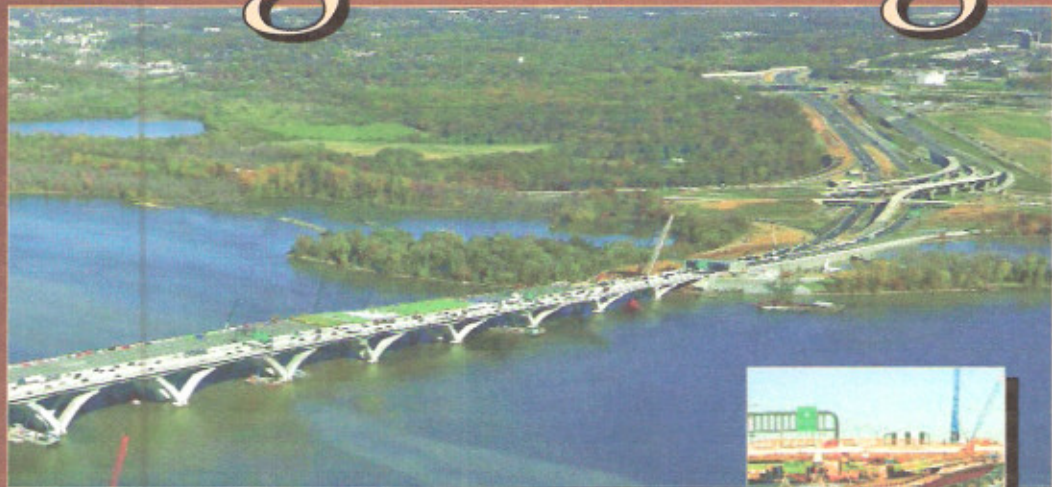


July 2008

Cost Engineering

The AACE International Journal of
Cost Estimation, Cost/Schedule Control, and Project Management

*Promoting the Planning and
Management of
Cost and Schedules*



COST ENGINEERING FOCUS: GOVERNMENT/PUBLIC WORKS

IN THIS ISSUE

- Technical Article -
The Cost Planning
Model — A Search for
Optimal Design
Solutions
- Technical Article -
Looking for the
Source — Where Do
Crash Costs Come
From?
- Technical Article -
The International
Cost Engineering
Council (ICEC)
- President's Message -
Putting "International"
in AACE International
- Legal Brief -
Cost-Plus-Fee
Government Contracts
- Executive Article -
DC Traffic
Improvement Project
Wins US Award
- Special Feature -
First Cost
Engineering
Symposium in the
Middle East
- Brian D. Dunfield,
CCE, Remembered

aace
International

*The Association for the Advancement of
Cost Engineering International*

Visit our website at www.aacei.org

President's President's Message



Stephen P. Warhoe, PE CCE CFCC
President

Cost Engineering (ISSN: 0274-9696/08) is published monthly by AACE International, Inc., 209 Prairie Ave., Suite 100, Morgantown, WV 26501 USA. Periodicals postage paid at Morgantown, WV, and at additional mailing office. **POSTMASTER: Send address changes to AACE International; 209 Prairie Ave., Suite 100, Morgantown, WV 26501 USA.** Single copies: US\$8 members/ US\$12 nonmembers (both +shipping), excluding special inserts available to AACE members only. Subscription rates: United States, US\$65/year; all other countries, US\$82/year. Overseas airmail delivery is available at US\$99. Subscriptions are accepted on an annual-year basis only. Copyright © 2007 by AACE International, Inc. All rights reserved. This publication or any part thereof may not be reproduced in any form without written permission from the publisher. AACE assumes no responsibility for statements and opinions advanced by the contributors to its publications. Views expressed by them or the editor do not necessarily represent the official position of **Cost Engineering**, its staff, or AACE International, Inc. *Printed in York, PA, USA.* **Cost Engineering** is a refereed journal. All technical articles are subject to review by a minimum of three experts in the field. To submit a manuscript for peer review, please e-mail it to editor@aace.org. **Cost Engineering** is indexed regularly in the Engineering Index, Cambridge Scientific Abstracts, by EBSCO Publishing, and in the ABI/Inform database. **Cost Engineering** is available online, via the ProQuest information service; on microform; electronically on CD-ROM and/or magnetic tape from Bell & Howell Information and Learning, PO Box 1346, Ann Arbor, MI 48106. **Photocopy permission:** Authorization to photocopy articles herein for internal or personal use, or the internal or personal use of specific clients, is granted by AACE International, Inc., provided that the base fee of US\$4.00 is paid directly to Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923 USA. Telephone: 978.750.8400. For those organizations that have been granted a photocopy license by CCC, a separate system of payment has been arranged. The fee code for users of the transactional reporting service is ISSN-0274-9696/02 US\$4.00. This permission to photocopy does not extend to any **Cost Engineers' Notebook**, **AACE Recommended Practices** supplements, or membership directories published in this magazine and/or special inserts. Payment should be sent directly to CCC. Copying for other than personal or internal reference use without the express permission of AACE is prohibited. Address requests for permission on bulk orders to the editor. **ADVERTISING COPY:** Contact Network Publications Inc., Executive Plaza 1, 11350 McCormick Road, Suite 900, Hunt Valley, MD 21031. Telephone: 410.584.1906. E-mail: aace@networkpub.com for rates. Advertisers and advertising agencies assume liability for all content (including text, representation, and illustrations) of advertisements printed and also assume responsibility for any claims arising therefrom made against the publisher. The publisher reserves the right to reject any advertising that is not considered in keeping with the publication's mission and standards. The publisher reserves the right to place the word **advertisement** with copy which, in the publisher's opinion, resembles editorial matter. All advertising accepted for publication in **Cost Engineering** is limited to subjects that directly relate to the cost management profession. Current rate card available on request. **COST ENGINEERING DEADLINES:** Submissions for **Cost Engineering** must be received at least 7 weeks in advance of the issue date. Send to: Editor, 209 Prairie Ave., Suite 100, Morgantown, WV 26501 USA. Deadlines do not apply to technical papers.

Putting "International" in AACE International

Several years ago, way back in 1992, the membership of our organization approved a change to the association's name; memorializing what the organization had already known for a very long time. The voting members wanted to show the world that AACE was indeed a global organization; so much so, that the association's name was modified to reflect this new paradigm. However, changing the name of the association is one thing, transforming the association into a global organization has been quite another.

Until roughly 2003, outside of doing a good job supporting several of our international sections from the headquarters office in Morgantown, WV, little else had been done by the association to support or market itself outside of North America. Of course, even through today, it is evident that our international sections have been doing the best that they can to market the association; some sections having more success than others.

I can't say for sure why the association has in last few years increased its focus on becoming better known globally. Maybe it was because there was the right combination of inspired board members with either international experience or possessing the understanding of how flat the world is becoming. From 2003 through today, significant changes have taken place, and are continuing to take place, to demonstrate that AACE International is a global player in the project control and project management industries.

I recently witnessed the efforts and success that AACE International is experiencing outside of North America. A couple months ago, I had the privilege of traveling around the world, speaking and participating, on behalf of AACE International, in several conferences and professional society meetings.

During the last week of May, I spoke at the PM Soft Project Management conference in Moscow, Russia. It was my first time to Moscow or to Russia. This conference, which was celebrating its seventh year, was three days long, had over 470 attendees, and was very well organized. I was given the

opportunity to speak to an audience of 60 or 70 Russian project managers and cost engineers about AACE International and the value it can provide, to not only project team members, but also to their employers. There was an exhibition hall as well. At our exhibit, we spoke to many people interested in learning more about AACE International. Additionally, we had brought a stack of 100 AACE International brochures translated into the Russian language; all of which were snapped up by the end of the first day. According to Sean Regan, AACE International's new international marketing chair and our association's facilitator to the PM Soft event, having representation at the PM Soft conference was a large leap for making our presence known in the country.

My next visits were to two Arabian Gulf Section events. The first event was in Al-Khobar, Saudi Arabia, where the Arabian Gulf Section held its first annual Cost Engineering Symposium. This was a one day event with a packed house of over 150 attendees located in a five star hotel. At the symposium, I made two presentations; the first of which was a talk about AACE International and its value, and the other was a discussion on the basics of earned value management. Sandwiched in between my presentations was a very informative talk by Mr. Ahmed A. Al-Sulaim, the general supervisor for the project controls and estimating division of Saudi Aramco, the Saudi Arabian oil company. I was told that Mr. Al-Sulaim is responsible for overseeing the project controls of over US\$50 billion in current and future project work. Having a gentleman of this stature in the cost engineering field was an excellent way to kick off this annual symposium for the Arabian Gulf Section. The credit for doing such a great job on the symposium must go to Mr. Madhu Pillai, the section president, as well as the section's board of directors and others in the section that helped. Just like the PM Soft conference, this event was excellently organized, and the Arabian Gulf Section was an excellent host.

(No sooner did the Cost Engineering Symposium end in Al-Khobar, I found myself



Submitted photo
At the PMSoft Project Management Conference in Moscow, Russia, are, from the left, Dr. Sean T. Regan, CCE CEP, of IMTC-MEI; Oleksiy Sheshyn, CCC, of IMTC-MEI; and Janna Khaleyeva, of PMSoft.



Submitted photo
At the PMSoft Project Management Conference, a translator shares comments by Richard Ferris, Vice President of Primavera; Dr. Alexandr Tsvetkov, General Director of PMSoft; and Dr. Elena Kolosova, Director of PMSoft.

on a flight to Dubai to speak at another Arabian Gulf Section event; a scheduled Section dinner meeting. The Arabian Gulf Section is primarily split between members in Saudi Arabia and Dubai, most of whom are in Dubai. I was picked up from my hotel for the dinner meeting by Dr. Firas Abouzaki, CCE, PSP, one of the most energetic people (and passionate about AACE International) I have met in a long time. In addition to the energy he pumps into the Section, I could also see from his interaction with the Section members, he is very well respected. The purpose of the Section meeting was two-fold; for me to talk about what is happening at AACE International, and to hear from our members on what value can be added to their membership. Several topics were raised by Section members, and many good ideas were generated to bring more value to our international members and to members in general. Several of these ideas will be discussed by the board and maybe turned into new policy. In alignment with my experience working internationally, many of the attendees at this meeting were interested in our newest certifications, including the Certified Estimating Professional (CEP), the Certified Forensic Claims Consultant (CFCC), and especially our reciprocal relationship with the Royal Institution of Chartered Surveyors (RICS).

My last stop was at one of my favorite places to have ever lived; Kuala Lumpur, Malaysia, one of the most beautiful places on earth. Here, I had two presentations. The first was scheduled with several cost engineers from the country's oil company, Petronas, with the help of Ms. Ros Mariani Bt Abdul Rashid, an AACE International member. We discussed the value of cost engineering and the value of AACE International to the cost engineer. The meeting went very well as was evidenced by the several excellent and in-depth questions that were asked, including topics on the availability of cost engineering education and certification.

After living in Malaysia for nearly two years, the terms, cost engineering and project controls, and most of their associated functions, are not ones I found to be very often used in the capital design and construction industries. Most Malaysian owners and contractors rely on the tradition of using quantity surveyors and accounting staff to manage and oversee their projects, so what limited portions of what a project controls engineer performs might be performed by the quantity surveyor or project accountant.

However, cost engineering is making its way into the Malaysian construction industry. The differences in typical skills between a cost engineer and a quantity surveyor are an entirely different topic for another time. Understanding this way of thinking in Malaysia, it brings me to my second Malaysian presentation and last one of my trip. The presentation was to the Institute of Engineers - Malaysia (IEM). The IEM is roughly the Malaysian equivalent to the National Society of Professional Engineers. With the help of another AACE International member, Ir. C M Mohamed Aboobucker, I spoke to the IEM on a technical and educational topic, specifically, the basics of earned value. Being able to talk about cost engineering to a group of registered engineers in Malaysia was valuable to the association because it introduced AACE International and cost engineering to many people whose projects depend on or may benefit from people who understand cost engineering related functions. Additionally, there was a common theme from many of the people that I spoke to at the meeting, and that was, skilled professionals in the areas of estimating, schedule control and cost control are in high demand.

Overall, the primary lessons learned from my visit to the several countries in which I spoke include: a) professionals in the capital design and construction industry are eager to learn more about cost engineering and gain technical knowledge, b) there continues to be a significant demand for cost engineering-related certifications, and c) AACE International has much work ahead of it regarding letting project managers and cost engineers around the world in on the fact that we exist and that we have so much to offer. These three lessons, I believe, all translate into opportunities for AACE International that we should not lose sight of. ♦

PMs ask themselves,

How do you help a New Scheduler to work smarter and a Smart Scheduler to work faster?

Answer,

SCHEDULE ANALYZER

- o SA has just been getting bigger and better since 1993.
- o SA is used world-wide by Experts as well as Beginners.
- o Reports and analyses that you never dreamed existed.
- o Insights/advice that would take an expert weeks to find.



See more at www.RonWinterConsulting.com



Submitted photo

Shown left, Steve Warhoe, PE CEE CFCC, AACE International president, was one of the keynote speakers at the first Symposium on Project Controls at Gulf Meridian in Al-Kabar, sponsored by the Arabian Gulf section of AACE International. At right, Madhu P. Pillai, CCC, president of the Arabian Gulf Section, welcomed speakers and delegates.



Submitted photo

Attendees listen attentively at the first Symposium on Project Controls at the Gulf Meridian in Al-Khobar, sponsored by AACE International's Arabian Gulf Section.



Submitted photo

Shown in a panel discussion, along with moderator, Dr. Khaled Medhala, vice president-technical of the Arabian Gulf section, at the project controls symposium in Al-Khobar, are Dr. Abdulaziz Bubshait, dean of the College of Environmental Design, KFUPM, Dr. Jassem Al-Rumaihi, director of finance and administration for FMQ, and Mr. Steve Warhoe, PE CCE CFCC, AACE International president.

Environmental Design, KFUPM, Dr. Jassem Al-Rumaihi, director (finance and administration) FMQ, a leading mechanical EPC company in the oil and gas sector involved with mega projects in the region, and Mr. Steve Warhoe, were the other members of the panel. Dr. Abdulaziz is a professor and teaches construction engineering and management in KFUPM. He is active in a number of professional societies and also served as the president and vice-president - technical with the Arabian Gulf Section. Dr. Jassem specializes in the field of management information systems and was earlier the chairman of the Accounting and Management Information Systems Department in KFUPM.

Dr. Abdulaziz, with his presentation entitled, "Project Management in the Era of Rising Oil Prices," enthralled the audience by providing valuable observations and presenting a model on customer driven project management. Dr. Jasim presented the results of a case-study about the importance and selection of ERP software relevant to the construction industry and its

merger with Timberline software.

The speakers for the symposium were presented with plaques from the Arabian Gulf Section as an appreciation and memento for the event. The event was a real intellectual entertainment for the professional community in the region. A grand luncheon eased the delegates after comprehending almost unlimited knowledge shared during the event. Mr. Warhoe commended the team work of the section leadership.

Members Meet in Dubai

United Arab Emirates, a fast growing region within the Arabian Gulf Section's area had a members meet on the evening of June 2. A dinner conference was conducted in Al Bustan Rotana Hotel, Dubai, with the incoming AACE International President, Mr. Stephen Warhoe, as the honorary guest speaker. Other speakers during the event included Arabian Gulf Section President Madhu P Pillai, and the section's UAE's Regional Director Dr. Firas Abouzaki.

Mr. Pillai and Dr. Abouzaki highlighted the achievements of the section and especially of the UAE area, having the highest number of new members within the region.

Mr. Warhoe reaffirmed to the membership, the programs of the association and the benefits for each member. The importance of AACE International certifications was communicated and elaborated to the audience. There was an overwhelming response from the attendees and all queries of the membership were addressed by Mr. Warhoe in a highly interactive session.

Mr. Warhoe described the latest joint agreement between AACE International and the Royal Institution of Chartered Surveyors (RICS), which now enables a certified CCC/CCE to become eligible to acquire the MRICS with the proper documentation and by paying the necessary membership fees. The evening was concluded with dinner and the attendees shared their point of views over technical subjects that they are experiencing. ♦