

10 Book Review:
*The Defense Management
Challenge: Weapons Acquisition*

6 How can you develop a
learning curve from
historical production data?

ICEAAWorld

The magazine for the International Cost Estimating & Analysis Association



Reflecting on the Professional Development & Training Workshop

PROUDLY

Serving our Federal Government for over 60 years

Wyle is one of the nation's leading providers of independent analytic, engineering and testing services to the Intelligence Community (IC) and the Department of Defense.

We are rapidly growing our cleared IC support team in the National Capitol Region and are actively seeking qualified candidates to join our team of professionals currently providing support in the following areas:

**PROGRAM MANAGEMENT · COST ESTIMATING AND ANALYSIS
EARNED VALUE MANAGEMENT · FINANCIAL MANAGEMENT · BUDGET ANALYSIS
ACQUISITION MANAGEMENT · PROGRAM CONTROL · STRATEGY AND OPERATIONS**

These positions require an active TS/SCI and Counter Intelligence (CI) Polygraph or Full Scope (FS) Polygraph or eligibility to obtain this level of clearance.

Wyle provides an employee friendly environment, exciting and challenging work, competitive salaries, and comprehensive benefits packages.

**Let Wyle
be the key that
unlocks your future.**

For more information about our current
job openings visit our website at
www.wyle.com or email your resume to
aerorecruiting@wyle.com.

wyle

TRUSTED SERVICES AND SOLUTIONS



International Cost Estimating
& Analysis Association

8221 Old Courthouse Road, Suite 106
Vienna, VA 22182
703.938.5090
iceaa@iceaaonline.org
www.iceaaonline.org

International Officers

President
Brian Glauser

Executive Vice President
Paul Marston

Secretary
Pat Zedeker

Treasurer
Michael Thompson

Vice President of
Professional Development
Peter Braxton

Past Board Chair
Andy Prince

Directors &
Regional Directors:

Eleanor Bassett

Kurt Brunner

Michael Doherty

Eric Druker

Katie Geier Noriega

Yasushi Horikawa

Herve Joumier

Greg Kiviat

Jeffrey Moore

Andrew Nicholls

Andy Nicholls

Daniel Nussbaum

Rex Potter

Kirk Schneider

Executive Director
Megan Jones

Certification Program
Administrator
Sharon Burger

ICEAA World Editor
Joe Wagner

Meetings & Member Services
Brittany Walker



The Magazine for the International Cost Estimating & Analysis Association

TABLE OF CONTENTS

2 Letter from the Editor
Joe Wagner, *ICEAA World* Editor

3 **President's Address**
Brian Glauser, ICEAA President

4 Business Office Update
Megan Jones, Executive Director

5 Training Corner
Ashlin Smith, 2014 Workshop Training Co-Chair and
Kevin Cincotta, Chapter & Organization Training Coordinator

6 Ask an Analyst
Joe Hamaker

10 Book Review
Lt Col David Peeler

13 2014 ICEAA Workshop Overview

25 Costing News from the UK
Dale Shermon, SCAF Chairman

27 Chapter & Region Updates

The International Cost Estimating and Analysis Association is a 501(c)(6) international non-profit organization dedicated to advancing, encouraging, promoting and enhancing the profession of cost estimating and analysis, through the use of parametrics and other data-driven techniques.

ICEAA World is a publication of the International Cost Estimating and Analysis Association. Members of the association receive copies as a benefit of membership. Subscriptions for non-members are available on a yearly basis for \$30.00 per year.

Publication of materials is at the discretion of the editor and officers of the association. Opinions expressed by contributors are not necessarily those of the International Cost Estimating and Analysis Association. The association endorses no product or service, does not engage in any form of lobbying, and does not offer for sale any commercial product or service for a profit. All revenue received from the activities of the association are used solely for the professional benefit of its members.



Letter from the Editor

Joe Wagner, ICEAA World Editor

Well, we are deep in the doldrums of another Washington DC summer. It is 90+ degrees outside, humidity approximates that of the rain forest, and everyone around here is off to the Outer Banks of North Carolina, the Shenandoah Mountains or their family place in Maine. Those of us left behind have brought together another issue of your ICEAA magazine.

Someone else obviously not on vacation is our *Ask an Analyst* columnist **Joe Hamaker**. His article on the ins and outs of learning curves can be found on page six. We also are providing a wrap-up of the 2014 ICEAA Professional Development & Training Workshop in Denver. Dividing your time between workshop activity at the Marriott City Center and the 16th Street corridor of downtown Denver was a difficult task. You can see some of the action in our photos beginning on page 13.

Related to the 2014 Workshop, those of you presenting papers there may want to consider submitting your paper to the *ICEAA Journal of Cost Analysis & Parametrics* for professional publication and recognition. See the JCAP advertisement in this issue of *ICEAA World*, or go to the www.tandfonline.com/UCAP website.

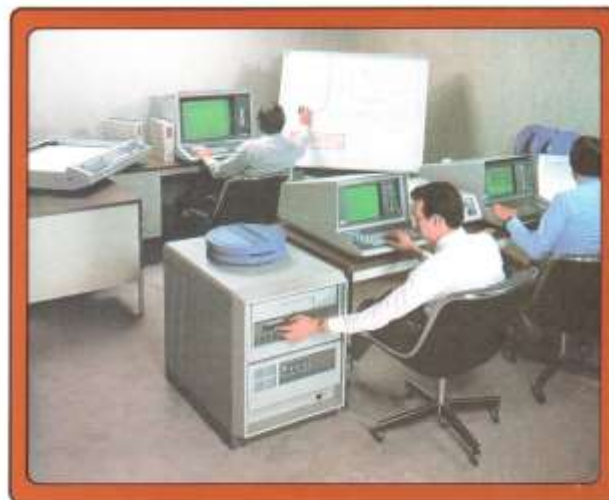
If you find this one issue of *ICEAA World* does not satisfy your craving for professional cost

information, we maintain an archive of past issues on our ICEAA website under publications. There you'll find ICEAA, SCEA, and ISPA publications going back to 2005. Keep checking back on our website, as we expand its capabilities and content. We are continually expanding its functionality to provide more and better services to our membership.

I appreciate our regional directors who are contributing a column to *ICEAA World*. I would like to see all of our leadership speaking out to the organization with ideas and suggestions to improve the Association and the profession. For example, Region 5 Director **Mike Doherty** has several great ideas in his report, including a search for areas within his region that might support a new ICEAA chapter, and working with his chapters to support the 2015 Workshop in San Diego.

As we approach our publication date, we have learned of the recent passing of **Mr. Ray Crum**, of Huntsville, AL. A long time presence in the leadership of the Institute of Cost Analysis (ICA) and the Society of Cost Estimating & Analysis (SCEA), people like Ray represent the professional history of our predecessor organizations, and we greatly mourn his passing.

Finally, we are in the midst of creating e-files of all our old business files and publications at the International headquarters. I find myself spending far too much time browsing instead of sorting, which leads to some amazing discoveries. The accompanying picture is from the cover of a 1983 SCEA *National Estimator*, our predecessor publication. Show it to your children, or to your 2 lb. laptop, and tell them how far we have come with "computerized cost estimating and analysis".



Computerized Cost Estimating and Analysis:
New Techniques and Devices

President's Address

Brian Glauser, ICEAA President



I want to begin by extending my most sincere gratitude to everyone involved in the planning and execution of our 2014 ICEAA Professional Development & Training Workshop in Denver. It was a successful event in every aspect. We had a great venue, three engaging Keynote presentations, and high quality professional training and workshop presentations. The hotel was very accommodating, the food was great and the location made it convenient to explore the local area. I also want to extend my gratitude to our sponsors who graciously supported our workshop and lastly to all of the attendees whom I believe received tremendous value from their participation. Finally, I want to congratulate all of our association and paper award recipients who were recognized at the workshop

and are also listed in this issue.

As you can imagine, a workshop of this size requires months of planning by many people. I would like to recognize and thank all of the people who volunteered their time and energy in order to put this program together. While there isn't enough space to recognize everyone by name, I at least want to acknowledge some of the key contributors, including:

Conference Chairs: **Rich Harwin**
and **Andrew Drennon**

Program Chair: **Mel Etheridge**

Training Chairs: **Ashlin Smith**
and **Brian Welsh**

Association Awards Chair:
Joe Hamaker

Best Paper Chair: **Eric Druker**

All of the Trainers and Track
Chairs

And lastly, the International Business Office staff; **Megan Jones, Brittany Walker, Sharon Burger** and **Joe Wagner** whose tireless efforts really shined through in making this a highly successful event. The staff handled all the site arrangements, logistics, and last minute surprises – they are truly what keep the association humming along. This was the first workshop under Megan's leadership, and based upon the result, we can be assured that our association is in good hands.

In the meantime, the business of the association continues and we have a lot of activity in many areas. We continue our planning to form Special Interest Groups (SIGs), focus on both short and long term budgets to assure the financial health of the association, look for ways to expand our reach and membership, and continue to expand and improve our training and certification curriculum to best serve our constituents.

In summary, our association continues to grow and prosper due to the effort and commitment of all of you. Please extend an invitation to your colleagues to join our association and receive its benefits and to participate in your local events as well as next year's international workshop in San Diego. 🌐

RAY CRUM 1934 - 2014

On July 25, 2014, Mr. Ray Crum passed away in Huntsville, AL at the age of 79. Retired from the TRW Company in 1992, Ray since then has resided in Huntsville, AL, where decades before he had begun his career working for the Parsons Company with Dr. Werner von Braun. In 1965, Ray had moved to Southern California to join the TRW Corporation in Redondo Beach, where he ultimately served as the Division Manager for Pricing.

When the Institute of Cost Analysis (ICA) was founded in the early 1980's, Ray served as the President of the Southern California Chapter. When ICA merged with the National Estimating Society (NES) in 1990 to form the Society of Cost Estimating & Analysis (SCEA), Ray was elected as the first President of SCEA, in which post he served until 1995.

Ray held BA and MBA degrees in Management from West Coast University, and was active in church and other social service activities in Huntsville since his retirement. He is survived by his wife Karla, and daughter Daniela.



Business Office Update

Megan Jones, ICEAA Executive Director

While I've been with ICEAA since January, it wasn't until the 2014 Workshop that I felt like I was truly *with* ICEAA. It was fantastic to meet so many members and put faces to the email addresses that have become familiar. The warm welcome extended to me and to all of the folks who were new to ICEAA and the workshop made for a positive atmosphere that reminded us what being an association member is all about.

This issue of *ICEAA World* features a special section with all the highlights of the event, complete with congratulations and thanks to all of our award winners and to everyone involved in making the workshop such a bar-raising success.

2015 Workshop Co-chair **Mike Thompson** couldn't even wait until we left Denver to start planning for San Diego! We are paying close attention to all of the feedback we received to take all of the improvements of 2014 to the next level, and to make even more modifications to brighten our few remaining weak spots. Expect tighter, more celebratory awards ceremonies, more flexible session timing, and an adjustment to the overall schedule that will eliminate the dreaded Friday morning "dead zone".

You can start planning for 2015 too. The call for papers form is online and ready to accept your abstracts. Early birds should also keep an eye out for emails announcing a registration special: register for the 2015 Workshop before December 31 to get 2014 registration rates.

Back in the office, we're hard at work developing new features for the ICEAA website and are on track to release the first of three phases of features this fall. We will be distributing new logins for all members and will invite you to fill out member profiles that will ask for information about your interests, marketing preferences, and working relationships. Gathering detailed data will allow us to customize our current services while making more strategic decisions about future directions.

On the subject of new data, we encourage everyone to fill out the *ICEAA World* readership survey at

www.surveymonkey.com/s/ICEAAWorld

We want to know what you like best about our magazine, what you find most valuable, and the areas we need to work on. Your feedback will help us make *ICEAA World* the best member benefit it can be!



**COST ESTIMATING
BODY OF KNOWLEDGE**

Instructor Licenses Available!

The modules in ICEAA's Cost Estimating Body of Knowledge are designed to be an effective teaching tool. With an instructor license, cost professionals with an intimate understanding of CEBoK® can utilize that knowledge to guide others through the curriculum.

Companies or individuals interested in providing CEBoK® training for others, contact the ICEAA Business Office for information on an instructor license.

CEBoK® is copyrighted by ICEAA. Instructors wishing to make use of CEBoK® material in fee-based instructional courses may acquire limited rights to use CEBoK® for the fee of \$20 per student per day of training. Such limited rights must be granted in writing by ICEAA prior to conduct of the training. All students attending training must be covered by an individual or enterprise CEBoK® license. Groups hiring vendors to conduct CEBoK® training are required to request proof of an instructional license from the contractor.

Training Corner

*Ashlin Smith, 2014 Workshop Training Co-Chair
and Kevin Cincotta,
Chapter & Organization Training Coordinator*



The training tracks and courses at the ICEAA Workshop have been in our sights for so long, it's hard to believe it's over!

While there's a detailed recap of the workshop later in the issue, we would like to thank all of our training track chairs, co-chairs, instructors, presenters, and everyone else that helped enrich this year's outstanding program.

While the ICEAA International Board of Directors is busily developing Special Interest Groups (SIGs) for various cost

estimating communities of interest, a logical next step once they are finalized is to develop SIG-specific training. Examples of SIGs could include parametrics, DoD cost estimating, software, services, or many other things! If you have a proposal for a SIG (or, better yet, if you're interested in giving, or receiving, topic-specific training), contact **Kevin Cincotta** to discuss details (kevin.cincotta@icfi.com).

We are also pleased to report that CEBok and its related, ICEAA-endorsed training,

continues to be a hit of international proportions. A recent training engagement in Canada was a tremendous success, with future engagements planned for Brazil, the United Kingdom, and elsewhere.

Globetrotter or not, we are always interested in your feedback. Send us your comments, questions, love letters, or hate mail, and you just might find them here—in the next issue's Training Corner!



RETAINING YOUR CCEA® CERTIFICATION IS SIMPLE

CCEA® holders are required to accumulate at least 30 recertification points across three areas of involvement during a five-year period

PROFESSIONAL WORK EXPERIENCE

EARN UP TO 15
POINTS FOR:
EMPLOYMENT IN A
COST-RELATED
PROFESSION
SERVING IN A
COST ANALYSIS ROLE
CREATING
COST ANALYSIS
PRODUCTS

PARTICIPATION AND CONTRIBUTION

EARN UP TO 15
POINTS FOR:
MEMBERSHIP IN COST
ORGANIZATIONS
SERVING IN A
LEADERSHIP
POSITION
RECEIVING AN
AWARD, CITATION,
COMMENDATION

LEARNING AND SHARING

EARN UP TO 15
POINTS FOR:
PARTICIPATING IN
COST-RELATED
COURSES, SEMINARS,
WORKSHOPS, ETC.
TEACHING,
PUBLISHING,
PRESENTING ON
COST TOPICS

visit www.iceaaonline.com/certification-matters for more information



Ask an Analyst

Joe Hamaker

One of the editors of *ICEAA World*, **Madeline Ellis**, suggested to me that a good Q&A for this column might originate with questions from PRICE Systems and Galorath—questions that they had been asked by their customers and the answers they provided. So I contacted both companies and indeed, both were happy to accommodate. In fact, I encountered an embarrassment of riches—lots of good questions and answers (thanks Madeline—good idea).

So working with **Evin Stump** of Galorath and **Arlene Minkiewicz** of PRICE, we narrowed down the field to one really good Q&A from each company. Covering both in one issue of *ICEAA World* would be too lengthy so I will go in alphabetical order of the

company name and use the Galorath Q&A in this issue and the PRICE Systems Q&A in the next issue of *ICEAA World*. The question deals with learning curves, which long-time readers will remember was the subject of several articles in the 2011-2012 time period, written by Tim Anderson of Aerospace Corp. In this case, we elected not to name the person who asked the question and to just focus on the question and the answer provided.

Just because I have a column in the bank, so to speak, don't be dissuaded from sending me any stumpers you run across in your work—I'm always on the lookout for some good questions about cost analysis to use in this column. So without further ado, here is the *Ask A Cost Analyst* question and answer for this issue:

Q:

How can you develop a learning curve from historical production data?

Answer provided by Evin Stump of Galorath:

Actually, this is four questions in one because there are two commonly accepted learning curve types and two commonly occurring data situations. The learning curve types are unit (U) and cumulative average (CA). The data situations are unit and block. The U learning curve looks at the learning from one production unit to the next, while the CA learning curve looks at average learning over a consecutive group of production units. Both are in common use, and they give slightly different results.

Unit data is a list of results, most commonly production labor hours, from unit to unit. Block data are data that have been collected for a range of production units, such as units 1-50 and 51 to 100.

Ideally, we would like to deal with unit data because it contains the most information, but often all we can get is block data.

Possibilities for what we might want to do are:

- Determine a U curve from unit data
- Determine a CA curve from block data
- Determine a U curve from block data
- Determine a CA curve form unit data

All of these are possible; one is harder than the others, as we shall see on the next page:

Unit	Hours	Unit	Hours	Unit	Hours
1	48.3	11	30.1	21	26.5
2	42.0	12	29.9	22	26.3
3	37.9	13	29.6	23	25.9
4	36.2	14	28.8	24	25.9
5	33.0	15	28.6	25	25.6
6	32.2	16	28.1	26	25.5
7	30.9	17	27.8	27	25.1
8	31.8	18	27.5	28	25.0
9	31.1	19	27.1	28	24.6
10	30.8	20	26.8	30	24.6

To the left is an example of unit data.

Let's fit a U curve to it. We will use (without proof) a well-known equation from learning curve theory:

$$H_{2n}/H_n = S/100$$

This equation states that the ratio of the hours for some unit 2n to another unit n (half as many as 2n) are equal to the learning slope S, expressed as a percentage, divided by 100.

Let's look now at some doublings:

Unit	Hours	S/100
1	48.3	-
2	42.0	0.86957
4	36.2	0.86190
8	31.8	0.87845
16	28.1	0.88365
Average		0.87339

Unit	Hours	S/100
3	37.9	-
6	32.2	0.84960
12	29.9	0.92857
24	25.9	0.86622
Average		0.88146

Unit	Hours	S/100
5	33.0	-
10	30.8	0.9333
20	26.8	0.87013
Average		0.90173

We could continue this process for doublings starting at unit 6, 7, etc., but for the sake of brevity we will not. Usually the accuracy of the fit does not improve much after three or four of these doublings.

We have collected three averages. What we want next is a grand average, and we will do it as a weighted average, with the weights being the number of S/100 values computed in each doubling series.

$$\text{Weighted average} = [(4)(0.87339) + (3)(0.88146) + (2)(0.90173)]/9 = 0.88238$$

We infer that the percentage slope is 88.238% to a very close approximation.

We could jump to the conclusion that the first unit hours are 48.3, but that value may not be the best fit to this data. Let's use an approach that is likely to give us a much better value. We begin by summing the hours across all 30 units in the data set we are working with.

The result is 893.5 hours. Next, we find the values of

b and 1+b corresponding to the value of S we have found. We use another well-known equation from learning theory to find b, the natural slope:

$$b = \log(0.88238)/\log(2) = -0.18053$$

$$1+b = 0.81947$$

Consider now yet another well-known approximation equation for the total hours between any two units M and N:

$$T_{M,N} = [H_1/(1+b)][(N+.5)^{1+b} - (M-.5)^{1+b}]$$

We know all of the values in this equation except H_1 , so we solve for H_1 :

$$893.5 = (H_1/0.81947)(30.5 \cdot 0.81947 - 0.5 \cdot 0.81947)$$

$$H_1 = 46.08 \text{ hours}$$

Continued on pg. 10

We have fitted the U model equation:

$$H_n = 46.08N^{-0.18053}$$

The average error over the 30 data points is about 0.02 hours. Next we will use a similar method to fit a CA model to the same data set. For the CA model, the total hours for unit 1 to unit N are:

$$T_{1,N} = H_1 N^{1+b}$$

We can also write:

$$T_{1,2N} = H_1 (2N)^{1+b}$$

We take the ratio of these two equations:

$$T_{1,2N}/T_{1,N} = 2^{1+b}$$

This equation says that the ratio of the cumulative hours at any unit 2N to the cumulative hours at unit N is equal to 2^{1+b} . If we convert our data table to a cumulative data table, we can follow a process similar to that in the previous example to find b. From b, we can find S. Here is the cumulative version of the data set from the previous example:

Unit	Cumulative Hours	Unit	Cumulative Hours	Unit	Cumulative Hours
1	48.3	11	384.3	21	665.0
2	90.3	12	414.2	22	691.3
3	128.2	13	443.8	23	717.2
4	164.4	14	472.6	24	743.1
5	197.4	15	501.2	25	768.7
6	229.6	16	529.3	26	794.2
7	260.5	17	557.1	27	819.3
8	292.3	18	584.6	28	844.3
9	323.4	19	611.7	28	868.9
10	354.2	20	638.5	30	893.5

We now do doubling routines similar to those in the previous example. The first one starts at unit 1.

Unit	Cumulative Hours	2^{1+b}
1	48.3	-
2	90.3	1.86957
4	164.4	1.82060
8	292.3	1.77798
16	529.3	1.81081
Average		1.81974

We repeat this for doublings starting at unit 3:

Unit	Cumulative Hours	2^{1+b}
3	128.2	-
6	229.6	1.79095
12	414.2	1.80401
24	743.1	1.79406
Average		1.79634

We repeat again for doublings starting at unit 5:

Unit	Cumulative Hours	2^{1+b}
5	197.4	-
10	354.2	1.79433
20	638.5	1.80265
Average		1.79849

The weighted average of the averages is:

$$\text{Weighted average} = [(4)(1.81974) + (3)(1.79634) + (2)(1.79849)]/9 = 1.80722$$

Hence we find that:

$$2^{1+b} = 1.80722$$

to a close approximation. Taking logarithms of both sides:

$$1+b = \log(1.80722)/\log(2) = 0.85377$$

$$b = -0.14623$$

Using the relationship between S and b:

$$S = 10^{-0.14623 \log(2) + 2} = 90.36\%$$

If we need H_1 , we can use this:

$$893.5 = H_1 (30)^{0.85377}$$

$$H_1 = 48.97 \text{ hours}$$

As previously noted, it should not be a surprise that the U and CA models give somewhat different H_1 and S values when data are fitted. The models work in different ways. The fitted CA model is:

$$A_n = 48.97N^{-0.14623}$$

Cumulatively, the fitted equation is:

$$T_{1,N} = 48.97N^{0.85377}$$

The average error on a cumulative basis over all 30 points is about 4 hours. We next consider the situation where only block data are available. If there is only one block available, there is insufficient information to fit a learning curve using either the U or the CA model. There must be at least two blocks. The case where there are just two blocks is fairly easy to fit using simple algebraic methods combined with a bit of trial and error in the case of the U model. We illustrate it here for the U model. Two blocks of production have been completed. There was no loss of learning between the blocks. These were the results. Fit the U model to this data.

Block Units	Block Hours
1-50	2,812
51-150	4,026

The total hours for both blocks are 6,838 hours. We can write:

$$T_{1,50} = [H_1/(1+b)][50.5^{1+b} - 0.5^{1+b}] = 2,812 \text{ hours}$$

and also:

$$T_{1,150} = [H_1/(1+b)][150.5^{1+b} - 0.5^{1+b}] = 6,838 \text{ hours}$$

These two equations can in theory be solved for the two unknowns b and H₁. However, they are complex and highly nonlinear, so a solution is difficult. We take note of the fact that the term 0.5^{1+b} is always a small number, typically in the range 0.5 to 0.7. So to a first approximation, we can neglect it and write the following ratio:

$$T_{1,50}/T_{1,150} = (50.5/150.5)^{1+b} = 0.41123$$

Taking logarithms of both sides and solving for 1+b yields:

$$1+b = 0.81375$$

Also:

$$b = -0.18625$$

$$S = 10^{-0.18625 \log(2)+2} = 87.89\%$$

This result is an approximation because we neglected the term 0.5^{1+b}. Using the above approximate solution as a starting point, we proceed by trial and error to find that to a very close approximation, 1+b = 0.8002 and S = 87.067%. If we need H₁, we can use:

$$T_{1,150} = (H_1/0.8002)(150.5^{0.8002} - 0.5^{0.8002}) = 6,838 \text{ hours}$$

Solving for H₁, we find that H₁ = 100.0 hours. Fitting a CA model to two block data is much easier. We do this in the next example.

Block Units	Block Hours
1-50	2,812
51-150	4,026

The total hours for both blocks are 6,838 hours. We can write:

$$T_{1,50} = H_1(50)^{1+b} = 2,812 \text{ hours}$$

and also:

$$T_{1,150} = H_1(150)^{1+b} = 6,838 \text{ hours}$$

Taking the ratio of these two equations:

$$T_{1,50}/T_{1,150} = (50/150)^{1+b} = 0.41123$$

We take the logarithm of both sides and solve for 1+b:

$$1+b = 0.80883$$

Hence:

$$b = -0.19117$$

$$S = 10^{-0.19117 \log(2)+2} = 87.59\%$$

If we need H₁ we can write:

$$T_{1,150} = H_1(150)^{0.80883} = 6,838 \text{ hours}$$

Solving for H₁:

$$H_1 = 118.8 \text{ hours}$$

All of the equations used in this analysis are derived in the booklet All about Learning Curves, available free (by e-mail) from Galorath Incorporated. Call 310-414-3222 and ask for Sales.



Money Changes Hands...

...A Good Book Changes Minds

Book review by Lt Col David Peeler

Once more into the breach...

As proposals for another attempt at acquisition reform gain ground, a further look at the history of such reforms seems prudent. Understanding where reform has been and what has and hasn't worked is the best base for our current attack on what's not working. Seminal works by Peck and Scherer were reviewed in earlier issues of *ICEAA World*, as was the continuation of their theme by Fox. Those three works focused on the economic structure and performance of (Peck & Scherer, 1962) and scrutinized the economic incentives within (Scherer, 1964), and the management of (Fox, 1974) the weapons acquisition process. This month's selection delves deeper into the management challenges.

THE DEFENSE MANAGEMENT CHALLENGE: WEAPONS ACQUISITION

J. RONALD FOX

Harvard Business School Press:
Boston, Massachusetts; 1988.

The Defense Management Challenge: Weapons Acquisition is a deep look into the management difficulties in the defense acquisition business. As a follow-up to his previous book, Fox "discovered that most of the problems reported in *Arming America* still exist; indeed some had become worse." That was in the 15-year span between 1973 and 1988. Many believe the issues Fox treats have not improved. Thus, an understanding of what has gone before, targeting specific conditions, is paramount to prevent similar mistakes in coming reform efforts.

In The Defense Management Challenge, Fox differs with broadly held – both then and now – beliefs concerning contracting actions and types and the composition and mix of defense management talent. After a very brief introduction, Fox provides an overview of the defense acquisition process, Congresses interplay with the acquisition process, and a look at the Pentagon in the first three chapters. Most notably, he discusses the disincentives for cost control, consequences of micromanagement, and problems arising from indecisiveness and obstruction.

Program management is the topic of a short chapter four, with an emphasis on the role of the program manager and their relationship with the contracting officer for program success. Chapters five through seven outline an appraisal of careers in acquisition management, civil servants in the acquisition workforce, and government representatives at

BOOK REVIEW

contractor plants. Among significant other things, these three chapters address tenure in acquisition career areas, military with operational experience verses career program managers, accountability, and the proclivity to compile paper, rather than analysis that turns data into information.

Fox provides insightful summaries of the challenges facing the management of weapons acquisition. He believes there is a lack of a free-market in major weapons acquisition. Further, Fox provides concise concluding summaries regarding oversight, authorizations, appropriations, organizational structure, and incentives.

The book provides sobering information that now serves as an after action report to reforms of the past. Therefore, this title, as well as the three previously reviewed, provides intelligence regarding the acquisition battlefield from which to build a plan for future actions that will produce the desired effects.

The read is worthwhile for those with the time or specific interest; otherwise, the book serves as a great reference for research into its topical chapters. While I made copious notes in the margins, most readers would not enjoy a cover-to-cover reading. This text does not have the same continuous interest throughout as the previous three titles reviewed along this theme.

As a side note, Fox wrote one additional text on acquisition reform, Defense Acquisition Reform, 1960-2009: An Elusive Goal, wherein he lists, summarizes, and evaluates the reforms of the past 50 years. Another text that serves better as a reference than a leisurely read.

Colonel Peeler spent the last 12 months as a Secretary of Defense Corporate Fellow, working at Amgen, Inc. Leveraging this experience, he wrote a paper on biotechnology business lessons for the DoD. His next assignment is Deputy Director of Financial Management at the Air Force Life Cycle Management Center in Dayton, Ohio. He is a certified cost estimator/analyst and an Air Force certified acquisition professional in both financial and program management. He is a member of both the American Society of Military Comptrollers and the International Cost Estimating and Analysis Association.



ICEAA Events Calendar

ICEAA Canberra Chapter
October meeting
Canberra, Australia
Contact: Andrew Nicholls
awnicholls@bigpond.com

Lone Star Chapter Workshop
October 23, 2014
Fort Worth, TX
Contact: John Deem
john.w.deem@lmco.com

2014 Integrated Program
Management Workshop
November 3 – 5, 2014.
Bethesda, MD
www.ipmconference.org

Region 7 Workshop
September 17, 2014
Huntington Beach, CA

Southern California Chapter
Winter Workshop
December 17, 2014
El Segundo, CA

Southern California Chapter
Spring Workshop
March 18, 2015
San Pedro, CA

for Region 7 and Southern California
Chapter Events, contact:
Kurt Brunner
kurt.r.brunner@leidos.com

Quentin Redman:
quentin.redman@pricesystems.com

**Remember: workshops and training at
ICEAA Chapters or at other ICEAA-
affiliated events may qualify for points
towards your CCEA® recertification!**

ertification ongratulations

ICEAA would like to acknowledge both those who volunteer their time to proctor the Certification Examination and those who achieve certification. Without CCEA® certified proctors to manage exam administration, ICEAA would be unable to offer the exam in so many locations throughout the year. If you are CCEA® certified and would like to proctor an exam in your area in exchange for points toward recertification, please contact the ICEAA International Business office.

Thanks go out to following individuals for volunteering their time to proctor the certification exam during the first half of 2014: Areve Alexander, Rick Beavers, Brad Boehmke, Stacy Dean, Paul Gardner, Ross Hosse, Donnie Hustrulid and Mitch Lasky.

CCEA® Achievers:

Brent Allen
Aerojet Rocketdyne

Meredith Bain
CSC

Jean Nicole
Barmettler
MDA

Michael Barnum
Tecolote

Richard Batten
Tecolote

John Dunn
Boeing

Timothy Feagans
JLRD

Jeremy Goucher
Herren Associates

Dion Lopez
Northrop Grumman

Jeff McDowell
Tecolote

Rebecca Rosenbaum
LMI

Akilah Wallace
Rand

Michael You
AFCAA

PCEA® Achievers/CCEA® Eligible:

James Freeman
Integrity Management
Consulting

Miranda Jones
Spirit AeroSystems

Jacob Petter
Air Force

Quan Jared
Navy

Bopha Seng
Tecolote

PCEA® Achievers:

Charles Burns
MDA

Stephanie Isenman
Boeing

Donald Kimminau
CSC

Ria Laureijs
Rand

Kevin Moynihan
Boeing

James Rowan
MCR

Michael Smith
Booz Allen Hamilton

Re-certified CCEAs:

Brian Bazil

Walter Bednarski

Daniel Scott Boyd

Cheryl Calimlim

Jim Caunce

Savita Choudhry

Kevin Cincotta

Lance Cole

Gerald Corwin

Thomas Dupre

Christopher Edwards

Michael Euziere

Jaime Galvan

Matthew Gaughan

Robert Heath

Jing Hees

Alan Jones

Michael Kvartunas

John Leahy

Gene Lowther

Christopher Milo

Jeremy Mitchell

Jeffrey Platten

Eric Plumer

Scott Prestridge

Luther Price

Joseph Ruwe

Thomas Sanders, Jr.

William Seeman

Chris Sheng

William Shockley

Blaze Smallwood

Virginia Stouffer

Aneesh Talwar

Charles Tapp

Ryan Timm

Brian Welsh

Jeanne White



2014 Professional Development & Training Workshop

Workshop Overview

Contributors:

Andrew Drennon, 2014 Conference Co-Chair

Joseph Hamaker, 2014 Association Awards Chair

Megan Jones, ICEAA Executive Director

Ashlin Smith, 2014 Training Co-Chair

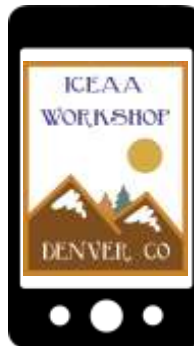
The 2014 ICEAA Professional Development & Training Workshop brought over 380 professionals from government, industry, and academia to Denver, Colorado for 3 1/2 days of training and professional papers, June 10-13, 2014.

We were encouraged by the attendance this year, which exceeded both last year's numbers and our own expectations, and included an increased presence of government employees.

Our three keynote speakers, **Craig Gravelle**, Senior Director of Business Development with Sierra Nevada Corporation's Space Systems; **Michael Gass**, President and CEO of United Launch Alliance; and **Bill Seeman**, Division Chief, Space Programs with the Air Force Cost Analysis Agency started each day with insights into the future of space travel and what that means for the cost community.

The Workshop featured more than 100 member-submitted professional papers, reviewed by a panel of experts and presented personally by the authors. The papers were divided into the nine tracks shown on page 16 with details on the winners of Best Paper for each track.

The training sessions were organized into four content tracks: The Cost Estimating Basics track reviewed the core body of knowledge based on the Cost Estimating Body of Knowledge (CEBoK), while the Cost Estimating Advanced track supplemented the fundamental body of knowledge with the advanced topics based on CEBoK. The Parametric Training track highlighted the key topics of the Parametric Estimating Handbook, and the Integration track provided the inter-disciplinary topics and processes. Highlighted among the tracks were discussions of special interest areas such as risk, earned value management, scheduling, and software. Beyond just



preparing students for the CCEA[®] exam, this year's training offerings were designed with the lofty goal of maximizing the depth and breadth of content while incorporating new and relevant research findings into the modules.

For the first time, we launched the ICEAA conference app, which allowed attendees to access the conference schedule and all materials from a smartphone, tablet, and computer! Check out the important links box below for information on how attendees can access all of the papers, PowerPoints, and handouts from the Workshop.

Many other of the changes implemented this year by the Workshop Planning Committee, from schedule tweaks to menu changes, were well-received. We thought the baseball-themed reception before the Colorado Rockies game on Wednesday was a real hit with attendees!

The following pages will serve as a trip down memory lane for those who attended the workshop. For those who couldn't make it this year, **Mike Thompson** has a column at the end of the section to let you know how to make sure not to miss out in 2015! 🌐

Important Links:

Photos, speaker bios, session descriptions and more:
www.iceaaonline.org/denver14

Workshop proceedings (attendees only)
www.iceaaonline.com/2014proceedings

ICEAA App Web Portal:
<http://iceaa.eventpedia.us/>



THANKS TO ALL OF OUR 2014 SPONSORS AND EXHIBITORS

Gold Sponsor:



Silver Sponsors:



Sponsors & Exhibitors



2014 Best Paper Awards

This year's crop of professional papers presented a genuine challenge to the judges of the 2014 Best Paper Awards, a process that begins months before anyone arrived in Denver.

Our thanks goes out to all of the authors of this year's papers. By volunteering their time and expertise, they are not only providing an invaluable service to ICEAA members and Workshop attendees, but are sharpening the cutting edge of innovation in cost estimating and analysis techniques.

Authors of the papers selected for presentation at the Workshop were encouraged to submit their presentations for review by the Best Paper Judges back in April. A team of judges for each of the nine tracks rated the papers in that discipline on technical content, creativity, potential application to the cost estimating and analysis fields, and overall quality and style. The paper with the highest score was named the best paper for that track.

The lead judges from the individual track judging teams then came together to review the highest rated papers and determine the overall winner using the same method with which the track winners were scored.

2014's best paper came from the Parametrics track: *Bayesian Parametrics: Developing a CER with Limited Data and Even Without Data* by **Dr. Christian Smart**,



Dr. Christian Smart (L) 2014 Workshop Overall Best Paper Award winner and Brian Glauser (R), ICEAA International President.

Director of Cost Estimating and Analysis at the U.S. Missile Defense Agency. This year's win marks the sixth time Smart has won best paper for a track since 2008 and the fifth time that paper was then named Overall Best Paper.

Congratulations to Dr. Smart and all of the 2014 winners! In case you missed any of these presentations in Denver, encore presentations of several of our best papers will be at the Integrated Program Management Workshop, November 3-5, 2014 in Bethesda, MD. Check out www.ipmconference.org for more details.



2014 Best Paper Judges

Richard Aldrich	Stephanie Casserly	Tom DuPre	Jukka Kayhko	Tom Sanders
Guenever Aldrich	Neil Chakrabarti	Emile Ettedgui	Mitch Lasky	Christian Smart
William Barfield	Kevin Cincotta	Buddy Everage	Jim Linick	Barbara Stone-Towns
Walter Bednarski	Tom Dauber	James Glenn	Ken Marshall	Bill Taylor
Geoff Bernstein	Darrin DeReus	Tom Harwick	Arlene Minkiewicz	Debra Walter
Blake Boswell	Charlie Dobbs	Greg Hogan	J.D. Ottenbreit	Robyn Wiley
Paul Breon	Eric Druker	Jeffrey Jainicke	David Peeler	Noah Wright
Michael Brozyna	Douglas Druley	Arthur Kaczynski	Matt Pitlyk	



Best Papers by Track



Cincotta (L), Lilley (R)

Best Paper: The Business and Art of Cost Estimating Track *A Comprehensive CES and BCA Approach for Lifelong Learning*

Authors:

Kevin Cincotta
Technical Director
ICF International

Dr. Darcy Lilley
Chief Learning Officer
Air Force Air Mobility
Command

Lauren Nolte
Senior Cost Analyst
ICF International

Best Paper: Earned Value Management Track *Trust but Verify – An Improved Estimating Technique Using the Integrated Master Schedule (IMS)*

Author:
Eric Lofgren
Cost Analyst
Technomics, Inc.



Lofgren (L), Andrew Drennon, 2014
Workshop Co-Chair (R)

Best Paper: Information Technology Track *Improved Method for Predicting Software Effort and Schedule*



Rosa (L), Glauser (R)

Dr. Wilson Rosa
AIS/C4ISR Branch Head
Naval Center for Cost
Analysis

Dr. Barry Boehm
Professor Emeritus
University of Southern
California

Dr. Bradford Clark
Vice-President
Software Metrics
Incorporated

Joseph P. Dean
Operating Location Chief, Hanscom AFB
Air Force Cost Analysis Agency

Dr. Raymond Madachy
Associate Professor
Naval Postgraduate School

Best Paper: Life Cycle Costing Track *Cost Overruns and Their Precursors: An Empirical Examination of Major Department of Defense Acquisition Programs*

Authors:

Alan Gideon
Senior Systems Engineer
Booz Allen Hamilton

Enrique Campos-Nanez
Senior Software Engineer
Epsilon Group

Pavel Fomin
Aerospace Engineer
United States Air Force

Best Paper: Cost Management Track

Innovative Business Agreements and Related Cost & Pricing Methods at NASA in Support of New Commercial Programs

Authors:

James Roberts

Senior Cost Analyst
NASA Kennedy Space Center

Torrance Lambing

Lead, Business and Cost Analysis Office
John F. Kennedy Space Center, NASA



Roberts (L), Glauser (C), Lambing (R)



Left to right:
Tavassoli, Meyers,
Nehring, Glauser

Best Paper: Methods & Models Track

Relating Cost to Performance: The Performance-Based Cost Model

Authors:

Michael Jeffers

Senior Cost Analyst
Technomics, Inc.

Anna Irvine

Technomics, Inc.

Robert Jones

Senior Cost Analyst
Technomics, Inc.

Robert Nehring

Cost Analyst
Technomics, Inc.

Kelly Meyers

Surface Combatant Team Lead
Naval Surface Warfare Center
Carderock Division

Jean-Ali Tavassoli

Cost Analyst
Naval Surface Warfare Center
Carderock Division



Elghefari (L), Glauser (R)

Best Paper: Risk Track

A Critique of Cost-Risk Analysis and Frankenstein Spacecraft Designs: A Proposed Solution

Mohamed Elghefari

Eric Plumer



Plumer (L), Glauser (R)



Left to right: Alford, Prince,
Glauser, Boswell, Pitlyk

Best Paper: Space Track

The NASA Project Cost Estimating Capability

Andy Prince

Manager, Cost Engineering Office
NASA/Marshall Space Flight Center

Brian Alford

Operations Research Analyst
Booz Allen Hamilton

Blake Boswell

Analytic Tool Developer
Booz Allen Hamilton

Matt Pitlyk

Operations Research Analyst
Booz Allen Hamilton



Association Awards

As in the past, a highlight of the 2014 Conference in Denver was the presentation of the annual Association Awards. ICEAA thanks everyone who nominated one or more of their colleagues for an award; the stories shared gave us unique glimpses into what makes our members the best of the best in the cost professions. We encourage you to personally congratulate any of these individuals should your paths cross in the coming months. As you read the summaries of their achievements below, give thought to the dedicated and inspiring members you interact with regularly and consider submitting a nomination for 2015. Information and deadlines will be posted on the ICEAA website once available.

Annual Achievement— Management: **Richard Beavers**

Richard Beavers, Business Operations Senior Manager for Lockheed Martin Missiles & Fire Control was nominated for his outstanding management contributions to our profession.

With Rick's encouragement, all nine eligible employees in his business operations group joined ICEAA, three of which have since obtained their CCEA® and another is in preparation. This encouragement is backed up by using his overhead budget to pay all the fees related to his employees' engagement in the association, and by allowing employees flexibility in work hours when preparing for and taking the exams.

His dedication to professional development and the personal growth of his employees goes even deeper. For example, in 2013 he initiated a rotation of work assignments in the group to provide opportunities for individuals to expand their knowledge base while giving the group a wider breadth of expertise. He ensures all estimators and analysts in his group remain current on formal compliance

training, sending employees to seminars and formal training, and encouraging them to share tips with each other to enhance efficiency.

Rick takes great steps to ensure his employees' success does not go unnoticed. Everyone in his group has received performance awards, one employee received both a business-level excellence award (top 1% of company) and corporate-level performance award, and another received a promotion. Beyond formal recognition and awards, Rick is constantly looking for ways to make his employees' good performance known, whether sending them informal thank-you notes or forwarding congratulatory emails to their supervisors.

Association Service Award: **Peter Braxton**



Peter Braxton, winner of ICEAA's 2014 Association Service Award has demonstrated uncommon sustained volunteer service to ICEAA and its parent organizations since attending his

first ISPA/SCEA conference in 1999, where he won best paper in the Cost as An Independent Variable track.

Peter has ten consecutive years of service as a committee chair and was a driving force behind the formation of ICEAA, authoring the Training and Body of Knowledge Solution Team plan, and continues to lead the development and maintenance of CostPROF and CEBoK®. While serving as training co-chair for ten consecutive conferences, he has co-authored over two dozen papers, four of which have won best paper awards, and presents at least three training sessions and one paper at each conference.

Peter is integral in forming partnerships between ICEAA and cost professionals around the world. He has conducted week-long CEBoK® boot camps in the United Kingdom and Australia, and presented training and papers at each of the last two European conferences. Stateside, he actively reaches out to sister societies including American Society of Military Comptrollers (ASMC), National Contract Management Association (NCMA), Department of Defense Cost Analysis Symposium (DoDCAS), College of Performance Management (CPM).

He is a strong supporter of the Washington Capital Area Chapter, encourages membership at his employer company, Technomics, promotes the value of CCEA® certification, and actively recruits and mentors the next generation of ICEAA members.

Annual Achievement— Technical: James Glenn



In recognition of his significant cost estimating and analysis contributions to the development, test, and deployment of space and missile defense systems,

James Glenn, Manager/Senior Cost Analyst at Computer Sciences Corporation in Huntsville, AL, was selected for the 2014 ICEAA Annual Achievement – Technical Award for his support of the Missile Defense Agency (MDA) Cost Estimating and Analysis Directorate as the acting Engineering Support/Analysis of Alternatives Team Lead.

Mr. Glenn demonstrated unparalleled levels of dedication and professionalism while developing cost estimates for three Congressionally-mandated studies; was a major contributor on both the U.S. Strategic Command Vision for the Future of Missile Defense Study and MDA cooperative effort with the Office of the Secretary of Defense Cost Assessment and Program Evaluation Independent

Cost Estimate for European Phased Adaptive Approach. Mr. Glenn continually followed cost estimating and analysis best practices to ensure the MDA mission was, and will continue to be, executed successfully and with high-quality products.

James Glenn is the Greater Alabama ICEAA Chapter Treasurer, and earned his certified cost estimator analyst (CCE/A) certificate May 2012. He was selected as MDA Directorate of Cost Estimating 2012 Contractor Cost Estimator of the Year, and received the 2013 Air, Space, and Missile Defense Association Service Excellence Award-Contractor.

Parametrician of the Year: Greg Kiviat



In recognition of his life-long work in parametric model development and of his continued support to ICEAA and its parent organizations, **Greg Kiviat**, Manager of

Preliminary Design Affordability Analysis at Sikorsky Aircraft was named ICEAA's 2014 Parametrician of the Year.

To support his belief in promoting more effective applications of parametrics at Sikorsky and United Technologies Corporation (UTC), Greg has executed an initiative of internal training and certification

for 800 company estimators, with a four-tier in-house certification and training program, based on more than 40 formal instructor-led courses. For his MIT-Industry Partners System Engineering Certificate Program in 2004, Greg conducted original research on the application of parametrics-focused CAIV and DTC initiatives through government and industry, including surveys of ISPA and SCEA members.

Greg is a regular presenter at ICEAA chapter events and ISPA/SCEA and ICEAA Conferences, was co-author of the 2007 Best Paper Overall, "Realities of Cost As an Independent Variable (CAIV) - Stakeholder Perceptions," and has been a member of the Board of Directors for both ISPA and ICEAA since 2010. Greg co-founded the Affordability Network of United Technologies Corporation (UTC), parent company of Sikorsky Aircraft, which promotes the use of parametric techniques at the company.

Thanks to the 2014 Awards Committee for taking the time to carefully read and conscientiously score each of the numerous nominations we received this year:

Hank Apgar
Brian Flynn
Robyn Kane
Robert Nehring
Andy Prince
Alf Smith
George Stratton



More photos at www.iceaaonline.org/denver14





Photo Credits: Herve Joumier, Angela Kleinsasser, Joe Wagner, Lisa Yedo

More photos at www.iceaaonline.org/denver14



Our thanks to the 2014 ICEAA Workshop Planning Committee:

Workshop Co-Chairs
Andrew Drennon
Rich Harwin

Training Co-Chairs
Ashlin Smith
Brian Welsh

Program Chair
Mel Etheridge

Association Awards Chair
Joe Hamaker

Best Paper Awards Chair
Eric Druker

And to the hard working
ICEAA Business Office Staff
who made it all possible:
Sharon Burger
Megan Jones
Joe Wagner
Brittany Walker



ICEAA PROFESSIONAL DEVELOPMENT & TRAINING WORKSHOP

June 9-12, 2015 | San Diego, CA



2015 Workshop Introduction

by Mike Thompson, 2015 Workshop Co-Chair

With the success and positive experiences in Denver fresh on our minds, there's no better time to start thinking about next year's Professional Development & Training Workshop, June 9-12 in San Diego! My Conference Co-chair Doug Druley and I are pleased to announce that planning is well underway to make the 2015 Workshop our best ever.

Our Wednesday morning keynote is on board. Dennis Conner captained the Stars and Stripes in the America's Cup yacht race a total of six times: winning four and losing twice. His experience organizing everything that is required for a race, from situating the most minute details to leading a team of experts,

is not unlike what our analysts, estimators, project and program managers go through every day – but we don't have to worry about sea sickness!

We're back at the Sheraton San Diego Hotel & Marina, home of the SCEA/ISPA Joint Conference in 2010. We have secured the same group rate for hotel rooms as we enjoyed 5 years ago, and will be releasing a promotion this fall for earlybird registration: sign up in 2014 to get 2014 Workshop rates.

But that's where the comparison to 2010 ends. The deadlines for paper contributions are significantly earlier this year than in the past and for good reason: the 2015 Workshop will be ICEAA's first step to taking all of our professional development and training *beyond* the next level: we're going all the way to the top.


There will be fewer papers accepted, and the scrutiny on those papers will be tougher. Authors of accepted papers can expect constructive feedback and coaching on their presentations from their track chairs between the submission deadline and the

workshop. Training sessions will be modified to make the best use of in-person time with mentors and maximize certification exam preparation.

The result will be a workshop full of up-to-date information, valuable innovations, and the kind of tangible experience that just doesn't come from reading a PDF or listening to a webinar.

If you're ready to accept the challenge of bringing the best of the best to the ICEAA Workshop, we're ready to accept your abstracts at

iceaaonline.com/callforpapers15

Stay tuned for more details as they come. 



*Dennis Conner
2015 Workshop Keynote Speaker*

Important Dates:

December 1, 2014: Abstracts, bios and release forms due

January 15, 2015:

Announcement of accepted abstracts

March 30, 2015: Papers/ presentations due



Society for Cost Analysis & Forecasting (SCAF): Costing News from the UK

by Dale Shermon, SCAF Chairman

It's been a busy few months in the SCAF program. We started by going to the Ribby Hall holiday village in the north of England. SCAF has been holding our summer meeting near Preston for a few years now, but this was a new venue for us. All the reports were favourable, so don't be surprised if we are there again next year. The Spa hotel



was excellent and the motel was moderately priced. The conference facilities were the right size and the catering was great, although next year we will organize a dessert! If you missed the event there were some inspiring presentations and the question and answer session was very thought-provoking. In the grounds I found a treehouse which had a sign "looking for a meeting room with an inspiring environment?" perhaps we will hold a SCAF committee meeting there next year!

The next noteworthy event was the ICEAA Workshop in Denver. You will recall that SCAF has signed a MOU with ICEAA to work more closely in the future. There was a good representation of Europeans at the event, but we were outnumbered by Americans. With multiple presentation and

training tracks there was not a moment of boredom all week. In my opinion, the hot topic at the conference was integrated cost and schedule risk analysis, a challenge for us in Europe as well as in America. It would seem that the schedule community thinks they have a lead in this area through the addition of resources to their schedule risk analysis, but I'm not totally convinced. I think that the cost community needs to enter the debate, especially when integration costs are considered.

During my travel to Denver I was one of the first passengers to use the new terminal 2 at London Heathrow. United Airlines transferred its flights to the new terminal and was piloting the new systems. I have never had customer service like it in an airport, the security screening staff were waiting for customers, just to have something to do, the restaurants were empty and the duty free was abandoned!



I was fortunate enough to attend the Farnborough International Airshow this year, conveniently located in the same town as the QinetiQ headquarters. After a morning of walking around the

exhibition halls it was great to see the Airshow. The A380 did a display like a fighter jet which was amazing to watch; it would seem the A350 which followed was still assessing its flight envelope. Although it was my first sight of the aircraft, its flight dynamics were very simple in comparison to the A380. The Boeing 787 Dreamliner was wonderful to watch from the US, but unfortunately the star of the show, the F-35 Lightning II had to withdraw. As a cost engineer the exhibition halls are interesting. The opportunity to see and discuss so much technology in a small area is wonderful. For me the exhibits that are cut away are fascinating, you are able to see where the cost lies!

This year SCAF had its first Awards dinner in Bristol at the Marriott, which I was unable to attend, but I understand that a great time was had by everyone who was present. **Arthur Griffith** (Deputy SCAF chairman) presented the award to this year's winners and received a SCAF service award himself; many thanks Arthur! If you are thinking of presenting, or offering an article to the SCAF newsletter here is the motivation that you need.

The future programme for this year is shaping nicely with the annual conference and a joint OR society / SCAF workshops on 16 Sept. and 18 Nov. respectively. Enjoy the rest of the summer and put the dates in your diary now.





CALL FOR PAPERS

Journal of Cost Analysis and Parametrics

Editor-in-Chief: Prof. Ricardo Valerdi, *University of Arizona* • **Managing Editor:** Dr. Christian Smart, *Missile Defense Agency*

The *Journal of Cost Analysis and Parametrics* is the official publication of the International Cost Estimating and Analysis Association. It is a scholarly journal featuring peer-reviewed articles that provide the latest developments in cost estimating, cost analysis, and cost management. Its objective is to improve the theory and practice of cost estimating, analysis, management, and research results among cost-analysis educators and practitioners around the world.

The journal seeks to publish research that is interesting, intellectually rigorous, and advances the body of knowledge of cost analysis and parametrics. Papers involving a variety of topics, settings, and research methods are solicited. Manuscripts related to a broad range of application areas for any sector of the economy including manufacturing, financial services, construction, retail, defense, and not-for-profit are desired. New theories, topical areas, and research methods are encouraged. Areas of interest include, but are not limited to:

- Cost model development and validation
- Decision analysis
- Risk and uncertainty
- Simulation
- Trade studies
- Learning curves
- Productivity assessment
- Earned value management
- Design to cost
- Lifecycle costing
- Statistical techniques for analyzing data
- Data visualization

SUBMISSIONS

Submissions will be evaluated based on their: (1) readability; (2) relevance; and (3) reliability. All papers accepted for publication in the Journal must have a high level of readability. Poor readability can impede the ability of a reviewer to evaluate the contribution of a paper and may lead to rejection. It is necessary to ensure the paper can be readily understood by individuals involved in the area discussed in the paper. References should not impede the flow of the paper and unnecessary obscure jargon should not be used. If applicable, details of the statistical methodology should be in an appendix rather than in the body of the paper if they are not central to the focus of the manuscript.

The second criterion is relevance. A paper is relevant if it has the potential to influence cost estimating, analysis, or management. A paper that appeals to a broad spectrum of readers or is unique or innovative has a better possibility of influencing practice and theory development and therefore, is more relevant than a paper without these features.

The third criterion is reliability. The paper is reliable if the conclusions of the paper can be reasonably inferred from the arguments. Reliability is easier to assess when a paper is statistical or involves empirical research with which the reviewer is familiar. Authors can improve the probability of acceptance of a paper by including a section on the limitations of the research techniques.

Authors are advised to consult previous issues of *JCAP*—and its predecessor journals—for suitable topics to submit for consideration. For questions from potential authors please contact:

Ricardo Valerdi, Editor-in-Chief
(rvalerdi@arizona.edu).

United Kingdom Region Report

By Andy Nicholls, UK Region Director

The 2014 ICEAA Workshop in Denver was one of the best I have attended, with good quality papers, and a large gathering of interested members - both old hands and first time attendees. From a UK and European perspective, the really great news is that the ICEAA Board agreed that the 2016 International Conference will be held at a venue in the UK. The UK has hosted the Olympics, Commonwealth Games and now the world's best costing conference may be added to the list!

ICEAA will have discussions with the two UK costing entities associated with ICEAA - the Society for Cost Analysis and Forecasting (SCAF) and the Association of Cost Engineers (ACostE) to agree and co-ordinate on surrounding events to maximize the benefits for members of all societies. The venue has yet to be selected but that work is already underway with the help of **Jason Dechoretz** (ICEAA BoD member with international responsibilities) and **Dale Shermon** (SCAF President) to assist in identification of potential dates and locations.

If you are not from the UK then it may be a good time to plan a holiday as well as conference attendance. So a couple of tentative dates in your calendars are a good idea.

So what does this mean for ICEAA members in the UK? Whether you are a senior manager or cost estimator in your organization you may wish to consider:

- This conference is a place to showcase the ability, competence and professionalism of the costing profession
- How many of your staff could be permitted to attend and plan for that in your 2016 budget
- What papers on costing topics could be offered and shared with the international costing community
- Training and examination opportunities for certification (PCEA, CCEA® & CCEA/P) will be available during the conference. The training sessions will be run in parallel with the conference and are over a longer period than just the main conference itself; the certification examinations carry an additional cost above the conference fee
- Would your organization want to place a trade stand at the conference

Anyone who wants advice or help in choosing or preparing a paper, please contact me directly.

The call for papers will be issued late in 2015 so potential authors have around 16 months to produce an award winning offer! On that subject I would urge all UK members and my European colleagues to make every effort to nominate for ICEAA awards people who are worthy – a list of awards and nomination activity will be published much closer to the conference in 2016.

Recognition of achievement is all part of 'continuing professional development' activity. You may nominate any member for any award provided that nomination complies with the award requirements. The nominee does not have to be in the nominator's organization and several members may support the nomination if necessary. ICEAA will assess the nominations and decide based on the evidence submitted who receives the award.

More information will be written into future editions of *ICEAA World* as it becomes available and the website will be updated to contain Conference 2016 details as they emerge. 🌐

Advertise in

ICEAA
World

Covers:

Full Page \$600

Inside front/back, outside back

Interior Ads:

Full Page \$500

Half Page \$400

Quarter Page \$300

visit

[www.iceaaonline.com/
publications](http://www.iceaaonline.com/publications)
for details

Europe Region Update

By René Berghuijs, Chairman BeNeLux Chapter, in association with the Dutch Association of Cost Engineers (DACE)

Last year the BeNeLux Chapter were asked to introduce cost parametrics to an interested audience of some 50 students in the Dutch Association of Cost Engineers (DACE) certification program. So, in late November **Hervé Joumier** presented at the Hogeschool Arnhem Nijmegen, where the DACE certification course is taught. The presentation was derived from the ICEAA Training Program presented at the 2013 Workshop, and covered modern methods for the development of CERs. The students liked it and gave positive feedback.

Our group is now working on the plan for standardized teaching of parametrics as an integral part of the DACE certification program, to be started in the 2014-2016 cycle. This is one of the goals of the cooperation between ICEAA and DACE, the promotion and development of lesson plans at universities and colleges.

Another activity for the BeNeLux Chapter members early this year was helping **Steven Zijp**, a student at the



Hervé Joumier with Bram Steennis, DACE



René Berghuijs (left) and Steven Zijp



Robert de Vries (left; DACE) and Brian Glauser (ICEAA) signing the MOU.

Aeronautical Faculty of Delft University in the Netherlands, to complete his thesis on cost estimating for future commercial aircraft. He has developed a parametric cost model that will be used by the faculty to validate the economic feasibility of future commercial aircraft. Steven graduated with flying colours on June 26, 2014.

At the beginning of this year **Marcel Smit**, long time Dutch cost analyst, accepted the nomination for Vice Chairman of the BeNeLux Chapter. Marcel is a staff member at the Dutch Technisch & Natuurkundig Onderzoek (TNO) in The Hague. He brings a wealth of experience in the field, so we are very pleased to have him on board.

In March the Memorandum of Understanding between ICEAA and DACE was signed during an informal meeting with the DACE Chairman and President.

We are planning two chapter meetings In the 2nd half of this year, with topics of interest. 🌐



ICF INTERNATIONAL (NASDAQ: ICFI) is a growing consulting firm focused on improving the quality of life for our clients and those they serve. With over 5,000 employees, we have global reach and capability in critical areas that affect both the public and private sectors.

Key areas of focus include energy, environment, infrastructure, health, social programs, public safety, training, systems acquisition support, and technology solutions and services. All of these require cost estimating professionals.

If you would like to broaden, diversify, and take your cost estimating skills to the next level, consider a career at ICF! We are interested in talking to cost estimators/analysts of all experience levels, particularly those who are PCEA or CCEA-certified.

To learn more or apply, go to www.icfi.com/careers.

Australia Region Report

By Andrew Nicholls, Australia Region Director

The Canberra chapter has had a number of very successful events thus far this year with great attendance and insightful topics. The chapter executive has tried to mix the style of events up which has resulted in a few firsts for our growing chapter.

Chapter Meetings:

In April the new board held their first chapter meeting with membership. This meeting consisted of a look at the year ahead, a quiz and a new area of discussion around lessons learnt. Our second meeting in June was held at the KPMG offices, where we were indeed honored to have two main presentations for this meeting – Graduates and Lessons Learned. For the main event 2 graduates shared their views on what it's like to be a graduate in the estimating space. This was a very insightful presentation with great interaction, questions and discussion. I am sure a few of us reflected on our careers and how we can pass on our knowledge and experience to ensure our future "costies" have a positive experience for their own careers and adventures. For the second half of the meeting we were privileged to have our first lessons learned session where one of our members shared his extensive knowledge and passion on EVM and scheduling.

Future events this year:

In August we will have our first lunchtime event sponsored by the Department of Defence where we will be honored to have representatives from Tecolote present on joint cost, schedule, risk and uncertainty modelling.

October will be at the BAE offices where we will have a presentation from a BAE Costie - *From Critic to Creator - my journey from the MOD UK to BAE Australia*.

In Adelaide the momentum and enthusiasm for ICEAA is continuing with one event held in May, sponsored by KPMG with a wonderful turn out and quite a few new

people. **Tony List** from Cost Plan gave us a very practical and insightful look at estimating on civil projects. I am sure a few of us took away a few tips for our own industries and companies. We are hoping to have another event in September looking at risk and uncertainty, so watch this space.

We would like to thank the membership for their continued support and enthusiasm as we grow our presence and continue to share our knowledge and experiences in Australia

Finally the chapter would like to thank Capability Development Group (Defence), KPMG and BAE Systems for supplying venues for meetings, thus keeping the cost down for our events.




In this economy, how can you
STAND OUT in a crowd?

Post your resume on the **Cost Estimating Career Center** to be seen by employers in the market for an employee who thinks outside the box.

Go to <http://careers.iceaaonline.org/>
Click on **"Your Resume"**
Create a **"Job Seeker Account"**
Get your name out as an employee who will **go the extra mile** for the job!

Region One News

By Ellie Bassett, Region 1 Vice President

Though I've lived in New England all my life, I have called many different settings home, from Small Town USA, to the ocean shore, and finally in the Live Free or Die State. No matter which area I lived in, there always was a common denominator: patriotism. New England is rich in American patriotic history, particularly in the Boston area and surrounding towns in Massachusetts: the sites of the Freedom Trail, Paul Revere's midnight ride, Boston Tea Party...the list goes on and on.

In Lexington, Massachusetts, where Paul Revere's Midnight Ride ended in 1775, one can find an organization known as The Minutemen, a group dedicated to honoring those brave Patriots who have made the ultimate sacrifice in defense of our Nation's freedom.

One of the organization's activities is the Battle Road reenactment where numerous groups in and around the Lexington/Concord, MA area commemorate the Battles of Lexington and Concord by reenacting the events of April 19, 1775.

I am relating this story, not only because I am from New England and proud of our history, but because I had the honor of recognizing one of our own ICEAA members who retired this year and is a member of the 6th Middlesex Regiment, one of the numerous area groups that participate in the Patriots Day

reenactments. This person is **Joe Dean**.

Brian Glauser asked me to present a plaque to Joe commemorating his years of service to SCEA/

"From those who first fell on Lexington Green, to the heroes of today, we hope to continue telling the story of American Independence."

The Lexington Minutemen Mission Statement

ICEAA and thanking him for the same. It really was an honor to be asked to do so.

Joe Dean retired after a long career with the Department of Defense. During his career he has served in the military, government, and as a support contractor. He is a former member of the Software Engineering Institute's Software Acquisition Metrics Working Group and has served in various capacities with SCEA, ISPA and ICEAA over the past 20 years. Joe was the ICEAA National Vice President and until last year served as the ICEAA Region 1 VP.

Joe worked in the estimating business for many years. Joe Dean retired from the Air Force after serving 22 years, the last seven at Hanscom AFB as a cost analyst and cost research analyst where he developed the "ESC Cost per Line of Code Model". Before that he was a software systems analyst for the Communications Computer Programming Center at Tinker AFB in Oklahoma. Among many

other achievements Joe earned a Bachelor of Science degree in math, a Master's Degree in Business Administration, and is a co-author of, "Practical Software Measurement, Objective Information for Decision Makers".

He spent 19 years with Tecolote Research Inc., as a senior cost analyst and technical expert. His focus was cost estimating software-intensive systems. He applied his skills on everything from submarines to satellites. Joe retired after serving as the - Operating Location Chief, Hanscom AFB, Air Force Cost Analysis Agency, a position he held for the past 6 years.

We all will miss Joe's friendship, cost expertise, and mentoring here at Hanscom, but wish him well in his retirement. He is a true Patriot!



*Sergeant Joseph Dean,
6th Middlesex Regiment*

New England Chapter News

By Jessica Karnis, New England Chapter Secretary

We had a successful Cost Workshop in May with two keynote speakers: Commissioner Mr. **Enrique Zuniga** and CFO Mr. **Derek Lennon** from the Massachusetts Gaming Commission. They detailed the process by which the state of Massachusetts analyzed how to expand gaming in the Commonwealth in a successful and ethical manner. The state recently approved the addition of slot parlors as well as resort casinos and the commission has been conducting financial viability assessments of the companies interested in licenses. They evaluated the long term value to the state to include the economic development impacts while also considering social impacts and public safety. A large part of this centered around a geographical assessment of which Massachusetts locations would provide the best Return on Investment with the least amount of negative influence.

Also presenting at the workshop were: Dr. **Adam Ross**, research scientist in the Engineering Systems Division at MIT who gave a great talk on his research of



Mr. Enrique Zuniga, Massachusetts Gaming Commissioner, at the New England Chapter Annual Cost Workshop.

affordability analysis; Dr. **Wilson Rosa** from Naval Center for Cost Analysis and Mr. **Joe Dean** from the Air Force Cost Analysis Agency presented their research on “Improved Method for Predicting Software Effort and Schedule,” Mr. **James Campbell**, AFLCMC, who elaborated on his organization’s processes and “Why Cost is Key to Success in the POM,” Mr. **Michael Allen** of Tecolote Research, Inc. giving a presentation on “ACE-IT 7.4 New Features,” and Mr. **Andrew Walker** of Tecolote Research Inc. who presented his program’s experience and lessons learned on “Better Buying Power 2.0”. We would very much like to thank all of the speakers that made this year’s workshop a success!

The 2014 New England Chapter Annual awards were presented at the cost workshop. We are happy to announce that Mr. **Andrew Walker** received the Technical Achievement Award, Mr. **Eric Timinski** received the Service to Society Award, and Mr. **Richard Beavers** received the Management Award. Chapter member Mr. Beavers also went on to accept the Annual Achievement -Management Award from ICEAA National this year. Congratulations to our exceptionally well deserving award recipients!

The Chapter Board of Directors is busy planning a host of events for the upcoming year and we look forward to being able to provide more valuable learning opportunities to the members. If any ICEAA members are planning to travel to the Boston area, please contact us about attending or speaking at one of our events.

Jessica Karnis, ICEAA New England Chapter Secretary
(781)225-0669
jessica.karnis@us.af.mil

Kelly Kane, ICEAA New England Chapter Vice President
(781)225-4191
kelly.kane.1.ctr@us.af.mil

Tell us what you think!

Please complete the *ICEAA World* Readership Survey at:

<https://www.surveymonkey.com/s/ICEAAWorld>

Region Five News

By Mike Doherty, Region 5 Vice President

Region 5 members enjoyed this year's ICEAA conference in Denver. It was a professional and personal pleasure for our members to interact with other ICEAA chapters and members, and to participate in the workshop training and other presentations.

My special thanks to **John Fasciani**, Rocky Mountain Chapter President, for his chapter's creation of the informational flyer on Denver, and for his dedication and that of his membership in developing and supporting a chapter table in the Workshop exhibition hall throughout the week. It was very informational

and helped many ICEAA members plan activities while in Denver.

Over the next year I will be working with our chapter presidents to encourage their members to take a greater involvement during next year's workshop in San Diego.

The Northwest Chapter will be holding elections this fall and as the Past President I will be taking an active role in identifying candidates for the elections. It is critical for chapter membership that chapters have a seamless transition from one group of officers to the next. I have been and will continue to work with **Spencer Comert**, NW Chapter President, to ensure the NW

Chapter has successful elections and transition. The plan is to have the officers announced at their year-end event.

Region 5 chapters include Pikes Peak, Rocky Mountain and the Northwest Chapter, all of which have existed for some time. It is time to start exploring some potential areas for additional chapters. This fall I plan on working with the international office to identify those areas within region 5 that have ICEAA members but lack a nearby ICEAA Chapter.

The summer period is a slow time for chapter activities but each of the Region 5 chapters is planning activities for the fall. 🌍

Northwest Chapter News

By Spencer Comert, Northwest Chapter President

2014 Workshop

The 2014 ICEAA Workshop was a great experience for the NW Chapter members for many reasons. Whether learning from several great speakers at training sessions and paper presentations or networking with other members from around the globe, this year's Workshop was one of the best so far for all the NW Chapter members in attendance –

and we've heard lots of great feedback from other attendees on the outstanding content and the organization of the conference itself.

But it was the location that truly allowed us to show our adventurous side. Here's some hard proof that our estimators are on top of the world!



Fundraising

The Northwest chapter has been very successful in fundraising over the past years by selling beverages at the Seattle Mariners baseball games and bringing revenue to our chapter. These funds have allowed us to host various social events as well as our year end gala, which included a catered celebration for our members



including casino games, a silent auction, and raffle with prizes.

Unfortunately, due to a change in accounting procedures, we are no longer able to raise funds at Mariners games. With the help of our members at a brainstorming session in July, we came up with some great ideas including: movie night, poker tournament, garage sale and other events that will require volunteering and collaboration. While finalizing the details, NW Chapter Officers are still interested in hearing from the membership.

For more information on how you can get involved or if you are interesting in volunteering please contact **Shawn Mahoney** (ICEAA NW Chapter Fundraising Officer)

Education

The 2014 spring ICEAA Certification Preparation course is complete!

Over the past few months, students have gone over each of the modules in the Cost Estimating Body of Knowledge (CEBoK) in preparation for the upcoming CCEA® exam. Six students sat for the exam in June and July.

A huge congratulations to:

Kevin Moynihan
for obtaining his PCEA
John Dunn
for obtaining his CCEA®

This is a huge accomplishment, so make sure to give them a big pat on the back if you happen to see one of them around! Stay tuned for results from the July exam.

The certification course is made possible by current NW Chapter CCEAs volunteering their time and energy to support their peers. A very big thanks to all the teachers supporting the spring certification course: **Randall Aldrich, Spencer Comert, Stacy Dean, Kerry Kou, David Torgerson, Chricelle Klippert, Katherine Coyle, Glenn Florey and Chad Larson!**

The ICEAA NW Chapter is committed to providing exam preparation resources and coaching for all those interested in achieving their certification goals. If you would like to get involved there are many opportunities including instructing, exam proctoring, and developing supplementary study resources.

For more information on how you can get involved or if you are interesting in pursuing your certification please contact **Stacy Dean** (ICEAA NW Chapter Education Director).

Chapter Elections

Over the past 2 years, the ICEAA NW officers have made great strides in expanding and improving the chapter. However,

with chapter elections right around the corner, it will soon be time to hand over the torch to a new team. Though bittersweet, the current officers are busily preparing to ensure a smooth transition and allow the new team to hit the ground running.

The Northwest chapter has 6 different positions to manage the chapter's various activities:

President: Oversee chapter operations and preside at all chapter and board of director meetings

Vice President: Acts on behalf of the president when needed and host all chapter meetings.

Secretary: Manages all chapter communication and member services

Treasurer: Maintains chapter funds and annual financial reports

Fundraising Director: Facilitates chapter fundraising activities

Education Director: Facilitates chapter educational and certification activities

Interested in getting involved? Why not run for a position? The chapter elections kick off this November and nominations are open to all ICEAA members. All you need to do to nominate yourself is to send your bio (with an indicated of which office you're running for) to **David Padineant**, NW Chapter Secretary. 🌐

ICEAA Northwest Chapter Board of Directors:

President: Spencer Comert
spencer.comert@boeing.com

Treasurer: Cheryl Wilson
cheryl.r.wilson@boeing.com

Education: Stacy Dean
stacy.m.dean@boeing.com

Vice President: Cristian Petrini
cristian.d.petrini@boeing.com

Secretary: David Padineant
david.padineant@boeing.com

Fundraising: Shawn Mahoney
shawn.p.mahoney2@boeing.com

Region Seven News

Southern California and San Diego Chapters

By Kurt Brunner, SoCal Chapter President and Region 7 Director; Omar Mahmoud, San Diego Chapter President; and Quentin Redman, SoCal Chapter Vice-President

Following the well-received ICEAA Southern California (SoCal) Chapter spring workshop sponsored by **Galorath Inc.** on **March 19, 2014** in El Segundo, California, the San Diego and SoCal Chapters are planning a **Joint ICEAA Region 7 Workshop** at **Boeing** on **September 17** in Huntington Beach, California. Among the planned presentations are:

Co-Keynote Speaker: **Paul Geery**, Director, Boeing C3 (Command Control Communications) Solutions

Co-Keynote Speaker: **Bill Seeman**, Chief, Space Branch, Air Force Cost Analysis Agency

Leone Young, Ph.D., Candidate: *Cost Maintenance Cost Model Based On COESMO*

Omar Mahmoud, Lead Associate, and **Blaze Smallwood**, Associate, Booz/Allen/Hamilton: *The Agile Project Management Tool - Effectively Managing the Three Dimensions of an Agile Project: Cost, Schedule, and Scope*

Dr. Christian Smart, Director of Cost Estimating and Analysis, Missile Defense Agency: *Bayesian Parametrics: Developing a CER with Limited Data and Even Without Data*



Kurt Brunner



Quentin Redman



Omar Mahmoud

(Best Overall Paper at the 2014 ICEAA Workshop)

Arlene Minkiewicz, Chief Scientist, and **Shawn Hayes**, Independent Consultant, PRICE Systems LLC: *Space Missions Cost Estimation Model*

Jacob Trimper, Consultant, Galorath, Inc.; *Bottoms Up Estimating of NASA Instruments Using Technical Parameters*

Our workshop focus is always to “advance, encourage, promote and enhance the profession of cost

estimating and analysis through the use of parametrics and other data-driven techniques for use by the membership as well as the general public.” The Southern California

and San Diego Chapters of ICEAA will continue to offer workshops that include a notable and diverse group of extraordinary speakers, training sessions, cutting edge topics, and knowledgeable attendees that are fully entertained and engaged.

Typically, around 80 to 100 attendees from across the nation and around the world participate in our no-cost, daylong events. These forums have consistently drawn a huge cross section of the cost analysis and parametric

Questions? Contact the following for questions on:

Membership Status: Steve Sterk
steve.a.sterk@nasa.gov (661) 276-2377

Hosting or presenting at the workshop:
Kurt Brunner at kurt.r.brunner@leidos.com
(310) 524-3151 or Quentin Redman at
quentin.redman@pricesystems.com (310) 692-5926

SoCal Chapter Elections:
Pamela Ehrreich, pamela.f.ehrreich@boeing.com
(714) 206-0254.

Or you can always reach out to the ICEAA office at
iceaa@iceaaonline.org or (703) 938-5090.

community while presenting the latest concepts and techniques, and have produced animated and enthusiastic dialogues and great interest in the topics discussed.

Make sure you plan to stay until the end of the ICEAA SoCal Workshops for the membership drawing. You must be present to win! Our Membership Chair, **Steve Sterk**, is always on hand with a selection of great gifts for the drawing.

Workshop agendas are available to all ICEAA members. Information about upcoming events, including registration information, maps and directions, can be found on the ICEAA SoCal website at: www.iceaaonline.com/socal. Presentations and information from past events are also available.

The **Southern California Chapter Winter 2014 Workshop, December 17 at Lockheed Martin** in El Segundo, promises to continue this exciting and informative tradition! Additionally, the **Spring 2015 Workshop** is **March 18, 2015** at Fort MacArthur in San Pedro, sponsored by the Los Angeles Air Force Base. More details to come, so start planning now!

As always, our workshops are free. We also have occasional lunchtime seminars at **The Aerospace**

Corporation in El Segundo, so stay tuned.

Please consider hosting a workshop or presenting at a workshop! It will be a rewarding experience.

We would like to thank the current SoCal board for their tireless teamwork in making the SoCal workshops a great success, as well as all the members and participants for their support over the years. We look forward to seeing you at the next workshop!

The election process is now underway for the SoCal Chapter Board of Directors. Candidate information will be available on the ICEAA website and will be emailed to SoCal Chapter members. Elections will take place in September.

The ICEAA San Diego Chapter has been holding regular webinars and early evening get-togethers.

The San Diego Chapter workshop held on April 30, 2014 hosted by Northrop Grumman in Rancho Bernardo, California included an introduction of the Board of

Directors, a guest speaker from Level 4 Ventures discussing a tool used to support cost estimating, and Information on the Chapter sponsored PCEA/CCEA® exam.

The April San Diego Chapter Workshop also featured the inaugural Region 7 “Estimator/Analyst of the Year” awards, which recognize the outstanding accomplishments of Junior and Senior ICEAA San Diego Chapter members.



William Roetzheim



Will Evans

The first **Region 7 Junior Estimator/Analyst of the Year** went to **Will Evans** from Booz Allen Hamilton, and **William Roetzheim** from Level 4 Ventures was named the **Region 7 Senior Estimator/Analyst of the Year**.

Congratulations,
Will and William! 🎉

ICEAA San Diego Chapter Board of Directors:

President	Omar Mahmoud
Vice President	Walt Bednarski
Treasurer	Scott Hardy
Secretary	Sheona Whitwer
Director of Membership	Sam Toas

ICEAA Southern California Chapter Board of Directors:

President	Kurt Brunner
Vice-President	Quentin Redman
Secretary	Evelyn Davalos
Treasurer	Chris Hutchings

Board Members:
Tom Bosmans
David Graham (Program Director)
Doug Howarth
Suzanne Lucas
Carlos Zerpa

Lone Star Chapter Report

By John Deem, Lone Star Chapter President

Barr Aerospace Group



Dr. Sonny Barr with the Lone Star Chapter talking economics and forecasting

Our first chapter meeting of the year was held January, 30 at The Blue Mesa Grill at University Park Village, and we hosted **Dr. Saul “Sonny” Barr**, senior economist at Barr Group Aerospace, adjunct professor

at TCU, and professor emeritus of Economics and Finance at the University of Tennessee. His company has provided economic development, consulting and training services to the Pentagon, Goodyear, Raytheon, Honeywell, Alcoa, Embry-Riddle Aeronautical University, local airports, and government, as well as many others. His company’s FREE website, AeroWeb (www.bga-aeroweb.com) is visited daily by every manufacturer and prime contractor, as well as thousands of small and medium sized companies each month. Aerospace intelligence and statistics, including news and commentary updates minute-by-minute on the AeroWeb.

Spring Golf Outing

We held a spring golf outing April 25 at Squaw Creek in Willow Park, and being a bunch of estimators we didn’t actually keep score, but rather we estimated our scores. Amongst the triple digit scores there were many notable



Summer Social at Blue Mesa Grill at University Park Village

shots. **Stephen Jeansonne** had several crushing drives, I had a lot of beautiful chip shots, and **Cathy Kehoe** sank a couple of putts well over 30 feet. Wow! Of course being analysts in addition to being estimators we did some number crunching to document the experience.

Squaw Creek Golf Scores		
(low end of estimated ranges)		
Data Description		
Variable	Low	
# of Observations	3	
Maximum	120	
Minimum	102	
Range	18	
Descriptive Measures		
Average	109	
Std. Dev. (Sample)	9.6	
CV (Sample)	8.9%	
RMS (Population)	7.9	
1st Quartile	102	
Median	105	
3rd Quartile	120	
Skewness	1.55	
Histogram Data		
Range	Center	Count
102.0 - 111.0	106.5	2
111.1 - 120.0	115.6	1

Summer Social

On July 17th we held a summer social at Blue Mesa Grill intending to give interested individuals an opportunity to learn more about the Lone Star Chapter, share thoughts about developing professional skills, and learn about current industry trends. It was attended by a few members and a few non-members from Lockheed Martin Aeronautics, Lockheed Martin Missiles & Fire Control and Bell Helicopter including individuals nominated for positions on the 2015-2016 chapter board.

Fall Workshop

Plans are underway to conduct a professional development workshop in the DFW metroplex covering subject of interest to our local chapter. Expected topics are manufacturing cost, affordability, estimating methods and tools, contract pricing, analysis and negotiating skills. Please contact one of the officers if you are interested in coming to Fort Worth to give a presentation or attend with the workshop.



IPM 2014

The premier workshop on Earned Value Management

Building Reliability and Accountability



The College of Performance Management
is a PMI Registered Education Provider



The PMP, PMi and R.E.P., and the
Registered Education Provider logo
are Registered marks of the Project
Management Institute, Inc.

NOVEMBER 3-5, 2014

BETHESDA NORTH MARRIOTT HOTEL & CONFERENCE CENTER
▶ BETHESDA MD ▶ WWW.IPMCONFERENCE.ORG



ICEAA International Business Office

8221 Old Courthouse Road, Suite 106

Vienna, VA 22182

703-938-5090

iceaa@iceaaonline.org

www.iceaaonline.org



ICEAA PROFESSIONAL DEVELOPMENT & TRAINING WORKSHOP

Call for Papers

Reach hundreds of peers

Contribute to the advancement of the field

Expand your skills and professional network

**Present your paper at the 2015 ICEAA
Professional Development & Training Workshop**

June 9-12, 2015 ☀ San Diego, California

Demonstrate your expertise, contribute to the advancement of the profession and expand your network with a paper presentation. Space is limited, and we expect a high number of quality submissions, so be sure to submit your abstract early!

Submit your abstract and bio at:

www.iceaaonline.com/callforpapers15

Important Dates:

December 1, 2014: Abstracts, bios and release forms due

January 15, 2015: Announcement of accepted abstracts

March 30, 2015: Papers/ presentations due

Only those entries submitted with a long-form paper will be considered for Best Paper Awards