MESSAGE FROM THE PRESIDENT...
AFC President Bill O’Neill, University of Minnesota

Greeting to all of you from the board of the AFC.

There have been things going on behind the scenes that will assist us in better serving you through the newsletters, teleconferences and the fall and spring conferences that we have held for 10+ years now.

We have been in the process of identifying and hiring a newsletter coordinator who will be able to consistently provide you with the latest news from the council and FM articles that are informative and current. The permanent hosting of the AFC website will be resolved in the next couple of months. IFMA has available for the AFC a host site location that we are moving too. I believe that both of these challenges will become a reality by July 1… This is good news for us.

As this newsletter is being distributed, we are having our Spring 06 conference sponsored this year at the University of Wisconsin, Madison. It is being hosted by Richard Pierce, IFMA board member and champion of the AFC mission. Thank you to him for all of the hard work and effort that he has put into preplanning and hosting of this event.

During the fall of 05 we were hosted by the University of Pennsylvania and Temple University. That conference’s major theme was the role of technology in our lives. We had presentations that illustrated the use and function of Archbus in the facilities environment, and heard a compelling presentation about the plan and progress that the City of Philadelphia has made in making that city the first truly wireless city in the nation. Those presentations are a great example of the quality of the programming that goes into these conferences.

One final note is that we are aware that the council has grown by 200+ members over the last year and a half and that we need to be in touch more. We know you all have a lot to share with us and we are looking forward to making that connection stronger in the near future.

Enjoy your spring
Regards,
Bill O’Neill, AFC President

A BALANCED APPROACH TO OUTSOURCING

One of the positive changes in the FM world that has occurred in the past ten years has been the shift to a more balanced approach to outsourcing in the form of strategic sourcing. Once senior management recognized that the major drivers of the previous sourcing solution, the overwhelming desire to reduce administrative costs and eliminate staff as quickly as possible, weren’t working well, a new strategy emerged. Now senior managers are determining their core and non-core functions before jumping to external solutions to service delivery and asking hard questions to validate their decisions. They make certain answers to questions like the ones below are known.

• What services should we always provide in-house and which ones could benefit from an external provider relationship?
• How will a service provider blend into the culture of our institution?

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A Balanced Approach to Outsourcing

- How will we control the quality of outsourced personnel?
- Do we have sufficient detail in our scope of work to ensure full understanding by our outsource provider?
- Do we have a long-term commitment to the relationship such that we have sufficient incentives for our service provider?
- Do we have a fundamental understanding of the concept of partnership or strategic alliance on the part of both parties?

This new outsourcing philosophy makes a great deal of sense. Not only are facility organizations looking for firms that demonstrate expertise in providing a family of like services, such as those associated with energy management, concierge services, operations and maintenance, and housekeeping and grounds-keeping, but they are also searching for long-term strategic partnerships that benefit both the provider and the client. After some early starts and fits with outsourcing, senior management has recognized that the best path to a successful sourcing arrangement starts with the FM organization’s in-house homework to define requirements and needs, and create an environment that forges a strategic alliance.

Stormy Friday, IFMA Fellow

Stormy Friday is President of The Friday Group, a management, marketing and facilities management consulting firm based in Annapolis, MD.

Focus On: Worker Accommodation - Affordable and Integral to Worker Well-being

Over two-thirds of job accommodations cost under $500 and many cost nothing at all.

By Suzan Butyn

“The nature of work has changed,” says Alan Cantor, President of Cantor + Associates Inc. “With it comes the expectation that the human body will keep up with the capacity of the computerized work world but we need to be realistic about what can safely be done in a day, without risking worker health.”

Alan Cantor, B.Ed., M.A. is a researcher, writer and educator with expertise in making workplaces, schools and services fully accessible to people with disabilities. His consulting firm develops comprehensive accommodation plans for individuals with injuries and disabilities; advises organizations on ensuring that their products, services, and facilities are accessible to people with disabilities; and conducts programs on repetitive strain injury prevention.

Cantor says, “I get nervous when people use the word “ergonomic” as an adjective instead of a noun because it means they don’t understand that ergonomics is a science. The greatest mistake that employers make is buying ergonomic equipment without training the workers.” Cantor argues that the success of ergonomics in the workplace hinges on the training workers receive.

This is even more important when accommodating injured workers back into the workplace. People with injuries or disabilities can perform essential job duties once they have been accommodated. Employment
Operations supervisors are upset. Each of them wants their work done first regardless of what it is. Critical maintenance work is delayed or missed. Other work in the CMMS is so old, no one remembers if it has been done or just forgotten. Your backlog is growing and is out of control. What do you do first? How do you prioritize?

In order for a maintenance department to be truly efficient and effective, its work must be planned, scheduled and performed in some order of importance to the facility. Work type and equipment criticality are two key areas for development in a CMMS.

The work type code is often called a priority code and should be based on the nature of the work, (emergency, preventive, predictive, etc.). The location/equipment criticality code is established based on the unit’s relative importance to production or operation of the site (key unit shuts down line, plant, etc.). These two values are then multiplied together (beware: different systems use different formulas) to arrive at a Relative Importance Factor (RIF), or the order of service. This computed result is then evaluated by the planning and scheduling process and changed as required.

With only slight modification, the following tables are used in many different systems.

**PRIORITY**

1) Safety/life and limb: Needs to be completed above all else.
2) Environmental: Needs to be completed immediately.
3) Emergency: Needs to be completed immediately.
4) Critical: Needs to be completed within 24 to 48 hours.
5) Preventive maintenance: Completed as scheduled.
6) Routine: Can be scheduled for completion at a future time.
7) Project Work: Long-term planning.
8) Housekeeping.

**CRITICALITY**

1) Affects plant personnel or the environment.
2) Shuts down the entire plant.
3) Shuts down an entire department.
4) Shuts down an entire line.
5) Restricts the full performance of a department or line.
6) Shuts down a vital piece of equipment but does not affect the plant, line, etc. This equipment usually has a backup.
7) Shuts down a non-vital piece of equipment.
8) Building work.
9) Mobile equipment.
10) Other (i.e., office equipment).

**Calculating a RIF**

Applying these tables, an emergency request (Priority 3) on a piece of equipment that would shut down a line (Criticality 4) would give the work a RIF of 12 (3 x 4). A critical (4) job that shuts down a vital piece of equipment (6) would result in a RIF of 24 (4 x 6).

Depending on the CMMS, the highest or lowest number could be most important. In this example, the lower RIF number (12) would be more important and scheduled first.

The facility’s planning and scheduling function can then review the resulting work list showing these RIFs. New work orders coming in with RIF codes 1 to 16 should be reviewed and scheduled daily or immediately, usually with minimal formal planning. The remaining work orders are placed in the backlog to be reviewed by the planner.

DID YOU CONTROL THE CHAOS?

by Arne Oas

The review should check for parts, manpower availability, equipment availability and overall importance. This will ensure that the time required and parts required for critical jobs were evaluated and that everything is available. During the review, the RIF of a work order could, of course, be changed due to additional information (a change in machine condition or status) or office politics.

The last part of the scheduling piece (usually not included in CMMS RIF calculations) is the age of the work order. All other things being equal, the oldest work order should be done first.

Backlog control is critical to the effective implementation of a computerized or a manual maintenance system. Base this control and associated performance of work on work type and equipment criticality. Use these control features in your CMMS to help.

American University is engaged in many projects to upgrade and improve its facilities. Katzen Arts Center, a $48 million integrated arts facility, will open this spring. You can view the project Web site at (www.american.edu/katzen). In addition to the arts center, a newly renovated Student Health Center will be completed. A number of projects are on the boards for the coming months including: infrastructure replacements for the steam and electrical distribution systems, renovation of a former residence hall (used as temporary offices), and an addition to the University Center.

Information about American’s facilities can be found at (www.american.edu/finance/vpfin/).
accommodation is the process of tailoring work to meet the needs of an individual. It is an ongoing process of identifying and removing -- or minimizing -- the adverse effects of barriers in the work environment and in the methods of doing work. These barriers prevent an otherwise qualified person with a disability from achieving the expected outcomes of the job.

“Working in this culture is fundamental to a workers self-esteem and dignity”, explains Cantor, “so accommodating them after an injury is very important to their well-being and quality of life.”

Federal, provincial and territorial Human Right laws have established the test of “undue hardship” to guarantee that essential job duties are accommodated. The test of “undue hardship” specifies the extent to which various parties are responsible for ensuring that employees are accommodated. The main criteria for assessing “undue hardship” are cost, including outside sources of funding; and health and safety factors.

Cantor maintains that accommodating someone with a disability is seldom as expensive or difficult as not making the effort to accommodate them. “Delaying accommodation even for a few days outstrips the modest cost of thoroughly accommodating expediently,” Cantor warns. Over two-thirds of job accommodations cost under $500 and many cost nothing at all. Failing to accommodate can cause the organization lost productivity and reduced output from employees who need to do the work of the injured worker not to mention the cost of lawyers for Human Rights tribunals and other hidden costs. Says Cantor, “In the end it is simply cheaper to accommodate now and accommodate well!”

Assistive technologies
Devilishly clever contraptions
Human resource strategies
Employment policy changes
Spatial reorganization
Training and retraining
Customized software
Alternative formats
Personal support
Transportation services
Adapted furniture
Building modifications
Low-tech devices
Environmental adaptations

IAQ and Schools: Proaction
by Donald Newell, EMCOR Services/Trimech Corp

In our daily activities, we are frequently shown the pervasive problems from poor indoor air quality (IAQ). Often, “MOLD” or “MILDEW” will lead to “general feelings of sickness”, “dizziness”, “difficulty in breathing”, or just “weird odors”. Pictures of black spots or slime, and an interview will accompany these stories in the news. Whether found in someone’s basement, or behind the wallpaper of a poorly ventilated bathroom, most may see it as a problem, but not theirs.

When these issues are discovered in our schools, few, if any, would argue that money is secondary in importance to the speed and effectiveness of the solution. Since there is little that we wouldn’t do for the long-term benefit of our children, shouldn’t we be concerned about any feature of an indoor environment that would impact their health, or their ability to learn- especially if the costs of these proactive measures were almost insignificant to the cost of reaction? Clearly, the answer is “yes”.

This article will present general information on indoor environmental quality (IEQ) in schools with a goal to empower parents, school boards, educators, administrators, and support staff to “Proact” to IEQ triggers, rather than React to IEQ problems. It also presents facts that may be useful in justifying the development and implementation of an IAQ management plan. Following the guidelines presented for both new and existing buildings, IEQ will hopefully become less mysterious and therefore less common in the future.

The IMPACT of IEQ:

IEQ is an essentially expanded version of IAQ. While it still includes traditional IAQ issues such as mold, dust mites, dander, asbestos, harmful chemicals, etc., it now also includes more ethereal items such as thermal comfort, poor lighting, lack of sufficient views to the outdoors, ambient noise, or anything else that could impact the learning environment.

Some interesting facts:

• Approximately 50 percent of schools reported at least one unsatisfactory environmental condition, while 33 percent reported multiple
unsatisfactory conditions.\(^1\)

- A major factor of poor environmental conditions was often the decision to defer vital maintenance and repair expenditures from year to year.\(^1\)

- Poor air quality can negatively impact student alertness, and student and teacher attendance—which subsequently has a negative impact on student learning.

- Students attending schools that were in poor condition score 11 percent lower on standardized tests than students who attend schools in good condition.

- Persistent moisture/dampness often leads to mold, which has been consistently linked with asthma, allergies, and other respiratory illnesses.

- Asthma is the leading cause of absenteeism among school children, accounting for 14 million missed school days per year.\(^1\) There is strong causal “evidence linking common indoor substances to the development or worsening of asthma symptoms in susceptible people”.\(^6\)

- Measures to control the indoor environment can result in 10-30 percent reduction in allergy and asthma symptoms and related costs.\(^3\)

- A study of 1\(^{st}\) and 2\(^{nd}\) graders in New York showed scores in word recognition roughly 20 percent higher for those students in quieter classrooms.\(^2\)

- Students in classrooms with the highest day lighting (natural light) tested between 7 percent and 14 percent higher than students in classrooms with the lowest day lighting. The day lit classes also progressed 20 percent faster in math and 26 percent faster in reading.\(^9\)

Despite this, only 42 percent of schools in this country have IAQ management programs—only 40 percent of which are considered “well-functioning”.\(^4\) In total then, EPA studies show only 17 percent of schools have a proper IAQ management and mitigation program, hardly a success story.

### For Existing Buildings

Fortunately, the EPA (Environmental Protection Agency) has already prepared everything required to develop, and maintain a proper IAQ management plan. The “IAQ Tools for Schools” provides the step-by-step methodology to actively manage the IEQ in schools, including a significant emphasis on the reduction of asthma triggers. Available resources include:

- An easy-to-follow “Road Map”
- Videos
- Fact Sheet
- Samples Memos and Policies
- Recommended IAQ Management Plan
- Checklists specific for:
  - IAQ Team Walkthrough
  - Teachers
  - School Officials
  - Administrative Staff
  - Health Officers
  - Food Service Staff
  - Facilities and Maintenance Staff regarding:
    - Ventilation
    - Building and Grounds Maintenance
    - Waste Management
    - Renovation and Repairs
    - Integrated Pest Management

All of these, including a unique “Problem-Solving Wheel” can be ordered for free at (www.epa.gov/iaq/schools).