled glass containers and fly ash from the flues of Montana’s coal-fired generating plants; the minute remainder’s a proprietary substance. Creating long-life products from Albian keeps these materials out of the landfill.

HCI also makes a polymer concrete that is 85% recycled material. It is extremely impact resistant and has great tensile strength (i.e.: long piece resists snapping in half under stress).

One very good customer attracted by the green features in both of these products is Yellowstone Park. HCI is currently making vanities from the polymer concrete for a facility at Canyon. They have also made tent pad borders (polymer) and curb stops (Albian) for Park use.

Headwaters Trail Project near Three Forks sports park benches made from Albian – inert, weather resistant, sturdy, and green. But green is not the natural draw Hedleys had expected.

Most people are attracted to its aesthetic features, both Chuck and Deb agree, noting its inherent beauty, ability to be shaped, and general versatility. With the outer paste polished away, an attractive crushed glass pattern emerges. The material can be tinted in many color hues.

Customers in Helena and Big Sky have countertops made from the Albian which is competitive with Corian and similar high-end building products. One customer supplied crushed green glass bottles for a countertop that created a very unique surface coloration.

"It’s Not Easy Being Green…"

Chuck and Deb Hedley with tent pad border.

Albian makes an attractive inset in wooden table tops both because of its appearance and because it has no shrinkage. HCI has sample blocks that display wildlife images and geometric lines set off in complementary color tints.

Experimentation with its other features continues.

Inclusions, where material is cut away and filled with alternate resins, offers interesting variety. But, because of its glass component, cutting detail into Albian overheats saw blades; the blades, in turn, melt the glass particles. Chuck needed to find an alternative.

With a strong background in composites, particularly fiber-reinforced glass, Chuck felt that a water jet cutter would make the cuts needed, especially for a new customer who wants special cutouts filled with polymer to use with backlighting in his kitchen. Hooking up with a known water jet cutter in Salt Lake City, more than 700 miles away,
Chuck said, “It’s just the tip of the iceberg.”
He likens Weber to himself, liking the challenge of interesting projects.
“Weber,” he said, “is very knowledgeable about machinery and cutting. His equipment makes fast, fine cuts. If you can draw it, Weber can cut it.”

Showing off both the cutout and the piece taken from it, Deb said that both offer new marketing opportunities. The secondary pieces, like the intact rose and stem, might be incorporated into future design work.

Beyond marketability for its artistic features, several features make the substance highly desirable for manufacturers. First is its fast setting time. The material sets up with a strength of 2-3000 psi in just a few hours, which means molds can be turned two or three times a day vs. once a day for Portland cement. It is also unique in its ability to fill detailed molds.

“In molds, it can fill very fine detail because of the nature of fly ash,” Chuck said. “Each particle is spherical and acts like tiny ball bearings, filling the smallest indentation.”

Not giving up on the “green” aspects of their product, the company would like to expand the line using its additional properties.

HCI also makes a polymer composite which responded to the water jet cutter well and plans to continue consulting in the area of composites.


Forward focus is a newsletter for Montana manufacturers published quarterly.

Check it out
Feel free to call MMEC about manufacturing topics or issues that concern you.
Call us at: 1-800-MEP-4MFG
MMEC Customizes Training Programs
To Help Manufacturers Learn, Evolve, Act and Profit

MMEC’s LEAP manufacturing training program offers a broad array of training designed to help manufacturers turn knowledge into bottom line results. Calling upon our experienced field engineers and a network of training partners, MMEC can now develop a customized training program designed to meet your company’s specific needs in these areas:

- Manufacturing Operations
- Financial Management
- Marketing
- Human Resources
- Quality

An MMEC field engineer would be happy to meet with you (at no cost) to determine the training you need, based on the goals you’re trying to achieve. Once we understand your training needs, we can develop a training plan specifically targeted to your goals and tailor the courses to make them more relevant for your company.

For example, Jore Corporation in Ronan recently called upon MMEC to assist it with developing a training plan to build upon the Play the Lean Game workshop, in which some of their manufacturing employees had participated. Recognizing the power of Lean, they understood that putting that knowledge into action requires strong leadership and supervisory skills among key company employees. MMEC worked with Jore VP of Operations Jim Hertle to develop a plan to help further those goals. MMEC identified a progression of training, some of which MMEC field engineers would provide, and then partnered with Associated Employers of Montana for a complement of supervisory and communications training. The training will run from January to early May.

"The plan MMEC put together is helping us build an organization that is successfully putting Lean principles to work," says Barbara York, HR Manager for Jore Corporation.

Whether you’re trying to improve cycle times and need training on setup reduction or you’re looking to supplement employee skills, MMEC can customize a training package that will help you achieve your training and business goals. At the MMEC Web site www.mtmanufacturingcenter.com/Training&Events you can explore the variety of training we provide, including detailed course content outlines. You can even download our latest training brochure.

If you are interested in training beyond our offerings, we can help you locate qualified trainers. To discuss your training needs, contact your MMEC field engineer directly or contact MMEC at 406-994-3812 or mmec@coe.montana.edu.

MMEC would like to acknowledge Montana Department of Commerce and Montana Department of Labor for providing the Workforce Investment Act funds that have made expanded MMEC training possible.

Ag Technology Show Features Inventors, Exhibitors

Fourteen Ag Inventor finalists, from a total of 57 entries in the Ag Technology Show Inventor’s Contest, will compete for the $1,000 grand prize at the January Ag Technology Show in Billings.

The contest is just one feature of the show that is geared toward helping Ag buyers to learn more about the latest, state-of-the-art equipment and services to help their businesses. Show organizer Cynthia Berst said the finalists will show their products at the show where exposure may help turn their innovations into revenue streams.

A five-member panel of judges at the show will select the Top Inventor.

The finalists, selected by the Jury Selection Committee, are

Reg Gibbs, Billings
- Calf Sling Weighing Belt
- Breakaway Stirrup

Tim Schaff, Fishtail
- Rake Bucket Attachment (SSL)

Mike McCoy, Laurel
- Lift Bale Cart

Mark Holthouse, Willard, OH
- Squirtless Irrigation Valve System

Jeanne McKinney, Hamilton
- Hydraulic Calf Table

Chuck Pluhar, Cohagen
- Hi-Pressure Wind-driven Water Pump

Fred Davison, Highwood
- Belt Tighten Lacing Tool

Tom Carey, Boulder
- Pipeline Collection Plate

Frank Swenson, Shepherd
- Cordless Electric Branding Iron

Jeremy Dietz, Ekalaka
- High Pressure Wind-driven Water Pump

Fred Davison, Highwood
- Belt Tighten Lacing Tool

Ken Wolery, Billings
- Fence Sweep

Virgil Larson, Wibaux
- Wire Tightener

Steve Bricker, Gillette, WY
- Fencing Trailer (ATV/Pickup)

The Ag Technology Show will be at the Holiday Inn Trade Center, January 23 – 25. The tradeshow will open daily at 10 A.M. Admission is free. Attendees will be able to view the new ag innovations and vote for their favorite inventor for the People’s Choice Award.

Congressman Denny Rehberg will announce contest winners at the awards ceremony Saturday at 4 P.M.
Meet More MMEC Board

Four MMEC Advisory Board members exemplify the clear connection between agriculture and manufacturing through their involvement in companies across the state. These companies take Montana commodities and give them extra market value using manufacturing processes that include cleaning, cutting, baking, packaging, and even organic farming methods. These four members, like the others on our 23 member board, provide guidance and an understanding of the issues and needs of manufacturing in the state. After all, value-added agriculture is manufacturing.

Lamar Rase claims his Bachelor of Science degree in Forest and Range Management means he can tell the differences between a cow and a tree and landed him a position with 4B Wholesale Supply where they cut steaks from the cow and pack them in boxes from trees. That was 25 years ago. He is now V.P. Operations for the Missoula company which includes Imperial Meats, one of Montana's meat processing giants. Imperial is one of the first two USDA plants in Montana to qualify for USDA HACCP plant status, a USDA recognition as a larger processing facility. As is typical in Montana companies, Lamar wears a lot of different hats from inventory control and personnel management to transport and marketing and is modest at the accomplishment. He and the company he represents stand behind the idea that a small voice can make a difference even if it is only in a relatively small geographic area.

Steve Massey is production manager at Wheat Montana, west of Three Forks, where grains are grown, processed, packaged, and/or baked into all sorts of delicious items. The company offers many different grains, flour, mixes, and products derived from basic grains. The company's bakery products are well known. The grains have a "Better than Organic" guarantee, meaning they are tested and certified to be chemical and pesticide free. Wheat Montana is a real Montana success story using state of the art manufacturing, progressive management, and creative marketing.

Dave Oien is President of Timeless Seeds and Specialty Foods in the heart of Montana's Golden Triangle at Conrad. The company is located in some of Montana's most productive agricultural land where much of the high quality organic cereal grains, flax, legumes and other specialty crops, processed and sold by Timeless, are grown. The company was created in 1987 by four organic farmers to develop cropping and market opportunities for their own farms. Its products are cleaned, packaged and specialty marketed to retailers, food services and bulk buyers including food manufacturers. Today the company contracts and sources organic grains from dozens of organic farmers throughout Montana and its agricultural neighbors.

Andre' Giles (not pictured) is President of Montana Flour & Grains in Fort Benton, another company tapping the productive agricultural land of north central Montana. He is a Montana native and graduate of Havre High School. He has a strong agricultural and business background with an MBA from the University of Texas at Austin and a B.S. in Agricultural Economics from Utah State University.

ISO 9000: December Deadline

The transition period for converting to the ISO9000:2000 standard ends December 15, 2003, for those companies certified under the 1994 standards. Registration will terminate for those who have not made the conversion. The newer standard emphasizes two areas valued in today's competitive environment: customer satisfaction and long-term continuous improvement. The requirements of the new standard are more consistently applied for all companies regardless of the specific type of business. If you need more information, contact MMEC at 406-994-3812 to visit with one of our field engineers.
## BBER 2003 Montana Economic Outlook Seminar

### “Newcomers: A Plus for Montana?”

#### 2003 Schedule

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### Presented by First Interstate Bank and UM Bureau of Business & Economic Research and co-sponsored by local area Chambers of Commerce.

Seminar registration fee is $70 and includes a one-year subscription to Montana Business Quarterly (a $35 value). Continuing education credits available. For information or to register call 406-243-5113 or visit www.bber.umt.edu.

Currently, Montana’s economy is surprisingly strong. The state is expected to finish 2002 with the second fastest growing economy in the nation, with annual job growth of 1.1 percent. But will this continue?

As in past years, the Bureau of Business & Economic Research will present highlights of the latest economic trends and what they mean for Montana. Researchers from the Bureau will analyze how a recent influx of politically conservative, older, more affluent newcomers is influencing the economic landscape. Special luncheon speaker Jim Sylvester will take a closer look at what factors influence people’s decisions to move out of or into the state and why citizens choose to stay despite less than advantageous economic conditions.

Experts will examine key economic sectors: wood products industry, manufacturing, agriculture, health care, and travel & tourism. BBER Director Paul Polzin will sort out the alphabet soup of recessionary storm clouds that loom ahead and what each means. Other presenters include Charles Keegan, BBER Director of Forest Industry Research; Steve Seninger, BBER Director of Economic Analysis; Steve Holland, Montana Manufacturing Center; Kevin McNew, MSU Department of Agricultural Economics & Economics; Thale Dillon and Norma Nickerson, Institute for Tourism & Recreation Research.

Each seminar runs from 8 a.m. to 1 p.m. (see schedule at left)