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The Society of American Military Engineers

GREATER KANSAS CITY POST
KANSAS CITY, MISSOURI

"Proud Heritage - Promising Future"

Vol. 14 No.2
April / May 2003

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Upcoming General Membership Meetings

May 2003 Meeting (Will be held April 30, 2003)

Please join the Greater KC Post as we welcome Lieutenant General Robert B. Flowers, Commander and Chief of Engineers, U.S. Army Corps of Engineers, for his presentation on the current world events. This meeting will be truly informative and is expected to be heavily attended as we are honored and privileged to hear LTG Flowers perspective on the current world situation and the role of the USACE.

(One professional development hour (PHD) will be given for attending this event.)

Where: Royals Crown Club at Kauffman Stadium
1 Royal Way-I-70 & Blue Ridge Cutoff
Kansas City, MO 64129

When: April 30, 2003 □ Registration – 11:30 AM
Luncheon – 12:00 Noon □ Program to follow
Cost: Luncheon \$22.00 per person

Menu: Chicken Cordon Bleu with Wild Rice Pilaf, Sliced Roast Beef
Tenderloin, Green Beans Amandine, Fruit Salad, Pasta Salad, Garden
Salad, Fresh Strawberry Shortcake, New York Cheesecake and Beverage.

RSVP to Michelle Mahoney by 4/25/03 and indicate your menu selection.

Fax: 816-472-4086 □ Phone: 816-527-2348 □ Email: mmahoney@hntb.com

Upcoming Meetings

LTC Gary Heer, Chairman of our Programs Committee, is planning the remainder of our 2003 Programs Schedule and has tentatively retained the following guest speakers. Please reserve these 2003 dates as you will not want to miss any of these meetings. Meeting details will be provided via mailings the Post web page and upcoming issues of the newsletter

- June 26, 2003 Luncheon Meeting, Change of Post Leadership and Award of 2003 Scholarships. Same Young Engineers Group to sponsor.
- July 24, 2003 Luncheon Meeting, Guest Speaker: Dr. Wolff, SAME National President



KU Student Post Followup

by Sean McKee, Student Post President



The next Student Post meeting is being planned as a field trip later this month. Details about the field trip will be posted to the Post web page once they have been finalized. You may also contact the KU Student Post President, Sean McKee, via e-mail at smckee@ukans.edu if you are interested in participating. Last months meeting was held on March 26, 2003. The featured speaker was General Berkheiser (Retired) who spoke to our KU Student Post members about the importance of ethics. Sean McKee reported that the presentation was well attended and well received.

(Go Jayhawks!)



General Berkheiser (Retired) speaks to our KU Student Post Members.

Message from the President. . .

“Congratulations to all members of The Greater Kansas City Chapter of the Society of American Military Engineers - Gold Post winner for 2003! All of your hard work and participation paid off and we received top honors from the Society. But the excitement continues, with scholarship announcements coming soon, a Student Chapter with a record number of members and a core of hard working folks making the Post relevant to young members. Our Programs Committee continues to bring in the folks you want to see to both entertain and educate. One would think we would have had a drop-off in energy after hosting the National Convention a year ago, but that is not the case. Energy remains high and we now set about the task on how to invest our resources to maintain a thriving Post.



I ask for your support in the election of new officers. Ballots are out and it is important to know the nominees have your buy-in as they prepare to assume their duties. Our intent is to have all of the ballots counted prior to our joint MSPE/KSPE/SAME meeting on 17 April. Finally, I want to put in a plug for the SAME summer camps. Again we're sponsoring attendance for a couple of aspiring engineers - a great way to promote the profession. As you can see, we've been busy. You should be proud, as I am, of all we've achieved and all we will achieve. Onwards and Upwards!

Don Curtis, COL, Post President
Donald.R.Curtis.COL@nwk02.usace.army.mil



SAME Young Members Update

Young Members Royals Night Spring Spectacular

The Young Members of the Kansas City Post of S.A.M.E. are gearing up and heading to Kauffman stadium. On May 8th, those interested are invited to attend the Royals vs. Orioles game as part of a joint venture of engineering societies. Although the event is put on by ASCE, all local engineering societies are invited to attend. The price for the evening includes not only the game, but also what is sure to be a great tailgate party.

Contact Ann Riedel, USACE KC District for more information about this event (816) 983-3863 or Ann.Riedel@nwk02.usace.army.mil

Treasurer's Report

Following is a summary of the Post's funds and status of our account for the period of February 13, 2003 to April 2, 2003.

Operating Fund:

Balance = \$3,162.80 Net Change = - \$567.59

Merrill Lynch Fund: (Scholarship and Future Operating Fund)

\$ 37,571.84 Principal
\$ 207,452.94 Accrued Earnings (Cash)
\$ 245,024.78

KC SAME Post Upcoming 2003 Meetings

Meetings are tentatively scheduled for the 4th Thursday of each month, with the exception of those that conflict with holidays or guest speaker schedules. Mark your calendars planned meeting dates are:

April 17, 2003	September 25, 2003
April 30, 2003 (May 03 Meeting)	October 23, 2003
June 26, 2003	November 20, 2003
July 24, 2003	December 18, 2003
August 28, 2003	

Reminder: Please Help Us Maintain the KC Post Membership Database

Please submit any changes for your contact information, including address, phone and fax numbers, and e-mail to Bill Koski at koskiwa@cdm.com so that we can maintain our Post membership database and keep you informed of Post activities. You can now update your personal information via the KC SAME Post web page at www.same.org/kansascity/

SAME Newsletter, Greater Kansas City Post

President: COL Donald Curtis • Secretary: Frank Bader

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Jun/Jul 2003 Issue Deadline for Submittals June 11, 2003

This newsletter is issued every other month. Send article ideas to Phil Dula (see information above) or Lori Hintz (Ph: 651/291-3436, e-mail: lorih@baywest.com).

2003 Newsletter Deadlines

June/July 6/11/03	August/September 8/13/03
October/November 10/15/03	December/January 12/10/03

General Membership Meeting Followups

February 2003 Meeting Follow-up

Our February 2003 meeting was conducted at the Argosy Casino and was held as a joint meeting with the American Public Works Association. Our featured speaker was Mr. Bob Dimmett the USACE Project Manager for the Missouri River Levee System L-385. Mr. Dimmett intrigued those in attendance with the magnitude and technical challenges of this very important flood control project.

A presentation of our Certificate of Appreciation was made to our new Sustaining Member Firm: Roseman & Associates. Accepting the award on behalf of Roseman & Associates was David Hendrikse.

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Award of Certificates of Appreciation given to our featured speakers from left: LTC Gary Heer, USACE KC District, Bob Dimmett, USACE KC District, James Weitzel, Kessinger/Hunter, and Doug Wesselschmidt, President KC Chapter APWA.

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March 2003 Meeting Highlights

The Greater Kansas City Post met for our March 2003 meeting at Cascone's Restaurant on March 27, 2003. As always the food was great. Our featured speaker was Mr. Joseph Hughes, Chief of the Regulatory Branch of the USACE Kansas City District. Mr. Hugh provided an update on the USACE Regulatory Programs highlighting SWANCC, New Fill Definition, and Mitigation Guidance.

A presentation of our Certificate of Appreciation was made to our new Sustaining Member Firms: JE Dunn Construction and the M.E. Group, Inc. Accepting the award on behalf of JE Dunn were Michael Haverty and John Novak. Accepting the award on behalf of M.E. Group, Inc. was Dave Barry.



Award of New Sustaining Member Firm Plaque from Colonel Curtis to Dave Barry of the M.E. Group.



Presentation of Certificate of Appreciation Mr. Joseph Hughes and Colonel Curtis



Award of New Sustaining Member Firm Plaque from Colonel Curtis to Michael Haverty and John Novak of JE Dunn Construction.

On Station in the Everglades

by Steve Whitfield

(Steve is a Resident Representative for Burns & McDonnell on a project to restore the Florida Everglades, and transferred from Burns & McDonnell's Kansas City Office to Florida. As a former Kansas City Post President and active Board member, Steve has been keeping us updated on his new endeavors.)



March 14, 2003

Everglades Summer Begins

We officially shifted from the winter season to the "dry season" on March 1st. Our winter was very dry and we have actually had more rain since the dry season began than we had all winter. It has been warm; 90s and high 80s for some time now and the tourists are all in south Florida clogging the highways. Fortunately, they are far away from the project site here.

Recently, Florida Power & Light performed maintenance on the high tension power lines that connect the east and west coast down here. I had heard about how they do it but was amazed to see it done. The towers are probably 80 to 90 feet tall, with three sets of transmission lines at the ends of long arms. They carry thousands of volts. The towers sit in swampy areas and must be accessed by helicopter. To replace the insulators, which are about 12 feet in length, a helicopter lifts two or three guys, one at a time, from a staging area nearby to the tower arm where he gets off. The men are lifted at the end of a long line, occasionally with a suspended ladder attached. The copter maneuvers up and down adjacent to the wires at a high rate of speed. The men on the tower disconnect the insulators and the chopper picks it off the tower and delivers it to the staging area. A new insulator is then delivered to the men on the tower and they install it. They sometimes sit on the wires or stand on the arms about 80 feet above the ground. Up and down like a very fast elevator, the men and equipment ride, attached to a swiftly maneuvering helicopter. They work rapidly and then

come down to proceed to the next tower. It is a highly orchestrated display of incredible skill and daring. People stop along the highway and watch, fascinated.

Pump stations have progressed to the point where the concrete curtain walls are being attached to the steel frames. The stations are huge and stand out like hotels being built in the swamp. The Contractor was able to salvage the pump that fell off a truck in Alabama, by casting a new housing and flying in a special team from Brazil to verify that the pump vanes were within their microscopic tolerances. This last pump will be delivered in two weeks. All pumps will be installed in the next few weeks as the overhead cranes (35 ton) have been installed. Then the huge engines will be delivered and installed.

Some problems occurred with two of our bridges as abutments were placed too close together on one (survey problem) requiring that the pre-cast girders be removed and ends sawed off. The casting yard made an error on drain hole locations in the double tees for another bridge, requiring an approved fix be designed and implemented.

Our main earthwork Contractor has had another field management change, which hopefully will provide some relevant earthwork and dewatering expertise so that they do not fall further behind in the schedule and maybe actually make up some lost time. Just heard that they plan to double shift, finally; a positive sign.

On the wildlife front, I saw two big gators in action a couple of days ago. Proceeding along a levee I could make out a commotion of buzzards at the waters edge up ahead. When I got there I could see they were feasting on a dead wild hog, floating on its back. As I observed I noticed a big alligator approaching the spot from underwater, his tail propelling him very rapidly. He suddenly burst out of the water and clamped onto the hog; the buzzards scattering wildly, then casually swam off down the canal with the hog clenched firmly in his jaws. Later, that same day, I saw another, very big gator, slowly crossing the farm road ahead of me. They look like dinosaurs out of water. As I got closer I could see that he had a hold of something. When I came up to him he sort of looked at me and I could see he had a live, thrashing buzzard in his mouth. He had obviously gotten close enough to a distracted vulture to make the catch. I couldn't imagine that anything would eat a buzzard. Anyway, the gator suddenly got nervous and picked up his pace onto the canal bank, whereupon he dove into the water. Some thrashing around for awhile underwater and then he disappeared. Unfortunately I did not have any film in my camera.

And so the summer begins. We should have two months of excellent construction weather ahead of us before the rains begin in earnest. Will report again in the rainy season.

To be continued.....

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Greater Kansas City Post Wins SAME Post of the Year!!!

Congratulations to the Greater Kansas City Post for reaching the pinnacle of SAME achievement. The National Awards Committee after reviewing the annual activities and accomplishments of all SAME Posts named our Post this year's Gold Post winner. The competition was strong with the Minneapolis-St. Paul Post receiving the Silver Post award and the Washington Post receiving the Bronze Post award. As usual the decisions by the National Awards Committee were very difficult but our Post however, was the unanimous winner of the Gold Post Award. The decision process was comprehensive with the selection committee reviewing many factors including: Grand Slam winners, membership, membership retention, Young Members Programs, timely submission of Post Documents, participation in support of SAME awards programs, and hosting the National or Regional Conferences. Congratulations and thanks to all our hard working Post members that made the attainment of this award a reality.

Brain Teaser

A barge loaded with scrap iron is floating in a lock. If all the scrap iron falls off the barge into the water in the lock will the water level of the lock go up, down, or remain the same? See page 7 for the answer.



Society of American Military Engineers 2003 Engineering and Construction Camps

This year, SAME is offering two camps this year for high school students, co-sponsored by SAME HQ, SAME Engineering Education Committee, public agencies and local Posts at:

- **Naval Base Ventura County, Port Hueneme, California, co-sponsored by the Oxnard-Ventura Post and the Naval Facilities Engineering Service Center, July 26-August 1**
- **U.S. Air Force Academy, Colorado Springs, Colorado, co-sponsored by the Colorado Springs and Denver Posts and the Department of Civil and Environmental Engineering, July 5-11**

The Greater Kansas City Post (GKCP) is once again sponsoring two high students to the Engineering and Construction Camps. One student will be nominated from our partner school district Hickman Mills CSD #1 and the other student will be nominated and selected at large from our membership. Our members are requested to nominate a relative for this open slot. The camps are open to students that are entering their sophomore, junior or senior year in high school in the Fall 2003. You can review the description of the two camps, the application process, downloadable application and marketing brochure for each camp, and points of contact on the web site. Please go to the camp icon on the SAME home page (www.same.org). Interested students should complete the application and designate the camp of their choice to the attention of Larry Myers at larry.l.myers@usace.army.mil Questions can also be forwarded to him at this address or call him at 816-983-3205.

SAME Education Fund

SAME is also requesting corporate support in two ways from our Sustaining Members. First, providing financial support to the camp and other educational programs by donations to the SAME Education Fund, and second, providing construction materials, helpers and mentors for the camp. As a result of financial and in-kind donations last year, we were able to reduce the price of the camp from \$500.00 to \$400.00 per student this year. Please consider a personal or corporate contribution to the SAME Education Fund at the following levels:

Platinum @ \$1,000.00 or above
Silver @ \$250.00-\$499.00

Gold @ \$500.00-\$999.00
Bronze @ \$50.00-\$249.00

We will recognize both types of contributions from Individuals and Sustaining Members on the SAME web site as well as in feature articles on the camps in the coming months. Please refer any general questions on the program to Mr. Larry Myers, Chair, Engineering Education Committee, U.S. Army Corps of Engineers, Kansas City District (816-983-3205 (larry.l.myers@usace.army.mil)) or to the points of contact listed on the web site for each of the camp.

New Greater Kansas City Post Sustaining Member Firm Highlight

M. E. Group, Inc. was incorporated in 1991. The majority of MEG staff which includes Principals, Associates, Engineers, and other technical support personnel previously worked together at Maniktala Associates Engineers, Inc. since 1982. MEG has 10 Stockholders.

In this competitive environment, our firm has retained **stability** through principal involvement in design of the projects. The five principals have worked together for an average of **22 years**.

MEG is based in the Midwest with offices in Kansas City, Missouri; Lincoln and Omaha, Nebraska; Denver, Colorado; and Des Moines, Iowa. All our offices work closely together; we are one firm and pool our resources to provide large firm capabilities.



Firm Profile:

M.E. Group, Inc., (MEG) is a mechanical, electrical, telecommunications and plumbing consulting design engineering firm. Among the services provided are HVAC, plumbing, control systems, indoor and outdoor lighting design, fire protection, life safety systems, security and surveillance systems, chilled and hot water systems, central plant design, campus utilities, power distribution, audio/video/data wiring, and telecommunications design.

The firm has provided services from studies to turnkey projects with construction costs ranging from under \$10,000 to approximately \$200,000,000.

Commitment & Mission:

Our Mission is to meet and exceed your requirements through hard work and innovation. Our Vision is to be the best in our chosen fields. Our Culture can be defined as the organization of individuals that possess the character, knowledge, work ethic, and desire to learn and achieve. Our Commitment is to provide you (our client) with innovative solutions and quality projects that are completed on time and within a budget.

CADD Capabilities & Technology:

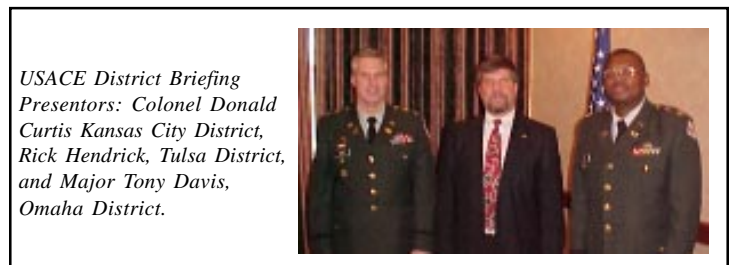
AutoCAD, Versions 2000, 2002 and LT, Intergraph Microstation PC (Version 4) Systems, Computerized Project Management & Scheduling, Design & Equipment Selection Software, Computerized Spreadsheet, Database & Word Processing Tools, Networked Offices, and High-Speed Internet Access – are some of the tools we currently use to provide state-of-the-art technology resources for our Clients.

National Engineers Week and USACE Kansas City, Omaha, and Tulsa Districts Briefing:

In support of National Engineers Week (February 16-22, 2003) the Greater Kansas City Post hosted a display booth at the conference exhibit area. Thanks to Bill Singleton, Burns and McDonnell and Tom Poer, HNTB, for manning the booth. The conference was very well attended and provided a great vehicle to market the advantages of membership in SAME. In addition to the conference activities all Sustaining Members were invited to hear the Program briefs/updates for Kansas City, Omaha, and Tulsa Districts Army Corps of Engineers. Thanks to Colonel Donald Curtis, USACE Kansas City District Commander, Rick Hedrick USACE Tulsa District and Major Tony Davis of the USACE Omaha District for their comprehensive briefings.



Greater Kansas City Post Booth at National Engineers Week Conference. From left to right: Tom Poer, HNTB, Colonel Donald Curtis, Post President, and Bill Singleton, Burns and McDonnell.



USACE District Briefing Presentors: Colonel Donald Curtis Kansas City District, Rick Hendrick, Tulsa District, and Major Tony Davis, Omaha District.

Young Members March Get-Together

The Young Members of S.A.M.E. held a joint social hour at the Blue Moose Bar & Grill on March 6th. There were 10 companies represented by some great Young Member prospects who were able to meet with some of the leadership from the Corps of Engineers. The social was a joint effort with KSPE (Kansas Society of Professional Engineers), which allowed both groups a chance to learn a little about the other. The Young Member's group looks forward to the possibilities of working with other professional organizations in the future. Remember, although a Young Member is defined as an S.A.M.E. member 35 years or younger, all S.A.M.E. members are invited to join in the Young Member activities.

For more information about the Young Members Group contact Matt Metcalf at (mmetcalf@hntb.com).

Advertise in the Newsletter

By Phil Dula

There are still opportunities to advertise in our newsletter. Please show your support of the Greater Kansas City Post Newsletter and join our newsletter advertisers. As Editor of our Newsletter I would like to thank **Bay West, Pangea, Haz-Mat Response Disposal, Inc., HDR, HydroGeologic, GBR, URS, Tetra Tech, and our latest supporter, Ecology and Environment** for their support of the Post newsletter. Their support is greatly appreciated as the advertising fee of \$30 per issue is used to support our web page development and meeting announcement mailing costs. Your business card format advertisement could be included at nominal cost of \$30.00 per issue or at a discounted price of \$150.00 if your firm signs up for 6 issues. Contact Phil Dula at phild@baywest.com or (913)-663-2915 if you wish to take advantage of this opportunity.

Career Opportunities

Did you know that our sustaining member firms are linked to our Post web page? By accessing these company links you can search for personnel resource needs at these firms. In addition Federal job openings can be searched at the following sites: www.usajobs.opm.gov and www.kchasjobs.com. These openings include opportunities at the USACE, EPA, GSA, etc. In addition we request that our member firms utilize our Post's Newsletter to list their current employment opportunities. Please contact Phil Dula to have your career opportunities included in the newsletter.

Brain Teaser Answer

According to Archimedes' Principle, the weight of the floating barge loaded with iron equals the weight of the volume V_1 of water displaced by the barge:

$$V_1 \rho_w = W_b + W_{Fe}$$

Where ρ_w is the density of water and W_b & W_{Fe} are the weights of the water and iron respectively. After the iron has fallen into the water the volume V_2 of water displaced by the barge alone is equal the weight of the barge:

$$V_2 \rho_w = W_b$$

To this we must add the volume of water V_{Fe} displaced by the iron in the water:

$$V_{Fe} = W_{Fe} / \rho_{Fe}$$

So the total displacement of water after the iron falls in the water is:

$$V_2 + V_{Fe} = W_b / \rho_w + W_{Fe} / \rho_{Fe}$$

Now subtract this from V_1 from our first equation and W_b / ρ_w is eliminated leaving:

$$V_1 - V_2 - V_{Fe} = W_{Fe} (1/\rho_w - 1/\rho_{Fe})$$

Since the density of iron ρ_{Fe} is greater than the density of water ρ_w the term in the parentheses is positive. Thus V_1 is greater than $V_2 + V_{Fe}$ and so the water level is less after the accident. Note to Archimedes' Principle tells us that the density of iron ρ_{Fe} is greater than the density of water ρ_w since solid iron sinks in water because it cannot displace a volume of water equal to its weight.

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Mike Trial, Deputy District Engineer for Project Management at the USACE Kansas City District to Retire

Please join the Kansas City District in honoring Mike Trial in his retirement. An open house will be held in Room 164 at the Richard Bolling Federal Building from 1:30 PM to 3:30 PM on April 28, 2003. An Italian Buffet luncheon will be held in his honor at Figlio Tower on April 29, 2003 from 11:00 AM to ????. The cost of the luncheon will be \$22 per person. Please RSVP to Stephanie Loerm at (816) 983-3341.

