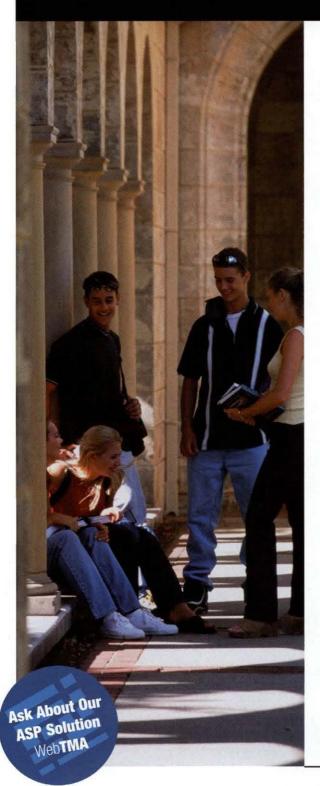
VOLUME 18
NUMBER 1

The official publication of APPA: The Association of Higher Education Facilities Officers

Development.

Nonprofit Org.
U.S. Postage
PAID
Permit No.653
Alexandria, VA

The Administration just asked you to *forecast* annual materials and labor requirements for your campus...now what?



TMA can provide the *answer* with the historical data related to all work performed at your campus.

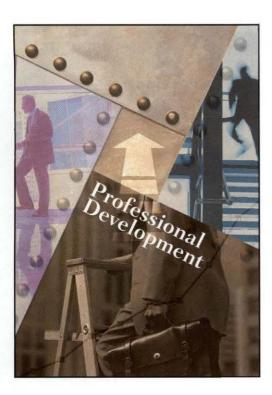
TMA SOFTWARE SOLUTIONS

- Work Order Management
- Preventive Maintenance Management
- Equipment Management
- Materials Management
- Handheld Paperless Solutions (Palm OS)
- Web Enabled Work Request Module
- Over 300 Built-in Reports and Graphs
- Asset/Building/Space Management
- Personnel Management
- Scheduling
- Project Management
- Contract Management
- Safety and Risk Management
- Hazardous Materials Management
- Bar Coding
- Estimates
- GASB 34/35 Compliant
- Cross-platformed with Mac and PC



800.862.1130 (toll free) • 918.494.2890 (main) • www.tmasystems.com





Volume 18 Number 1

January/February 2002

FEATURES

30 Accession Planning: Who's Next at Bat?

by James Christenson

34 APPA Introduces the Educational Facilities Leadership Forum

by James O. Roberts

37 Sharpening the Saw: Ohio University's Career Enrichment Institute

by Karen Sickels Deardorff

41 Australasia Trip Report

by Philip L. Cox

Departments

From the Editor
APPA Regional Reports3
Executive Summary
Membership Matters
Field Notes
Facility Asset Management

Listnotes
by Jennifer Graham
The Bookshelf
 Public/Private Finance and Development, Methodology, Deal Structuring, Developer Solicitation
 Preventing Indoor Air Quality Problems in Educational Facilities
New Products51
Coming Events
Index of Advertisers

Facilities Manager

PRESIDENT: Garv L. Revnolds. The Colorado College

EXECUTIVE VICE PRESIDENT:

E. Lander Medlin, Alexandria, Virginia

EDITOR: Steve Glazner

ASSOCIATE EDITOR: Medea Ranck **ASSISTANT EDITOR:** Jennifer Graham SUBSCRIPTIONS: Cotrenia Aytch **CREATIVE DIRECTION:**

Corporate Design

PRINTING: Corporate Press, Inc.

EDITORIAL OFFICE:

703-684-1446 ext. 236

FAX: 703-549-2772

E-MAIL: steve@appa.org

jgraham@appa.org medea@appa.org

cotrenia@appa.org

WEB: www.appa.org

ADVERTISING:

Gerry Van Treeck

Achieve Communications

3221 Prestwick Lane

Northbrook, Illinois 60062

Phone: 847-562-8633

Fax: 847-562-8634

E-mail: gvtgvt@earthlink.net

Facilities Manager (ISSN 0882-7249) is published six times a year (January, March, May, July, September, and November) Editorial contributions are welcome and should be sent

to the address below.

Of APPA's annual membership dues, \$53 pays for the subscription to Facilities Manager. Additional annual subscriptions cost \$66 for APPA members, \$120 for nonmembers. For information on rates and deadlines for display advertising, telephone 847-562-8633 or 703-684-1446 ext. 238.

Copyright ©2002 by APPA: The Association of Higher Education Facilities Officers. Contents may not be reprinted or reproduced in any form without written permission. The opinions expressed are those of the authors and do not necessarily reflect the views of APPA. Editorial mention of companies or products is for informational purposes only and should not be construed as an endorsement, actual or implied, by the Association.

POSTMASTER: Send address changes to Facilities Manager, 1643 Prince Street, Alexandria, VA 22314-2818

Published by APPA:

The Association of Higher **Education Facilities Officers** 1643 Prince Street Alexandria, VA 22314-2818

Global Partner in Learning

From the Editor

by Steve Glazner

Education and professional development

are important to facilities managers at educational institutions. We see this borne out by the record numbers of mid- and upper-level administrators who attend APPA's Institute for Facilities Management every January and September. We also see it reflected in the dedicated students who immerse themselves into APPA's Leadership Academy every June for advanced personal, professional, and organizational skills development.

This constant striving for self-improvement in the support of their institutions' missions and goals is not uncommon among APPA members. In a 1999 survey, we found that more than 45 percent of our members earned a master's degree, with another 12 percent having pursued a doctorate or other post-graduate

This issue of Facilities Manager reinforces the value of professional development in the facilities management environment. Jim Roberts, APPA's vice president for educational programs, introduces us to a new program called the Educational Facilities Leadership Forum, which will be unveiled July 21-23, 2002 in Phoenix, Arizona. This program will be a challenging and dynamic program and promises to become the educational centerpiece for all facilities professionals.

Columnist Jim Christenson also contributes a piece on accession/ succession planning, which more institutions are beginning to consider as their leadership and workforces grow older. Some of the best professional development programs are held locally or on your own campuses. Karen Deardorff tells us about Ohio

University's Career Enrichment Institute as one example.

And APPA President-Elect Phil Cox describes how valuable a professional development experience it is to visit colleagues at other institutions outside your own country. His report on his recent trip to the Australasian region reinforces important connections with our international facilities colleagues.



MARCH 17-19,

2002

DALLAS,

TEXAS

APPA/NACUBO

MEMBERS:

\$579

NON MEMBERS:

\$729

REGISTER AT

WWW.NACUBO.ORG/

REGISTER_FOR_

PROGRAMS

APPA Regional Reports

Eastern Region Rick Wareham ERAPPA Newsletter Editor

dvertised as "The Sweetest Place on Earth," Hershey, Pennsylvania did not disappoint as the site of the 51st Annual ERAPPA Meeting, held September 29 through October 3, 2001. The Keystone Chapter of ERAPPA selected Facilities Management—Foundation for Academic Excellence as the theme for this meeting. The Host Committee, co-chaired by Ford Stryker and Mark Geletka, did an outstanding job of overseeing the planning of the educational and social events, resulting in a very successful conference.

The Hershey Lodge and Convention Center, on the outskirts of

Hershey, was a beautiful location and provided the membership with wonderful facilities to hold the sessions. Even the weather cooperated for all the outdoor events that were scheduled.

For those members that arrived early for the conference, they were treated to some very special social activities. On Saturday evening, "ERAPPA Night at the Races" was held at the nearby Penn National Track. Several of our business partners sponsored the races and all the other activities that took place that evening. On Sunday morning, those members who wished to golf were able to participate in the ERAPPA Golf Outing at the prestigious Hershey Country Club. Those who were a bit more

adventurous had the opportunity to spend the day at Hershey Park. ERAPPA piggybacked with another corporate sponsor and had the entire park to ourselves. The Park has several exciting roller coasters and many members took advantage of the short lines.

The meeting officially opened Sunday evening with entrance into the exhibit area. Over 90 business partners participated. The exhibit area was open daily during meeting breaks and lunchtimes. This provided plenty of time for members to stop by the booths and get information from our business partners.

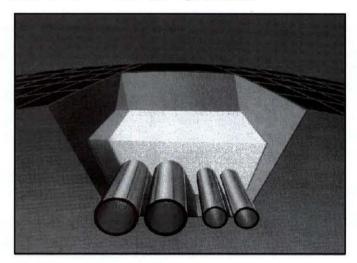
The educational sessions began on Monday morning with a general session presented by SST Communi-

The Name That Started It All! GILSULATE® 500xR

Providing Superior Quality Since 1949

Thermal Insulation & Protection System for Underground Pipes & Tanks at 35°F to 800°F

- District Heating & Cooling
 - Cogeneration
- Retrofit Existing Systems
 - New Construction
 - Hydrophobic
 - Load Bearing
 - Simplified Installation



If You Can Stand On It, You Can Backfill It!

For complete material & design assistance visit our website

at www.gilsulateatp.com or contact:

American Thermal Products ~ 3371 Bonita Beach Road ~ Bonita Springs, FL 34134 ~ 800-833-3881 ~ Fax 941-992-9152

cations of Chicago. The theatrical group presented skits on safety and diversity in the workplace. Later that day, a five-track educational program was offered that covered a multitude of subjects pertinent to facilities management. The sessions were well attended and received very positive evaluations from those attending.

Monday evening, the members were treated to an authentic Oktober-fest celebration at a German restaurant near Reading. A wonderful German band and folk dancers provided the entertainment for the participants.

Tuesday was another busy day of educational sessions and the annual business meeting, where several officers were elected. Sheri Vucci was elected to serve another term as treasurer. Ron Dupuis was elected second vice president and Mike Delleo was elected director. Reports were given by Tom Goldsmith (Education Committee), Tom Stepnowski (Awards and

Scholarships), Earl Smith (Membership), Rick Wareham (Newsletter), and Robert Bertram (Board Restructuring).

The annual banquet was held that evening. Many were presented with awards and certificates for their valuable contributions made to ERAPPA, APPA, and the local chapters. Past President Robert Carter passed the gavel to new ERAPPA President Michael Sofield.

Wednesday morning, the membership was treated to a Franklin Covey presentation on leadership. These sessions are always very enjoyable and worthwhile.

The meeting was a tremendous success and the KAPPA host committee (subcommittee chairs Bernie Geishauser, Pete Buchheit, Paul Politza, Dave Carll, Ed Dankanich, Rick Wareham, and advisors Erma Fiedler and Jack Knee) should be commended for pulling off an outstanding meeting. We were even

fortunate enough to have APPA President Gary Reynolds in attendance for most of the meeting.

The ERAPPA membership looks forward to another year. Local chapters have been active, holding meetings once or twice a year. A number of chapters have been experimenting with annual retreats for its members, usually centered on leadership training. These have been very well received. As always, local chapters concentrate on education on the local level and offer scholarships to the regional and national levels. ERAPPA has spent thousands of dollars on scholarships to the APPA Institute and Leadership Academy and will continue to do so in the future.

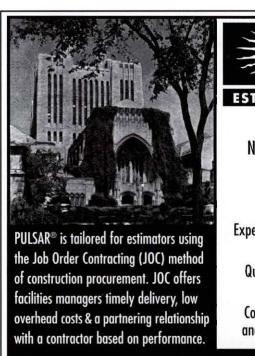
Everyone is looking forward to the 2002 annual meeting that will be held at St. Johns in Newfoundland, Canada next September.

Southeastern Region Jewell Winn SRAPPA Vice President for Communications

irginia Tech was host to the 50th annual conference of SRAPPA, welcoming more than 350 members and guests to the Hotel Roanoke. Physical Plant Director Bill Elvey and his staff did an excellent job in hosting the four-day conference entitled Show Your True Colors in Roanoke, Virginia.

The weather was beautiful and the display of fall foliage proved Elvey correct, as Virginia Tech continued to show their true colors throughout the entire conference. At least 40 participants kicked off the event Saturday by playing in the annual SRAPPA golf tournament at the Hanging Rock Golf Club, which overlooks the Roanoke Valley. Trophies and prizes were awarded for team and individual efforts. That evening, a reception was held at the hotel with a caricature

Continued on page 7





ESTIMATING SYSTEMS, INC.

Software for Estimating
New Construction & Maintenance

User Friendly & Cost-Effective

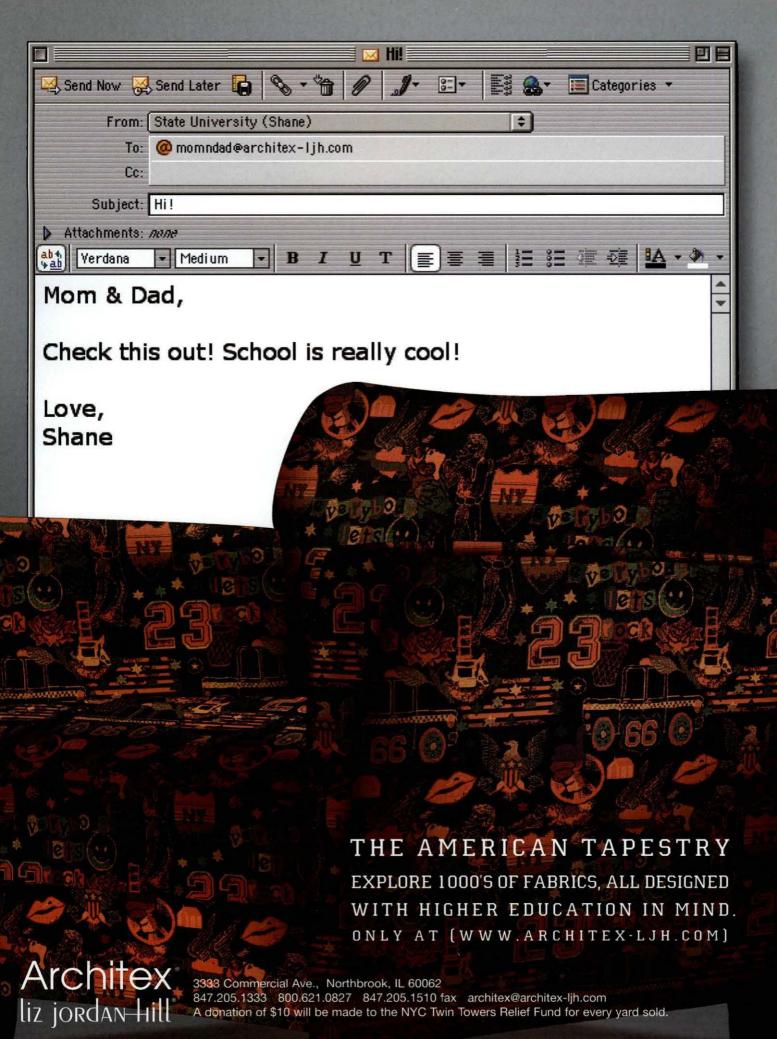
Expedite Estimating & Contract Negotiations

Quick & Easy Quantifying of Line Items

Comparison Reports Indicating Quantity and Cost Differences between Line Items

Solutions For Facilities Managers Faced With Time & Budget Sensitive Construction Projects

Please visit our website at www.estimatingsystems.com Or Call Toll-Free 1-800-967-8572





FINALLY A FIRE SPRINKLER SYSTEM THAT HELPS ME STAY ON SCHEDULE AND BUDGET IN ALL LIGHT HAZARD APPLICATIONS.

BLAZEMASTER® CPVC FIRE SPRINKLER SYSTEMS

Deadlines and budgets. Two of a design engineer's worst headaches. High-quality BlazeMaster CPVC fire sprinkler systems ease the burden of both.

That's because our systems install quicker and easier than metallic systems. No pre-fabrication, in addition to on-site alterations, save up to 50% in design time. Lightweight and flexible, CPVC systems deliver the performance you require without compromising safety. BlazeMaster CPVC systems meet the highest safety standards and are approved for use in all NFPA 13 Light Hazard applications.

Hotels. College dorms. Hospitals. High-rises. Wherever there is concern for safety, BlazeMaster systems are there. In fact, we're listed for more applications than any other non-metallic system. And unlike metal, BlazeMaster CPVC pipes and fittings are virtually maintenance free and immune to Microbiologically Influenced Corrosion (MIC). Designed for a 50-year life expectancy, our sprinkler systems work for you long after many other competitive systems corrode away.

Fast. Reliable. Long lasting. Fully approved. And cost effective.

Listed for more types of applications than any other non-metallic system.

NEW UL LISTINGS FOR BLAZEMASTER PIPE AND FITTINGS:

- Exposed solid wood joists in NFPA 13D basement installations
- Exposed system risers in accordance with 13D and 13R
- No set-back at ceiling openings

Call today for more information. 888-234-2436

www.blazemaster.com

BlazeMaster

Continued from page 4

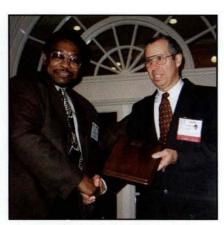
artist and pianist to liven up the evening.

The official kick off luncheon was Sunday morning. A bagpiper led the group into a beautifully decorated ballroom and the attendees were entertained by a young group of a cappella singers called the *Mixed Emotions*. Registration continued and 64 exhibitors set up their booths in one of the hotel's ballrooms for the vendor show.

The next two days were filled with opportunities for members to gain a wealth of information by attending any of the 28 educational sessions offered.

The spouses experienced the beauty of fall in the Blue Ridge Mountains as well. During three days, the spouses were taken to the Chateau Morrisette Winery, Mabry's Mill (an old saw mill), and the Virginia Tech campus, where they visited the Center for Real-life Kitchen Design, and The Cave, a virtual reality tour.

SRAPPA members also enjoyed side trips to Roanoke's Explore Park, a recreational and educational facility where visitors can stroll through three eras, depicting life in Virginia from 1671 to 1850. Additionally, attendees were allowed to tour Virginia Tech's 2,600-acre campus where they were met by the university's marching band, and treated to dinner and entertainment by the New Virginians Vocal Jazz Group Ensemble.



Past President David Anderson, right, congratulates President Sam Polk.

International APPA News

Mexican Universities Form APPA Chapter

new Mexican chapter of APPA is in the works. This venture, one of the many ongoing international efforts at APPA, is lead by Dan Johnson from the PCAPPA region, along with his two counterparts in Mexico: Eduardo Diaz Sanchez, Director de Planta Fisica and Juan Arvizu Vargas, Dirección de Planta Física, both with the Instituto Technologico de Estudios Superiores de Monterrey. The task force from PCAPPA also includes Rob Quirk, PCAPPA president from CSU Long Beach, David Gonzales, University of California Santa Barbara, Hildo Hernandez, CSU Northridge, and Johnny Torrez, University of California.

The initial meeting took place at last July's Educational Forum in Montreal, Canada. Dan Johnson, who attended the meeting, is very excited about forming the chapter, and sharing information with his colleagues in Mexico. Living in California, and in a town that is 85 percent Latino, Johnson feels it is a "natural connection." Of course, this is more than a personal connection. Johnson says that the thriving university and college campuses all over Mexico will have a lot of valuable information, best practices, and experiences to share with American campuses.

Johnson hopes that the first thing affiliation with APPA can offer the Mexican chapter is education. The goal is for the key people in Mexico to attend APPA's Institute for Facilities Management, Leadership Academy, and Educational Facilities Leadership Forum. Not only will attendees from Mexican institutions receive valuable education and training, but hopefully they will provide feedback that APPA can use to modify or expand its programs to ensure their suitability for international members.

The next steps are not yet decided, but the group plans to meet sometime in the beginning of the year. "Our region is very committed to making this opportunity fully develop," says Johnson.

The conference concluded on Tuesday evening with an exquisite banquet and ceremonies to install the 2002 SRAPPA Board of Directors. A 50th anniversary cake was presented and a champagne toast made by the entire group.

Next year's conference will be hosted by Robert McMains of Emory University in Atlanta, GA, October 12-15, 2002.

Midwest Region Becky Hamilton MAPPA Newsletter Editor

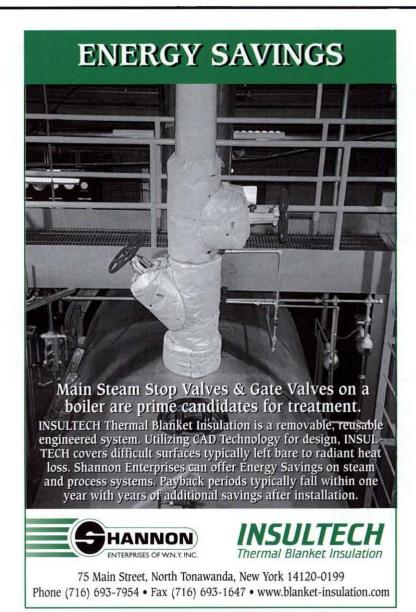
Partners in Learning was the theme from our annual MAPPA meeting this year. Our partners

in Wisconsin went out of their way to make our learning experience successful and our visit enjoyable. In all, 132 business partners had 60 booths in the exhibit hall and their participation was greatly appreciated by the 190 MAPPA participants and 13 guests who attended.

The conference was held in the Monona Terrace Convention Center overlooking Lake Monona in downtown Madison, Wisconsin. The venue was an absolutely beautiful setting—most of our meals were in the Grand Terrace, where we could watch the sun rise and set over the lake. A breathtaking site for many of us landlocked Midwesterners.



APPA's President Gary Reynolds and SRAPPA Past President David Anderson congratulate Senior APPA Delegate Mike Besspiata, center.



The keynote session on Monday morning started us off on the right foot, with Charlie Jenkins, a long-time APPA member and wonderful speaker, talking about partnership in leadership. Charlie advised us that we can become campus-wide leaders by following three simple strategies: work within our circle of influence, become a transition person, and mind our emotional bank accounts. His presentation included several of the colorful quotes that have become a trademark of Charlie's; my personal favorite from this session was "Bloom where you're planted. Brighten the corner where you grow and people will notice."

The rest of Monday morning included four concurrent sessions: leadership presented by Charlie Jenkins; cost accounting presented by Clay Kline, from Maximus, Inc.; wireless technology presented by Steve Spiwak, ONDEO Nalco; and tech talk, which focused on fire protection at colleges and universities, presented by Jerry Piasecki, fire protection engineer, URS Corporation.

After lunch and a couple of hours networking with our business partners in the exhibit hall, participants broke into two groups for the experience exchange—a long-time favorite for everyone at our annual meetings. In light of recent events, many of the questions in both sessions revolved around safety and security issues. Another hot topic was budget cuts. Following the experience exchange, participants had the opportunity to visit with our business partners one more time in the exhibit hall.

Monday evening everyone enjoyed Casino Night on the Grand Terrace. Obviously the University of Wisconsin is more financially flush than their colleagues at other schools because they gave each person \$10,000 to start with. Of course, it was play money.

On Tuesday morning, following the annual business meeting, APPA President Gary Reynolds treated us to a talk. It was nice to welcome Gary

Continued on page 10

New From APPA!

The Strategic Assessment Model, Second Edition

The second edition of APPA's self-assessment and continuous improvement tool, *The Strategic Assessment Model*, reacquaints readers with SAM concepts and performance indicators, and how they relate to the Balanced Scorecard concept and the Baldrige Award criteria. New to the second edition are several case studies from schools around the world on how SAM is implemented and used as a benchmark for successful facilities management. The appendices provide a glossary, references, and the SAM surveys.

The Strategic Assessment Model

Price: Member price = \$90, Nonmember price = \$140



Contents

What Is SAM and How Can SAM Help You? Larry R. Givens

Professional Leadership and the Strategic Assessment Model, Douglas K. Christensen

Creating a Learning Organization Environment for the Facilities Professional.

David A. Cain

The Financial Perspective, David A. Cain

The Internal Processes Perspective, Larry R. Givens

The Innovation and Learning Perspective, Laura Long

The Customer Perspective, Don J. Briselden **The SAM Trilogy:** Three Scenarios of Organizations in Search of Performance Excellence. *Tom Harkenrider*

Case Study 1: Implementing SAM at the University of Maryland, Baltimore, *Maggie Kinnaman*

Case Study 2: SAM as a Tool for Facilities Management at Ontario Universities, *David V.B. Riddell*

Case Study 3: Continuous Improvement Within the California State University System, *Gretchen Jones*

Case Study 4: U.K. Strategic Assessment, Vic Slater

Case Study 5: The University of North Texas Makes Headway, Richard Merrill Case Study 6: Benchmarking 'Down Under,' Brian Fenn

Case Study 7: Continuous Improvement and Performance Measurement at the University of Miami, *Mike White*

Case Study 8: Continuous Improvement Through APPA's FMEP and SAM: Toward Achieving the Award for Excellence in Facilities Management, David A. Cain, Douglas K. Christensen, Mark Flynn, and C. Ronald Hicks

Appendix A: APPA Strategic Assessment Model Employee Climate Survey

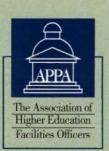
Appendix B: APPA Strategic Assessment Model Work Climate Survey

Appendix C: Glossary

Appendix D: References and Bibliography

To Place an Order:

- Visit APPA Bookstore Online at www.appa.org/resources/publications
- Request an Order Form and Fax It to 703-549-2772
- Mail Your Order Form to 1643 Prince Street, Alexandria, VA 22314-2818
- ? Questions? Call APPA at 703-684-1446 ext. 235, or e-mail cotrenia@appa.org



Continued from page 8

back to MAPPA (he was one of us before he moved to Colorado and joined RMA). Gary's personal reflections on leadership were enjoyed by all.

Four concurrent sessions were held on Tuesday morning: University of Wisconsin (UW) Utility Project, Building Audits-Where Do We Begin?, FMEP (Facilities Management Evaluation Program), and Beyond Measuring and Verifying.

After the break additional sessions were offered including: EPA Initiatives, Landscape Services MAPPA Web Page and Its Unlimited Opportunities, and Ergonomic and Safety Initiatives.

After lunch there were three topics to chose from: Financial Planning in an Uncertain Financial World, Building an Environmentally Sustainable Campus, and Train Like a Pro.

A new concept was available after lunch: MAPPA Cracker Barrel hot topics. Several topics were discussed at various locations and participants moved through to attend several. Topics included security issues, budgets and financial concerns, energy and utilities, benchmarking, environment, vehicles, new buildings, and staffing challenges.

After the new officers were sworn in at the annual banquet, we had the pleasure of being entertained by the Stoughton Norwegian Dancers. These high school students enabled us to experience first-hand the strong Scandinavian influence of the Midwest.

Wednesday morning we were greeted by our hosts in costume at a Halloween breakfast. Kris Ackerbauer apparently received some second looks by security personnel at the conference center when he appeared in his full survival suit, complete with gas mask!

New officers for the coming year include: President Alan Bigger (University of Notre Dame), President-elect Clay Shetler (Goshen

College), Secretary John Ott (Ohio State University/OARDC), and Treasurer Jerry Carlson (Illinois State University).

A first for MAPPA, copies of electronic presentations from this year's conference will be posted to the MAPPA Web Page at www.M-APPA.org. If you were unable to attend the conference or if you attended but would like to visit again, please take a look.

A special thanks to our program and host committees, whose hard work exemplified the theme of Partners in Learning. We look forward to next year's annual conference in Ames, Iowa, September 29-October 2, 2002.

* * *

Central Regional Al Stoverink CAPPA President

e had a great time at CAPPA 2001 at Southeast Missouri State University. The educational program provided a smorgasbord of options, and the exhibit hall held a record number of display booths, representing a wide range of business partner products and services.

Special thanks goes to APPA President Gary Reynolds for giving his time to be with us throughout the entire conference, being our keynote speaker for the second day, and presenting a full day of programming. Gary's presentations, and those of several others, were top quality and representative of programs offered at the International APPA's Institute and annual Educational Facilities Leadership Forum.

At our business meeting, Darrel Meyer was elected third vice president to host the 2004 conference in Kansas City. Darrel was also recently appointed to the APPA Awards and Recognition Committee and will serve on our CAPPA Region Awards committee as well. Pat Apel was reelected

to serve another two-year term as our education chair and Neil Morgenson was reelected to serve another twoyear term as the treasurer. An announcement was made that Bob Hutton was recently appointed to serve on the APPA Professional Affairs Committee. Amendments were adopted to the Bylaws that provide for the immediate past president to chair the Awards committee and provides for Emeritus membership for qualifying business partners. The group was advised that the Executive Committee would be looking at a possible consolidation of the Bylaws and Constitution documents at the spring Board meeting; any proposed changes will be mailed to the membership at least 60 days prior to next year's conference.

We have three standing committees provided for in our Constitution and Bylaws: awards, membership, and education. We want to energize these committees with active participation from "enthusiastic volunteers," so as to engage the membership more directly in carrying out the mission of our Association. In order to do this more effectively, CAPPA President Al Stoverink is asking for more "enthusiastic volunteers," and has committed to personally work with each committee chair to facilitate bringing each committee together for a meeting between now and the semi-annual Board meeting, held in April. To achieve this objective, we will try to coordinate meetings of the committees with the Technology Conference in San Antonio or some other time convenient to most members of the

John Skubal, who is the immediate past president, will chair the Awards committee this year, per the amended Bylaws. Due to a deadline of January 31 for APPA award nominations, the committee will meet in Kansas City within the next 45 days to map out a strategy to see that deserving members of our association have an

opportunity to be recognized in the coming year. Other volunteers who have agreed to serve on this important committee are Lalo Gomez (Texas), David Gronquist (Kansas), and Neil Morgenson (Nebraska).

Neal Swarnes, membership chair, will continue to chair the Membership committee. He already recruited a number of enthusiastic volunteers to serve as committee members for this year and held a committee meeting during the recent conference.

Pat Apel, education chair, will also continue to chair the Education committee. Pat is hard at work putting together the Technology Conference, but there is great interest in establishing other similar programs or one-day workshops in all parts of the region for front-line staff. Of particular interest is the potential to forge a partnership with the Physical Plant Crafts Association (PPCA), who were very ably represented at our conference by their current President, Bonnie Crippen, and their current Secretary, Charlene Badger.

Next year will be the 50th Anniversary Conference to be held at Black Hills, South Dakota. Art Jones and company are planning their version of a great educational and networking experience. As the conference is rotated to different areas of the CAPPA region and sponsored by different campuses each year, each conference takes on its own flavor and a slightly different mix of people are able to attend.

Part of our mission is to facilitate ample opportunities for engagement as an association by individual members. We are constantly on the hunt for "enthusiastic volunteers" who want to contribute to the development of the organization in some way. We are all very busy people so we are not looking for "solo pilots" who have to take on major tasks with little or no help. We are an association of over 700 members, so just a little from a few can serve a lot. As was so aptly presented by APPA President

Gary Reynolds, "Leadership is personal." Let's make it so.

Rocky Mountain Region Paul F. Smith RMA President

eptember of 2001 will be with us all for the rest of our lives. The tragedy that occurred on September 11, 2001, continues to impact us both in our professional and personal lives. In the aftermath of this nation-unifying event, the 2001 RMA educational conference was held in Tucson, Arizona, and was hosted by Pima Community College from September 13-15, 2001.

Our theme for the conference, Endless Horizons, was the key to both our educational program and our companion programs. In Tucson we are blessed with great weather (sometimes a little hot) that allows us, it seems, to see forever; and as facilities management professionals, there is always the feeling that the horizon of providing exceptional customer service to our institutions is hard to reach and sustain. With these thoughts in mind we crafted a program and, later, adapted our program (due to the impossibility of some of our presenters and business partners to get to Tucson) to prepare us for endless horizons.

The conference started on Thursday with the opportunity for conference attendees to participate in various activities. For those so inclined, there was the annual RMA Golf Tournament, which was held at the Starr Pass Golf Course; a venue often used in the past for the PGA Tucson Open. The attendees also had a choice of two different trips to expose them to the uniqueness of southern Arizona. One trip was a shopping tour with lunch to Nogales, Sonora, Mexico and Tubac, Arizona (site of an old 16th Century Spanish Mission and an artists' colony). The other trip was to Kartchner Caverns, the newest cavern complex open to the public in the U.S. These caverns are an incredible natural wonder and because they are still growing, tour groups are limited in number, so this group can truly brag that they saw something few people have seen.

Our very busy Thursday also included our annual business meeting. During this meeting Mark Shively, associate director of physical plant, University of Wyoming, was elected third vice president. Thursday's events concluded when all attendees, members, companions, and business partners gathered at our icebreaker social that included a make-your-own-sundae buffet. (A tradition started by Bob Lashway,



New 3rd Vice President, Mark Shively, University of Wyoming, regales all at RMA Annual Meeting with tales of Jackson Lake Lodge.



The Redhouse Dancers providing RMA members with a glimpse of our Native American heritage.

Montana State University, at our 1995 educational conference.) The icebreaker also served as the opening for our business partners' show.

The next two days were the heart of our educational conference. Unfortunately, several of our presenters were unable to come and we had to juggle presentations and ask for help from our business partners and others to provide new presentations. In the true facilities spirit, everyone worked together to get the job done. The substitute presenters did an outstanding job and as a result the educational program was very successful. Our topics included: e-procurement; the chilled water production and distribution system at the University of Arizona; violence in the workplace; relationship CPR (managing and repairing relationships with our bosses, peers, coworkers, and customers); a BACNET/LONWORKS panel discussion; a talk on a day in the life of a facilities manager; the use of wireless technology in controls applications; the use of software to do project cost estimating; how to manage birds on your buildings; and a facilities tour of Biosphere II.

I heard positive comments about all of the sessions, but several were considered exceptional. Relationship CPR presented by Mr. Brad Harper had people talking all morning on Friday. The BACNET/LONWORKS panel provide valuable insight into the development of a common protocol for interoperability, as well as what we

as facilities officers can do to ensure we get what we need when procuring new or upgrading building automation systems. The visit and behind the scenes tour of Biosphere II, a \$150 million, self-contained environment, was another highlight of our educational program. This facility constructed in the early 1990s was first used as a closed biosphere to see how and if it would be possible for a small group of people to live and sustain themselves for a two-year period without any assistance from outside the biosphere. Biosphere II is now a part of Columbia University and provides an educational experience at the undergraduate level, and is also used for experiments by worldrenowned scientists testing hypotheses about global warming, increased build-up of carbon dioxide, among other things. This was truly a unique trip and experience.

On Friday evening, the conference visited another world-class facility: the Arizona-Sonora Desert Museum. We were privileged to tour the Museum, which is in reality part zoo, part museum, and part botanical garden. We saw everything from the big and small of the Arizona-Sonora area B to big horn sheep to humming birds. Also that evening we were treated to a glimpse of our Native American heritage with a variety of dances, chants, and music. At the end of the evening, everyone joined in the Friendship Dance, which was so appropriate considering the events,



What a swimming hole: Biosphere II ocean environment.

which had taken place on September 11.

Our banquet on Saturday evening provided a setting for recognizing those RMA members who had contributed during the past year both at the national and regional level. Retiring President Craig Bohn presented awards of appreciation to his board members and committee chairs. He also presented a President's Award to Wayne White for exceptional service to RMA and APPA. The Lee Newman Award, for the most consistently supportive business partner, was presented to GLHN Architects and Engineers, Inc. and accepted by their President, Bill Nelson. The Val



It is amazing what a facilities engineer can do with an erector set: Bioshpere II.

Petersen Award for best article(s) or best reporting by a state correspondent was presented to Frank Fox of the University of Wyoming.

The next year should be an exciting one for everyone in the higher education facilities business. I am excited about serving as President during the coming year and working with our board and committee chairs to improve the educational opportunities for our membership. We are all going to be challenged because of the events that occurred last September, but I have faith that we will continue to find solutions to the challenges.

This coming year RMA will hold its 50th education conference. The conference will be held from September 15-17, 2002 at the Banff Centre, Banff, Alberta, Canada. Steve Baldick and

the University of Calgary and the Banff Centre will host this conference. This will be a great place to find our higher expectations and visit a truly remarkable area. I hope to see many old faces, as well as many new faces, in Banff.

Pacific Coast Region Anna Weskerna PCAPPA Newsletter Editor

embers of PCAPPA went "beyond the boundary" to Vancouver, British Columbia, Canada, for their 50th Annual Meeting and Educational Conference from September 30 through October 3. The majestic Fairmont Hotel Vancouver, a dedicated heritage building and city landmark, located in the heart of Vancouver's thriving business, cultural, and shopping centers, was the conference site. Vancouver has the distinction of being Canada's most beautiful outdoor playground. In addition to being home to a highly diverse, multicultural population, it has developed and perfected a unique blend of nature and civilization. The impressive skyline showcases both snow-topped mountains and omnipresent skyscrapers. It is a veritable natural splendor within a sophisticated urban environment.

The Greater Vancouver area is served by 14 higher education institutions. The British Columbia Institute of Technology and other Lower Mainland Universities, Institutes, and Colleges hosted the conference. The theme of the conference was Beyond the Boundary: Excellence Through Technology and Innovation in Facilities Management, which exemplifies the challenges that facilities managers must face in times of rapid change.

The conference began on Saturday with a delightful four-hour dinner cruise around Vancouver's picturesque waterfront.

On Sunday the attendees were treated to an informative, educational



Registration desk at the PCAPPA regional meeting

tour of various campus facilities in downtown Vancouver. The day ended with an opening gala event for an opportunity to renew old friendships, meet new friends, and establish networking partners.

Dr. Tony Knowles, BCIT president, greeted the attendees with a warm, welcoming address on Monday morning. Then, the first formal educational session began with an invigorating keynote address by David Gouthro, president of The Consulting Edge: Movers and Shakers Inc., a Vancouver-based management development and consulting firm, on "Building the Passion to Lead in Times of Change."

Monday and Tuesday were booked with educational sessions, business partner exhibits, lots of delicious food, and a wonderful networking opportunity.

Since the workshops keyed in on critical issues that many of us are currently facing, it was a pleasure to see people relax and interact during our annual banquet on Tuesday evening. As always, it was great to see everyone together again, providing an opportunity to acknowledge our accomplishments and solidarity.

Lander Medlin, executive vice president of APPA, was pleasantly among us this year as she was notably absent for the first time last year due to illness. She provided a thread to other regions and all the activities being undertaken by APPA. Chong-Hie Choi, director of budget and fiscal planning for APPA, was faithfully present as PCAPPA's liaison and supporter of our activities. Over the years, these two dynamic ladies have seen PCAPPA's growth and supported our continued improved quality of service to facilities management leaders in our region.

At this year's annual awards banquet, to open our ceremony we had a special opportunity to witness a First Nations Elder and her prayer. After the benediction by long time PCAPPA member, past secretary/treasurer, and emeritus member Dale Klein, everyone enjoyed a delectable meal. After dinner it was, once again, our great pleasure to recognize individuals and institutions for their support and accomplishments toward improving our organization.

Certificates of Appreciation were awarded to the conference hosts:

Continued on page 15



American college campuses average 1,800 fires a year. But according to National Fire Protection Association (NFPA) data, no fatalities have ever occurred in a dormitory with a properly installed and maintained sprinkler system.

Victaulic® sprinkler systems can be installed during semester breaks, making it easy for you to protect your students.

Our Pressfit® system and FIT® technology — along with FireLock™ system components — enable a quicker installation. You'll enjoy considerable savings in time and money, especially when compared with traditional threaded piping.

Be smart, be safe. And be sure to find out how you can save time, money, and maybe even lives. For more information, ask your local contractor, call us at 1-800-PICK-VIC, or visit www.collegefiresafety.org



Continued from page 13

British Columbia Institute of Technology, Capilano College, Douglas College, Langara College, Kwantlen University College, Simon Fraser University, University College of the Cariboo, University College of the Fraser Valley and University of British Columbia. The PCAPPA Presidential Certificate of Appreciation was awarded to Anna Weskerna, newsletter editor, from Idaho State University, and Hildo Hernandez, education chair, from CSU Northridge, who retired this past December and will be greatly missed by the organization.

Tuesday evening's award banquet was highlighted by a challenge from JR Huffman of San Joaquin Chemical to "dig deep" to support the PCAPPA fund for service workers and families in need due to the September 11 attack. Scott Burns from San Diego State University announced a donation to the fund from the SDSU Facilities Workers of \$2,500. The total raised to date for the New York Facilities Workers is nearing \$10,000, thanks to the people and organizations of San Joaquin Chemical, San Diego State, and PCAPPA.

Brian Worley, University of LaVerne, eloquently concluded his tenure as PCAPPA president and turned over the gavel to this years' president, Robert Quirk, California State University/Long Beach.

On Wednesday golfers joined in the fun at the golf tournament held at the Furry Creek Country Club, just north of Vancouver off the "Sea to Sky" highway and known as "the most panoramic gold course in British Columbia," and it truly was a beautiful sight. Eagles, black bears, and white-tailed deer are frequent visitors to this par 72, 18-hole championship course designed by Robert Muir Graves and built in 1993. At the end of the tournament, the players were treated to a 19th hole banquet and special awards to the outstanding players of the day.

The PCAPPA board continues to enthusiastically support the educa-

tional mission of the association and has allocated \$13,000 in the budget for educational opportunities for its members. In fiscal year 2000-2001, six scholarships were awarded at \$1,500 per person. The scholarships were awarded in cooperation with San Joaquin Chemical Inc. and APPA. PCAPPA continues to value education as one of the most important services to its members. Also, the strong alliance between APPA and PCAPPA continues to grow. In this coming year, the education committee will continue to work on scholarships, annual conference program sessions, host funding assistance, and services delivered electronically on the PCAP-PA web page.

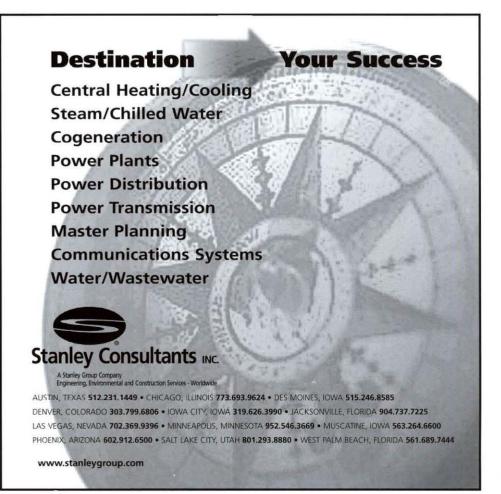
A giant thank you goes to John Wong, PCAPPA president-elect, and his wonderful, hard-working staff for providing PCAPPA with an excellent conference. There were a total of 230 attendees at this 50th annual educa-



Brian Worley, left, University of Laverne, passes the gavel to this year's PCAPPA President Robert Quirk, California State University/Long Beach

tional conference, including 67 business partners and speakers, and a fantastic participation of 28 business partner booths.

The University of Nevada/Reno and Facilities Director Berger (Buzz)



Nelson will host the 2002 PCAPPA 51st annual meeting and educational conference. This program is already promising to be another fun-filled and rewarding educational experience for the attendees.

We have an exciting year ahead of us!

Australasian Region Andrew Frowd AAPPA President

he AAPPA Regional Meeting was held in Canberra, October 7-10, and again, as is our practice, was combined with the annual conference for the Association of Tertiary Education Administrators (ATEM). The theme for the conference was "Federations of Learning, Research and Technology in the 21st Century." The conference theme was developed within the context of the following setting.



Phil Cox addresses the AAPPA Board

As funds for education have progressively been cut, tertiary institutions have been forced to seek alternative funding sources. In doing so, a variety of partnerships have emerged. Universities are collaborating with colleges of technical and further education with industry and government, and with a variety of pri-

vate education providers—both onand off-shore.

While these federations may have made education more accessible to larger and more diverse groups, will the result be a reinforcement of identity for individual institutions? Will the quality of courses be affected by partnership demands? What benefit, if any, will new federations bring to local communities and regions?

The model for these collaborative conferences is that we have common plenary sessions, which cover issues affecting the higher education sector as a whole, interspersed with individual special interest streams. This year, AAPPA ran three concurrent streams, with a fourth at a number of times. The papers presented by our members were again of a very high quality, and can be accessed through the AAPPA Web page (www.aappa.com).

We were delighted to have Phil Cox (and Marsha) join us for the conference as part of their tour "Downunder." Phil presented one of the keynote plenary sessions, and outlined how Cornell University had undertaken its "transformational leadership" program to create a better workplace where everybody strives to achieve their full potential. The story of the journey at Cornell was very relevant to our AAPPA members, as well as our ATEM colleagues, as many

Facility Support Services

As you may have heard, a recent inspection program is expected by officials concerning environmental and safety compliance. <u>Is your facility ready for this audit?</u>

EPA OSHA STATE OFFICIALS



Are You Ready For Unexpected Company? Call Us For Compliance! Office Locations:
Facility Support Services LLC
2685 State Street
Hamden, Connecticut 06517
352 Country Lane
Algonquin, Illinois 60102

1-203-288-1281 EMAIL: Support@SNET.NET



From left, outgoing board member John Simmons, business partner Mark Kelly, outgoing president Robert Kelly, and business partner Kenn Fisher at the Woods Bagot sponsored wine tasting

of us are struggling with ways to provide even better service to our customers.

Canberra is Australia's national capital, and as such offers many

attractions to take up the free time of our conference delegates. Some of the highlights were a tour through the back of our Parliament House, and the AAPPA Conference Dinner at our recently opened National Museum. This allowed our members to have a

private viewing of the Museum exhibits, which covered much of our recent history.

Our annual meeting built upon a very successful year for AAPPA. Our Middle Management for Facilities Managers course continues to be well attended and receives great reviews from our members. This year we again conducted two-day workshops, one in Sydney and one in Auckland,

on the theme of Strategic Asset Management. Building on the input from our workshops, AAPPA published a Strategic Asset Management guideline, containing a user guide to conducting a condition audit.

Another major achievement for AAPPA was the publishing of our new strategic plan, called "Navigating the Future," which builds on the three C's of APPA's strategic plan, and sets our regional direction for the next five years.

AAPPA continues to thrive through the commitment and dedication of its Board and co-opted members. Again this year, we were fortunate to have a high quality group of members nominated to the Board, and dedicate themselves to furthering the practice of quality facilities management in Australasian institutions.



Executive Summary

Professional Development: An Expense or an Investment

by Lander Medlin

In this issue there is an article written by James O. Roberts, APPA's vice president for educational programs, in which he states, "In facilities management, dealing with change is a daily occurrence. In the past 20 years, our profession has moved from one of managers, training, and paper, to leadership, education, and technology."

Additionally, we have moved from buildings codified as expenses to strategic institutional assets (with a replacement value that appreciably exceeds most institutions' endowment)—resources that require strong management and leadership skills, by all members of the facilities staff. John Gardner, a leading author on leadership and a former university president and statesman, wrote: "The pace of change is swift. Institutions that have lost their capacity to adapt pay a heavy price. Continuous renewal is necessary."

In essence, institutions consist of two major components: "people" and "things." For the facilities professional, the buildings we seek to construct and maintain represent some of those important "things." Much has been written about our efforts to preserve the built environment and the need for continuous renewal.

But what about the importance of the "people"? Are we intentionally doing enough to maintain and improve the skills of the people at our institutions? For it is the people that are facing this rapidly and dramatically changing environment. Therefore, we must provide them with up-todate training and professional development.

Lander Medlin is APPA's executive vice president. She can be reached at lander@appa.org.

In order to provide the appropriate training and development for facilities professionals, we must first understand the challenges that are impacting and changing our industry. Below are just some of the changes facing education and the facilities profession.

- Technological Revolution—
 Information technology and the Internet are challenging the traditions of the education community and reshaping the way we learn, communicate, and do business.
- Public Accountability—The public perception of the way we do business, the cost of doing business, and the outcomes we produce are measured, skeptical, and wary at best.
- Globalization—The growing diversity and shifting demographics at our institutions and within our workforce bring new issues that will require different approaches.
- Regulations—Governmental and environmental rules and regulations are strangling us both financially and operationally and our ability to consider, maybe even embrace, them will be required.
- Education as a Business—
 Competition and a business-driven model are fast characterizing our educational enterprise.
- Changes in Leadership—People at all levels are becoming decisionmakers and must develop a broader understanding of the institution.

These changes, and the challenges or opportunities they present, are daunting. Therefore, we must become more flexible and incorporate new ways of thinking about the educational enterprise. It is no longer just about managing the built environment, it's about understanding and translating stakeholders' needs into the right built environment.

This type of adaptation does not come naturally to any of us. We all need training that will teach us how to make the necessary changes and ultimately become more effective in the delivery of our business and services.

Do you consider your professional development (and that of your staff) an expense or an investment? In these times of economic adversity, it may appear necessary to reduce your professional development commitment. However, I encourage you to continue to make the investment. Consider the following:

- Your staff represents the largest single fixed resource in your operating budget.
- Your staff makes the physical delivery of education and learning happen daily.
- Your staff touches the lives of every stakeholder on the campus in one way or another.
- Your staff must know how to use and improve upon today's technologies and create streamlined processes.
- Successful business and process changes arise chiefly through the management and leadership of and by people.

As rapidly as the world and the institution are changing, so to are the training and development needs of your staff. Therefore, it is reasonable to consider the cost associated with professional development as a long-term investment rather than a one-time, short-term expense.

Hence, when you choose educational programs, publications, and information, you are looking for real value. APPA's reservoir of educational programs and publications continue to provide the best value for the educational facilities professional. In addition, APPA's delivery system con-

tinues to be modified and adapted to meet your individual and institutional changing needs. For example:

- · The Institute for Facilities Management is offered twice a year (January and September) and provides education across the four core competencies of facilities management: General Administration & Finance; Operations & Maintenance; Energy & Utilities; and Planning, Design & Construction. The educational sessions are carefully designed, delivered, and organized to ensure that both maximum learning occurs and people connections are made, enhancing access to the rich network of colleagues and other professionals across the industry.
- The Leadership Academy is a three-track system (consisting of Individual Effectiveness Skills, Organizational Leadership Skills, and Professional Development Leadership Skills) offered each June. The Academy develops the essential leadership skills that every individual must have in order to effectively deliver facilities services in an ever-changing environment.
- The Individual Effectiveness
 Skills-on-Campus program noted
 above, along with the other two
 tracks of the Leadership Academy's
 curriculum, can now be delivered
 at your institution, thereby cost
 effectively canvassing a larger
 number of your staff at the same
 time.
- The Educational Facilities Leadership Forum replaces the Annual Meeting and Educational Conference in form, function, and focus. The Forum, offered every July beginning in 2002, will emphasize skills, ideas, and insights you can take home with you and put into practice. The Forum will feature interactive discussion panels, target experts in a variety of topical areas, different perspectives on common industry concerns, stimulating open discussion on relevant issues in educational facilities management, and provide a marketplace of products and ideas.

 APPA's Facilities Manager magazine (the cornerstone of your membership services) and the publications program are invaluable print and electronic resources on the critical issues that you have said are relevant and pertinent to the effective, daily delivery of your job responsibilities.

The importance and necessity of training and professional development

could not have been captured more aptly than by Dr. Janet Lapp, who, this past July in Montreal, said, "The only thing more tragic than losing a staff member you have trained is never training that staff member at all." Make sure your long-term organization and institution investments include training and development for your staff, and yourself.



Put paperless work order processing in the palm of your hand! Maintenance Manager II Mobile connects powerful Eagle Facilities Maintenance Management Software (CMMS) with convenient Palm-OS handheld PDAs.

Maintenance Manager II Mobile is the first and only handheld CMMS to *store* equipment histories on the handheld unit, giving technicians unprecedented access to relevant information at the equipment site.

- · Call up Repair Histories at the Equipment Site
- · View Work Order Details On-Site
- · Create New Work Orders in the Field
- · Record Parts Usage, Time/Date Completed
- · Check off Tasks as You Go
- · Complete Work Orders On-Site
- · Attach Multiple Pieces of Equipment to One Work Order
- · Scan Equipment Barcodes

Maintenance departments that implement Maintenance Manager II Mobile will notice *substantial improvements* in maintenance scheduling, and reductions in data entry and paperwork requirements.

Maintenance Manager II and Maintenance Manager II Mobile interface with many popular Building Automation Systems. Call us for more information. 1.800.388.3268.

Eagle

10500 N. Port Washington Road, Mequon WI 53092 Phone: 1.800.388.3268 or 1.262.241.3845 Email: sales@eaglecmms.com Web: www.eaglecmms.com

Membership Matters

Networking Without Boundaries

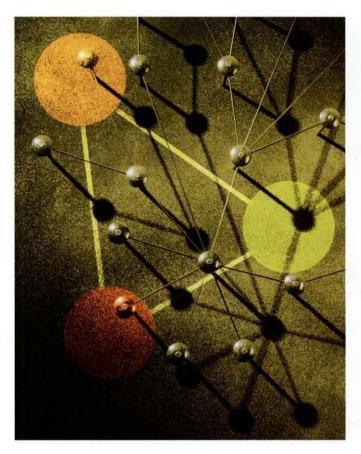
by Dina Murray

In addition to APPA's Educational Facilities Leadership Forum, formerly the Annual Meeting, APPA's seven regions also offer a wide variety of learning and networking opportunities at various times throughout the year. APPA's Educational Facilities Leadership Forum takes place in midsummer and regional meetings occur in September and October. Each meeting and program has a different flavor and all educational facilities professionals are welcome to attend any regional meeting regardless of geographic location.

Having attended the ERAPPA and CAPPA regional meetings, I had an opportunity to meet many educational facilities professionals from a wide range of careers. While most attendees were employed in the region where they attended the meeting, several were not. Steve Glazner, the staff liaison to the SRAPPA region, brought this anomaly—the usual trend is only attending the regional meeting in your so-called backyard—to my attention. This is important to note for several reasons.

The preface for desired outcome number two, *collaboration*, of APPA's strategic plan states, "The organization will engage in symbiotic and collaborative relationships and partnerships. The organization is inclusive and accessible, serving facilities professionals, their institutions, and related communities." The word collaboration is usually used when talking about bringing groups outside

Dina Murray, APPA's director of member services since April 1999, recently left APPA to work for the National Spa and Pool Institute. We wish her well in her new opportunity.



of APPA together, but with seven regions, one recognized chapter, GAPPA, and many chapters that operate independently of APPA, collaboration from within is also a valid concern.

International and regional meetings aren't just for those who reside and are employed in a particular region. While geographic lines and divisions do exist on maps, they are, hopefully, nonexistent within APPA regions.

Henry Ford said, "Coming together is a beginning, staying together is progress, and working together is success." This statement is certainly evident in the formation and success of regional meetings, as well as APPA's conference, the Educational Facilities Leadership Forum. Just as members and participants from different parts

of a region come together for regional meetings, APPA relies on a larger, worldwide base of members and participants to make its meeting, seminars, and other offerings a success.

APPA's redesigned annual meeting, the Educational Facilities Leadership Forum, has a new track format that will offer attendees the opportunity to explore different outlooks and ways of thinking about pertinent topics. This format is also an attempt to make your educational and

professional budgets go farther by offering a comprehensive learning and networking experience. The Forum will be very different from most regional meetings. This difference could be your rationale for attending both the Forum and regional meetings, as they each have unique features and perspectives. See Jim Roberts' article in this issue for more details.

If you are interested in learning more about APPA's upcoming international and regional meetings, please visit our website at http://www.appa.org/membership. Information is listed for 2002 and 2003 so you will able to plan ahead and make the most of the educational and networking opportunities available to you as APPA members.

How does your school measure up?



Productivity Total Costs Appearance Environmental Health

Measuring up to school facility cleaning and maintenance standards is not child's play. With

challenges today such as increased enrollments, aging buildings and budget constraints, we at Butcher's understand that the cleaning and maintenance of schools is now more difficult than ever. Based on an active collaboration with Schools and Universities, Butcher's has developed The Graduate Program™,

a comprehensive training program targeted to clean for health, safety and appearance. By providing

professional training and support tools, The Graduate Program supplies realworld solutions to your toughest maintenance challenges. For more information on how Butcher's training and quality products can help your school "measure up," call us at

1-800-225-9475.

The Butcher Company Marlborough, MA 01752 USA 1-800-225-9475 • www.butchers.com



Field Notes

Doing More With Less

by James E. Christenson

"We have done so much with so little for so long that we can now do everything with nothing forever."

> —Anonymous, but attributed to the U.S. Navy Seabees

he theme of this issue of Facilities Manager is Professional Development. At one time, some of us thought of ourselves as plant engineers, not much different from those in industry. More recently, we adopted the term facilities manager or facilities professional as more appropriate. In an age of rapid change, we find that educational institutions must also adapt to a new mission orientation: learning, discovery, and engagement. APPA's President, Gary Reynolds, urges us not just to be facilities managers or asset managers, but to be stewards of the institution's mission. And, as has been discussed so frequently, today's successful chief facilities officers are, above all, called to be leaders in their universities, colleges, or schools. The facilities professional is expected to play many constantly changing roles.

But some things do not change. At the recent MAPPA educational conference, the dominant theme in informal discussion, the experience exchange and "hot topics" discussion was the reduction of funding. For some institutions, this has been going on for two decades, vacillating between freezes in hiring, reductions in budgets already allocated, and promises of reductions in future years' budgets—

Jim Christenson retired last year after serving 40 years in university and federal facilities management. He can be reached at jchriste@umich.edu.



sometimes all three simultaneously. Reported reductions this year and in future years range from 2 to 6 percent, or more. When such reductions are combined with the effects of inflation and compounded annually, the resulting facilities budget can force staffing below 75 percent of present levels in four or five years. Ironically, many institutions still are moving forward with aggressive building programs, which will cause future effective staffing for a unit area to be further reduced.

So the question is, how does a facilities professional who is a steward of an institution's enlightened mission lead the facilities group and the institution to greatness when resources are shrinking drastically? There are no easy answers. And most of the answers I will recite are probably ones you have already tried. But let's go through the checklist anyway:

- · Eliminate waste
- Reduce consumption of energy
- Improve productivity

 Prioritize and eliminate facilities activities.

Eliminate Waste

This one is so obvious that most of you will say that was done years ago. But was it? Waste can be identified at many levels. The chief facilities officer should be looking at the "forest" level. Everyone may be working as hard as they can. But are they doing the right things? Are things being done with great efficiency and enthusiasm that should not be done at all?

Identifying waste, though, is not a one-person show. Nearly everyone in an organization is ready to talk about the waste that he or she sees every day. You may think they only are seeing things from the "tree" level, but as the forest is made up of trees, so wasted funds add up to significant amounts of potential discretionary money. Empowerment-sharing power with those who do the real work-has so many advantages that, especially when funds are tight, it is criminal not to practice it. Twenty years ago, in his book Out of the Crisis, W. Edwards Deming listed 14 points for management. Point number eight was, in his words, "Drive out fear, so that everyone may work effectively for the company."

Eliminating fear in an organization is only one aspect of empowerment. But fear of getting in trouble with the boss is the main reason non-empowered workers refuse to identify the waste they see all around them. In addition, employees in hierarchical organizations often contribute to the waste in two ways: they rigidly follow policy even though their common sense tells them there is a more effective and cost-saving solution, and they spend significant work time discussing with their fellow workers and

their customers the shortcomings of those rigid task-masters in the chain of command. Training these people, then freeing them to make their own decisions within boundaries, and assuring them that ideas and reports of waste are welcome—not punishable by death—can go far in eliminating waste while making the workplace much more pleasant.

Reduce Consumption of Energy

Many others have written and will continue to write about methods of reducing the consumption of energy. I only wish to emphasize that for most institutions a sharp focus on the ethics and economics of sound energy management can yield major amounts of discretionary funds. Perhaps your institution should weigh the advantages of living with 78-degree temperatures in summer, 68-degrees in winter, and restricted building heating/cooling hours so that a dozen faculty and staff members can be retained versus keeping the same temperature throughout the year and losing those people. A suggested order of attack on energy usage is 1) eliminate pure waste, 2) be sure the HVAC systems are well-maintained and calibrated, 3) adjust temperatures to seasonally appropriate levels, 4) restrict hours and days of building heating/cooling, and 5) invest money in energy conservation measures, usually retrofits that have a payback of five years or less. The unit cost of energy will not go down. Without decisive action, energy costs will force out the people who make an institution run.

Improve Productivity

Assuming that work that should not be done at all has already been eliminated, there are four sequential aspects of productivity: being at the institution, being at the work site, working, working efficiently.

It is amazing how sickly people are at educational institutions. It is not

It is amazing how sickly people are at educational institutions. It is not uncommon for many people to use 12 to 15 days of sick leave a year, while a few others are always at work.

uncommon for many people to use 12 to 15 days of sick leave a year, while a few others are always at work. Policing sick time is unsavory business, but may be necessary if there is no incentive to bank sick leave for a catastrophic illness or as a means to buy health insurance in retirement. Combined time off (no distinction between sick leave and vacation time) is a good way to remove the guilt and the need for policing, but requires a uniform

approach by the entire institution, or for all state employees. If the work climate is ideal, most staff members will not abuse sick leave and will put pressure on those who do.

Reducing the time away from work because of accident-related injuries may be another method of increasing productivity. If a safe work environment is carefully nurtured, I am convinced, based on experience at two major universities, that time away from work for job-related injuries should be no more than 0.1 percent of the total facilities workforce. We owe everyone a safe work environment; but it also pays tangible dividends in productivity. The first step in productivity improvement, then, is to get everyone to show up at the institution for work when they are not on earned vacation or legitimately sick.

Continued on page 25

COMMERCIAL & RESIDENTIAL INSURANCE RESTORATION SPECIALISTS



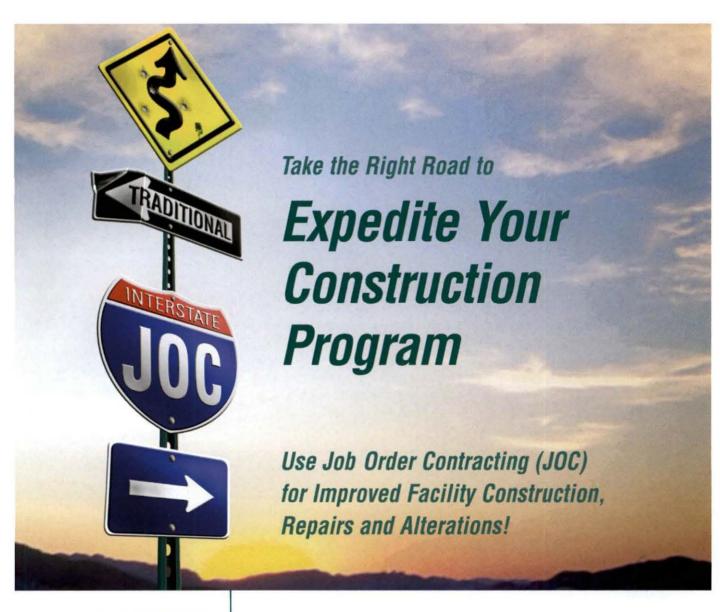
Professionalism, Knowledge, Resources... When Disaster Strikes

Restoration Services:

- Structural Drying & Dehumidification
- · Restorative Cleaning
- Art & Furniture Restoration
- Document & Media Restoration
- Electronics Reclamation
- Industrial Equipment Restoration
- · Biohazard Remediation
- Mold Remediation
- · Reconstruction Services
- Nationwide CAT Response Team

- 24 Hour Emergency Service -

1924 Greenspring Drive • Timonium, MD 21093 • 410-453-9000 • Fax 410-453-9002 10820 D Hannah Street • Beltsville, MD 20705 • 888-724-7363 • Fax 301-595-5674



YOU DON'T PAY

if you don't use
the program
we develop
for you it doesn't get
more simple
than that.

Over 50 of the nation's leading campuses use JOC! JOC is a method to procure construction services that saves time, saves money and increases quality. The Gordian Group is the premier provider of JOC development and implementation services. We are the turn-key solution provider offering coordinated and customizable products and services which include:

- Complete service package to minimize investment of your staff's time.
- On-site implementation services delivered by experienced JOC professionals.
- Complete training for University and contractor staffs.
- Most comprehensive Construction Task Catalog in the industry.
- Most comprehensive Technical Specifications in the industry.
- Customizable, easy-to-use, management software.



For more information, visit www.jocinfo.com or call us at: 800/874-2291

Continued from page 23

Unfortunately, most people who work in a facilities organization don't report to their office and stay there for the day. They may have tasks all over the campus on any given day. Appropriate transportation is critical to the operation of the department. Investment in well-stocked service vehicles and in adequate, well-placed service vehicle parking can greatly leverage the time of those who provide support to the institution's facilities.

Zone or area maintenance can help reduce the number of vehicles needed, the time lost in transportation, and improve service; but not everyone can be placed in zones. Making sure materials are available at the work site prevents unnecessary trips. The second challenge then is to determine how to maximize the time each person spends at the site where the work is to be done.

The third challenge is not easily addressed. Facilities people are usually spread too thin for a supervisor to be present with each group. Unless each person is motivated to give a solid day's work, even a person who has one work site for the entire day may not spend eight hours working. And, while statistical work sampling may provide some one-time information, it has several shortcomings and provides no long-term measure. On a construction or renovation job, progress can be measured against a standard estimate. But that is more difficult with preventive and predictive maintenance work. It is often possible, in fact, to fake PM work completion, and the truth will not be known until equipment begins to break down. So we have to depend heavily on self-motivation. This means we need to hire the right people and provide a work environment that makes it easier and more rewarding to work than to do anything else.

Finally, if we have maximized the amount of time at the institution, at the work site, and working, how can we still increase productivity? Here is

where wise investment can again pay dividends. I have too often seen well-meaning supervisors and managers squeeze the equipment budget mercilessly. Custodians can accomplish much more with the same effort if they are provided the right equipment for the job and if it is well-maintained. The same is true in trades work, grounds care, and trash collection. As with adequate transportation and materials support, the right tools for the job leverage the efforts of each individual.

Prioritize

If you have done everything else, and the budget is still smaller than the demands on it, the tough decisions must be made. The mechanism is simple: list all tasks in order of importance to the mission. The execution is difficult: eliminate the least important. It may be interior painting. Office trash collection may have to be less

It is often possible, in fact, to fake PM work completion, and the truth will not be known until equipment begins to break down.

frequent, less grass mowed, no flowers planted. Each institution must make choices so that the really important work can continue.

These are times that test the mettle of management and the vision of leadership. Living within a shrinking budget while actively supporting the vital mission of your institution requires your best wisdom and that of each member of your team.



WFF FACILITY SERVICES

A NATIONAL COLLEGE/UNIVERSITY CUSTODIAL SERVICE SPECIALIST



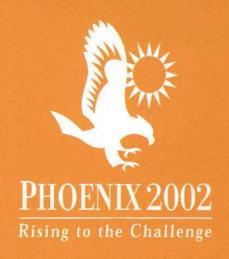
Our singular goal is to partner with physical plant directors to provide a clean environment for students, faculty and staff.

WFF Facility Services Partners

Abilene Christian University • Benedict College • Antioch Community High School • Belmont Abbey College • Capital University • Charleston Southern University • Embry-Riddle Aeronautical University • University of Evansville • Lewis & Clark Community College • Loyola University • Oklahoma Christian University • Otterbein College • Paine College • Seattle University • State of Washington • University of Central Oklahoma • University of Tulsa • Webster University

Contact Karl A. Oldag

2815 Olive Street • St. Louis, Missouri 63103
Phone: 800-652-2388 • URL: www.wfffacilityservices.com



THE EDUCATIONAL FACILITIES LEADERSHIP FORUM

ARE YOU READY FOR SOMETHING NEW?

Join us July 21-23 in Phoenix, Arizona, for a revolutionary new professional development experience for facilities professionals:
The Educational Facilities Leadership Forum. In response to members' wishes,
APPA has created a multi-track, high-level educational event where facilities professionals can come together to explore new ideas. The Forum emphasizes skills, ideas, and insights you can take home with you and put into practice.



Why You Should Attend

- Immerse yourself in your area of interest with our multiple track format
- · Participate in panel discussions that allow deep exploration of topics
- · All-invited speakers
- Collect practical ideas you can apply at your institution
- · Develop your peer network-where else can you find hundreds of your colleagues from higher education? The stories alone are worth the price of registration!

Six program tracks will be explored in detail

- Customer Service
- ♦ Innovation & Learning
- Internal Process Management
- Financial Management
- Technology Management
- Knowledge Management

Mark your calendar now for this innovative learning opportunity and look for more details to come. The Educational Facilities Leadership Forum-it's not your father's annual meeting!

Thanks to the Following Supporters

APPA thanks the following Business Partners for their generous support of the Educational Facilities Leadership Forum (as of 12/20/01).

Great sponsorship opportunities are still available. Act now to reserve yours! Call Andria Krug at 703-684-1446, ext. 230, or e-mail andria@appa.org.



famis

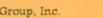
Butchers

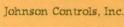




Lerch Bates and Associates, Inc.

Gordian Group, Inc.







Siemens, Inc.



Prism Computer Corporation

RMG, Inc.

Facility Asset Management

Maintenance Business Plans

by Matt Adams, P.E.

s a result of inequities in the quality of school buildings across the United States, new state and system-wide construction initiatives are underway. Large amounts of state bond funds have been earmarked for the renovation, upgrade, and new construction of classroom facilities. In Ohio, for example, approximately \$2.6 billion has been budgeted for classroom improvement work over ten years. This is also happening in New Jersey and other states as well.

The approval of large budgets for facility improvements is a huge benefit for educational institutions in itself. However, there is a new call for longterm stewardship. In Ohio, the legislation also stipulates that a local school receiving the state funds is responsible for best practice maintenance of the new facilities. In that case, each school district must compile and submit a Facility Maintenance Report. The FMR, as it is known, is a plan for stewardship of the new facilities for their designed life cycles. This creates an impressive level of communication and knowledge sharing. This initiative also raises the question: what isn't every maintenance organization required to submit a maintenance business plan?

Throughout institutional facilities management, the desire for improved

Matt Adams is president of The Adams Consulting Group, Atlanta, Georgia. He is co-chair of APPA's Trades Staffing Guidelines Task Force and can be reached at matt@adams-grp.com.



communications is very strong. In particular, the business agents of institutions continue to look for reporting and measurement tools for the various maintenance organizations that will demonstrate accountability for their considerable budgets. Most facilities managers rely on the basic budgetary process to provide this information, with respect to the year-by-year planning of service organizations. This however is only half of the equation. Budgets still only supply financial planners and senior administrators with the cost of providing maintenance. They are not given any meaningful quantification of the results of these expenditures. This is where a maintenance business plan is useful.

If you step back and consider this idea it is simple yet powerful. Were we to start a maintenance business from scratch and ask the bank for a loan, a business plan with a description of services, execution strategies, growth plans, and, naturally, costs projections would be fundamental. Business officers are accustomed to assessing information in this format.

Why then can't any maintenance organization, new or old, big or small, construct a business plan for the facilities manager or business officer that serves to effectively communicate a total picture of the department's workings?

The basic business plan used in the private sector contains many of the essentials of a maintenance business plan. Where they differ is in the accounting standards and the assumption of rapid organizational growth. In most cases, a maintenance business plan stresses ongoing continuous facilities asset improvement and not just overall growth in financial size. For the Ohio State Facilities Commission and other industry best practitioners, the maintenance departments must submit for approval a plan that incorporates at least the following:

Statement of Plan Objectives – this introductory section is focused on the communication of goals, objectives, resources requirements, and facilitation of stewardship.

Macro and detailed description of the facility assets – this includes the old, new, upgraded, and otherwise associated facilities incorporated into the district (or campus). Added to this is a facility inventory table that provides for construction and renovation dates, style of construction, type of HVAC system(s), occupying department, and building manager contact information. In addition, a physical description of the site and infrastructure is included.

Maintenance Function Descriptions – clear and concise definitions of the multiple maintenance related services. This is compiled in lay terminology and put in the context of the educational and stewardship mission of the district (campus). In other words, this is a description of what the department does and why.

Description of Key Performance Indica-

tors –using basic terminology, this provides a description of the spectrum of service levels for each function. These can be labeled, simple gradients such as: threshold, target, and optimal (as used by Sinclair Community College facilities department). The current versus project measurement for each maintenance function is delineated.

Milestone Implementation Schedule - this is a short- and long-term continuous improvement schedule. From each perspective of the submitting department, service center, and individual, specific, and measurable milestones are identified in the continuum to improve scores on key performance indicators. The resource requirements of each initiative are clearly footnoted. In addition, the status of ongoing or completed initiatives, tasks, etc., is presented.

Summarized Cost/Benefit Table - this is a simplified summary of the staff, budget, and total resource cost allocation per service center coupled with the metrics of key performance indicators. The purpose is to communicate a clear and simple relationship between resources consumed versus facilities management functions provided. In this way, non-facilities administrators and stakeholders can more clearly understand the corresponding costs associated with facilities management services. In addition, the negative impact of under funding is more clearly demonstrated.

Supporting Technical Data – this reference data is compiled to assist in providing detailed maintenance services implementation specifications. For school districts, continuity is a problem as a result of

high turnover of maintenance staff and administrators. The basic policy descriptions, macros of facilities management tasks, warrantee information, outsourced contact details, and all other basic information is either included in summarized format or located for easy retrieval.

Once the initial maintenance business plan is accepted, the plan(s) are easily located on the web. In this form, the plans become a knowledge base for all staff and administration. In addition, the data serves to educate the stakeholders and even taxpayers about the details and often complexities of facilities stewardship. Ongoing use of improvement initiatives, milestones, and performance indicators enables the maintenance business plan to become a living document that is updated each year.

TM

Maxiforce 1

Rigid and Collapsible Bollards

NEW: The MAGNIS Collapsible Padlock Bollard The O'KEEFE Removable Padlock Bollard Products to fit every budget!

The Maxiforce 1 Bollard Features:

- Can be lowered in either direction.
- Helps control through traffic. (Wrench Operated)
- A completely easy serviceable bollard. (Eliminates down time)
- Allows for the replacement of existing units (No digging up of most other in ground bases)
- Partial units can be purchased.
- Stock parts are readily available, but rarely a necessity.
- No more expensive replacements.

G. Reale Enterprises, Inc. 3444 Marshall Road Drexel Hill, PA 19026



Tel: (610) 623-2611 Fax: (610) 623-6384

ACCESSION PLANNING:

Who's Next at Bat

by James Christenson

For every complex question there is a simple answer, and it is wrong.

-Oscar Wilde

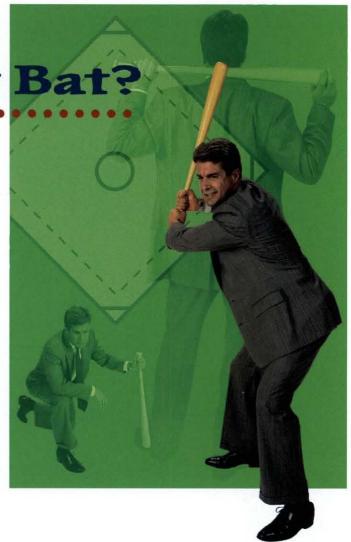
ho's up?" someone yells. No one comes forward. The pitcher fidgets. He has struck out the first two batters. He's hot. He wants to finish the inning in style. Finally, an embarrassed and unprepared player comes to the plate. Play resumes.

Many of us have played sandlot baseball—or we've watched as our children play pick-up games or Little League. In impromptu games, when there's no team manager and little planning, details like batting order are not high on the priority list. In fact, the team may suddenly realize that the next batter has left for dinner—or is behind the backstop playing with a stray dog.

The sudden realization that there is a vacant position isn't limited to kids' sports. Organizations have been known to come up short when someone asks, "Who will take his place?" The director suddenly decides to retire. Or she accepts an unexpected offer at a prestigious university 2,000 miles away. Who will carry on the great work? Who will maintain the momentum that took so long to build? Those left behind realize too late that they should have seen this coming. There should have been some preparation. "Someone" should have done some accession planning—planning for the time when a key individual is no longer there.

Accession (or succession) planning for chief facilities officers—directors, AVPs, or vice presidents for facilities—is not common, especially at public institutions. A public institution's policies often require a national search for high-level vacancies. So even if the chief facilities officer ("cfo" for purposes of this discussion, to avoid offending the person's boss, the Chief Financial Officer—the "CFO") has put sound acces-

Jim Christenson is an APPA member emeritus living in Osseo, Wisconsin. He writes the Field Notes column for Facilities Manager and can be reached at jchriste@umich.edu.



sion planning into action, there is no assurance it will yield the results intended.

If the plans are not prepared in consultation with other key players, those players will be making unanticipated decisions concerning the successor after the cfo is gone. This really happens. The only reason I was given the opportunity, as an outsider, to serve as the cfo or physical plant director of four universities was that these institutions had no accepted accession plan in place. They did not have adequate confidence in their own people.

Why Worry?

Perhaps we should go back a step. Why does it matter? Why is it important that there be continuity? After all, presidents come and go. And often, new presidents want to pick all their immediate subordinates, creating a complete turnover in top management. Deans may be appointed for five years; they learn the business just in time to realize that their appointed time is ended and another will take over. Why should the position of cfo be different?

In January 2001, Carole Barone of Educause stated, "Education must transform itself or become irrelevant." This is one among a thousand voices telling higher education leaders that the old ways of developing, sharing, and storing knowledge will not work today and tomorrow.

I maintain that facilities—the institution's building and grounds —have no spokesperson other than the cfo. Who else is there to express concern over deferred renewal? Who else will articulate to stakeholders the fact that the institution's facilities are its largest endowment and must be treated as such? Who else realizes that what the alumni really come back to see are the buildings and grounds they haunted as students, not their long-departed professors or old friends who never show up anyway?

Some might argue that the top administration, the trustees, or the legislature should be concerned about the condition of the present buildings and grounds. In a few cases that is the case. But the concern, if present at all, is often passing. Other matters intrude: policy, the financial endowment, new programs, construction of exciting new facilities. And, in fact, these—especially policy-making—are proper concerns of these groups. Normally the only time the president, regents, or legislature addresses issues concerning the condition of the present facilities is when there is a new construction project that replaces an obsolete building or when really serious deterioration becomes evident to all. Even then, the issue is usually discussed only after the cfo, in his or her stewardship role, has tried to get it on the agenda for six months.

In January 2001, Carole Barone of Educause stated, "Education must transform itself or become irrelevant." This is one among a thousand voices telling higher education leaders that the old ways of developing, sharing, and storing knowledge will not work today and tomorrow. That puts a great burden on these leaders to do continuous research on what will work in this rapidly changing world, to repeatedly update their strategic plans with that information, and to implement these plans in time to maintain the institution's academic and financial standing. Higher education's policy makers are left with even less time than in the past to be concerned with the state of the facilities—other than to recognize that some of them badly need adaption if they are to support the constantly changing tools of learning.

So, I ask again, Who is left to speak up for the voiceless facilities? The chief facilities officer. That still begs the ques-

tion of why there should be continuity in that position. Actually, I would argue that there should be continuity in the policy-making positions as well. Too much time is spent learning the territory, too little making forward progress. But there are times that the governor or the people of the state legitimately want a change of direction. The action to accomplish that may be a new board of regents and replacement of key leaders. Then, especially, when wholesale turnover of policy makers takes place, it becomes all the more important that the stewardship function of the cfo not become a casualty by the discontinuity of that role.

Preparation by Selection

Vacancies in key facilities positions provide opportunities to prepare for the day when the present cfo will be gone. In a large facilities division, most department head positions are potential stepping stones to the cfo position. Even in small organizations, there is usually at least one position that should be occupied by a person qualified to succeed the cfo. Any time there is an opportunity to select a person to fill a vacancy, the cfo can take a major step in preparing the organization for transformation into something closer to the organization's vision.

This iterative action sequence describes some of the most important work of any cfo:

- Bringing the organization together around a common mission and vision
- · Identifying supporting goals and strategies
- Defining organizational relationships
- Writing key job descriptions
- Finding the best person for each vacant position
- Providing the staff development and the inspiration to make the vision reality.

As the list shows, filling a vacancy is important, but only one part of the leadership role. Much else must be done to prepare people and the organization for transition. And what does the cfo do when there is no vacancy?

Preparation by Leadership

Turnover of department heads within a facilities organization can be due to two very different causes: 1) An institution or a facilities division that is a really bad place to work (all the rats flee the sinking/stinking ship), or 2) an inspired institution or organization that does very well at growing people to prepare them for ever-increasing responsibility. Most organizations are someplace in between. In those, people may stay in their positions for a decade or more.

People with a wealth of experience who are in key positions, but do not appear to have what it takes to be the next cfo, present the greatest challenge to the cfo. That is true whether the cfo is expecting to lead the organization for another ten years or is planning to retire next year. The temptation is to find a devious way to replace them. The inexperienced cfo says to himself, "If I can create an entirely new team, everything will turn around." Unfortunately, that

usually results in a team of people who need to spend most of their time learning about everything—the institution, the job itself, and the direction that the leader wants the organization to go. I know. I have thought those thoughts myself, acted on them, and learned my lesson the hard way.

A true leader provides the inspiration and reasons for the existing people to change. Few people are programmed like animals to never deviate from habitual behavior. If they are convinced with reason that a different direction will benefit the institution and if they can see clearly what role they can play, they will change and grow. The most rewarding work of a leader is to grow people to exceed their own and others' expectations. Such growth can result in one or more great candidates for the cfo vacancy when it occurs. That is a win-win transformation for the institution and for the individual.

Preparation by Development

Whether potential candidates for a vacant cfo position are relatively new in a subordinate position or have spent a career in the organization, they need to be constantly learning. We believe that today's technical and scientific knowledge has a half-life of four years. We may assume that skills in leadership, management, interpersonal relations, marketing, financial management, and asset management require little updating, or that they come naturally. Most readers of *Facilities Manager* know that that is far from true.

Every organization that intends to remain vital must be a learning organization. APPA's Institute for Facilities Management and the Leadership Academy (see dates on page 56 in this issue) help facilities organizations of all sizes to provide excellent growth opportunities for their key people. The annual Educational Facilities Leadership Forum, regional educational conferences, and gatherings of state and local facilities professionals offer more opportunities.

Large organizations can and should have their own centers for organizational learning. Some regions of APPA facilitate the participation of staff from small institutions in the staff development programs of nearby large institutions. Several years ago, one independent university groomed its own directors and vice presidential replacements by identifying key young executives and, through a process of interviews, intensive five-year reviews, and deliberate placement in growth positions, developed these individuals into institutional leaders. Opportunities and ideas for staff members' growth abound. All that is required is the commitment by leadership to that objective.

Preparation by Anticipation

We know that age has something to do with retirement, although there is not always a direct relationship. Even so, whether our interest is in replacing skilled crafts workers, department heads, or the cfo, analyzing data to help predict the need for replacements is essential. For large groups of people, this should be done each year, comparing average age with the average age of prior year retirements. This can, for

example, help determine how many candidates to bring into the apprenticeship program.

Predictions of when key department heads and the cfo must be replaced are tougher—sometimes even for the individuals themselves. The cfo usually serves "at the pleasure of the president." Under some presidents, that may impose a high degree of uncertainty. And, of course, department heads and the cfo may wish to take advantage of opportunities at other institutions when they feel they have contributed all that they can at their present institution. At most institutions, though, retirement is the route for vacating a key position. Although that does not provide a completely predictable target date, it is the most predictable of the variables.

In the case of the cfo and key department heads, that predictability should be used to plan a smooth transition. If institution policy absolutely requires a national search, that fact should be made clear to all and the search scheduled for the appropriate time frame as soon as the cfo or department head has declared his firm intention. If the institution has done its prior work as a true learning organization and if individuals have taken that opportunity seriously, the national advertisement should indicate a "strong internal candidate." That saves the time of those who may routinely apply for open positions hoping for the greener grass that always exists on the other side of their imaginary fence. That, in turn, saves time for the search committee.

Most importantly, though, such a statement reminds internal candidates that their learning and their efforts are recognized and that, unless a Nobel Peace Prize winner with doctorates in engineering and business administration also interviews well, they have a reasonable chance at the position. After all, the internal candidates already know "the territory," the people the organization serves, and the vision that the institution is working toward. If they have been actively learning and have been effective performers, most selection committees and officials would judge them to be the most qualified candidates.

So-Who's Up Next?

Neither the cfo nor her staff stays forever. We can't escape the fact that eventually we all leave or die on the job. Continuity in facilities leadership is especially important since the cfo is often the only person speaking on behalf of the mute buildings and grounds. The tools to be used to ensure continuity combined with excellence include those associated with good leadership under all conditions: vision, inspiration/persuasion, strategic planning and thinking, strategic goals, wise selection, and a commitment to the development of people. So, in accession planning, as with any important endeavor, wise, visionary leadership makes the difference. If present, those people who remain won't be left wondering "Who's next at bat?"

COLD HARD FACT #1

This Quiet Unassuming Machine



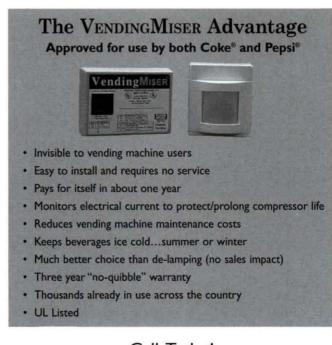
Drains Your Utility Budget

Vending machines use an incredible amount of electricity to keep beverages cold. VENDINGMISER can help you save hundreds of dollars a year on <u>each</u> vending machine.

Money In Your Pocket

VENDINGMISER uses a passive infrared sensor to completely power down a vending machine when the area surrounding it is unoccupied. When someone approaches the machine, VENDINGMISER restores its power.

Product in the vending machines always stays cold because VENDINGMISER automatically restores power to the machine at preset intervals. VENDINGMISER will never power down a vending machine while the compressor is running or cut short a cooling cycle once it repowers the unit.



Save More Than Money

Companies and institutions using VENDINGMISER are cutting their energy bills by an average of 47%. VENDINGMISER reduces the usage of electricity, thereby lowering our dependence on fossil fuels, reducing pollution and leading to a cleaner environment.

Easy Installation

VENDINGMISER is a plug-and-play device with no settings or adjustments. Your vending machine is not even touched. VENDINGMISER'S three year warranty is a demonstration of our confidence in your satisfaction.

Call Today!

To learn more about VENDINGMISER call 1-800-770-8539 for the name of a representative in your area, or visit our web site at www.bayviewtech.com and click on PRODUCTS.



APPA INTRODUCES

the Educational Facilities Leadership Forum

Facilities Forum

by James O. Roberts

In the world of facilities management, dealing with change is a daily occurrence. In the past 20 years, our profession has moved from one of managers, training, and paper, to one of leaders, education, and technology. After a series of surveys, APPA's Education Com-



mittee realized that we must make some changes in our Annual Meeting and Educational Conference to meet the needs of our membership. When this July rolls around, we are asking you to be prepared for what we hope will be the change you wanted.

In 1999, APPA's Education Committee began looking for a new direction for the annual meeting. We were seeing less participation by the membership in preparing presentations

Jim Roberts is director of plant operations at Campbell University, Buies Creek, North Carolina, and APPA's vice president for educational programs. He can be reached at roberts@mailcenter.campbell.edu.

for the educational sessions. The topics seemed to be limited, and the membership was asking for a different type of presentation.

Our process started with a survey of the membership to find out what was needed. We contracted with three companies to assist in this project: Kazoleas and Associates, Marketing General, and Survey Advantage. Survey Advantage asked 18 questions on touch screens at the 2000 meeting, which gave us specific information on the annual meeting in Fort Worth, Texas; we then expanded the touch-screen survey at the Montreal meeting in 2001. Dean Kazoleas and his associates completed a communications audit of APPA. It included interviews with more than 500 respondents and covered a needs assessment for programming. Marketing General handled a survey of our general membership. This involved questions about the location of our conference, topics of interest, type of presentations, the length of the conference, and the time of year the conference is held. All of these instruments told us that we are seen "as the place to get cutting-edge information, whether it be about specific problems, the future, or broader management issues." (Marketing General Survey) The surveys also told us we needed to make some changes, and that is what we have done.

In July 2001, the Education Committee met in Montreal to begin the groundwork for our new program in July 2002 in Phoenix, Arizona. The theme of the meeting is, appropriately, Rising to the Challenge.

We started with three main objectives: determine what types of sessions would be offered, specify what delivery methods we would use, and develop a new name. From these discussions we determined our focus would be threefold. First, address the changing needs of educational facilities professionals; second, provide a forum for exchange of information; and third, offer the tools for professional development and institutional excellence. In this challenge we intend to follow APPA's mission "to support educational excellence with quality leadership and professional management through education, research, and recognition."

APPA's annual meeting has been renamed the **Educational Facilities Leadership Forum**. Our intent will be to prepare a program similar to the Institute for Facilities Management and the Leadership Academy. We will provide the tools to sharpen your professional saw. The six topic areas for the Forum will be:

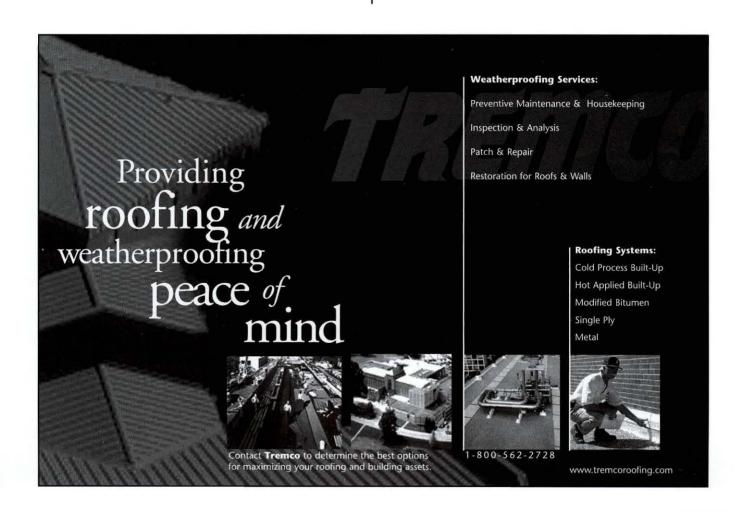
- 1. Customer Service
- 2. Innovation and Learning
- 3. Internal Process Management
- 4. Financial Management
- 5. Technology Management
- 6. Knowledge Management.

Our sessions will continue to be focused on achieving organizational excellence. We plan to use at least six presentation directions:

- 1. A visionary
- 2. Writer/publisher/professional
- 3. Institutional practice or perspective
- 4. Critical issues panel
- 5. External presenter or proven leader
- 6. "How-to" skills training.

There will be planned time for networking, enhancing relations with business partners, entertainment, and recognition. We are designing the new Forum to prepare you to meet the future challenges of facilities management. You will learn how to complete assessments of your organization and what it takes to improve organizational effectiveness. We will provide opportunities to develop leadership skills. We will develop the "how-to" for safety, regulatory, and technological issues.

There is excitement about the opportunity we have to change, grow, and lead our profession. Our direction is on track and moving. The Education Committee wants you to continue to communicate with us, sharing your ideas and needs. The Educational Facilities Leadership Forum is going to be your best opportunity to sharpen the saw. I guarantee it.



For any Occasion...

Call Today
for your
FREE
Color Brochure
1-800-333-2687

Our
ABS Folding
Tables and Series 5

Folding Chairs provide
years of quaranteed
service in a multitude of
colors and styles.

Buy direct and SAVE!

Your Facility Name Here



Fort Smith, Arkansas, USA 501.783.2593 Fax: 501.783.7608 Visit Our Web Site at www.mccourtmfg.com



SHARPENING THE SAW:



tephen R. Covey reminds us of the value of training and professional development to an organization with these words: "We are the instruments of our own performance, and to be effective, we need to recognize the importance of taking time regularly to sharpen the saw..." 1For Sherwood Wilson, associate vice president of administration for facilities and auxiliaries at Ohio University, sharpening the saw means taking care of the most important tool you have-yourselfby taking the time to upgrade skills and keep on top of the new developments in the field. The facilities management team at Ohio University has developed a remarkable program to help facilities and auxiliaries employees keep their saws sharpened—the Career Enrichment Institute (CEI). This program encourages employees to embrace continuous quality improvement by learning new skills or upgrading existing ones, and as will be discussed later, has the potential to positively impact employees, their children, and the community. For example, in addition to acquiring or upgrading skills through the CEI, employees also have the option of applying their coursework towards an Associate's degree.

Karen Deardorff is director of communications and grant development for the facilities and auxiliaries department at Ohio University, Athens, Ohio. She can be reached at deardorf@ohio.edu.

Building the Foundation

The CEI is actually an extension of an earlier professional development initiative taken by the Facilities and Auxiliaries Division—the Apprenticeship Program. The Apprenticeship Program was developed as part of facilities management's efforts to have the most technically competent craftspeople anywhere in Ohio. Associate Vice President Wilson knew that his employees had the potential to be the best facilities team in the state, if not the country, but he also knew the existing system of advancement did not foster excellence. Wilson recognized that the challenge was to develop a program that would allow employees to take ownership of their professional development, that would set high standards which they could strive for, and that would enable them to get the training they needed and were interested in. To solve this dilemma, facilities management proposed the formation of an apprentice program recruitment pool from which future positions in its skilled trade shops would be filled. The pool would allow employees interested in pursuing a career in maintenance to obtain the training and experience required to reach the Maintenance Repair Worker 1 level.

Although union leadership supported the aims of this program, union members were not so comfortable. Members of Local 1699 of the American Federation of State, County, and

The 7 Habits of Highly Effective People, Stephen R. Covey. New York: Simon & Schuster, 1989.

Municipal Employees (AFSCME), the union that represents about 680 maintenance and service workers at Ohio University, were uncertain as to the effect the pool might have on their career advancement. They raised these concerns during the contract negotiations held in February 2000. The leaders from both sides hammered out a program together that would bring stronger job security along with more efficiency and productivity. In the end, the program was a win-win proposition for both the bargaining unit and management. The contract was signed on March 2, 2000, and through the dedicated efforts of the facilities management team, the CEI was up and running for the spring term.

Charlie Adkins, president of AFSCME Local 1699 and a strong proponent of the program, is thrilled with the overall success of the Career Enrichment Institute and the interest shown by bargaining unit employees. "I can honestly say I never dreamed that when we negotiated this program, it would be so well received," remarked Adkins.

Acquiring Professional Skills and Advanced Training on Work Time

The CEI is a unique joint venture between Ohio University and Hocking College in Nelsonville, Ohio, through which Ohio University staff can attend a wide variety of work-related classes. Through this partnership, participants receive Hocking College credits for every class, giving them the opportunity to not only upgrade their skills, but to also apply the credits towards earning an Associate's degree.

CEI is based on a core curriculum that fosters professional excellence by including such courses as Conflict Resolution, Customer Service, Communication, Diversity, Basic Math, and Computers. The core curriculum was purposely structured with courses that would give our employees basic tools needed to deal with the challenges and customer interactions faced every day on the job. In addition to the core courses, advanced technical training in specific disciplines such as HVAC or Advanced Welding, is also available.

Ohio University offers all facilities and auxiliaries employees (management, supervisory, bargaining unit, and classified) the opportunity to enroll in one work-related class on paid time per quarter. All expenses for the class, including tuition, books, and related expenses are paid by Ohio University. Employees may also enroll in one class on unpaid time, with Ohio University covering the costs. Through an agreement with Hocking College, tuition is waived and Ohio University is billed directly for the lab and general fees, not the student.

Jean Radcliff, director of work management, manages the initiative and says that while classes completed on work time makes scheduling a challenge, it is also one of the features that makes the program so special. "We want to do everything we can to make it possible for our employees to participate because we really believe in the value of this initiative," said Radcliff.

CEI is based on a Core Curriculum that fosters professional excellence by including such courses as Conflict Resolution, Customer Service, Communication, Diversity, Basic Math, and Computers. The core curriculum was purposely structured with courses that would give our employees basic tools needed to deal with the challenges and customer interactions faced every day on the job.

Turning Idea into Reality

Radcliff worked with representatives from Hocking College to get the details of the program put in place. She was also actively involved in communicating the program's goals and details to employees through an introductory booklet given to each employee and at all-employee staff meetings. Radcliff believes that the program was best promoted through word of mouth. She also believes that part of the program's success can be attributed to helping the employees through the process step by step and making it absolutely painless for them to participate.

To sign up for classes, program participants register at a special office in the facilities management department and work with a dedicated Hocking College liaison. In addition to handling registrations, the liaison identifies the courses required or requested, schedules the courses and instructors, registers students, and often acts as a counselor to help employees get the most benefit possible from the program.

Courses are geared toward adult learners, with an emphasis placed on on-the-job excellence. The curriculum is based on Prentice Hall's Wheels of Learning series, which was developed by the National Center for Construction, Education and Research. Following the series, participants learn the theory that supports the hands-on training that Ohio University has always had in place. The materials and method have proven valuable to not only new employees who are just beginning in their trade, but also to those who have been in the craft for over a decade.

Enrollment so far has not been a problem—with the computer courses, including Basic Computer Skills and Introduction to Windows being the most popular. Over 100 facilities and auxiliaries employees signed up for classes in the spring quarter. Many of these employees have also enrolled in a second class to be taken on their own time.

The numbers of students enrolled has proven that there was a need and an interest in training and career development. Students often come to Radcliff with requests for certain types of courses and when they are relevant to the mission of the division, she works with Hocking College to include them in the curriculum if possible. Continually adapting the courses to meet the needs and interests of the students has been a strong selling point for the program.

Not only will the curriculum continue to expand, but hopefully the reach of the program will expand as well to include Ohio University's regional campuses through distance learning. With the university's microwave equipped classrooms, staff members at campuses 80 miles away could participate in a class as it happens.

When looking at current statistics, one of the reasons the

Success for Today and Tomorrow

opportunities afforded by the Career Enrichment Institute is especially important to the bargaining unit employees is easy to see. Not only do their lives have the potential of being impacted by the program, the lives of their children may also be impacted. Figures taken from the 1999-2000 Ohio University employee tuition waiver report indicate that children of nonbargaining unit employees are 37 percent more likely to attend Ohio University as an undergraduate than are the children of bargaining unit employees (80 bargaining unit waivers versus 138 nonbargaining unit waivers). And, based upon this same report, figures indicate that non-bargaining unit employees are nearly 1300 percent more likely to attend as undergraduates (part time) than are bargaining unit employ-

With the implementation of the CEI, we are already beginning to see an upward shift in the percentage of bargaining union employees enrolling in college courses. Enrollment totals for the first year of the CEI were 276 bargaining unit employees and 39 non-bargaining unit employees. When comparing these enrollment figures with the university average, the enrollment of bargaining unit employees in post-secondary coursework has increased by 800 percent.

ees (10 bargaining unit waivers versus

170 non-bargaining unit waivers).

Associate Vice President Wilson firmly believes the CEI provides real opportunities for employees now and in the future, for their children, and for the community. When asked how facilities management will measure the

success of this program, Wilson addresses both the immediate and long-range outcomes. "We have seen immediate success because our employees are signing up for classes, already have better skills and are being promoted based on those skills. Our long-range success will be achieved when we see employees standing in line to take classes and the demand will necessitate that we grow the program to keep up. The real success in my book, however, will be in the future when these same employees' children decide to go to college because they saw how important education was to their moms and dads. And, the education of these employees and their children will in turn have a long-range, positive impact on the socioeconomic development of the community," explains Wilson.

It appears that the potential for success is more than just a dream. Diane Roberts, a paint shop employee, is taking classes to set a good example for her kids and is proud that her efforts in the CEI have already inspired her children. Recognizing the value of the skills she learned in the keyboarding class, Roberts purchased the program used in class for her home. Her 12-year-old daughter now uses the program as well—a testament to the immediate and future success of Ohio University's Career Enrichment Institute.

Stay INFORMED with our Custodial Staffing Analysis Software

We were the first, and still the best, at determining custodial staffing needs with analysis based on APPA's <u>Custodial Staffing Guidelines*</u>. Comparisons made at all five levels of cleanliness, and at your actual task frequencies.

Software developed in consultation with Jack Dudley, P.E., Editor of the First Edition of the Guidelines and Co-author of the Second Edition. Now with an advanced version:

- Includes 358 ISSA tasks
- Multiple Sites & Institutions
- Auditing
- Chemical Usage Analysis
- Equipment History
- Training Records & Reminders
- Work Assignments, etc.
- And, still very affordable

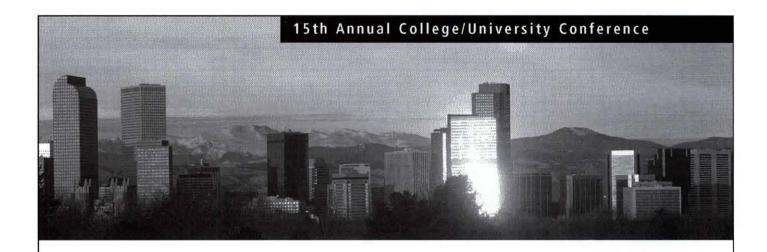
INFORMED LLC
Telephone: (734) 395-2053
Fax: (734) 483-8917
Learn more at our website:

www.contractron.com

*Mention of APPA does not imply endorsement of the product. ISSA cleaning times used by permission of ISSA, Lincolnwood, IL. www.issa.com



Get a grip on your facility, and your custodial staffing needs



"CHP Goes to College"

February 28-March 1, 2002 Denver, Colorado

If you operate a central plant, then this conference is for you!

- Are you faced with uncertainty in energy budgeting?
- Are you responsible for reliable energy service to an expanding campus community?
- Are you considering cogeneration or combined heat and power to gain efficiency and greater control over your destiny?



The **College and University Forum of IDEA** is pleased to announce their 15th Annual Conference featuring panel discussions on utility master planning, energy and fuel procurement strategies; plant security and the latest innovations in energy efficiency and environmental compliance. You will hear first-hand from senior representatives from the US Environmental Protection Agency and US Department of Energy on policies and programs specific to campus energy systems. You will have the opportunity to interact with peers from across the country and take an inside look at a campus cogeneration system.

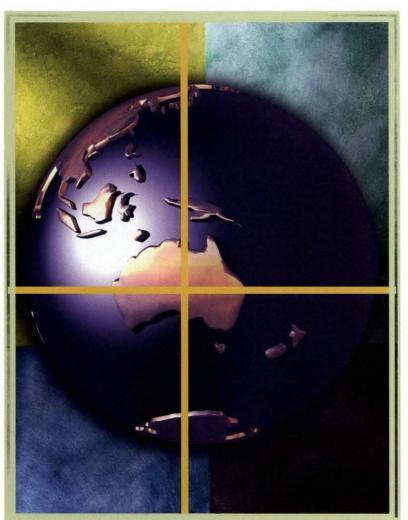
Colleges and universities are leading the way for growth in district energy and CHP in North America. At this conference, IDEA will present the results of a DOE-sponsored census of CHP systems on the nation's campuses. Come and learn what your peers are doing. Go home with new ideas and fresh insights.

IDEA has invited Ms. Christine Whitman, Administrator, US Environmental Protection Agency, to provide the keynote address on EPA's role in the National Energy Plan and the opportunities to advance CHP/district energy.

Winter is a beautiful time to visit Denver and enjoy all that the Mile High City and the Rocky Mountains have to offer. So don't miss out on this great learning and networking opportunity.

This conference is hosted by the University of Colorado at Boulder.

For registration information contact IDEA or visit **www.districtenergy.org** 125 Turnpike Road, Suite 3 Westborough, MA 01581 (508) 366-9339 (508) 366-0019 fax



Report by Philip L. Cox

In keeping with a recent tradition, as the APPA President-Elect, it was my duty to visit the Australasia Region and attend their annual meeting. I know what you must be thinking, tough duty, but someone has to do it. Fortunately, my wife Marsha was able to join me on what turned out to be the journey of a lifetime.

Our AAPPA visit started in Auckland, New Zealand when we stepped out of the airport and experienced first-hand spring in October. Having left New York State when everyone was bracing for autumn and winter, seeing all the plants coming into bloom was a refreshing sight. Our visit got off to an unbelievable start at Manukau Institute of Technology, where we were hosted by Roy Dicker. Expecting to tour M.I.T.'s main campus' buildings and grounds, we were surprised instead to be given a glimpse into the Maori culture and heritage of New Zealand's indigenous people. Roy and his staff arranged a Powhiri, a welcoming ceremony, in my honor, that was comprised of songs, prayers, gifts, and speeches. The

Phil Cox is director of facilities management at Cornell University, Ithaca, New York, and APPA's President-Elect. He can be reached at plc4@cornell.edu.

event took place in the campus' new marae, or meeting house, and was lead by the Papa and Matua and involved most of Roy's staff and his boss. It was an extraordinarily emotional experience that I will never forget. I was deeply moved by such an honor. What a way to kick off a tour.



l to r Roy Dicker, group manager and Anna Goldring, facilities management, Manukau Institute of Technology and Marsha Cox under the Tomokanga Gateway to MIT's marae, or Maori meeting place, Auckland

M.I.T., founded in 1972, has about 5,000 FTEs and their facilities are spread over four campuses. Like most campuses that Marsha and I were to visit, M.I.T. was struggling to find new sources of funding to augment their government allocation. One such source is the increase of overseas students, many of whom are from China. Many of these students stay on campus just long enough to learn English and return home. Another way in which facilities management is seeking to increase income is by providing security services to surrounding communities on a contract basis.

After spending time on campus with some of Roy's key staff, he and his wife Robyn gave us a whirlwind tour of the Auckland area, showing us the contrast between the east and west coastlines, both of which are beautiful. Wine tasting along the way helped wash down the road dust. Our final evening in the "City of Sails" included dinner and a stroll along the harbor where the America's Cup contenders dock. Of course our gracious hosts reminded us which country currently holds the cup.

Our next stop was Sydney. What a hustling, bustling, thriving city. Looking around at the diversity of cultures and nationalities there, it felt like the crossroads of the world—which I suppose it is. Our host was Robert Kelly, AAPPA President. Robert gave us the grand tour of Macquarie University where he is director of buildings and grounds. Founded in 1964, this picturesque campus on the outskirts of Sydney is home to about 22,000 students. About 3 to 4 percent actually live on campus, many of whom are from overseas. The newest residences are five bedroom, five bath units, which were first used by the Canadian Olympic Association for the 2000 games.



l to r Roy Dicker, group manager facilities management, Manukau Institute of Technology and his wife Robyn, Marsha Cox and Phil Cox on the coast of the North Island of New Zealand, near Auckland

While we were in Canberra at the AAPPA annual meeting, Robert was notified that Macquarie's new cogeneration plant was selected for an award by the Sustainable Energy Development Authority. The plant produces 1.5mw of electricity and chilled water to service the library and three other buildings, while effectively reducing the greenhouse gas emissions by 44 percent when compared to conventional systems.

Our guide for a tour of Australia's oldest university, the University of Syndey, was Pam Esdaile, who would become the new AAPPA secretary/treasurer at the AAPPA annual meeting in Canberra. Pam, senior policy & planning officer for facilities strategic planning, highlighted some of the elements of the recently-completed strategic plan for the university, which has facilities in eleven locations. One of the interesting features, for me, was the cooperation between the university and the local Council (city government) on how the campus landscape would be enhanced. Pam showed us through some fascinating buildings, one group of which was being renovated after the university took them over from a private school for the deaf. Some of the beautiful historic buildings reminded Marsha and me of our visit to Oxford a few years ago.

Before leaving for the AAPPA meeting in Canberra, Robert Kelly and his wife Lana helped us experience Sydney. Our hotel at the Rocks area of Sydney, which is in the shadow of the Sydney Harbor Bridge, made it convenient to enjoy the busy waterfront. Saturday morning was spent seeing the harbor from a ferry as we traveled to Manly Beach. Then Robert drove us to



I to r Pam Esdaile, AAPPA Secretary/ Treasurer and senior policy & planning officer, facilities management office and Phil Cox on the University of Sydney campus

Canberra, about three hours from Sydney. So, we got glimpse of the lovely countryside between the two cities.

Canberra was the focal point of our trip. This planned community, the nation's capital, designed by an American architect, is quite unlike any city I have ever visited. Laid out in circles with connecting radial boulevards like spokes on a wheel, where the hub is the Parliament, it is easy to lose your sense of direction.

The AAPPA Board meeting on Sunday was held at the new National Museum, which opened in March of this year. It was amazing to me how many initiatives AAPPA has underway and how much great work the region is doing. Their recently-published 2001 Benchmark Report and their Management Development Program are but a few examples.

AAPPA traditionally holds its annual meeting jointly with the Association of Tertiary Education Managers (ATEM), as was the case this year at the National Convention Centre in Canberra. Federations in Learning was attended by more than 500 higher education professionals, which included about 150 AAPPA members. Aside from the general sessions, there were usually four AAPPA and four ATEM presentations being offered concurrently. I had the privilege of addressing the general assembly on the topic of transformational leadership.

It was a delight to finally meet Amanda Hart, from the Australian National University, who served on the conference host committee. Amanda and I had been e-mailing one another for several months making arrangements for our visit. Her warm and witty way of making us feel welcome and helping with all sorts of details typifies the hospitable spirit of the great folks we encountered throughout our visit.

One evening in Canberra was spent in the National Museum of Australia where we were given time to tour the multitude of interesting exhibits before the AAPPA banquet there. It was a delightful evening. The final evening, which was the combined ATEM/AAPPA banquet, was set in the great hall of Parliament. This extraordinary building was completed in 1987 and we were treated to a behind the scenes tour of it during one afternoon of the conference. What a setting for a banquet.

While in Canberra, we managed to get a tour of the University of Canberra courtesy of Graham McDonald, director of property and a member of the host committee. I could see why Chancellor Wendy McCarthy, who spoke at the conference, was so proud of the campus. Established in 1968 and home to about 8,000 students, the campus is surrounded by natural areas, giving it a certain feeling of serenity. An unusually long center quadrangle, besides being a place for students, staff, and faculty to relax, was also home to many colorful parrots. After showing us around his own campus, Graham also gave us a windshield tour of nearby Canberra Institute of Technology-Bruce Campus and the Australia Sports Institute.

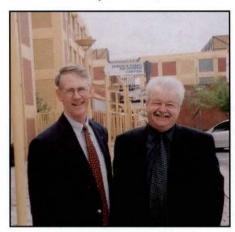
After Canberra we journeyed west to Adelaide, where Brian Phillips played host to us by showing us around three of the six campuses of the University of South Australia. Brian is the



l to r Phil Cox and Graham McDonald, director of property, University of Canberra on the Canberra campus

director of property and had just joined the AAPPA Board while in Canberra. As we toured the City West, City East, and Mawson Lakes campuses, we were struck by the many renovations that were being aimed to "humanize" spaces and make them less institutional in appearance. Each campus has a *Campus Central*, for instance, where the 26,000 students can get almost all the services and information they need in one place. Another innovation is the use of computer "barns," i.e., comfortable rooms equipped with computers in a variety of furniture configurations.

The final stop on our tour of AAPPA campuses was Perth, Western Australia. Russell and Jan Candy, who had visited us at Cornell a few years back, were our hosts and helped keep



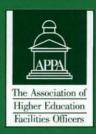
l to r Phil Cox and Brian Phillips, AAPPA Board member and director of property, University of South Australia on the West Campus, Adelaide

us hopping. First I toured Murdoch University, where Alan McGregor. AAPPA Presidentelect, is the director, office of facilities management. Murdoch is a young university, having been portioned off from the University of Western Australia about 27 years ago. I got to see the main, or South Street, campus and

was given a glimpse into the future by way of the *Masterplan: The Millennium Plan 2000 and Beyond.* Murdoch, with about 8,500 students, is looking to expand to 15,000. I was also privileged to have tea with Alan, some of his key staff, and the acting vice chancellor. Later, a luncheon attended by Murdoch and U. of W.A. facilities professionals, gave me a chance to learn how these neighboring schools attack a variety of campus issues.

Russell Candy, a past AAPPA President and director of the office of facilities management, showed me the University of Western Australia, which was founded early in the 1900's and consists of Mediterranean architecture on grounds that are replete with beautiful mature landscape features. One garden reminded me of a Roman amphitheater; another unusual area was the Cathedral of Pines, which serves as an outdoor auditorium where movies are shown at night. Russell also arranged a tour of the Oral Health Center, a new \$34M dental school facility still under construction adjacent to the QEII teaching Hospital. The evening was capped off in a lovely restaurant in King's Park with a spectacular view of the City of Perth. We truly enjoyed the company of Alan and Sandy McGregor and Russell and Jan Candy.

Continued on page 45



Operational Guidelines for Grounds Management

A comprehensive guide to Grounds Management.

Operational Guidelines for Grounds Management is your comprehensive guide to maintaining and managing your grounds and landscaping operation. Written by professionals with years of grounds and facilities expertise, this book will help you review, organize, and improve your grounds management department.



Included are chapters that discuss the importance of environmental stewardship, explain the benefits and drawbacks to broadcast and zone approaches to organization, and consider the pros and cons of contracting out your landscape operations.

You will also learn how best to staff your department, using our grounds staffing guidelines section, and how to use benchmarking to measure your progress. Plus, there's a chapter on environmental issues and laws to ensure your compliance with current regulations.

Seven appendices give you easy access to references that will help you plan and maintain your grounds operation. These include a selected list of software available for grounds management, sample job descriptions, a bibliography for further reading, and an extensive glossary of terms.

Operational Guidelines for Grounds Management is the result of a unique publishing collaboration between APPA, the National Recreation and Park Association, and the Professional Grounds Management Society.

The price of the book is \$75 members/\$125 all others.



Please send me______copies of *Operational Guidelines* for *Grounds Management*. Copies are available from APPA for \$75 members/\$125 all others, plus delivery (\$5.00 orders up to \$80; 10% of total purchase for orders greater than \$80, with \$15 maximum.) Please allow 2–3 weeks for delivery.

Name:		
	Zip:	
Phone:		
☐ My institution is	a member of APPA (quantity) x \$75 members/\$125 others	
<u> </u>	+(delivery-add \$25 for rush delivery.) For International Orders add 20% of total purchase.	
Total: \$		
Payment Method:		
☐ Check enclosed		
☐ Purchase order	number:	
Credit card: Plea	ase circle one:	
VIIC	A MasterCord American Frances	

Return this form to APPA Publications, 1643 Prince Street, Alexandria, VA 22314-2818; or fax to 703.549.2772. For more information call APPA at 703.684.1446 or e-mail cotrenia@appa.org. Visit our online bookstore at www.appa.org/resources/publications.

Cardholder's name:

Total amount of charge:

Authorized Signature

Card number:

(required):

Expiration date:



l to r Alan McGregor, AAPPA President-elect and director office of facilities management, Murdoch University, his wife Sandy, Russell Candy, past president of AAPPA and director office of facilities management, University of Western Australia and his wife Jan, Phil Cox and Marsha Cox in King's Park overlooking the city of Perth



Russell Candy, past president of AAPPA and director office of facilities management, University of Western Australia on the U.W.A. campus

Our final tour took place on the Joondalup campus of Edith Cowan University, which has existed as a university for ten years, the product of an amalgamation of several area teaching colleges. Edith Cowan is now in the process of consolidating its four campuses into two. Andrew Branston, director of the facilities and services centre, showed us the campus which he and his staff will need to transform in order to shift from the current student body of about 4,000 to 8,000 students after the consolidation. Marsha and I seemed to be the only ones on campus that were excited to see a small herd (or whatever a group would be called) of kangaroos lounging around just outside the new \$40M health & science building.

There are a few generalizations that I could make about the campuses I was fortunate enough to visit. Funding challenges seem to be a chronic problem. Jeff Gawthorne, acting vice chancellor of Murdock University, in the October 2001



l to r Russell Candy, past president of AAPPA and director office of facilities management, University of Western Australia, Phil Cox and Andrew Branston, director facilities and services centre, Edith Cowan University on E.C.U.'s Joondalup campus

campus newspaper wrote this about financial support to universities, "The Commonwealth has decreased its financial contribution for the past 19 years, passing more of the funding burdens to students... Since 1995 student-staff rations have risen almost 30 percent nationally." Many of the campuses I visited had not seen increases to their budgets in several years, despite significant growth to the campus over the same time span.

Outsourcing of facilities services is much more prevalent down under than it is in North America. However, even though much is contracted, the oversight for the contracted work remains a function of the facilities management organizations.

I was also surprised to discover that few students are housed by the New Zealand and Australian universities. In some cases this is due, in part, to traditions whereby residential colleges (independent residential organizations) provide for housing needs. Also, most of the student bodies at the schools I visited, are drawn from the local communities, so a larger fraction of students commute.

What did not surprise me was the warm hospitality that Marsha and I received everywhere we traveled. We had heard how fun-loving, warm, and friendly the New Zealanders and Australians are. They certainly lived up to that reputation and could not have been any more gracious and welcoming; they were terrific. It was especially heartwarming too, in the wake of September 11th, to experience the sort of empathy and support that poured out to us from everywhere we went when people realized we are New Yorkers.

The trip was a wonderful experience and I thank the APPA membership for making it possible. As a result of my campus visits and my participation in the AAPPA annual meeting, I feel a warm kinship toward the AAPPA members and I am excited about working closely with the AAPPA Board of Directors over the next three years.

Listnotes

Energy Savings and Performance Contracting

by Jennifer Graham

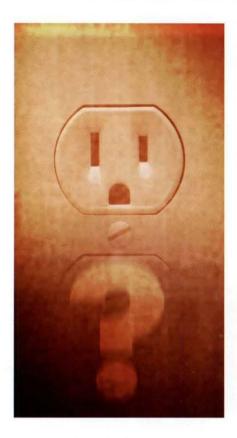
his Listnotes marks a full year of compiling different topics from the APPAinfo e-mail discussion list. And you're not having déjà vu; exactly one year earlier, I was also compiling your questions and answers about the ways a campus community can help save electricity.

If there's one thing I've learned during my tenure with APPA, it's the importance of energy conservation. Turning off the lights when we leave a room is such a simple and familiar concept, it's strange to think that it's still an issue. While not turning out the lights surely isn't the only cause of a high energy bill, it's one that continues to plague educational institutions.

As budget cuts are always an issue too, how to lessen energy usage will continue to be a topic of discussion, especially as the energy bill is one of the most expensive bills that an educational institution must pay regularly.

Question: It has been suggested that we print stickers and notices that will encourage people to turn out lights and conserve energy. This is viewed as a quick and obvious way to get folks involved in energy conservation (and money saving) in a time of limited budgets. While I believe that users on campus are in control of the bulk of energy, I also believe that stickers, posters, notices, etc. are not effective when compared to the larger efforts such as shared savings projects? Does anyone have thoughts or data that would support or refute my preconceived notions?

Jennifer Graham is APPA's publications manager. She can be reached at jgraham@appa.org.



Response 1: In the late 1980s and early 1990s we received a grant to advertise and encourage energy reduction. We put up posters and stickers all around campus. You may still even see an occasional "Kill a Watt, turn out the light" sticker on older switch plate covers on our campus. While we had an initial spike in lower energy, there were no long-term effects. Within a few months energy use began rising again.

Response 2: Be wary of stickers, especially the ones that go on light covers. They deteriorate quickly and look terrible. We have used a small rigid plastic sign that sits above the switch plate and is easy to install by just slipping it behind the light cover. As to their effectiveness, it is probably marginal at best, but it does get past the "well I didn't know if I should

turn it off" excuse you often get in classrooms and other public spaces.

Response 3: While it is not at all quick, installing variable air volume systems on your fume hoods can create *huge* energy savings, if properly done. You should be aware, however, that the real reason to use VAV on fume hoods is for safety, not energy conservation. The energy saved is merely a bonus, but it is a substantial bonus. There are lots of systems on the market, but beware of those that are really contractors saying, "We can do that with the stuff we have here on our shelf." There is a lot to this issue to get it done right.

Once installed, the major reason people don't get the energy savings they anticipated is sash management. Face it, if the sash is open, the hood pulls the same air volume, and uses the same amount of energy as a constant volume hood. There are devices out there to both close the sash, and others that just beep when the sash is open and the space in front of the hood has been unoccupied for some present time, say a minute. A good source of info on fume hood VAV is at www.accuaire.com.

Question: We are a five-million square foot hospital in Southeast Michigan. We are about to enter into an energy performance contract. Can anyone offer some practical suggestions based on your experience with performance contracting? In particular, what should we watch for when negotiating verification strategies and tactics?

Response 1: Prioritization. The ESCO will have prioritized based solely on return. You likely have priorities based on maintenance or facility con-

dition. Be able to list your priorities and show how they can be mixed with the ESCO's priorities to achieve a reasonable payback. I recommend you get a spreadsheet from the ESCO of their recommendations, then insert a column or two showing your priorities. Arrange the list according to your priorities with a running total of annual savings versus cost (payback). You'll quickly identify what you can and cannot do, and the ESCO will be satisfied that you've done your homework and will agree to the list.

Response 2: One of the most important things is to know and verify your energy consumption before the project. Many times assumptions are made that more energy is being used than there really is, and the third party gets some easy money and your energy bill does not drop enough. An accurate determination of what devices use how much power now is a necessity.

Response 3: A few thoughts that come to mind immediately. What is the motive for the performance contract? Is the primary driver to reduce costs to the campus, get better service, or add another option to acquire equipment without tying up campus resources? Have you gotten references from other successful contracts that have already been underway for some time? Also, tie down "in writing" how replacement parts/equipment will be purchased and at what percent markup from actual costs. Those numbers should not come as a surprise as you get into the first contract year. Negotiate a "not-to-exceed" annual labor figure so that you can clearly evaluate this new process versus your present maintenance process. You need some weasel-words in the contract so that it can be terminated if your campus isn't happy after a set period of time (like one year, etc.).

RenoSys® Fixes Old Pools and Decks!

(plus we make you look good in the process.)



With the RenoSys **PVC Pool Shell:** No Leaks &

No Painting & No Plaster W

No Caulking M

No Abrasion &

Low Maintenance M

Highly Attractive

used to line a commercial pool.

RenoSys (re-no-sis) n. 1. A commercial pool interior lining system for new pools

or deteriorated swimming pools. 2. The

reinforced textured PVC pool membrane



RenoSys provides commercial pools and their operators with the most durable, beautiful and low maintenance pool interior surface available.

RenoSys is North America's largest, oldest and most respected PVC pool and deck renovation company for some very good reasons. Our proud track record of 1,200+ quality installations, and our wide selection of colorful prints and textures make the RenoSys specification decision an easy one. Call us today to find out how RenoSys can save your pool facility money - now and for the long haul.

www.renosys.com / renosys@aol.com

Call us at 800.783.7005 for your Free Coaster Samples.

renosys corp./2825 east 55th place/indpls, IN 46220 @ 2000



The Bookshelf

Book Review Editor: Theodore J. Weidner, Ph.D., P.E., AIA

e begin the new year with two valuable books for facilities officers that look at very different parts of the organization. The first addresses the value and complexity of public/private partnerships. These are increasingly perceived as an excellent vehicle to accomplish projects at public universities. The second addresses the importance and techniques to achieve indoor air quality; none of us is immune to these concerns. Whether you are interested in either subject, there is valuable information to be learned.

Public/Private Finance and Development, Methodology, Deal Structuring, Developer Solicitation, by John Stainback. New York: John Wiley and Sons, Inc., 2000. 287 pp, hardcover.

As funds become

increasingly constrained, we are all looking for other ways to accomplish the many capital projects our campuses need. This book provides a clear, structured process to take advantage of another method to accomplish capital projects.

Mr. Stainback is an expert in public/private projects. He provides a clear outline for capital projects and

Ted Weidner is the associate vice chancellor for facilities and campus services at the University of Massachusetts/Amherst. He is also the co-chair of APPA's Trades Staffing Guidelines Task Force and can be reached at tweidner@admin.umass.edu.



describes ways to shortcut the process, as well as the dangers of taking a shortcut. There are 14 steps that any public partner must execute in order to prepare for a partnership project. Many of these steps must be accomplished regardless of the financial relationship. The author provides a clear rationale for each step and information about where a private partner will be coming from.

In addition to the steps, the author provides variations to some of the steps. Thus, the recommendations of the book can be customized to particular situations. There are brief outlines of RFPs, as well as outlines of the negotiation discussions that will occur. Recognizing that many people prefer concrete examples, the author provides eight case studies, including two at universities. Better still, there are sample RFPs and other documents for those of us who need help getting started. Sample spreadsheets demonstrate some of the financial information that is needed to make a good decision. Just about every base and contingency has been covered.

Regardless of what one is attempting to accomplish, there are fundamental perspectives that one must understand. This book provides a public representative with a basic understanding of what a private investor will be interested in and how he will attempt to take advantage of the situation. These processes, as well as others, require the public partner to have nearly as much understanding of the finances associated with these projects as the private partner.

While these observations are not unique, the author does a good job of explaining the importance of following the process and being prepared. Given some of the challenges I am facing, this book is going to remain close by my side.

Ted Weidner, associate vice chancellor for facilities and campus services, University of Massachusetts/Amherst

Preventing Indoor Air Quality Problems in Educational Facilities, edited by CH2M Hill. Orlando, Florida: CH2M Hill, 1997. 106 pp, softcover.

I tend to put technical books into two categories: theoretical, with loads of calculations, and practical, with an emphasis on real-world examples. This book, actually a spiral-bound manual of 106 pages, including table of contents and preface, is a good example of the latter. The book is written for building owners in humid climates and is based on the cooperative efforts of CH2M Hill and the Disney Development Company over six years. A basic knowledge of air conditioning principles and terminology is necessary to truly understand this book.

The book contains seven sections. The first section covers the key issues related to mold and mildew which range from the simple, a definition of what the hot, humid climate zone is, to more difficult concepts such as latent cooling load and relative humidity. Sections two through four describe the recommended design process that is created to prevent design errors that prevent construction of a good building. Section five describes the proper construction process, and section six is devoted to post-construction startup and system commissioning. Section seven covers the works cited.

The writer spends a lot of time on the basics of how cooling systems should work and gives examples of how poor design leads to two types of problems: cooling systems guaranteed to cause mold and mildew even when operating properly, and construction methods that allow moisture intrusion which will lead to IAQ problems. To my satisfaction, the writer emphasizes the need to do proper systems startup and commissioning—coming from an operations background, I very much appreciated section six.

Throughout the book the author also provides many charts, diagrams, and checklists that make the book a good reference.

My years of experience in a humid area (Atlanta), bring me to the conclusion that this book is an excellent addition to the library of anyone involved in building and operating buildings in the humid south. However, since indoor air quality problems due to molds and mildew are a problem in the north also, and since the book serves as a good primer on air conditioning, I would recommend this book to everyone.

Joe Fisher, Assistant Vice President, Facilities, West Virginia University



SURFACE WATER SENSING ALARMS

AVOID DOWNTIME

AND DAMAGE DUE TO

WATER LEAKS AND SPILLS!

...used in computer room / clean room sub-floors, equipment rooms, and unattended or difficult access areas; anywhere undetected leakage can cause damage, operations shutdown, or time consuming clean-up.

NEW! SENSOR CABLE

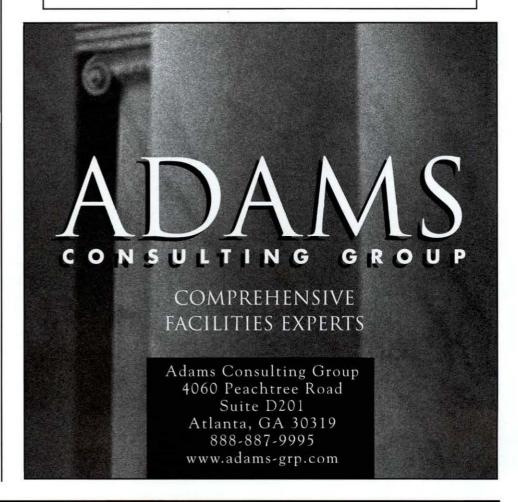
FOR FREE CATALOG AND PRICING CALL 1-800-533-6392 TODAY!

WWW.WATERALERT.COM

Dorlen Products

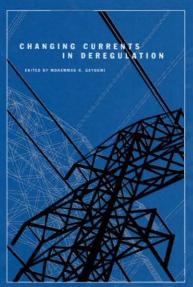
6615 W. Layton Ave. Milwaukee, WI. 53220

water ALERT* detection systems are installed in over 17,000 sites in the U.S.



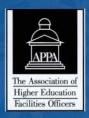
CHANGING CURRENTS IN DEREGULATION

This book provides a state-of-the-industry look at electric deregulation in the United States—from the rolling blackouts in California to Pennsylvania's success with electricity restructuring. Because many facilities professionals are unaware or unsure how deregulation will affect their institutions,



Changing Currents
in Deregulation
answers all the
questions that you
need to know.
Included are a history of the industry, electricity
pricing and availability, the role of
natural gas, and
predictions for

future efforts in restructuring. Included in the appendices are essays from individuals working in the field.



ORDER FORM

copies of Changing Currents in

Please send me

Deregulation. Copies are available from APPA for \$55
members/\$82 all others, plus delivery. Delivery fees are
10% of total purchase, maximum \$15; for international
orders, add 20% of total purchase; for rush/overnight
delivery, add \$25 plus regular delivery fees. Please allow
2-3 weeks for delivery.
Payment Method:
□ Check enclosed
☐ Purchase order number:
☐ Credit card:
Please circle one: VISA MasterCard American Express
Cardholder's name:
Card number:
Expiration date:
Total amount of charge:
Authorized Signature :
(required)
Name:
Title:
Institution:
Street:
City:
State: Zip:
Phone:
Fax:
E-mail:
☐ My institution is a member of APPA
(quantity) x \$55 members/\$82 others
+(delivery-add \$25 for rush delivery.
For International Orders add 20% of total purchase.
Total:\$

Return this form to APPA Publications, 1643 Prince Street, Alexandria, VA 22314-2818 or fax to 703.549.2772. For more information call APPA at 703.684.1446 or E-mail cotrenia@appa.org. Visit our online bookstore at www.appa.org/resources/publications.

New Products

New Products listings are provided by the manufacturers and suppliers and are selected by the editors for variety and innovation. For more information or to submit a New Products listing, contact Gerry Van Treeck, Achieve Communications, 3221 Prestwick Lane, Northbrook, IL 60062; phone 847-562-8633; e-mail gvtgvt@earthlink.net.

Virco Manufacturing's new Convertible Bench Tables add a new dimension of convenience for multi-purpose facilities.

Arrange front to front for cafeteria seating, back to front for seminar seating, and as benches for assembly seating. These durable units can be easily folded and rolled out of the way for storage so that your facility may be used for entirely different functions. These tables feature heavy-gauge



tubular steel frames, high-pressure laminated tops, and fourinch swivel casters with bearing raceways. For more information contact Virco at 800-813-4150.

Cooper Wiring Devices publishes a new 12-page brochure describing two classes of industrial plugs and connectors—watertight and insulated—designed to protect critical electrical service in harsh environments where dust, dirt moisture, chemicals, or corrosion are present. The watertight plugs and connectors feature a multipoint



watertight sealing system for use in tough, demanding applications. The insulated plug and connectors offer heavy-gauge blades for superior electrical performance and a durable exterior. For additional information call Cooper Wiring Devices at 800-366-6789.

Wegner Corporation introduces a new portable audience chair offering unmatched flexibility with all the benefits of luxury theatre seating. The chair features a stable, freestanding design that can be moved or reconfigured easily, making it ideal for black-box theatres, arenas, and other reconfigurable



spaces. With a thickly padded seat and back, including lumbar support, the chair offers exceptional comfort. A 16-gauge rectangular tube steel frame, hardwood armrests, and durable, high quality upholstery will provide years of trouble-free use. For more detail call Wegner at 800-326-8373.

Skil-aire announces the Moving Cooler. The first commercially available portable air conditioning unit that fully isolates the condenser and evaporative air streams to produce a cooler

environment while lowering energy costs. Meet the need for spot cooling in offices, cubicles, and meeting rooms while keeping close tabs on energy costs. Nothing wastes electricity faster than air conditioning an entire building when cool air is required only in isolated areas. Available in cooling capacities of 1, 1.5, 2, 3.5, and 5



tons. For more information regarding Skil-aire and other environmental control products and services call 800-625-7545.

Easy Risers, Inc. offers their new "Easy Risers" risers allowing you to easily adapt any table, chair, or existing furniture to meet the needs of students, staff, or visitors that may be physically challenged. Quickly installed these risers will save you time and money. The tough Easy Risers will certainly support

your needs and are actually strong enough to support a 3,000-pound van. Portable and adaptable they are available in two, three, four, and five-inch heights. The risers are easily sanitizable, and best of all affordable. For



detailed information on Easy Risers, Inc. go to www.easyrisersinc.com or call 866-300-6100.

Accent Signage Systems, Inc. announces the addition of the aluminum frame system to their line of signage products. The aluminum frame adds an exciting choice of metal frame finishes and



custom sizing for ADA signs. The 100-series edge design features a thin profile 1/16-inch edge. The 200 series design uses a 3/16-inch radius edge that matches their injection-molded frames. The sign insert fits into the frame using a simple snaplock mechanism. For questions and details about all of Accent Signage Systems, Inc. products call 800-215-9437.

Coming Events

APPA Events

or more information on APPA seminars and programs, visit our website's interactive calendar of events at www.appa.org.

Mar 17-19, 2002—Institute for Facilities Finance (held jointly with NACUBO). Dallas, TX.

Jun 10-14—Leadership Academy. Scottsdale, AZ

Jul 21-23—Educational Facilities Leadership Forum. Phoenix, AZ.

Sep 8-12—Institute for Facilities Management. Norfolk, VA.

Jan 26-30, 2003—Institute for Facilities Management. Ft. Worth, TX.

APPA Regional Meetings

Sep 15-17, 2002—RMA Regional Meeting. Banff, AB, Canada. Contact Steve Baldick, 403-220-8151 or baldick@ucalgary.ca.

Sep 28-Oct 3—ERAPPA Regional

Meeting. St. John's, NF, Canada. Contact Cynthia Whelan, 709-737-3491 or cwhelan@mun.ca or www.housing.mun.ca/conf/erappa.

Sep 28-Oct 1—PCAPPA Regional Meeting. Reno, Nevada.
Contact Buzz (Berger) Nelson, 775-784-6514 or buzz_nelson@vpaf.unr.edu.

Sep 29-Oct 2—CAPPA Regional Meeting. Spearfish, SD. Contact
Art Jones, 605-642-6245 or
artjones@bhsu.edu.

Sep 29-Oct 2—MAPPA Regional Meeting. Ames, IA. Contact Chris Ahoy, 515-294-8079 or ckahoy@iastate.edu.

Sep (date yet to be determined)— AAPPA Regional Meeting. Contact Brian Fenn, 61-07-3864-3778 or b.fenn@qut.edu.au.

Oct 12-15—SRAPPA Regional Meeting. Atlanta, GA. Contact Rita Tyler, 404-727-7487 or rtyler@fmd.emory.edu.

Other Events

Mar 6-8, 2002—National Facilities Management and Technology Conference/Exposition.

Baltimore, MD. Contact Tim Rowe, 414-228-7701 (ext. 452) or tim.rowe@nfmt.com or www.nfmt.com.

Mar 7-8—Physical Plant Crafts Association Conference.

New Mexico State University, Las Cruces, NM. Contact Paul Herrera, 505-646-1598 or pherrera@nmsu.edu or www.ppca.net.

Mar 20-23—Restoration & Renovation National Show.

Boston, MA. Contact Restore Media, 800-982-6247 or 978-664-6455 or info@restoremedia.com or www.restoration andrenovation.com.

May 8-10—10th National Conference on Building Commissioning. Chicago IL. Contact Diane Ferington, 503-248-4636 x201 or dferington@peci.org or www.peci.org/ncbc/ 2002/index.html.

Jun 30-Jul 5—Indoor Air 2002.

Monterey, CA. Contact Hal Levin, 831-426-0148 or www.indoorair2002.org.

July 13-17—SCUP 37: Mision y Cambia/Mission and Change.

San Diego, CA. Contact SCUP, 703-998-7932 or www.scup.org/37.

Index of Advertisers

Adams Consulting Group 49
American Thermal Products 3
APPA Educational Leadership Forum . 26-27
APPA Publications 9, 44, 50
Architex
Bayview
BlazeMaster 6
Butcher
Dorlen Products49
DriTherm Cover 3
Eagle Technology 19
Estimating Systems4
Facility Support Services 16
G. Reale Enterprises Inc 29
The Gordian Group 24

IDEA
Informed Software
McCourt Manufacturing
Popowski Brothers
Prism Computer Corporation Cover 4
PSEG
R.C. Associates
RenoSys
Shannon Enterprises
Stanley Consultants Inc
Tremco Manufacturing
TMA Systems, Inc Cover 2
VFA
Victaulic
WFF Facility Services





Underground Pipe Insulation / Corrosion Protection



- Continuously Manufactured Using Same Formula Since 1967
- Closed Cell 100% Hydrophobic Design
- Temperature Range: -273°F (Cryogenic) to +480°F (250°C)
- Ideal for New Piping Systems / Repairs / Tanks
- Approved by Department of Defense for New Construction

DRITHERM INCORPORATED

P.O. Box 5296

Parsippany, New Jersey 07054

(800)343-4188

FAX (973) 428-3391

THE FAMIS ASSET ENTERPRISE



Maintenance Management

Space Management

Calibration Management

Inventory Control

Tool Control

Key Control

Event Management

AutoCAD Interface

Web Site



TRADEMARKS: ORACLE of Oracle Corporation. EAMIS of Prism Computer Corporation. BANNER is a registered trademark of System & Computer Technology Corporation.

What Do You Want In A Facility Management System?

How about everything?

You could buy a maintenance management system from vendor X and a space management system from vendor Y and try to force the two to talk to each other. Or you can take a look at Prism Computer Corporation.

Prism's FAMIS Asset Enterprise is a suite of integrated software modules for managing facilities. Since each module is designed to work together, you can easily create the ideal facility management solution for your organization.

And with our advanced technology, you can also easily expand the FAMIS Asset Enterprise to people outside of your organization to create a true enterprise-wide system. For example, you can electronically communicate with your customers using the World Wide Web. You can also integrate it with Oracle Financials, SCT BANNER and just about any other financial system using our FAMIS Open Financial Interface.

The FAMIS Asset Enterprise is based on pure Oracle technology and supports Windows, Windows95/NT, Macintosh and Power Macintosh.

To find out a better way to manage your facilities, call us today at 800-774-7622 or visit our web site at www.prismcc.com.

PRISM



PRISM COMPUTER CORPORATION
TELEPHONE 800-774-7622 / FAX 949-553-6559
E-MAIL: famis@prismcc.com http://www.prismcc.com