

President:
Dr. Soliman Khudeira, P.E.
(312) 421-2104

Vice President:
Abder Rahman Ghoulleh, P.E.
(708) 229-9235

Treasurer:
Jamal Grainawi, S. E., P.E.
(847) 705-6376

Secretary:
Darlene Attiah
(773) 931-7223

IT Officer:
Hani Mayzouni
847-697-4000

Activity Committee:
Ranya Atia
(847) 646-4515

Education Committee:
Dr. Ghaffar Kazkaz
(847) 590-7075

Membership Committee:
Talal Almasri
(630) 483-7445

Career Enhancement Committee:
Eyad Elqaq, P.E.
(312) 357-1840

Financial Committee:
Mark Bendok, P.E.
(773) 935-3948

Publication Committee:
Dr. Hossam Abdou, P.E., S.E.
(312) 397-9840

Board of Trustees:
Chairman
Dr. Ahmad Hammad, S.E., P.E.

Members
Bilal Almasri
Hasan Al Gholeh
Jamil Bou-Saab, P.E.
John Dasoqi, S.E.
Dr. Sam Elmoursi, P.E.
Dr. Mohsen Issa, S.E., P.E.
Ayoub Talhami, P.E.

(cont'd)

springs, etc. create engine drag and are unsafe at high traveling speeds.

24. Remove snow tires during good weather seasons; traveling on deep tire tread really robs fuel!

25. Inflate all tires to maximum limit. Each tire should be periodically spun, balanced and checked for out-of-round.

When shopping for new tires, get large diameter tires for rear wheels. Radial designs are the recognized fuel-savers; check manufacturer's specifications for maximum tire pressures.

26. Remove vinyl tops - they cause air drag. Rough surfaces disturb otherwise smooth air flow around a car's body.

Bear in mind when buying new cars that a fancy sun roof helps disturb smooth air flow (and mileage).

27. Auto air conditioners can reduce fuel economy by 10% to 20%. Heater fan, power windows and seats increase engine load; the more load on your engine, the less miles per gallon.

28. Remove excess weight from trunk or inside of car - extra tires, back seats, unnecessary heavy parts. Extra weight reduces mileage, especially when driving up inclines.

29. Car pools reduce travel monotony and gas expense - all riders chip in to help you buy. Conversation helps to keep the driver alert. Pooling also reduces traffic congestion, gives the driver easier maneuverability and greater "steady speed" economy. For best results, distribute passenger weight evenly throughout car.

30. During cold weather watch for icicles frozen to car frame. Up to 100 lbs. can be quickly accumulated! Unremoved snow and ice cause tremendous wind resistance. Warm water thrown on (or hosed on) will eliminate it fast.

EXTRA TIPS

Install pressure regulator valve (sold in auto parts stores)... Use graphite motor oil... Beware of oil additives, regardless of advertising claims... Add Marvel Mystery Oil into gas fill-ups... Investigate fuel/water injection methods and products... combine short errands into one trip... Use special gas additives to prevent winter freezing of gas lines!

VOL 4
ISSUE 4

JANUARY
2003

AAAEA NEWSLETTER

ARAB AMERICAN ASSOCIATION
OF
ENGINEERS AND ARCHITECTS



INSIDE

PRESIDENT'S MESSAGE

COMMITTEE REPORTS

ANNOUNCEMENTS

CALENDAR

MISC.

VISIT OUR NEW
WEBSITE:
WWW.AAAEA.ORG

OR EMAIL US:
AAAEA@AAAEA.ORG

Ever Wondered how the Refrigeration Process Works? (Part I)

Snow and ice, cool streams, springs, caves and cellars were long ago used to cool food. Meat and fish were preserved in warm weather by salting or smoking. Around 500 B.C. the Egyptians and Indians made ice on cold nights by setting water out in earthenware pots and keeping the pots wet. The Chinese cut and stored ice in 1,000 B.C. The intermediate stage in the history of cooling foods was to add chemicals like sodium nitrate or potassium nitrate to water causing the temperature to fall. Cooling with this method was recorded in 1550, as were the words "to refrigerate". By the end of the 17th century, iced liquors and frozen juices were popular in French society. In 18th century in England, people collected ice in the winter and put it into icehouses, where the sheets of ice were packed in salt, wrapped in strips of flannel, and stored under ground to keep them frozen until summer. Warm winters in 1889 and 1890 created severe shortages of natural ice in the U.S. This stimulated the use of mechanical refrigeration for the freezing and storage of fish and in the brewing, dairy and meat packing industries. Commercial refrigeration techniques were also applied to railroad cars, were used in "coolers" in grocery stores and in various ways in manufacturing industries.

The following will explain in basic terms the principals that are used to create the refrigeration effect. This is only to enlighten any curious and unknowing observer as to how this magical effect occurs.

First of all, did you know that there is no such thing as cold? You can describe something as cold and everyone will know what you mean, but cold really only means that something contains less heat than something else.

The definition of refrigeration is The Removal and Relocation of Heat. So if something is to be refrigerated, it is to have heat removed from it. If you have a warm can of pop at say 90 degrees

Fahrenheit and you would prefer to drink it at 40 degrees, you could place it in your fridge for a while, heat would somehow be removed from it, and you could eventually enjoy a less warm pop. But let's say you placed that 40-degree pop in the freezer for a while and when you removed it, it was at 35 degrees. See what I mean, even "cold" objects have heat content that can be reduced to a state of "less heat content".

The limit to this process would be to remove all heat from an object. This would occur if an object was cooled to absolute zero which is -273 C or -460 F. They come pretty close to this under laboratory conditions and strange things like electrical superconductivity occur.

How do things get colder?

There are 3 main ways;

1) Radiation; 2) Conduction; 3) Convection.

Conduction and convection are used extensively in the design of refrigeration equipment. If you place two objects together so that they remain touching, and one is hot and one is cold, heat will flow from the hot object into the cold object. This is called conduction. If you were to fan a hot cup of coffee it would cool somewhat. Some of the heat from the cup of coffee would be carried away by the air molecules. That is called convection. And if you move a glowing hot ember away from a bonfire, and you watched it you will notice that the glowing will get dimmer and dimmer, it is cooling itself by radiating heat away. Note that an object doesn't have to be glowing in order to radiate heat, all things use combinations of these methods to come to equilibrium with their surroundings. So you can see that in order to refrigerate something, we must find a way to expose the object to something that is colder than itself. Before we talk about the actual mechanics of a refrigerating system, there are some other important concepts to discuss. (pg.3 cont'd)

President's Message



I recently attended a meeting sponsored by the Illinois Engineering Council (IEC), of which AAAEA is a society member. One of the topics on the agenda was how to get members to volunteer their time and to be involved. I would like to share with our members and board the recommendations contributed by all society president's to encourage volunteerism:

- The association should ask the members for help and keep giving them tasks
- Should ask people to come to the activities
- Encourage spouses to get involved
- Tailor the task to match a person's ability to serve
- Find some one to delegate to, if you do not have the time
- Social activities will help to involve members
- Show appreciation and recognition
- In volunteerism, getting people is only half the battle, keeping them is the other half
- Leaders of the association should show their enthusiasm to encourage others to volunteer
- Assign a mentor to each new member. The mentor should be a friend of the new member

Our association has always encouraged and welcomed any kind of volunteering related to AAAEA activities. We have established ongoing programs (EIT, ACT, math tutoring, etc.) that will continue to be offered as long as we have volunteers. If any one of our members are interested in volunteering, the following are areas that require your contributions:

- Volunteer now to serve as a member in a committee
- Prepare yourself to serve as an officer or a committee chairperson
- Solicit new members
- Visit the website and offer suggestions to improve it
- Attend and encourage others to participate in our educational and social activities
- Recommend a new educational or social activity
- Recommend ways to improve the newsletter, or better, contribute to the Newsletter. The following are the newsletter columns that you might be able to contribute to:
 - Article
 - Company profile
 - Featured member

- Announcements (congratulations, etc.)
- A mini article – pictures
- Announcement of events by other Engineering/Architectural Associations
- Interview
- Non Technical Corner
- Job Market (Positions Available)
- Job Market (Positions Wanted)
- Project Profile
- Notable Websites/Computer Tips/Facts/Quotes

By comparison to other associations, AAAEA is in good standing. We have many dedicated volunteers that help maintain AAAEA's growth. However, additional volunteers are always needed and appreciated.

Soliman Khudeira, PhD, PE

(continued from pg.1)

The States of Matter

They are of course solid, liquid and gas. It is important to note that heat must be added or removed to a substance to make it change from one state to another.

The Magic of Latent Heat

Long ago it was found that we needed a way to quantify heat. Something more than just saying "less heat" or "more heat" or "a great deal of heat" was required. This was a fairly easy task to accomplish. They took 1 LB of water and heated it 1 degree Fahrenheit. The amount of heat that was required to do this was called 1 BTU (British Thermal Unit).

To raise the temperature of 1 LB of water from 50 degrees to 51 degrees would take 1-BTU. However, if you tried raising the temperature of water from 212 degrees to 213 degrees you would not be able to do it. Water boils at 212 degrees at normal atmospheric pressure and would prefer to change into a gas rather than let you get it any hotter. (Lower the pressure and you lower the boiling point) So, finding some fluid that evaporates at a lower boiling point than water was one of the first steps required for the development of mechanical refrigeration.

Chemical Engineers spent years experimenting before they came up with the perfect chemicals for the job. They developed a family of hydroflouorocarbon refrigerants that had extremely low boiling points. These chemicals would boil at temperatures below 0 degrees F at atmospheric

17. Avoid rough roads whenever possible, because dirt or gravel rob you of up to 30% of your gas mileage.

18. Use alternate roads when safer, shorter, straighter. Compare traveling distance differences - remember that corners, curves and lane jumping requires extra gas. The shortest distance between two points is always straight.

19. Stoplights are usually timed for your motoring advantage. By traveling steadily at the legal speed limit you boost your chances of having the "green light" all the way.

20. Automatic transmissions should be allowed to cool down when your car is idling at a standstill, e.g. railroad crossings, long traffic lights, etc. Place gear into neutral position. This reduces transmission strain and allows transmission to cool.

21. Park car so that you can later begin to travel in forward gear; avoid reverse gear maneuvers to save gas.

22. Regular tune-ups ensure best economy; check owner's manual for recommended maintenance intervals.

Special attention should be given to maintaining clean air filters... diminished air flow increases gas waste.

23. Inspect suspension and chassis parts for occasional misalignment. Bent wheels, axles, bad shocks, broken

cont'd on back



16002 South Rive Road, Plainfield, IL. 60544

Tel (815) 577-0100 Fax (815) 577-8220

Temperature Control/Building Automation Systems
Voice/Data, Security, Fire Alarm

Fiber Optic Installations, Infrastructure Design

Satellite Systems for Multi Dwelling and Commercial
Electrical Construction for Industrial, Commercial

We provide design-build services for all systems offered

Contact Name: Sami Nassib

HQ2 Construction, Inc.

Your one Stop Construction Partner

101 W. Childs Street

Wheaton, IL 60187

Tel. (630) 588-8835

Fax (630) 221-1025

Applied

GeoScience

Incorporated

AGI is a consulting engineering firm that services the geotechnical, environmental, construction and minerals industries in both the public and private sectors.

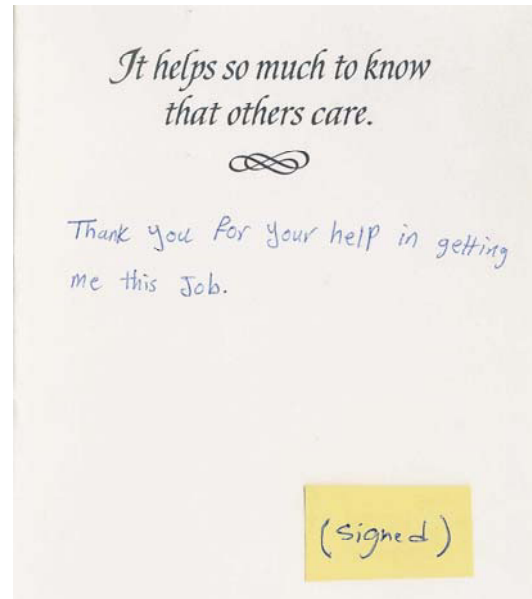
Main Office: 2385 Hammond Drive, Suite 6
Schaumburg, Illinois 60173

Chicago Office: 920 W. Madison, Suite 6
Chicago, Illinois 60607

Tel: (847) 303-0300 Fax: (847) 303-0900
appliedgeo@prodigy.net

ADAM M. MOGHAMIS, P.E.
Principal Engineer

- You may be disappointed if you fail, but you are doomed if you don't try. **Beverly Sills**
- I don't know the key to success, but the key to failure is trying to please everybody. **Bill Cosby**



Thank you Card Received by AAAEA's Career Enhancement Committee

30 gas-saving tips!

This article was taken from msn.com website

Save on your gas price!

The surest way you can improve your fuel cost problem is to change your motoring habits. Listed below under four categories are 30 effective methods of doing so... no need to buy expensive add-on equipment.

ENGINE WARM-UP

1. Avoid prolonged warming up of engine, even on cold mornings - 30 to 45 seconds is plenty of time.
2. Be sure the automatic choke is disengaged after engine warm up... chokes often get stuck, resulting in bad gas/air mixture.
3. Don't start and stop engine needlessly. Idling your engine for one minute consumes the gas amount equivalent to when you start the engine.
4. Avoid "revving" the engine, especially just before you switch the engine off; this wastes fuel needlessly and washes oil down from the inside cylinder walls, owing to loss of oil pressure.

5. Eliminate jack-rabbit starts. Accelerate slowly when starting from dead stop. Don't push pedal down more than 1/4 of the total foot travel. This allows carburetor to function at peak efficiency.

HOW TO BUY GASOLINE

6. Buy gasoline during coolest time of day - early morning or late evening is best. During these times gasoline is densest. Keep in mind - gas pumps measure volumes of gasoline, not densities of fuel concentration. You are charged according to "volume of measurement".

7. Choose type and brand of gasoline carefully. Certain brands provide you with greater economy because of better quality. Use the brands which "seem" most beneficial.

8. Avoid filling gas tank to top. Overfilling results in sloshing over and out of tank. Never fill gas tank past the first "click" of fuel nozzle, if nozzle is automatic.

HOW TO DRIVE ECONOMICALLY

9. Exceeding 40 mph forces your auto to overcome tremendous wind resistance.

10. Never exceed legal speed limit. Primarily they are set for your traveling safety, however better gas efficiency also occurs. Traveling at 55 mph gives you up to 21% better mileage when compared to former legal speed limits of 65 mph and 70 mph.

11. Traveling at fast rates in low gears can consume up to 45% more fuel than is needed.

12. Manual shift driven cars allow you to change to highest gear as soon as possible, thereby letting you save gas if you "nurse it along". However, if you cause the engine to "bog down", premature wearing of engine parts occurs.

13. Keep windows closed when traveling at highway speeds. Open windows cause air drag, reducing your mileage by 10%.

14. Drive steadily. Slowing down or speeding up wastes fuel. Also avoid tailgating - the driver in front of you is unpredictable. Not only is it unsafe, but it affects your economy, if he slows down unexpectedly.

15. Think ahead when approaching hills. If you accelerate, do it before you reach the hill, not while you're on it.

GENERAL ADVICE

16. Do not rest left foot on floor board pedals while driving. The slightest pressure puts "mechanical drag" on components, wearing them down prematurely. This "dragging" also demands additional fuel usage.

pressure. So finally, we can begin to describe the mechanical refrigeration process.

There are 4 main components in a mechanical refrigeration system:

The compressor is a vapor compression pump that uses pistons or some other method to compress the refrigerant gas and send it on it's way to the condenser.

The condenser is a heat exchanger that removes heat from the hot compressed gas and allows it to condense into a liquid.

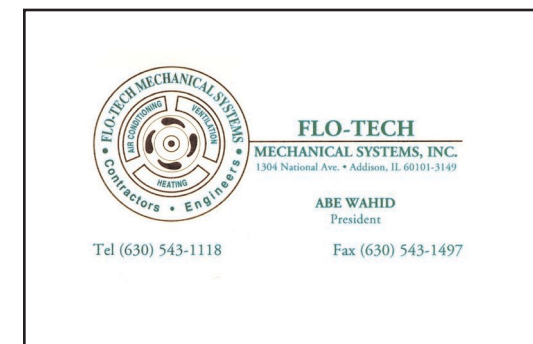
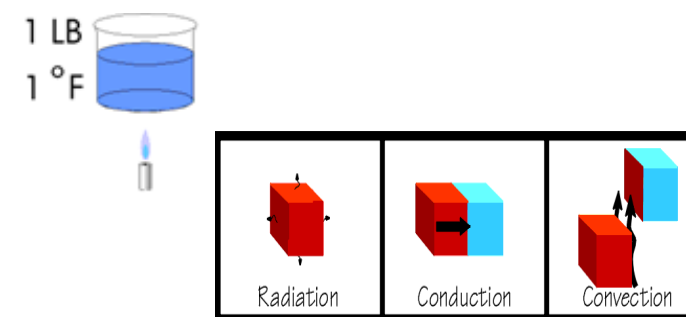
The liquid refrigerant is then routed to the metering device. This device restricts the flow by forcing the refrigerant to go through a small hole that causes a pressure drop. which help lowers the boiling point and makes it easier to evaporate, and will absorb heat from the surrounding area faster?

The component where the evaporation takes place is called the evaporator.

The refrigerant is then routed back to the compressor to complete the cycle. The refrigerant is used over and over again absorbing heat from one area and re locating it to another.

Remember the definition of refrigeration?

The removal and relocation of heat



CENTER OF GRAVITY (MASS)

By - Soliman Khudeira



What happens is clear and needs no explanation. However, Engineers and Scientists take a common sense situation and make *science* out of it. We scientificate things, if their such a word. That is what Newton did with the apple, for example, and out of which, great discoveries were made. Below is the science of Static to explain something that needs no explanation?

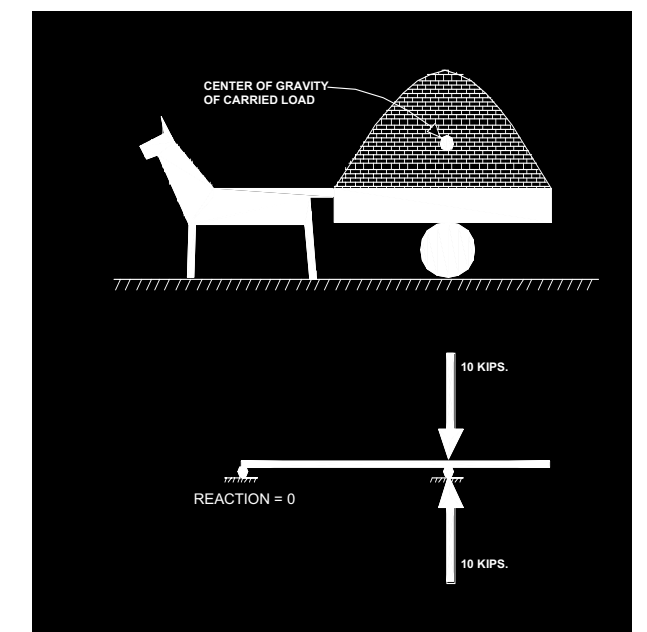


Figure 1: The C.G. is directly over the tire. The animal is extremely comfortable since he is carrying no load (reaction = 0). The tire, however, is being severely punished and ready to burst.

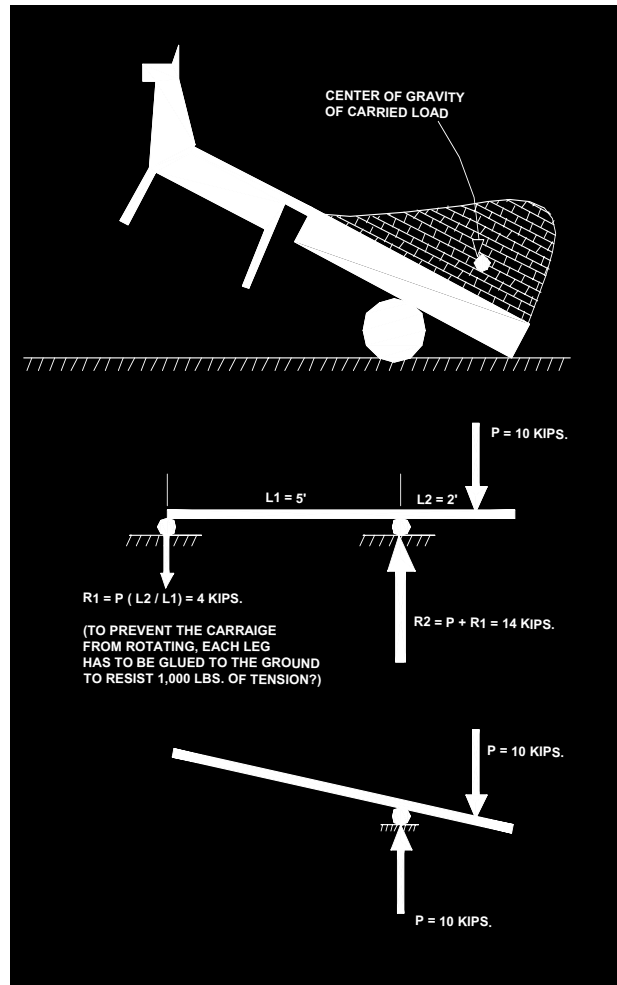


Figure 2: The C.G. is behind the tire. The animal is not carrying any load, instead, he is being carried.

Figure 3: The C.G. is closer to the animal. It's columns (legs) will buckle under this unmerciful load.

ACTIVITY COMMITTEE REPORT

Ranya Atia

The Activity Committee has been attempting to plan a couple of fun family winter activities for our members. These activities included a ski trip and a bowling event.

An RSVP form with details about a proposed Ski trip was mailed to members in late December to gauge interest. Unfortunately, only a few responses were received. Therefore, this idea will no longer be pursued. However, if there is interest in such a trip, we ask for your feedback via email so that the next board could plan a trip for next winter.

The bowling activity is still being pursued. We are looking at the first weekend in March. It would most likely be a Saturday or Sunday day event from 12:00 to 3:00 PM. A pizza lunch would be complimentary and cost to members would be approx. \$10/person for 2 games and shoe rental. Currently, location and exact date/time are being arranged. Look for official announcement and ticket to go on sale very soon.

The Annual Hafleh has been confirmed for Saturday March 29th at Drury Lane. As usual, the hafleh will include buffet dinner, entertainment, and prizes. Official announcement and tickets will be available soon.



AAEEA Members Volunteered as Science Fair Judges at Universal School

Miscellaneous corner

By: Hasna Khudeira

Selected Quotes, Facts, Notable websites, and/or Computer Tips.

Facts

- The Main Library at Indiana University sinks over an inch every year because when it was built, engineers failed to take into account the weight of all the books that would occupy the building.
- Butterflies taste with their feet.
- A duck's quack doesn't echo, and no one knows why.
- In 10 minutes, a hurricane releases more energy than all of the world's nuclear weapons combined.
- On average, 100 people choke to death on ball-point pens every year.
- On average people fear spiders more than they do death.
- Ninety percent of New York City cabbies are recently arrived immigrants.
- Thirty-five percent of the people who use personal ads for dating are already married.
- Elephants are the only animals that can't jump.
- Only one person in two billion will live to be 116 or older.
- It's possible to lead a cow upstairs. But not downstairs.
- Women blink nearly twice as much as men.
- It's physically impossible for you to lick your elbow.
- A snail can sleep for three years.
- No word in the English language rhymes with "MONTH."
- Average life span of a major league baseball: 7 pitches.

- Our eyes are always the same size from birth, but our nose and ears never stop growing. SCARY!!!
- The electric chair was invented by a dentist.
- All polar bears are left handed.
- In ancient Egypt, priests plucked EVERY hair from their bodies, including their eyebrows and eyelashes.
- An ostrich's eye is bigger than its brain.
- TYPEWRITER is the longest word that can be made using the letters only on one row of the keyboard.
- "Go," is the shortest complete sentence in the English language.
- If Barbie were life-size, her measurements would be 39-23-33. She would stand seven feet, two inches tall.
- A crocodile cannot stick its tongue out.
- The cigarette lighter was invented before the match.
- Americans on average eat 18 acres of pizza every day.

Quotes

- Assert your right to make a few mistakes. If people can't accept your imperfections, that's their fault. **Dr. David M. Burns**
- The time to repair the roof is when the sun is shining. **John F. Kennedy**
- I took a speed-reading course and read 'War and Peace' in twenty minutes: It involves Russia. **Woody Allen**
- Forgive your enemies, but never forget their names. **John F. Kennedy**
- Forget injuries, never forget kindnesses. **Confucius**
- I hear and I forget. I see and I remember. I do and I understand. **Confucius**
- It does not matter how slowly you go so long as you do not stop. **Confucius**
- Respect yourself and others will respect you. **Confucius**
- The wisest mind has something yet to learn. **George Santayana**
- Always bear in mind that your own resolution to succeed is more important than any one thing. **Abraham Lincoln**
- A sense of humor is part of the art of leadership, of getting along with people, of getting things done. **Dwight D. Eisenhower**

across 3 shifts along with cost, quality, safety, and service numbers for the department. The position requires a high level of leadership, problem solving and technical skills. Annual salary ranges from \$55-65k depending on experience. Relocation HAS JUST been approved for the position at this time.

Let me know if you know of anyone that might be a fit or be interested. And if so have them send me their resume. If you are interested send me a fresh copy of your resume and also please fill out this Maintenance Profile Sheet.

Thanks, Michael Gliner

Special Announcement

Dear members, agencies, consultants, and vendors:

On behalf of ITS Midwest, I would like to invite you to participate in our association annual meeting scheduled on Friday, March 7, 2003. The themes of this year meeting are TEA 21 Reauthorization and ITS Public/Private Partnerships. The meeting program features national, state and local transportation leaders. For more details about the program, please refer to the attached agenda.

This year meeting also includes an exhibit area to provide agencies, consultants, contractors, vendors and manufacturers with an opportunity to show their projects, products and services. For more details about this opportunity, please refer to attached form.

As part of the meeting, the Illinois Tollway have generously scheduled a reception and tour for the meeting attendees to see their new Traffic and Incident Management Center (TIMS). Please note that this reception and tour are included in the registration package.

I also have attached the registration and sponsorship forms for your reference and use.

If you have any questions, please feel free to contact Jeff Hochmuth (jjh@iteris.com or 630-926-1487) or me (mabbasi@hntb.com or 312-930-9119). We look forward to seeing you on March 7th.

Mousa Abbasi
ITS Midwest Annual Meeting Committee, Chair

JOB #4

URS is looking for Transit Communication and Signal Engineer with 7-10 years of experience. Please call Maher Abou-Mallouh at 312-733-7000 x6645.

AAAEA has received the following thank you letter from Universal School

Universal and Aqsa schools would like to thank the AAAEA for all their assistance with our students through the tutoring and ACT programs that are offered on Saturday.

I'd like to personally thank all the tutors that have been helping our students on Saturday. Under the direction of Dr. Kazkaz and the tutors, they have truly found the individual assistance very beneficial. The teachers have seen a marked improvement in the students understanding. To Mrs. Raghad Dahhan and the ACT volunteers we pray that your efforts shall be rewarded in many ways. You have brought to our students a service that they have been in need of for some time. We all appreciate what this organization has brought to our community.

Sincerely,
Hanen Abdallah
Universal School Math/Science Chairperson



Universal School Science Fair Student

New Members

Hesham Haj Yousif Housam Haj Yousif
Bassam Haj Yousif Hytham Mostafa
John Sidarous Ala Sassila
Mousa Ayyash

Financial Committee Report

Mark Bendok

The AAAEA Newsletter is looking for companies to advertise their business. The pricing per issue are as follows: \$50 for a business card size; \$150 for half a page; and \$200 for a full page. If you even would like to sponsor any of the AAAEA dinners, picnic or events or donate to the scholarship fund please contact us. Your company will be featured and widely exposed to all attendees. Thank you.

Announcements/Reminders

Have you distributed the three brochures we sent you? If you did, thank you and let us know if you need more to mail to you. If you did not, please do your part.

AAAEA has received a letter from the University of Illinois at Chicago (UIC) soliciting contributions for The UIC Hassan Mustafa Abdullah Memorial Scholarship Fund. If you are interested in getting more information and donating to this fund see www.arabscholarship.com

If applicable to you, call Illinois Department of Professional Regulations (www.dpr.state.il.us) at 312-814-4500 or (217) 785-0800 to apply for the April 2003 EIT/PE exam.

If applicable to you, call IDOT at (217) 782-7820 to inquire about their winter technical classes (www.dot.state.il.us).

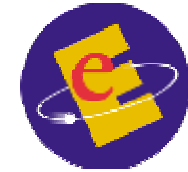
If it is time to update your resume or have a need for other career related issues, call Eyad Elqaaq at 312-922-8970.

Congratulation to **Issam Ryan**, he has been promoted to Design Squad Leader(CE IV) from CEIII.

SEAOI (Structural Engineers Association of Illinois) Annual Banquet and present the Excellence in Structural Engineering Awards on Saturday, June 7, 2003 at Brookfield Zoo. This gala event is the highlight of the SEAOI activities each year, in addition to announcing the winners of the 2003 Excellence in Structural Engineering Awards. More info, see www.seaoi.org

List of AAAEA Volunteers

Executive Board & Board of Trustees:
Manar Nashif (Newsletter Editing);
Tareq Ismail (Education Committee);
Raghad Adies-Dahhan (Education Committee);
Jehad Hassan (Activity Committee);
Mohamad Al-Hajjee (Activity Committee)



Chicago Engineers Week (CEW)

CEW Activities

The CEW will be in **February 16-22, 2003**. The Chicago land Engineers Week includes several events for current as well as future engineers. Competitions, banquets, luncheons, and regional events all combine to create quite a full week. Some of those events are:

- o IIT Bridge Building Contest
- o DuPage Area Engineers Week
- o Future City Competition
- o JETS TEAMS Competition
- o MATH Counts
- o Chicago land Engineering Awards Banquet (Washington Award)

For more information log on to www.chicagolandweek.org

ZED ARCHITECTS
3522 North Lincoln Chicago, Illinois 60657 773.388.8186
Nabil Zahrah
Commercial . Residential . Architecture

Washington Award

This year's observance may be one of the most influential gatherings in history. Members of more than 30 engineering societies will be gathering in the Chicago area to honor the profession and network with other professionals and civic leaders. The Chicago Land Engineering Awards Banquet in honor of Capt. (ret.) Eugene Cernan, the NASA astronaut who flew in several Gemini and Apollo space missions. He has the distinction of being the last man to leave his footprints on the surface of the moon.



When and Where?

The Washington Award Banquet will take place on February 19, 2002, at the Union League Club, 65 W. Jackson Blvd., Chicago. Tickets are \$70.00 per person. Reception 5:30 pm, dinner at 7:00 pm. Sponsorship opportunities are available. For reservations or sponsorship information, contact the Western Society of Engineers at wse@wsechicago.org or at 312/ 913-1730, 913-1731 fax.

CEW Participating Societies

- American Concrete Institute - Illinois Chapter
- American Institute of Steel Construction
- American Nuclear Society - Chicago Section
- American Society of Civil Engineers
- American Society of Plumbing Engineers
- American Water Works Association - Illinois Section
- **Arab American Association of Engineers & Architects**
- Chicago Engineers Foundation of the Union League Club
- Consulting Engineers Council of Illinois
- Institute of Electrical and Electronic Engineers
- Institute of Transportation Engineers - Illinois Section
- Illinois Association of County Engineers
- Illinois Engineering Council
- Illinois Society of Professional Engineers

- Illinois Society of Professional Engineers - Chicago
- Polish American Engineers Association
- Society of American Military Engineers
- Society of Women Engineers - Chicago Chapter
- Structural Engineers Association Of Illinois
- Western Society of Engineers

Calendar

The 9th annual Winter Networking Reception will be on Thursday, Feb. 20, 2003.

ACT classes begin Jan 4th – April 5th, 2003.
EIT classes start Jan 9th – March 27th, 2003

Chicago Engineer's Week: Feb. 16th – 22nd, 2003

AAAEA and AABAR Coordinate

The following was published in a recent Arab American Bar Association's (AABAR) newsletter: "We were pleased to receive representatives from the Arab-American Association of Engineers & Architects, Bilal Masri and Soliman Khudeira, who graciously invited AABAR to join them in their new offices at 922 W. Madison Street, 1st Floor. This would be at no charge and to the courtesy of the Engineers & Architects Association who are anxious to seek closer relations with AABAR. One reason for this is their desire to partner with us in revitalizing "Set-Aside-Project" of the city of Chicago. Many will recall that AABAR had prepared a plan of action to seek inclusion of Arab-Americans as a designated minority qualifying for minority contracts with the city of Chicago. The "Set-Aside" program would bring much financial help to the Arab-American community in this region. More discussion is underway."

- College degree in Civil Engineering / construction mgmt highly desired;
- Experience managing fixed bid projects AND negotiated projects;
- Strong understanding of the methods and means of demolition;
- Strong written documentation and project status communication skills;
- Strong Division 2 construction experience (earthwork, paving etc);
- Solid electrical and mechanical knowledge through experience;
- Some experience using computer for project management, reporting, email, Excel, MS Word, MS Outlook;
- Work best under pressure and tight deadlines;
- Take pride in your work - concerned over quality and long term liability impact of your decisions / efforts;
- Pay attention to details - reads and follows detailed architectural specs and notes;
- Not afraid to question architect and push back when things cannot be done;
- Reads, understands and enforces subcontractor contract deliverables;
- Strong ability to develop and manage schedules to tight deadlines and budgets;
- Demonstrated ability to build and maintain strong relationships with subcontractors;
- Strong creative problem solving skills;
- Demonstrated track record of going above and beyond to insure client satisfaction and quality within budget and on time;
- Strong team leadership / people management skills and ability to manage subcontractors to their deliverables
- Solid business savvy personality with a commitment to quality and service. Commitment to meeting deadlines and budgets - concern over long-term liability impact of your efforts.

Unfortunately we are unable to provide relocation at this time. Geographic Location of Position: Minneapolis, MN

If you are interested in this position or if you know anyone that might be interested, please forward this to them or contact:

Patty Meason
Tiburon Group
Fax: x
Email: 915922@candseek2.com

JOB # 2:

Your professional profile, which candidateseeker.com has on file, indicates you may have experience or know someone with experience relevant to the following

position. I was hoping you might be interested or be willing to forward this email to an associate who could benefit from this opportunity.

This business-based position requires a unique combination of cost management expertise and experience in direct management of production or development of technically complex electronic systems.

Selected candidate will be responsible for the management of U.S. DoD and derivative international programs; maximizing return on sales and obtaining follow-on business; and leading bid and proposal activity. Requires demonstrated experience in delivering high-quality products on budget and schedule per contract requirements combined with proven cost management and earned value experience and at least 3-7 years in program management with background in development (EMD) to production transition programs. Must be a U.S. citizen with the ability to obtain DoD security clearance.

REQUIREMENTS: Bachelor's/Master's degree in Business Management preferred.

SALARY: Salary range \$95,000 to \$105,000 plus full benefits and relocation.

Geographic Location of Position: Midwest Location

If you are interested in this position or if you know anyone that might be interested, please forward this to them or contact:

Bob Stanton, TSC/Blue Marble Studios
Fax: 847-381-1977
Email: 915977@candseek2.com

JOB #3:

I'm working with an awesome company in the area and wanted to send you these opportunities that I am working on and wanted to run by you to see what you thought. Please let me know if you know of anyone that might be a fit for this opportunity or even yourself. What's important is at this point if you know of anyone that might be a fit if they could forward me a copy of their resume ASAP so I can call them and talk to them in more detail about this job it would be wonderful. This is a stellar Fortune 500 company with a lot of progression opportunities and opportunity for career paths!

THIS FORTUNE 500 MANUFACTURING COMPANY, LOCATED IN THE PA STATE AREA IS CURRENTLY LOOKING FOR A MAINTENANCE MANAGER

We are currently searching for an experienced (3+ years), Maintenance Manager with a 4 year degree for our PA location. A Strong Maintenance Supervisor or Manager will be considered for this opportunity. This individual would be responsible for 10 maintenance mechanics

Another e-mail from Mark:

"Thank you very much for your help! Believe me I think I would not have passed if it were not for your help, care and attention you gave us during each of the seminars! Many of the types of problems you hit on were on the exam and that's what made the difference! Thank you soo very much and I shall always keep you in my prayers".

Congratulation to Mark. AAAEA is happy for him, and happier to refund his \$100 fee for passing. Thanks to all the EIT volunteers and instructors.

POSITIONS

The MWRD is taking applications for the following positions:

- Senior Structural Engineer
- Supervising Structural Engineer

Check the website for information on how to apply: www.mwrdd.org or call 312-751-5100.

The Deadline approaching!

AAA EA contact person for assistance: Abder Ghouleh 708-229-9235

PARTIAL details below:

Senior SE

DUTIES: Performs supervisory professional structural engineering work in connection with the design, layout, preparation of plans and estimates and erection or alteration of structural steel, timber, concrete and reinforced concrete structures.

REQUIREMENTS: Registration as a Structural Engineer in the State of Illinois; however, for a candidate with registration as a Structural Engineer in another state, registration as a Structural Engineer in the State of Illinois must be obtained prior to appointment. Four years of full-time, post-degree structural engineering experience related to the District's activities. Substitution: Graduate study in the designated fields of engineering may be substituted for the required experience on a year-for-year basis to a maximum of two yrs.

SALARY: The 2003 salary range is \$68,324.62 An assessment, of the required education, training and experience, including a written exercise, is weighted 100%. The minimum passing score on the rating of education, training and experience will be 70%. Candidates must achieve a passing score to have their names placed on the eligible list.

Supervising SE

DUTIES: Performs supervisory and administrative professional engineering work in the structural design of

reinforced concrete foundations, bridges, buildings, dams, locks and similar structures.

REQUIREMENTS: Registration as a Structural Engineer in the State of Illinois; eight years of progressively responsible full-time, post-degree structural engineering experience. At least four years must have been in work related to the District's design activities. At least three years of experience must have been in the supervision of degreed engineers, and at least one year must have been in an administrative capacity.

Substitution: Full-time graduate study in structural engineering may be substituted for the required non-specialized experience on a year-for-year basis to a maximum of two years.

SALARY: The 2003 salary range is \$92,206.66 to \$139,799.40.

An assessment, including a written exercise, of the required education, training and experience, is weighted 100%. The minimum passing score on the rating of education, training and experience will be 70%. Candidates must achieve a passing score to have their names placed on the eligible list.

FOR COMPLETE INFORMATION, please go to the website and check the employment section: www.mwrdd.org or call 312-751-5100

JOB # 1:

Your professional profile, which candidateseeker.com has on file, indicates you may have experience or know someone with experience relevant to the following position. I was hoping you might be interested or be willing to forward this email to an associate who could benefit from this opportunity.

One of the fastest growing, Midwest based, commercial construction companies is expanding and in need of experienced construction superintendents. We are looking for individuals that are committed to delivering quality workmanship within tight timelines. If you have at least 10 years experience in the construction industry, with a solid long-term employment track record and are interested in growing your career then consider this position.

To be successful in this position you must have the following:

- Experience working for a large commercial construction firm;
- Demonstrated experience in managing large commercial, industrial or multi-family residential housing projects with average size of \$10M and above;

AAA EA CALENDAR OF RECURRING EVENTS

Updated January 2003

<p>January</p> <ul style="list-style-type: none"> Scholarship Award Committee appointed before 1/31 Newsletter Career workshop Monthly speaker seminar Family Bowling Event 	<p>February</p> <ul style="list-style-type: none"> Winter Business & Professional Networking Reception Engineer's Week Thompson's Center Exhibit and Luncheon EIT classes begin ACT classes begin Career workshop Monthly speaker seminar Technical Field Trip Winter visit to High School (with other professional arab associations) 	<p>March</p> <ul style="list-style-type: none"> Auditing Committee appointed Annual Hafleh Newsletter Career workshop Monthly speaker seminar EIT classes continue ACT classes continue 	<p>April</p> <ul style="list-style-type: none"> Membership expires April 15 Career workshop Monthly speaker seminar EIT classes end ACT classes end Deadline for submittal of petition to nomination committee is April 20
<p>May</p> <ul style="list-style-type: none"> Newsletter Career workshop Monthly speaker seminar General Assembly/Election meeting 	<p>June</p> <ul style="list-style-type: none"> Picnic #1 Career workshop Monthly speaker seminar Technical Field Trip 	<p>July</p> <ul style="list-style-type: none"> Picnic #2 Newsletter Scholarship application deadline 7/31 Career workshop Monthly speaker seminar 	<p>August</p> <ul style="list-style-type: none"> Picnic #3 EIT classes begin Career workshop Monthly speaker seminar
<p>September</p> <ul style="list-style-type: none"> Picnic #4 Newsletter Career workshop Monthly speaker seminar EIT classes continue ACT classes begin 	<p>October</p> <ul style="list-style-type: none"> Business owners/job networking meeting Scholarship Committee interviewing the applicants Career workshop Monthly speaker seminar EIT classes end ACT classes continue 	<p>November</p> <ul style="list-style-type: none"> Semi-annual (General Assembly) meeting Career workshop Monthly speaker seminar ACT classes end Technical field trip Newsletter 	<p>December</p> <ul style="list-style-type: none"> Audit Committee meeting Nomination Committee appointed before Dec. 31 Career workshop Monthly speaker seminar

Announcements

2003 Annual Hafleh

Date: Saturday, March 29th, 2003
Time: 5:30 p.m. – 10:30 p.m.
Place: Drury Lane, Grand Ballroom
100 Drury Lane
Oakbrook Terrace, Illinois 60181
(630) 530-8300

Cost: \$35/Person

Reservations:

Call: AAAEA @ (708) 802-1148
or Email: aaaaea98@aaaaea.org or Mail:
P.O. Box 2160, Bridgeview, IL 60455

Reservation form attached

(Tickets will not be sold at the door)
(LIMITED # of tickets, so first come first serve!!)

AAAAEA 2003 BOWLING PARTY Reservation Form

Total # of people: _____

Total cost (\$10/person): _____

- Payment included** - make checks payable to AAAEA

Note: If payment not received prior to or at event, reservation will be canceled.

We are planning to have teams compete against each other for highest total score. Prizes will be given. AAAEA will randomly assign teams for those interested. Children teams will also be assigned for those interested. If interested, please fill out the below section:

- Yes, I am interested in participating in a team.
Number of people participating _____.
List Names of participants:

- Yes, I would like my children to participate in a children team. Number of children participating _____.

List Names and age of each participant:

Please submit form with payment **NO LATER THAN WEDNESDAY, FEB. 19th** to:

Ranya Atia (Chairman, Activity Committee)
5657 N. Crescent Ave.
Norwood Park, IL 60631

Questions or concerns, please call:
(847) 646-4515 (day); (847) 518-1559 (eve).

CONGRATULATIONS

The Board and members of the AAAEA wishes a speedy recovery to Tawfik Nassar.

Congratulations to Hasan M. Algholeh on passing the PE exam in Illinois.

Ahmed Alkenany passed his FE exam.

Nasser Gholeh on his new baby born girl Ella.

Congratulations to Hasan M. Algholeh on passing the PE exam in Illinois.

Issam Rayyan on his promotion as a Project Manager/Squad Leader in Design @IDOT District 1.

Sudud Mahmoud on his new baby born girl Hanna.

Congratulation to Bill Haddad for his appointment as a full circuit judge of Cook County.

Congrats to Layla Khatib and Baha Alrazzaq on their new baby boy, Ahmed.

Congrats to Mohammad Hasan and his wife on their new baby boy, Ayoub.

AAAAEA received the following TWO e-mails from Mark Saccomonto, a UIC student who attended AAAEA's 2002 EIT classes:

"I just received notice today of passing the EIT! What excitement after waiting 3 months to find out the results and studying for so long of a time! Thank you for your great help, I do believe it did make a difference in my overall score at the finish line. I have included proof of my passing and again thank you for your help. Thanks all of you"

(cont'd page10)

A PROFESSIONAL COMMUNITY PERSPECTIVE



Mr. Telhami is a Palestinian native who came to this country as a student in 1955. He is the beloved husband of Ghada Telhami and the father of Yousef, Lamees and Ghassan. He received his Bachelor of Science in 1960 from the Illinois Institute of Technology, and six years later, while working a full time job, he received his Master's Degree in Civil Engineering from the University of Wisconsin.

I recently conducted an interview with Mr. Telhami. What he had to say may wake some of us up.

"What was the most difficult situation you faced as a young professional?"

"As a 'foreigner' with a strange name, the doors do not open as easily as if your name was John or Jim. This is always the case. I read a recent study stating that people with African sounding names hardly ever had the chance to make it through the doors and get an interview, and this is true with us. So that may have been a major obstacle in my professional life that I faced, and I'm sure others have faced as well. Once the door is open, on the other hand, the rest depends on you. You can go as far as you want."

"What is your advise to young Arab-American engineers?"

"First, let me address the engineering students. You should always work hard and get good grades. You should work hard in order to achieve your goals. If it is worthwhile doing, then do it well. Also, while you are in school, you should be involved in student organizations and possibly do some volunteer work.

Now, as a young engineer, you ought to be very focused and know what you want; you should define your goals and give it your all. One should always shoot for excellence. But at the same time, you should not forget the need and necessity for having to be involved. You should belong to at least one, if not two, professional organizations. In addition to that, you should also be involved in something that relates to your community. It doesn't matter what it is, but you ought to be involved in something that pertains to your specific community, and to your community at large. I'm a firm believer that each individual, particularly an engineer, has an obligation to pay back to his immediate community and to his community at large."

"What are the benefits of having a community based, professional organization, such as AAAEA and what can AAAEA provide to an engineer?"

"I would like to address that question by stating that it is an **obligation** to belong and contribute to the Association. The psychological rewards of knowing you are contributing to your community outweigh the tangible rewards. But none the less, there are also very vivid rewards, such as the Association's excellent networking opportunity. There are at least fifty engineers who were placed in employment through the efforts of AAAEA. The Association offers courses to help engineers get registered. Everyone knows that an engineer, especially a civil engineer, should be registered.

"I can't stress more the need for individuals to be involved with the community. One always owes the community, not the other way around."

