

INSIDE

Q&A with Jonathan Wickert, College of Engineering dean

Page 2

CIRAS helps SPEED student 'break' into engineering

Page 4

Iowa State's Center for Nondestructive Evaluation puts high-tech tools to work for Iowa companies

Page 5

Record attendance at annual procurement conference

Page 6

Why a business continuity plan may be the best investment your company ever makes

Page 8

Appointment partners CIRAS, College of Engineering for industry outreach

When Jonathan Wickert became the new dean of the College of Engineering in July, he made it clear that economic development and ties to industry were important initiatives for the college. In September, he acted on that commitment by appointing CIRAS director Ron Cox as the college's assistant dean for economic development.

Cox retains his position at CIRAS, with a partial appointment in the engineering college.

"Through this appointment, Ron will strengthen and communicate the contributions made by the College of Engineering to Iowa's economy and beyond," Wickert said in a news release. "This is an area of significant and timely importance to both the state and university. Ron's insights and experience will benefit us greatly, and I welcome him to our team."

The move comes at a time when the economic impact of research and teaching in the college is of crucial importance to the state. As a member of the college's leadership team, Cox will build and manage relationships between the college, ISU Extension, industry, and state agencies.

"Iowa State's College of Engineering includes a vast resource base of knowledge, expertise, and labs," says Cox. "Connecting these resources to industry enhances economic development and helps the college fulfill its responsibility to the citizens of Iowa."

According to Wickert, Cox will develop a liaison between the college and the Iowa Department of Economic Development, Iowa Workforce Development, Iowa

Business Council, Office of Energy Independence, and other stakeholders. In addition, he will support specific aspects of the college's industrial relations, including distance education, research opportunities, and student design projects.

Cox's industrial experience includes work in the aerospace industry on transonic aircraft wing design and wind tunnel testing. He was vice president of engineering for a manufacturer



Ronald A. Cox
CIRAS Director

"Through this appointment, Ron will strengthen and communicate the contributions made by the College of Engineering to Iowa's economy and beyond. This is an area of significant and timely importance to both the state and university. Ron's insights and experience will benefit us greatly, and I welcome him to our team."

—Jonathan Wickert

of cooling towers prior to joining CIRAS. He also taught and conducted research while on the aerospace and mechanical engineering faculty at the University of Oklahoma. His research work focused on numerical modeling and hypersonic vehicle design. Cox was an extension field agent in the Mason City area for four years before assuming his current position as director of CIRAS in 2001. He holds three degrees in aerospace engineering, including a BS (1979) and PhD (1989) from Iowa State and an MS (1983) from the University of Texas at Arlington.

In this new role, Cox joins the college leadership of Wickert; Balaji Narasimhan, associate dean for research and graduate studies; Diane Rover, associate dean for academic and student affairs; Derrick Rollins, assistant dean for diversity; and Loren Zachary, assistant dean for engineering education.

Q&A with Jonathan Wickert, College of Engineering dean



*Jonathan Wickert
College of Engineering
Dean*

Editor's note: Jonathan Wickert became dean of the College of Engineering on July 1, 2009. Following are his responses during an interview to questions about the college, its approach to economic development, and its relationship with CIRAS.

What are some of the ways the college can best contribute to the economic well-being of Iowa?

One of the main contributions that the college makes to the state of Iowa and to employers is educating the next generation of engineers—educating them with a sound foundation so that they have good practical skills when they graduate. About 80 percent of our students, as they graduate from the College of Engineering, have already had a real, meaningful engineering work experience—either internships or co-op programs. So our graduates are regarded as being hard workers—with the midwestern values of work ethic and integrity—who have a solid education and also practical experience. We see our students in such high demand that companies are actually recruiting them at the junior, sophomore, and even earlier levels.

Another way the college contributes is through impactful research. Examples include the Bioeconomy Institute, which is closely affiliated with the college, and the NSF Engineering Research Center for Biorenewable Chemicals, which is a prestigious new center awarded under a competitive grant from the National Science Foundation. We also have an increasing amount of research underway in the area of wind power that involves collaborative work among a number of engineering departments.

A third way is the creation of new companies that come out of a faculty member's research. Certainly, one thing that impresses me a great deal about faculty in the college is their entrepreneurial skills. An example is a new company called BodyViz, which was created by a team of faculty in the Virtual Reality Applications Center. The technology takes the techniques and principles of virtual reality and applies them in a way that surgeons and physicians can use for planning medical surgery procedures.

How does your own background allow you to understand the challenges facing manufacturers and other businesses in Iowa?

I'm a mechanical engineer by training, and prior to becoming dean I was chair of the mechanical engineering department, so certainly that's the profession that I've been working in primarily. I've worked with quite a few companies during my career, either in a research or consulting capacity, so I feel as though I understand some

of the issues that companies are facing, particularly in these economic times. Another aspect of my job is that both the college and I seek to have very strong interactions and partnerships with key corporate partners. And so, although I've been dean now for only a short time, it's been a priority of mine to get out and interact with companies, including some of the companies that are very strong recruiters of our students.

How can the college connect with companies?

When I was the chair of mechanical engineering we started up an interesting program a year or two ago, actually partnering with CIRAS, for our student design projects that may be a model that other departments would want to adopt. Students at the end of their engineering studies do a capstone design project, and in mechanical engineering we began a system whereby the projects that the students worked on were real industrial problems. We would ask a company to provide a problem along with a point of contact at their company who would serve as a technical coach and help to mentor the teams of students. The company would support the team with materials, supplies, and fabrication expenses; in some cases the students would go visit the company for a plant tour and so forth. We ultimately moved to a system where our students would then work with these companies for their capstone projects. It's a program that I think has been successful to this point, and we look forward to its continued growth.

What are some college programs now in the planning stages that you are most excited about?

We will be putting a lot of emphasis on enhancing the diversity of students and faculty in the college and broadening the participation of multicultural and women students and faculty. This is an area where we are presently behind the curve in terms of national averages. Some of the feedback we've received from our industrial partners suggests that this is an area in which they would like to see us make substantial progress.

What are your views on the role of technology transfer?

Sometimes the technology that is developed through a research project is the result of a grant or a contract with a company. In that case the relationship already exists, and at the time that the contract was put in place there were discussions and negotiations on intellectual property, patent rights, and so forth. In other cases of technology development, the university's technology transfer office is available. The Office of the Vice President for Research and Economic Development is also active in facilitating faculty who are creating start-up companies. For instance, last year we had a start-up company that was created by a number of students in mechanical engineering who had developed, through the course of their research, some new technologies for biorenewables. The spirit of entrepreneurialism extends across the spectrum, from faculty all the way to students.

CIRAS Mission Statement

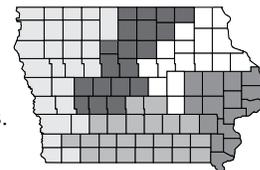
Improve the quality of life in Iowa by enhancing the performance of industry through research, education, and technology-based services.

CIRAS Director, Assistant Dean for Economic Development

Ronald Cox, PhD, rcox@iastate.edu, 515-294-9592

Account territories

Account managers provide initial needs assessments and also explore and match resources to client needs.



-  **North Central**
Derek Thompson, thompson@iastate.edu, 515-419-2163
-  **South Central (interim)**
Derek Thompson, thompson@iastate.edu, 515-419-2163
-  **Southeast**
Sean Galleger, galleger@iastate.edu, 515-290-0181
-  **Northeast**
Joseph Papp, jpapp@iastate.edu, 515-231-1452
-  **Western**
Bob Coacher, coacher@iastate.edu, 515-419-2162

Program Manager

Ruth Wilcox, rwilcox@iastate.edu, 515-290-1134

Primary Contact

Bioindustry
Steven Devlin, sdevlin@iastate.edu, 641-613-3298

Economic Development
Mark Reinig, mreinig@iastate.edu, 515-294-7883

Energy
John Roberts, jarobert@iastate.edu, 515-294-0932

Engineering
John Van Engelenhoven, jve@iastate.edu, 515-294-4475

Engineering Distance Education
Paul Jewell, pjewell@iastate.edu, 515-294-1827

Government Contracting
David Bogaczyk, bogaczyk@iastate.edu, 515-422-6313

Growth Strategies
Paul Gormley, gormley@iastate.edu, 319-721-5357

Management Practices
Michael O'Donnell, modonnll@iastate.edu, 515-294-1588

Productivity
Jeff Mohr, jeffmohr@iastate.edu, 515-294-8534

Quality Management
Merle Pochop, pochop@iastate.edu, 712-898-0137

The Center for Industrial Research and Service (CIRAS) provides education, research, and technical assistance to Iowa industry through partnerships with Iowa's universities, community colleges, and government agencies. Assistance is supported in part by the DoC/NIST Manufacturing Extension Partnership, the DoD/DLA Procurement Technical Assistance Program, and the DoC/EDA University Center Program.

Iowa State University does not discriminate on the basis of race, color, age, religion, national origin, sexual orientation, gender identity, sex, marital status, disability, or status as a U.S. veteran. Inquiries can be directed to the Office of Equal Opportunity and Diversity, 3280 Beardshear Hall, 515 294-7612. ECM 10111

What advice would you give companies wanting to access the college's resources?

Please contact us! We would love to sit down with you and have a conversation to understand your needs. We can explain the capabilities that are available in the college and have a dialogue about how we can establish a partnership. Companies can contact Ron Cox (now assistant dean for economic development) or their CIRAS account manager. But the point of contact doesn't have to be centrally in the college. If a company has a specific technology or area of interest, it is welcome to contact departments directly.

How do you see the college working with state economic development agencies?

I had a wonderful meeting with Joe Jongewaard (project manager) from the Iowa Department of Economic Development (IDED) recently. Joe sits on the Engineering College Industrial Advisory Council, which is a group of two dozen or so representatives of various companies and agencies that provides leadership advice and council for the college. We've also been in discussions with Joe and his colleagues at IDED. Wind power has been one of those topics. Last fall we had the first Iowa State Wind Energy Symposium on campus. Joe was a key participant and facilitator of that meeting, which brought a packed house of researchers, companies, utilities, and others to campus. That's a really good example of a firm handshake between the college and IDED.

Will Iowa become a center of wind energy in the way that Silicon Valley is in IT?

The governor has indicated that wind power is a big point of pride for the state and a way to meet our energy needs from a renewable source, and that it is also a driver for manufacturing jobs and industry in the state. I think it's extremely strategic, not only for the state of Iowa, as the governor has pointed out, but also for the university and for the College of Engineering. I think about things visually. As an engineer I think in terms of drawings and pictures and shapes, so in my mind I think of a map of the United States and from east to west I see a green agricultural belt with Iowa in the middle. From an energy standpoint, I see ethanol, soy diesel, and more come out of that domain. Then going north to south we have a blue wind belt with Iowa in the center of that as well. At the intersection of those belts is Iowa State University. So wind power and renewable energy sources from agriculture are outstanding opportunities for us. Completing that portfolio are the other flagship programs in the College of Engineering in photovoltaic research and nuclear energy education. Energy systems is an area where the college is extremely well positioned to make a contribution to the state.

Learn more about the College of Engineering at www.engineering.iastate.edu. 

CIRAS helps SPEED student 'break' into engineering

Summer jobs for high school students can take many forms. But Rachel Hauber's stint at CIRAS this past summer might be one of the most unusual. The Ames High School graduate worked in her Howe Hall office overlooking the C6 Cube, methodically testing disposable plastic cutlery until sometimes they broke.

Well not just any plastic cutlery. The knives, forks, and spoons Hauber tested were made from biobased materials. "It's cutlery made from renewable resources like corn and potatoes," she explains.

Hauber's job was to precisely measure the strength of each utensil she tested using a machine called a deflection indicator. The work was in support of a CIRAS program called BioPreferred. Underwritten by the U.S. Department of Agriculture, one of BioPreferred's missions is to evaluate the performance of biobased products. Since the Farm Security and Rural Investment Act became law in 2002, federal agencies have been required to purchase biobased products. But those products must meet government-established price and quality specifications. Rachel's work was aimed at determining which biobased cutlery brands would meet federal cutlery performance requirements.

The job was also designed to provide Hauber with some additional valuable benefits. She was one of a relatively small number of participants in a special Iowa State College of Engineering program called SPEED (Summer Program to Enhance Engineering Development). The eight-week program gives women and multicultural students the chance to take college-level courses and participate in actual research projects before beginning their first semester at Iowa State.

The SPEED program contains two tracks: an academic track and a research track. The academic track, which enrolled 13 students this past summer, prepares participants for their upcoming freshman year. As a result, students are able to take freshman-level math and physics courses instead of prerequisite courses. Meanwhile, the students taking part in the research track—12 were selected for summer 2009—receive hands-on experience, working on active research projects.

Besides acquiring valuable classroom learning, SPEED students also take part in professional and leadership development activities, including workshops and industrial field trips. The experience gives students an opportunity to develop stronger study habits and build a support network of peers, faculty, and staff. There is a monetary incentive for the completion of work and participation through a weekly stipend.

Summer at CIRAS

Each SPEED student's summer experience varies, of course, depending upon the kind of research project they get involved with or courses they take. Jessica Riedl, program coordinator at CIRAS, who served as Hauber's supervisor, gives some hints about what Hauber's experience was like at CIRAS. "I like to think of working at



CIRAS as an undergrad as something like an internship or a pre-workforce job, where you have to be self-motivated to succeed," Riedl says.

Besides working with Riedl, Hauber was also mentored by CIRAS director Ron Cox, with whom she met weekly. Cox and Hauber toured CoE facilities, and Cox even discussed proper lab techniques. "Rachel showed exceptional maturity and a strong willingness to learn," Cox says.

One of the lessons Hauber learned from the program is that engineering demands plenty of attention to detail. On the job, she methodically tabulated the results of her testing work just as any researcher or engineer would. As Riedl explains, "The federal government's performance standard for cutlery consists of several tests. The first is a deflection test. A deflection test of a fork, for example, would simulate putting food on the fork, or using the utensil to lift up food. To test this ability, a one-pound weight is applied to the tines of a fork." Hauber's spreadsheet reveals by how much the utensils bent or if they broke.

Hauber presented the results of her tests during a final meeting of Iowa State SPEED students. While she's not sure what area of engineering she'll eventually take up, it may well focus on renewable energy or water purification. Both are growing fields that will require the best young minds to tackle in the years ahead.

But regardless of where she chooses to spend her time, she believes the SPEED program will provide a long-term contribution to her success. "I think this program will be really good for my engineering career in that I'll have some experience working somewhere and some lab experience," she says.

To learn more about SPEED, e-mail engrdiversity@iastate.edu or call 515-294-4042. To learn more about BioPreferred, contact Jessica Riedl at 515-294-5416; jesriedl@iastate.edu. CIRAS enlists Iowa State students and faculty to help Iowa companies. To learn what CIRAS can do for your company, contact us at 515-294-3420; ciras.info@iastate.edu. ■

Look but don't touch

Iowa State's Center for Nondestructive Evaluation puts high-tech tools to work for Iowa companies.

By Robert Mills

Where can you go to find experimental ultrasound treatments for brain tumors, ultraprecise x-ray evaluations of electronic circuits, and evaluations of an ultrafast spinning mechanism used to weld difficult-to-join metals without melting them?

Few places in the world put these leading-edge technologies together in a single place. One of them is the Iowa State University Center for Nondestructive Evaluation (CNDE), an interdisciplinary research facility organized under the university's Institute for Physical Research and Technology.

Nondestructive evaluation is a broad term for any number of leading-edge technologies used to analyze materials without damaging them in the process. Besides ultrasound and x-rays, those methods might include x-ray radiation as well as electromagnetic, magnetic, and a number of other techniques. CNDE tests furnish scientists and engineers with invaluable knowledge, such as understanding how military equipment might hold up to battlefield conditions or how flaws could develop in the space shuttles' foam insulation.

In 1989, the CNDE performed one of its most dramatic efforts. Following the deadly crash of United Flight 232 in Sioux City, which claimed 122 lives, the center helped develop new techniques that are avoiding repeats of that tragic incident.

Not all of the CNDE's work centers on life-and-death issues. Much of it solves problems that enable Iowa companies to function better in a competitive world. Several years ago, for instance, Tire Environmental Services Inc., a Muscatine manufacturer of products made from recycled, shredded tires, was looking into new markets when the company approached CIRAS project manager Paul Gormley. The company needed a way to remove exposed wire from pieces of the shredded tires so they could be used as landscape mulch. Tire Environmental had been using magnetic separation to screen out most of the shredded tire bits that contained exposed wire strands. However, the company had to use a time-consuming and costly visual inspection process to detect the final entrapped steel. Without a considerable leap in capabilities, Tire Environmental would not have been able to make its mulch product profitable.

Gormley asked Dave Utrata, manager of IPRT's Company Assistance nondestructive evaluation group, to review the company's separation process. IPRT in turn called in Industrial Motion Technologies of West Des Moines, which represented Eriez Magnetics, a firm that specializes in magnetic separation, to get involved. Industrial Motion Technologies reviewed the metal detection process at Tire Environmental and made suggestions for improvement.

Meanwhile, the NDE group verified the use of x-ray inspection to reliably detect wires trapped in batches of shredded tires. While this testing was not anticipated to be practical in the field, it helped the team validate proposed alternate sorting methods. As a result of the collaboration, Tire Environmental was able to significantly improve its sorting capabilities with verified quality. "Since we finished

CNDE Tech Close Up

IPRT's Center for Nondestructive Evaluation has set the pace for materials testing research for over 25 years, helping scores of Iowa companies. Here are just three of the technologies companies can access.

HIFU—Short for high-intensity focused ultrasound, HIFU bombards samples with ultrasound waves at an intensity several orders of magnitude higher than those used in medical imaging. Applications in medicine, including the elimination of tumors, are anticipated.

High-Resolution Digital Radiography (HRDR) and Computed Tomography—Computed tomography, or CT, is often used in the medical field to show cross-sections of body tissues and organs. Add in HRDR and you have a system able to x-ray an object from various angles and then quickly produce detailed images of its internal features. In CT, one creates 3-D computer models composed of small cubic regions called voxels. The shade of gray or color of each voxel represents the nature of the material within the corresponding region of the object. Also, the 3-D model can be manipulated to show only certain materials, such as just the copper wire within an electronic component. Similarly, the model can be rotated and viewed from any angle, and it can be "sliced" to reveal a cross-section of any area. This makes it possible to look inside components and precisely evaluate features of interest.

Friction Stir Welding—With applications in space flight and commercial aviation, friction stir welding is not a testing tool. Instead, it's a fast way to create strong bonds in materials such as aluminum and titanium that are difficult to join with other processes. The method works by plunging a spinning pin into two materials to be joined and then moving it along the joint. The metal softens but does not melt, creating an especially strong weld. While the equipment to perform such welding is not at the CNDE currently, the center has performed exhaustive nondestructive analyses of such samples that serve to better understand the processing variables, as well as guide the inspection of products finished with such techniques.

the NDE project, the quality of our product has changed so much for the better," says Dennis Froelich, company general manager. "No one else in the industry seemed to have the answers for me; I am just so glad that Dave and his team were able to help us with this tough problem."

Robert Mills is a communications specialist with IPRT. Contact us at 515-294-3420; ciras.info@iastate.edu for more information on working with IPRT and other CIRAS partner organizations. ■



Above: ISUE/CIRAS clients were given the opportunity to meet and visit face-to-face with the IA DOT director of purchasing, Pat Harmeyer, and other IA DOT purchasing officers. **Below left:** Tom Harbison, deputy director of the U.S. Small Business Administration, addressed the Iowa Government Procurement Conference attendees. **Below right:** Rhonda Johanson from the Rock Island District, U.S. Army Corps of Engineers, visits with a prospective vendor.

Record attendance at annual procurement conference

The ISUE/CIRAS Annual Iowa Government Procurement Conference, held July 30 in Ankeny, was a big success. The event brought together business owners and government buyers to share critical information on how to be successful in government contracting at the federal, state, and local levels. The conference had a record attendance of 182, reaching maximum capacity.

Featured presenters included three federal government agencies, three state government agencies, a prime contractor, and one business's success story from last year's event. The presenters provided information about federal stimulus opportunities/how to become a federal contractor, subcontract planning, what products and services they purchase, what government agencies and prime contractors are looking for in a vendor, and common mistakes vendors should avoid. All presenters, other government agencies, government procurement officers, and several prime

contractors were available to network and answer questions that afternoon as part of the conference.

"I have already landed two contracts with the Iowa DOT based on the training I received from CIRAS preparing for the conference and through the contacts I made during this event," states Teresa Speck, owner of Ashwood Design Group, which is an advertising specialties/promotional items company in Clive. "This conference provided a fantastic opportunity to meet government procurement officers. I'm really looking forward to the next Iowa Government Procurement Conference."

Mid Iowa Satellite was awarded the 2008 Small Business Networking Success Story of the Year Award for capturing a state government contract with Iowa Prison Industries after the 2008 Government Procurement Conference.

The Procurement Technical Assistance Program provides Iowa businesses the knowledge and training needed to best align their company for success in selling to the government.



The 2010 Annual Iowa Government Procurement Conference will be held in July! More details about the 2010 conference will be available in the upcoming months at www.ciras.iastate.edu.

Continued from page 8

large manufacturers, requiring more resources than available to the small or medium firms.

CIRAS staffers developed a new approach and template for business continuity by combining CIRAS' knowledge of the critical functions in manufacturing with preparedness information from the Department of Homeland Security. The service launched on a trial basis in February 2009. Businesses affected by the 2008 floods and members of CIRAS' advisory council were among the first to be invited to use this service.

Protecting what's important

During a one-day on-site workshop, CIRAS works with the company's leadership team, identifying the manufacturer's critical business functions. Those functions might include such things as the management of facilities and suppliers as well as financial operations. The CIRAS-developed process highlights some of the common risks that might affect any of these core functions. What if a fire destroyed financial records or suppose a tornado put a supplier out of business?

As a next step, workshop attendees learn best practices for mitigating these risks or—worst case—how to recover should a flood, fire, or other major disaster affect one of its core functions. The emphasis is on resuming normal operations in the fastest and most cost-effective manner.

By the end of the one-day session, the company has created a draft BCP that includes critical basic information. A prioritized list of actions to continuously improve the BCP is also developed. CIRAS continues to work with the company after the workshop to ensure the plan is finalized and published.

To date, CIRAS has completed seven BCP workshops at Iowa manufacturing firms.

To learn more about how business continuity planning can help your company, contact Mike O'Donnell, CIRAS program manager, at 515-294-1588; modonnll@iastate.edu. ■

Q&A with Dr. Maureen (Mo) Lockwood, DM, Manufacturing Manager, Thombert, Inc.

What are some of the obstacles to developing a business continuity plan?

While I'm sure each company is different, we experienced several obstacles. First was just finding the time to allocate to the project. It was one of those projects that just never became a top priority. When allocating resources, other projects had faster payback or clearer focus and were thus prioritized higher. Another obstacle was not understanding exactly what needed to be included in the plan and how to go about developing it.

What motivated you to participate in the CIRAS workshop?

The CIRAS project was attractive for two reasons. First, it offered a standardized template for the process that outlined recommended areas of focus. Second, it was offered in a one-day workshop that made it feasible to pull together a number of key organizational leaders to begin outlining our business continuity plan in just a few hours.

How well did the workshop prepare you for writing a plan?

We left the workshop with a solid draft of a business continuity plan and a clear list of follow-up items. The draft, based on the contributions of about 12 individuals, provided a basic plan. After reviewing the follow-up to-do list, we scheduled one follow-up topic a month to keep us moving forward and further developing our plan. As we have followed this process, CIRAS has been there to answer questions and offer additional support information.

Did any aspects of continuity planning surprise you?

When I presented the draft plan to our company president, he was pleasantly surprised and very pleased at the comprehensiveness of the plan that was developed in just one day! The CIRAS workshop was efficient, detailed, and easily customized to meet our specific needs.

Have you implemented the plan that you drafted?

Yes! We continue to improve and further develop the plan, but it is currently a very usable document. The knowledge gained in the workshop continues to be discussed, shared, implemented, and expanded upon.

How important is a BCP to your business?

During the workshop CIRAS helped us understand that the business continuity plan is what follows emergency response, or "what happens after the last fire truck or emergency crew leaves." This was a significant realization for us. While we thought we had an adequate emergency response plan, we realized that we hadn't given sufficient planning to what steps should follow when a significant event such as a tornado or fire occurs. The business continuity plan has become very important to our business.

How does it make you feel to know that you have become more aware of this topic?

While we hope that we will never need to execute the business continuity plan, we feel much more secure in knowing that we do have a plan should a disaster occur. Also, we have had many improvements in our day-to-day operations resulting from thinking that occurred as a result of the plan preparation. For example, we have enhanced our backup training for key employees, which we have found helpful during vacations, and we have improved the backup process for our electronic data, which was instrumental when we experienced a server failure.

What advice do you have for businesses that do not have a BCP?

I highly recommend the CIRAS business continuity plan workshop! Over the course of just one day, your business will create a comprehensive plan that addresses a variety of potential response scenarios that can be applied to maintain business continuity regardless of the type of disaster.

INSIDE

Page 2 Q&A with Jonathan Wickert, College of Engineering dean

Page 4 CIRAS helps SPEED student 'break' into engineering

Page 5 Iowa State's Center for Nondestructive Evaluation puts high-tech tools to work for Iowa companies

Page 6 Record attendance at annual procurement conference

Page 8 Why a business continuity plan may be the best investment your company ever makes



www.ciras.iastate.edu

Why a business continuity plan may be the best investment your company ever makes

By Mike O'Donnell

The disasters of 2008 endangered the health and economic well-being of thousands of Iowans, prompting service organizations throughout the state to respond, and CIRAS was no exception. The ISU Extension unit directed its relief efforts in two areas: acting as an advocate for the special needs of Iowa manufacturers to state and federal relief agencies, and providing direct assistance to companies harmed by the flood.

Later, during the recovery process, CIRAS recognized that many businesses across the state hadn't adequately prepared for the flood. Nor were they necessarily prepared for other disasters that might befall them. Specifically, what these companies lacked was a plan for how to recover their operations following a disaster. The management term for this is a business continuity plan (BCP).

Business continuity planning is a well-defined, complex field, involving

risk analysis and mitigation, with a major sub-field of information technology continuity planning. BCPs aren't just academic exercises. They can mean the difference between whether a company shuts down or

recovers in the wake of a disaster. The U.S. Department of Homeland Security estimates that one in four businesses that close their doors due to a disaster never reopen. Beyond that, BCPs by themselves bring immediate benefits, such as increased security for investors and customers.

One size doesn't fit all

Seeing a critical unmet need for Iowa companies, CIRAS researched resources for BCP. It was determined that existing off-the-shelf tools were either geared towards very small businesses, making them too general and compact, or were for

CIRAS receives award for innovative service

In October, at the 2009 University Economic Development Association Summit, CIRAS was awarded the Excellence in Business Assistance Award for development of the business continuity planning service.

INSIDE:
Q&A with Thombert, Inc.

Continued on page 7

CIRAS News is published quarterly by the Center for Industrial Research and Service and edited by the CIRAS publications team. Design and production is by Engineering Communications, Iowa State University. Please send questions, comments, or address changes to ciras.news@iastate.edu.

Articles may be reprinted with the following credit line: "Reprinted from CIRAS News, Vol. 45, No. 1, Fall 2009, a publication of Iowa State University's Center for Industrial Research and Service." Please send a copy of the reprint to CIRAS News, 2272 Howe Hall, Suite 2620, Ames, IA 50011-2272.