

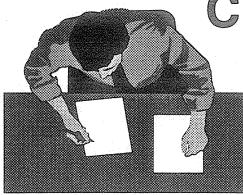
CROWN CRITER

Since 1971

Crown International, Inc. Employee Newsletter

Apr./May 1999

CEO's Memo...



It is exciting to be in a position to report that 1999 is starting out strong and ahead of plan. I know we continue to have daily challenges with parts, and I want to thank every Crown employee for your continued efforts and positive attitudes.

Our vision for Crown is that in five years we will be a \$250 million (plus) business, delighting customers with creative system solutions profitably in an environment of learning, empowerment and accountability. I see Crown as a company so attractive to potential employees that there would be people lining up at our doors to join our team. This is all possible if we work together to accomplish our mission to delight customers with creative solutions through innovation, agility and speed.

We, as a management team, must and will continually examine our vision and mission in light of our strong desire to Honor God through serving people, developing excellence, and growing profitably following Biblical principles. It must be understood that values do not give us direction, only VISION does that. Rather, values help us determine the rightness of our direction. We, as management, will remain committed to this self-examination process.

I would like to share with you our six key goals for 1999:

1. QUALITY

We are aggressively pursuing ISO 9002

certification by December 31, 1999, and ISO 9001 certification by May 1, 2000. ISO certification is only a small part of our overall quality initiative, and this as a growth initiative will become a product of learning. I am confident that focusing on people and the process first will result in radical improvements in overall measures of operational efficiency and increased customer delight.

2. CROWN 50

The groundwork was laid in 1998 to reduce our supplier partner base from over 350 to approximately 50. In 1999, we are committed to completing this process, resulting in no more than 60 suppliers providing products within two-week lead-times, while reducing overall procured material costs by at least 8%. This is probably the most profound project undertaken by Crown, and I have confidence that we can exceed this material savings target. Many thanks to the team working on this project.

3. MARKET DRIVEN PRODUCT DESIGN AND DEVELOPMENT

In 1998, organizational changes were made in Engineering and Marketing to make Crown more effective in designing product that is market-focused. In 1999, we have narrowed our focus and we are committed to completing approved (based on disciplined DCF— discounted cash flow— criteria) projects on time, and within budget and cost targets. These projects are reflected in the 1999 Operating Plan. The only project currently under re-evaluation is the OCIA/Techron project.

4. CROWN UNIVERSITY

This goal is part of our overall desire and need to create an environment of learning, empowerment and accountability. In 1999, in order to achieve our commitment to develop excellence and serve people while delighting customers, we will put in place a system and process to begin to develop and train our employees to be more effective in their roles at Crown. (Employees are customers too!)

5. INFORMATION SYSTEM/Y2K

Crown has invested a significant amount of money in the information system (MAPICS based). In 1999, we are committing resources to further integrate and fully utilize our present systems, as well as upgrade our systems as necessary, to provide information to run our business in a timely and effective manner. Information systems and technology have the potential, when combined with excited and trained people and effective processes, to create sustainable competitive advantages in the marketplace.

6. PURSUE STRATEGIC ALLIANCES

In order to fulfill our desire to grow profitably, and to remain relevant and competitive in the future, Crown must pursue synergistic alliances that will significantly improve Crown's competitive position in all of its Strategic Business Units (previously known as divisions).

Thank you for your part on the Crown team as we work together in 1999. I want to encourage you to be proactive and positive as we work together to achieve these goals.

by Richard A. Newberry



Faithful Service

Name	Years of Service
James Wordinger	25 Years (April 9)
Susan Vicary	20 Years (April 23)
Sharon Haney	15 Years (April 16)
Deborah Vermeulen	15 Years (May 29)

Janet Slabaugh	10 Years (April 10)	Jamie Pummill	5 Years (April 18)
James Goodsen	10 Years (April 13)	Kathryn Clingenpeel	5 Years (April 25)
Richard Griffin	10 Years (April 17)	Duwayne Cole	5 Years (April 25)
David Geiman	10 Years (May 15)	Norma Denton	5 Years (April 27)
Gretchen Neely	10 Years (May 21)	James Fisher	5 Years (April 27)
John C Michels	10 Years (May 30)	Craig Long	5 Years (May 2)
Carol Fisher	5 Years (April 16)	Beth Bigler	5 Years (May 2)
Deloris Jean Lewis	5 Years (April 18)	Wayne Veatch	5 Years (May 24)

1998: A year of change and improvement for Audio Sales

What a year for Crown Audio! In the last issue of the Crier, I shared with you what Audio Sales was doing externally to become more *agile*. In this issue, I'll share the equally exciting things that have happened internally to *delight customers!*

From my perspective, 1998 was certainly a year of change and improvement. For the first time in history, Audio integrated the finalized and mutually agreed upon quotas into its internal business plans for 1999, and those sales quota numbers are based on solicited rep input, acknowledgement, and actual performance, allowing for adjustments in local market trends.

We also reorganized Audio Sales to optimize effectiveness. The "Regional Manager" structure was eliminated and organizational elements were put in place to react and respond quickly to day-to-day problems, improve follow up, and to provide proactive training and support:

- Debbie Frantom was promoted to "Manager of Global Sales Support", with expanded duties that include management of a reorganized Rep-friendly order entry group, technical support, and our acclaimed warranty and service departments.
- Joe Wisler moved from marketing to sales as a technical resource to add value to the distribution channels.
- Doug Bullard moved from Audio



marketing to sales in our quest to fully support the Crown cinema sales efforts.

- The position of Music Industry Liaison was created and filled by Bob Lichty.
- Responsibility for product training efforts and the Crown Truck was shifted to Sales in support of Audio's distribution channels.

Very important: We changed our thinking to recognize local representatives as true business partners and acknowledge them as the true market experts in their territories, treat sales representatives as true value-added partners, and changed travel emphasis from "checking up" on dealers in the distribution chain to supporting distribution.

Do we have opportunities for improvement? Yes, the turnovers associated with the necessary changes at Crown have caused some business relationships that need mending. Yes, backorders have been experienced now and then due to our success (but

for the most part 1998 was a record year for on time shipments). Yes, we have reliability issues now and then (but our products and warranty programs are recognized leaders). However, I am convinced that we have built a foundation that will breed success, and that current and potential customers will not find a company with more will to delight its customers and once again become the undisputed "Big dog on the block."

We have phenomenal products and tens of thousands of happy CE customers out there. We still manufacture the best sounding amplifier on the planet. The Macro-Tech family is still the hands-down standard for touring performance and reliability. Com-Tech is still the best amplifier family made for 70-volt fixed installations and still the only amplifier with a true direct-coupled 70-volt output. Crown IQ products, according to leading sources outside of Crown, are at the forefront and leading the industry for computer control. The CM-311 is arguably the best headset microphone on the planet—ask Garth! The PCC 160...hey what more can I say about that. And, by the way, the MB series of mics mops up the competition.

Interesting things start to happen when we all focus on what is going right and continue to work together on what is not!

by Scott Robbins
Director of Sales, Americas

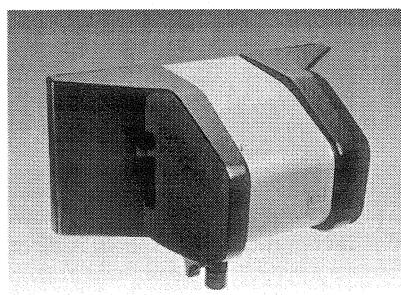


Crown SASS-P MKII Stereo Microphone Enhances Jewel's In-ear Monitor Mix

A Crown SASS-P MkII stereo condenser microphone enhanced the in-ear monitor (IEM) mix for singer-songwriter Jewel during a series of recent concert touring dates.

Eighth Day Sound, a touring company based in Cleveland, supplied the Crown SASS-P to Colm O'Reilly, Jewel's long-time monitor engineer. With a unique, patented design based upon Crown's PZM Technology, the SASS-P provides precise and realistic sound that accurately conveys the ambient environment, creating well-focused natural stereo imaging.

O'Reilly began utilizing the mic during Jewel performances on the Lilith Fair tour, clamping it to the front lighting truss at the halfway point, about 10 feet downstage of her normal stage position. Pointed toward the audience, the SASS-P captured crowd ambi-



ence, which was then blended into Jewel's stereo IEM mix.

"The SASS delivered impressive gain and a flat response," O'Reilly notes. "Rarely did we need to apply any equalization, except in extreme acoustic environments, where the top end was rolled off a little bit."

Based upon this successful evaluation period during Lilith Fair, O'Reilly then em-

ployed the SASS-P throughout a subsequent three-week tour. He adds that this approach stands in contrast to the typical method employed for capturing crowd ambience, which involves placement of microphones at stage left and right (either flown or on stands). These mics generally pick up only the chatting noise of the people in the extreme nearfield, while at the same time, they tend to produce resonance not consistent with the stage and venue.

"We were able to achieve very good response with this approach, based around the SASS. It sounded just as if she were standing between two PA stacks in a normal concert situation, without the isolation of in-ear monitors," O'Reilly explains. "Jewel just loved the sound and mix we were able to create."

by Bob Lichty, MI Touring Liaison



Developing Excellence

Note from Larry Kauffman: The article that follows was graciously provided by Susan Van Orman. I will be sharing this space occasionally with other members of the management team who have important information to share.

Work Instructions – Put them to Work for You!

Many of you may be hearing the words “work instructions” uttered more and more frequently at Crown. If you haven’t, you more than likely will. This is especially true if you work directly with our products. Work instructions are a key part of any successful On-the-Job Training program, and more effort will be focused on work instructions as we concentrate on the ISO 9002 requirements for OJT.

Not every job or task requires work instructions. ISO requires that if a job or task affects quality, then work instructions should be present. Beyond that stated requirement, work instructions may need to be developed if the answer is “yes” to any of the following questions:

Do temporary employees perform this job?

Are jobs rotated?

Is the job or task a “special process”?

Do different departments or shifts carry out the same work?

Is this a new process, machine, equipment, instruction or product?

Is the task done infrequently and steps could be forgotten?

Are there many steps or frequent opportunities for error?

A work instruction is a description of the steps necessary to complete a specific task, and is generally performed by one person at a time. You are probably familiar with the many common work instructions used in your everyday life. Recipes, assembly manuals for toys, computer help menus, and tax form instructions are just a few. Crown currently uses prints, schematics, text, and photo instructional sheets as work instructions.

The knowledge and skills of a worker, combined with a work instruction, result in a S.M.A.R.T. employee. This means that for every job or task with a work instruction, a

worker should be able to do the following:

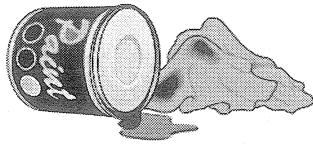
<input type="checkbox"/> Situation	✓ Explain the purpose of the task and recognize when to do the task.
<input type="checkbox"/> Materials	✓ Use the correct materials.
<input type="checkbox"/> Actions	✓ Perform the actions and explain what is being done.
<input type="checkbox"/> Results	✓ Produce the correct result.
<input type="checkbox"/> Total quality check	✓ Verify the work is correct.

Developing quality work instructions will help make OJT of new and temporary employees easier, and help current employees perform their jobs more efficiently. Many of you may be asked to help develop work instructions in your department, because no one knows how to do your job better than you do! If you are asked to help develop work instructions, remember that there is only one test of whether or not a work instruction is correct: Can employees consistently perform the job as required?

by Susan Van Orman, Training and Development Instructor

Safety On & Off The Job

Household Hazardous Waste: Responsible Solutions



Ever wonder what to do with that old paint or waste oil in your garage? You know that dumping it down the drain isn’t the answer. And what about all those old magazines in your attic? While they’re not a hazardous waste, they do present a fire hazard. Here’s where YOUR county agencies, and the services they provide at no charge, can be a big help. Below is a listing of these services:

Household Hazardous Waste (Paint, solvents, oil, cleaners, medicines, pesticides, etc.)

- If you are a resident of Elkhart County, the Solid Waste Management District sponsors two household hazardous waste drop off days each year, usually in May and September. Announcement of the 1999 dates, once set, will be made in upcoming Wednesday Assembly’s and posted on the EHS bulletin boards located in each plant. The District telephone number is (219) 293-2269.
- Residents of St. Joseph County can drop

off household hazardous waste Tuesday through Saturday at their Solid Waste Management District collection point at 1105 E. 5th St in Mishawaka. Contact them at (219) 235-9971. (Note: While not encouraged, the District will accept waste from non-residents if your area doesn’t offer a similar program, or you can’t wait until one of the Elkhart County events.)

Waste Oil

- Safety & Environmental Resources accepts waste oil for recycling at their 514 E. Marion St. location in Mishawaka. You can contact them at 674-0450 or 258-0507.
- Some automotive service providers, such as Napa Auto Parts in Wakarusa, accept used oil from their customers for recycling. Contact your shop to find out if they offer a similar service.

Magazine Recycling (permanent Elkhart County locations sponsored by the Solid Waste Management District)

- In Elkhart – the Kroger Store at Fulton and Nappanee Streets
- In Bristol – the Bristol Grocery
- In Goshen – Everett’s Grocery in the Linway Plaza

- In Nappanee – Martin’s Supermarket at 1530 East Market Street

Mercury-Containing Devices

In December 1998, the EHS Dept. announced Crown’s participation in the Indiana Governor’s Toxics Reduction Challenge. As part of the challenge, Crown is acting as a mercury collection point for employees to prevent mercury from common household devices such as clothes irons, thermometers and thermostats from entering the environment where it acts as a poison. Some Crown employees have already brought in their no-longer-needed mercury-containing items.

Please check the assembly areas for brochures that explain how you can prevent mercury pollution. They include stickers to place on some of the more common items as a reminder not to throw them in the ordinary trash when you are finished with them. The EHS Dept. can pick up any of these items from you, and ensure they are properly disposed of. Just call me at extension 8111 or Tim Bock at 8341.

by Carmen Wegener, Environmental, Health, and Safety Specialist





From Where I Sit...

I would like to announce a new addition to the Crown Fabrication area. In November 1998, Fabrication introduced a robotic loader/unloader to complement an existing turret press (computer-controlled machine that punches holes in sheet metal). The loader/unloader increases the productivity of the turret press by automatically feeding metal sheets into the press, then extracting and stacking the finished sheets after punching. This automated procedure saves handling time with every sheet processed, while enabling operators to perform other, more productive, duties. The loader/unloader also promotes maximum punch productivity by allowing the press to operate completely unattended for extended periods of time.

Employees throughout Crown have asked the question, "Why is Crown investing in new equipment when the budget is so tight?" I would like to shed some light on this question.

In today's competitive market, it is more important than ever before that the products we fabricate and manufacture are of the highest quality, lowest cost and responsive to the shortest turnaround times.

This system is designed and built to accomplish those requirements. The robotic loader/unloader minimizes non-value-added processes, such as dedicating an operator to the loading and unloading of every sheet. The loading/unloading cycle time can vary anywhere from one minute to ten minutes in a manual system. With the robotic system, the cycle time is no more than thirty-four seconds on any given job. Through attrition and restructuring, two shifts now run this area. During the two-three years prior to November 1998, there had been three shifts.

I applaud my operators for the flawless start up of this system and the support they have given to maintain and run it the way it's supposed to run. I encourage all employees to stop by and see the investment that Crown has made. So, the next time that you pass through Fab and hear a machine running—and there are no operators in the building—you will know that the robotic loader/unloader is running to help us Grow Profitably!

by Jim Fisher, Fabrication Manager



Employees that have joined Crown since January 1999:

Line 3	Line 11
Amy Jay	Christina Fites
Line 6	Magnetics
Leslie Fitzpatrick	Elizabeth McIntosh
Susan Laskowski	Audio Pro Audio Relations
Line 9	Stephen Morris
Linda King	Audio USA Sales
Melodie Nickerson	Amanda Divine
Line 10	Broadcast USA Sales
Awilda De Jesus	Helen Briebler



On the light side...

A man runs into the vet's office carrying his dog, screaming for help. The vet rushes him back to an examination room and has him put his dog down on the examination table. The vet examines the still, limp body and after a few moments tells the man that his dog, regrettably, is dead. The man, clearly agitated and not willing to accept this, demands a second opinion.

The vet goes into the back room and comes out with a cat and puts the cat down next to the dog's body. The cat sniffs the body, walks from head to tail poking and sniffing the dog's body and finally looks at the vet and meows. The vet looks at the man and says, "I'm sorry, but the cat thinks that your dog is dead too."

The man is still unwilling to accept that his dog is dead. The vet brings in a black Labrador. The lab sniffs the body, walks from head to tail, and finally looks at the vet and barks. The vet looks at the man and says, "I'm sorry, but the lab thinks your dog is dead too." The man, finally resigned to the diagnosis, thanks the vet and asks how much he owes.

The vet answers, "\$650."

"\$650 to tell me my dog is dead?" exclaimed the man....

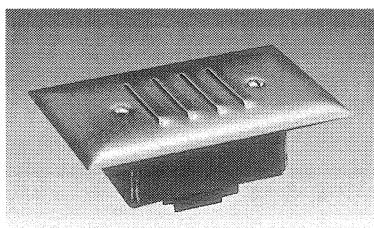
"Well," the vet replies, "I would only have charged you \$50 for my initial diagnosis. The additional \$600 was for the CAT scan and lab tests."

- Contributed by Sam Rowley, Assistant Director, HCJB World Radio Engineering Center



New Product Spotlight

This Mic's All Wet



The Crown Microphone Department is happy to introduce the PZM-11LLWR: A water-resistant Pressure Zone Microphone

with a balanced, line-level output. A plastic membrane inside the microphone protects the mic capsule from water damage. The mic mounts in a standard electrical outlet box.

Applications include fast-food restaurants, outdoor intercoms, toll booths, bridges, state park nature centers, theme park security, home automation, and so on. Because of its tailored response and PZM construction, the PZM-11LLWR picks up conversations or other desired sounds with extra clarity.

by Bruce Bartlett, Senior Microphone Design Engineer

Employee Committee Financial Report

Balance as of 3/1/99:

Checking	\$5,099.76
Savings	\$3,134.70
Total	\$8,234.46

The Crown Crier is a communication medium published by the Human Resources Department to promote the Company's mission and guiding principles, share management information about the company, and celebrate significant employee accomplishments and events.



Innovation Determination Agility Speed

1718 West Mishawaka Road, Elkhart, IN