



PARAMETRIC WORLD

A Newsletter of The International Society of Parametric Analysts

2010 ISPA/SCEA Conference & Training Workshop

June 8–11—Sheraton San Diego Hotel & Marina p. 12



Awards Banquet to be held at the San Diego Air and Space Museum pictured here.

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Tribute to Frank Freiman—p. 4

Below is an excerpt from Hank Apgar's ISPA Historian column which features remembrances of Frank Freiman who recently passed away:

"I learned that Frank's true genius was that he knew the way things worked—development activities, manufacturing processes, and operation and maintenance. And he used that knowledge to build the models that launched our industry. Frank built models mechanistically, not purely empirically."
Tony DeMarco, PRICE Systems

PARAMETRIC WORLD

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LETTER FROM YOUR EDITOR

By NINA TAHIR



With the severe cold weather on the east coast these days, it's comforting to know that before too long, it will be time to pack shorts, cotton slacks, Hawaiian shirts or summery dresses, and comfy sandals for warm and beautiful San Diego — host city for our June annual conference.

Our updated conference information in our newsletter features: [a preliminary list of workshop papers](#); information about the [invited conference speakers](#); the location of our [Awards Banquet](#) to be held at the famous San Diego Air and Space Museum located in Balboa Park; plans for our [informal guest program](#); and useful information about our host hotel accommodations, parking, and transportation from the airport to the hotel.

Hank Apgar, our ISPA Historian, compiled a moving tribute to Frank Freiman, a pioneer of parametrics, for this issue. We are sad to report that Frank recently passed away. Frank was the subject of a three-part ISPA legacy series published in **Parametric World** last year.

It's official! **Joe Hamaker** who is very witty in addition to being highly regarded in his field, graciously accepted the invitation from **Madeline Ellis**, our **Parametric World** Chair, to be editor of our [Ask a Parametrician Q&A](#) column. You ask the questions, and Joe will find the answers from our huge pool of experts including himself. The question this time around deals with a parametric estimate for a new start program where the program manager doesn't agree with the cost analyst's schedule. Joe takes on this one.

We have a paper from **Don MacKenzie** based on a study last year which focused on how well each of 3 frequently used methods—[LOLS](#), [IRLS](#) and [ZMPE](#)—predicted costs of known underlying relationships.

As usual we have reports from our regional chapters, board and committee reports, and a calendar of events. **Steve Sterk's** membership report talks about the forthcoming launch of our modernized ISPA website with forum capability and advanced features that will allow us to give you even more value for the cost of membership.

We have an enthusiastic group of writers from our Society who despite their busy schedules, still take the time to make our newsletter what it is. Without them, we would have a very slim publication. Thank you.

Nina Tahir
Editor

By JASON DECHORETZ

Fellow ISPA Members,



Whoa! It is a good thing that **PW** has no fear of snow or mudslides! Despite the crazy weather we are having our dauntless staff of editors and contributors have worked day and night to bring you this

edition. While Mother Nature appears to be in her winter slumber your Board of Directors, committee chairs and local chapters are busy trying to make sure your ISPA experience is as robust and fulfilling as possible:

2010 Conference Planning: Mr. Doug Druley and his co-chair from SCEA (Mr. Michael Thompson) are in the process of finalizing the myriad of plans necessary for our upcoming Conference and Training Workshop which will take place in lovely (and at this time of year, I might add warm) San Diego CA. They have provided you a more complete update in this edition of **PW** and real-time updates can be found on our Website.

Elections: We recognize the value of volunteer support to the Society and continue to seek a diverse membership to the Board of Directors. Mr. Richard Harwin is guiding us through the formal election process. We are sending ballots out electronically this year so check your e-mail box, but if you require the standard ballot please contact the Joint Business Office and they will send you one via USPS! Your vote is important to us so let's BRING OUT THE VOTE! If you did not get nominated for a Board position we have numerous committee positions which support the International Board and local chapter bodies, so please seek out ways to help ISPA become a better organization.

Awards: Innovations in practice and advances in theory are hallmarks of ISPA, and we want to continue to recognize these efforts through our two part Awards program. Mr. Jairus Hihn has formed a committee which will work with SCEA representatives to evaluate the technical papers submitted as part of the *Conference and Training Workshop*. The competition is expected to be fierce! Concurrently Mr. Henry Apgar has formed a committee which will evaluate the

merits of the Society Award nominations. Please see his article for additional details and get your nominations into Hank as soon as possible!

Professional Development: Mr. Doug Druley, with the support of Ms. Sherry Stukes and Dr. Roy Smoker, is continuing the improvement of our training and educational material. This work is also being done in coordination with Mr. Peter Braxton and other SCEA representatives. These changes will make our gathering in San Diego one of the most robust training experiences we have ever provided. The Board feels this is one of the best services we can provide our members since it contributes to your self improvement, benefits your employer and where appropriate adds to the value you bring to your customer.

Chapter Development: Recently we had a very successful joint Chapter meeting with SCEA in the Southern California region. We hope to replicate that and rejuvenate our Mid-Atlantic Chapter this winter. In addition, thanks to Mr. Rene Berghuijs, in early March we are going to have a joint meeting in The Netherlands with the Dutch Association of Cost Engineers (DACE). This represents our first of many outreach efforts to other International Societies to further advocate the use of Parametrics.

A couple of other items to note: As always Ms. Nina Tahir (your **PW** Editor) and Dr. Stephen Book (your **JCAP** Editor) are always looking for written contributions from you and if you have any ideas for improvement please forward them along.

I look forward to seeing you in San Diego; please hunt me down and let me know what you like about ISPA but more importantly what improvements you would like to see made. As always you can reach me at the contact information below.

Jason Dechoretz

ISPA CHAIRMAN OF THE BOARD

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A Tribute to Frank Freiman

BY HANK APGAR, ISPA HISTORIAN

Frank Freiman died on Sunday, December 13. He was 90 years of age.

Everyone recognizes the Freiman name as associated with ISPA's highest professional society award and most readers remember that he was ISPA's honorary Director. But, if it were not for Frank, there probably would be no ISPA.

Frank served in WWII as an Army Ordnance Officer, teaching the principles of statistical quality control. Later, at NYU, he studied the application of statistics to manufacturing, where he learned to plot production cost against weight. One of his post-graduate jobs was to prepare cost proposals and soon he moved to RCA where he focused on normalizing production cost data and then developed an application of parametrics to radar systems estimating; his favorite tool was log tables.

He worked for RCA where he developed the PRICE Models and started PRICE Systems, Inc.

I remember meeting Frank back in 1977 at a PRICE Users Symposium in San Francisco. At the conclusion of the 3-day meeting, attended by more than 100 PRICE Model users, Frank suggested formation of an independent and professional society that would promote all approaches and all tools associated with parametric analysis. At that time, the Defense Department would not accept parametric estimates for price proposals and parametrics was limited to the application of historical cost data for engineering estimates and trade studies.

Frank provided legal and financial support so we were able to charter ISPA in Washington DC. But, mostly, I was moved by Frank's enthusiasm and never-failing encouragement. He really believed that the industrial world was on the verge of revolutionizing the future of cost prediction.

To me, Frank was a mentor and a career-change agent. He supported many of our early board meetings (see photo on next page).

Tony DeMarco, President at PRICE Systems, remembers: *"My first job with PRICE was to*

evolve our flagship model, PRICE H, and I got into Frank's mind through the model's cost estimating relationships and algorithms. I learned that Frank's true genius was that he knew the way things worked—development activities, manufacturing processes, and operation and maintenance. And he used that knowledge to build the models that launched our industry. Frank built models mechanistically, not purely empirically.

Frank used his knowledge of "the way things work" to build the original PRICE models. He taught me NIHITO—that Nothing Important Happens In The Office, and that to build an accurate cost model, you need to see, touch and feel the processes that you are modeling. We carry on that tradition at PRICE Systems. Our models are not purely empirical, but model the way things are done. And

then we validate and fine tune our models with representative data. Tens of thousands of people have leveraged the mechanisms in the PRICE models to enjoy fulfilling careers improving their organization's productivity through faster, more accurate estimates. And cost modeling continues to spread today with Asia as the fastest growing market. All this from a guy who sat at his desk one day, looking at reams of detailed estimating sheets, and thought that there must be a better way. I thank Frank Freiman for teaching me that initiative and innovation are components of a great legacy."

Bruce Fad, Vice President at PRICE Systems, remembers joining "... Frank Freiman's PRICE Systems in 1979. Make no

mistake, it was not just Frank's model, but it was also his organization; his in the sense of a patriarch. Frank was everywhere and into everything PRICE did—he was the chief architect of the models, the face of the organization for marketing, and he frequently taught learning curve and functional relationships sessions at training classes. He hosted every Thursday graduation dinner marking the end of the then 2-week hardware training class. Frank was an engaged leader.



Frank Freiman

Continued on next page.



First ISPA Board of Directors — 1979

If I had to cite one thing that I believe to be most lasting about the Frank Freiman legacy it would be his incredibly pragmatic creativity. Frank's path into modeling and simulation was different than most. He wasn't educated in modeling & simulation. As I recall, his undergraduate degree was in chemistry or a related field of science. As an estimating manager for RCA, Frank labored longer than most in developing cross checks to use in his day-to-day tasks. As this labor grew to consume more of Frank's time and passion, he realized that he needed a scientific method to execute the thought. He was a soldier with a cause in search of a weapon – capable of significantly more impact than a soldier with a weapon in search of a cause! Frank had the unique ability to break the chaotic world of cost into digestible chunks. Not only did he understand the causes and effects of each chunk, he understood their interactions. He was already an expert in his field of estimating when he undertook the cost modeling & simulation cause that today is called parametric estimating. Because of his emersion in the bowels of cost estimating, Frank understood the futility of attempting to build a cost model from data. He also understood that buried in what is typically noisy cost data is information that that can navigate a cost model in the right direction. Frank Freiman knew that the most effective way to model cost is to build an apparatus that simulates how cost is incurred and use data to tune the model to different situations (e.g. product types, life-cycle phases, activities, resources).

I doubt that Frank was the only expert estimator intrigued by the notion of order in estimating via modeling & simulation. But, in my career, he is the only one I have encountered with the drive, the savvy, and the chutzpah to make it a reality. It has been a privilege for me to have served as a steward of his creation for the many years since."

Roy Summers, Director and Model Developer at PRICE Systems, remembers that *"Frank Freiman was a man of Ideas. Although many of his ideas found little notice, some had a very positive impact on the world of cost estimating as well as the lives of many people."*

Peter Korda, Retired Manager of PRICE West Coast Operations based in Los Angeles, remembers, *"I had the good fortune to work with and for Frank for several years during the establishment of RCA PRICE Systems. To me he was much more than just a business associate. He was a hero, a boss, a friend, and a genius—he will never be forgotten."*

It is not an overstatement to say that Frank was the father of parametric cost analysis. He developed complex mathematical models that to this day are used by government and industry worldwide. In addition to being a mathematical genius, he was a great businessman. Everyone liked Frank because he was very friendly and blessed with a good sense of humor. Frank, you will be in my memory forever."

Nina Tahir, also retired from PRICE Systems and now the **Parametric World** Editor, remembers: *"I heard many stories about Frank—how intelligent he was, how much he enjoyed telling or hearing a funny story or a good joke, and what an honor it was for Peter Korda (my boss) to work with him."*

I had occasion to see Frank many times at conferences, trade shows, and ISPA events where he promoted his next parametric endeavor—the FAST models. A people person, he was always extremely friendly and charming to me and everyone else."

When someone I know passes away, I always stop

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to reflect upon that person's life and how he or she lived it. To have a rich family life, a successful career, the respect of friends and business associates, and to leave an impressive and enduring legacy adds up to a life well lived in my book. Frank achieved those things in his lifetime, and I hope his family and friends will be comforted by the quality of his journey and how they helped to make it so."

Pierre Foussier, President of 3f in France, remembers, "Working with Frank for several years, by mail or formal meetings, I was always amazed by the amount of work he could do in a short time; he was really completely dedicated to his work. I visited him several times—first in Cherry Hill and, when he retired, in Florida. He even came to my home in France.

The subjects of our discussions were of course the models. I had very precise questions and/or suggestions. He always responded precisely—and not commercially—to my questions, and explained why the algorithms he developed (and showed to me) worked this way, what the origin of them was and sometimes—when the data were missing—why he thought the algorithms should work the way they did. He had considerable experience in production and our discussions were fascinating.

I also offered him suggestions about why I thought we could improve the models and what practical problems (from a cost estimator's point of view) they could solve. Despite his deep understanding of the models behavior, he never rejected them immediately. On the contrary he examined them carefully. Sometimes he accepted them and immediately wrote them into the models. Sometimes he disagreed, always explaining in detail why he thought the model should not be changed. I enjoyed our discussions and learned a lot from him.

I saw in Frank Freiman a person with whom it was possible to discuss in depth the basis of cost estimating, and few people shared his level of enthusiasm for why cost estimating was so important. I will certainly miss him."

Chuck Mauro worked with Frank during the years 1977 through 1984 and remembers, "It was exciting times at PRICE Systems to watch the business grow

while I was an instructor for the PRICE-S model. At Freiman Parametric Systems I worked with him on the development and training for the FAST family of parametric models for the Department of Energy."

Chuck also enjoyed a more personal relationship as Frank's son-in-law and remembers visiting him in Florida after he retired. "Frank kept himself very busy reading books on economics, computer programming, and he became very adept at video and animation. He made a number of videos for the various groups at his condominium. Every time I visited, he was working at his computer on one project or another.

Frank suffered a number of small strokes and had been diagnosed with congenital heart failure over the last ten years of his life. Even though his health was failing, his mind was sharp to the very end. My wife, Nancy, and I were at his bedside the day before he passed away. We talked about the fact

that he would soon be 90. We talked about his ever growing family, my 2-year old grandson, and the care he was receiving. We left talking about how we would be back to see him in the New Year.

Frank succumbed to heart failure on December 13th, and was buried on December 15th, his 90th birthday. Frank is survived by his wife Miriam, three daughters, six grandchildren and seven great-grandchildren.

Frank will be greatly missed both by his personal and professional families.

Professionally, he created the field of parametric cost and schedule estimating. His parametric family includes hundreds if not thousands of practitioners who have been employed and followed in his developmental footsteps. His personal family will miss him as a loving, caring, and humorous husband, father, grand-father and great-grandfather.

I was doubly blessed to have known him in both his professional and personal life. It was a privilege to have worked for such a pioneer in the cost estimating field. As his son-in-law, I was privileged to have such a wonderful human being as a father-in-law. He will be well remembered for both."

Frank was the last of the breed. He is our legacy.

Hank Apgar
ISPA Historian

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Do you have a knotty cost analysis problem? Something that you have been wrestling with but don't feel you know the best practice answer to? Well our new **Ask a Parametrician Q&A** column is an opportunity for you to get considered answers from senior cost analysts. It is an especially good opportunity for more junior level analysts to get their difficult questions addressed by the tops in our field. So send me your best conundrum to the email address below. We will select a question and feature it with the answer in the next issue of **PW**. Come on! Let's see if you can stump our experts or if they can prove their mettle by answering your challenging questions.

This issue's question was selected from numerous entries and comes from **Greg Hogan** of Booz, Allen, Hamilton.

GREG'S QUESTION:

"I am developing a parametric cost estimate for a new start program. My parametric data is very analogous to my new system, and I feel I have a good handle on my most likely cost estimate and my entire CDF (S Curve). I developed a parametric schedule estimate from the same data set and it also appears to make good sense. Now for the challenge: my Program Manager says he can do better than all those programs in the database and pushes back on my most likely schedule estimate by 12 months. He says the Agency can give back the extra year and money to the taxpayers. Do I now cut back my estimate for this shorter "optimistic" planning schedule or should I give the Program Manager the extra money because he will need it if he plans to beat the schedule prediction? I did a literature search and found where a couple of experts have concluded that cost and schedule were positively correlated at about 70%. One could conclude that I decrease my estimate. What should I do?"

Normally in this column, as editor, I will select a small set of experts to collaborate in coming up with an answer—but since I have often been confronted with Greg's dilemma myself, I decided if I wasn't qualified to take a good stab at this one I should turn back in my CPP and CCEA certifications. So I am fielding this one myself:

ANSWER:

There are several facets to this question. First, Greg says he feels good about his most likely estimate—I will assume here, though he didn't say so, that his S curve is skewed to the high side. Many things in life are naturally right skewed (also called "positive skew"): your commute time to work, the prices of real estate, the time it takes students to complete the ISPA CPP exam. Unreliability data is skewed right because of higher startup failure rates. Cost data is skewed right because there are always more "opportunities" to add cost than there are opportunities to save cost. Also, a right skew is naturally induced in data that cannot take on negative values. In case you tend to think everything is positively skewed, consider casino

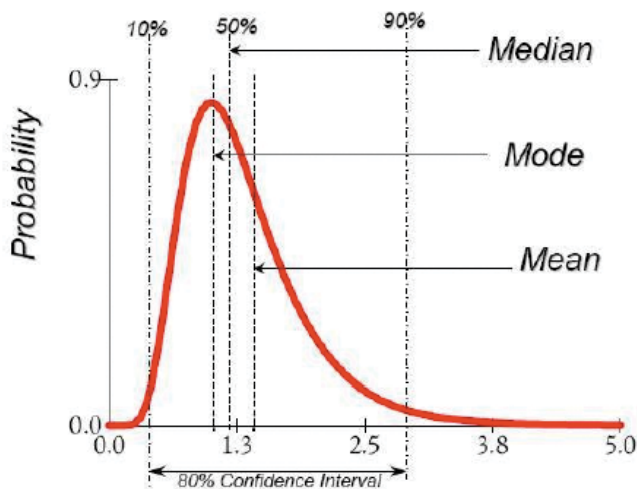
customer gambling losses: because the odds favor the house, the number of people coming out the door with winnings will be less than the number of losers—plotting that data as a histogram would show a negative skew and most of the area under the histogram would be negative values.

A second facet is that the Central Limit Theorem abhors skew and cost estimates are a good example of the CLT hard at work. Cost estimates are usually composed of a number of independent random variables and the CLT asserts that the sum of these underlying cost elements will end up normally distributed. So why am I asserting that Greg's total cost distribution is skewed right? Wouldn't the CLT make it come out with a normal shape? In cost analysis, the CLT is sent back into its cave by a limited number of cost elements in the WBS, by a few predominant ones and by correlation between WBS elements (this one being especially stern on the CLT because often in cost when one element experiences cost overruns, it drags its sibling WBS elements with it).

OK, so let's assume we are dealing with a right skewed distribution in Greg's case. He said he is happy with his most likely estimate (also called the mode). Now a third facet is that it turns out that in right skewed distributions, the median (50th percentile), mode, and mean line up as shown in the diagram (I always remember this by the association that they are in reverse alphabetical order). But note that if Greg really meant "most likely" then his results are less than 50% probable (and it is possible Greg was using the terms "most likely" with less precision but let's go with my gig here). From practical experience in cost estimates, I would say that the most likely is often around 30%-40% probability and that the mean is often around 60%-70% probability (but this is just a rough heuristic). So Greg's most likely value is probably under 50% confident which doesn't portend well for the PM's argument that he doesn't need this much budget. Greg should take this argument back to him.

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Ask a Parametrician — Continued from page 7.



A fourth facet of this question is that Greg very wisely did a Program schedule estimate and I love his practice of using the same mission database as the one used for the cost estimate. But the PM is telling Greg that he can shave 12 months off this schedule and deserves budgetary credit for that. (By the way, why would a PM be trying to turn down budget? Because PMs are marketers first and PMs second and they know that unless they can “sell” their Program they will never get a chance to try to manage their way out of the problems they have created by overselling). At any rate, notice that Greg clearly stated that his estimate is a parametric estimate (as opposed to a detailed buildup of labor, material and vendor quotes or some other approach). But CERs contain data points that already contain the cost effects of historical schedule growth (unless normalized out and we will assume here that is not the case). So it can be argued that the cost estimate that Greg is going forward with regardless if it is the mode, median or mean or some other percentile) already contains some monetized schedule slip. Greg’s schedule estimate is an interesting and very valuable piece of information but it probably shouldn’t be used to adjust the cost (and Greg did not mention that this was his intent—I just wanted to make sure the reader understands that parametric cost estimates already include schedule growth).

A fifth facet is the PMs argument that he can do better than the historical track record reflected by the cost data base. I call this the “Lake Wobegon” belief after Garrison Keillor’s fictitious Lake Wobegon where “all the children are above average.” Well statistics tell us all the children can’t be above average and neither can PMs. True, roughly half of all Programs will beat the odds and come in at

less cost than the average. Is Greg’s one of those? Unless there is some objective reason to believe that his Program will neither step in the same old potholes or find new ones of its own making, then it is better to go with an estimate that is somewhere nearer the central tendency of the data. And as Greg himself observes in the question, there is an argument here that if the PM intends to beat the historical schedule norm, he will need extra money for extra shifting, overtime, vendor delivery premiums, multiple critical path developments, etc.

This leads me to still another facet—I believe we are up to six now—and that is the question of why should we ever budget to something higher than 50% confidence? One answer is that there are almost always risks we have probably not accounted for in our estimate—call them “unknown unknowns” if you like.

OK, enough already with facets! Is there an answer here? I think my best answer is that if Greg is convinced his PM and his team are really

***Send your best conundrum to:
joseph.w.hamaker@saic.com
Let’s see if you can stump our
experts or if they can answer your
challenging questions!***

high achievers and that he has accounted for almost all risks that have a significant probability of happening, then Greg might acquiesce and go with a lower estimate. But those are pretty big “ifs.” Alternately, if Greg is uncomfortable with these assumptions (as I would be), he should go for the median (50% estimate). And if Greg’s intuition is that this Program may have more than the average problems, then he should educate the PM on all the facets covered here, especially the one about “unknown unknowns” and go with the mean estimate or some percentile above 50%. He should cap off his argument by advocating that enlightened PM’s budget to the median or higher and then try to bring the Program in at the most likely but that

few things are as bad as discovering halfway through implementation that there is insufficient budget to continue.



Joe Hamaker, Editor
Ask a Parametrician — Q&A
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Professional Award Nominations May Now be Submitted

The 2010 ISPA Professional Awards Committee is soliciting nominations for ISPA's professional awards as described below. You must be a current ISPA member to nominate a candidate. Nominations will be verified and reviewed by the Professional Awards Committee and recommendations forwarded to the ISPA Board of Directors for approval. Winners will be announced at the San Diego Joint Conference.

- **The Frank Freiman Award** is our highest honor and is presented to an individual who has made outstanding contributions to the theoretical or applied aspects of parametric modeling or cost estimating, promotion of parametrics, or applications of parametrics over a significant amount of time. A Freiman candidate is expected to have left a legacy to the profession for at least five years. This award was named to honor Frank Freiman for his pioneering work in the development of parametric models and for his role in the founding of the Society. The recipient need not be an ISPA member. The recipient may qualify for this award only once in a lifetime.
- **The Clyde Perry Parametrician of the Year Award** is presented to an individual, or group of individuals, who have made outstanding contributions to the profession of parametric cost analysis for a minimum of two years. This award typifies a leader in the activities of practicing or promoting the use of parametrics. This award was renamed in 2004 to honor Clyde Perry, an ISPA Founder. The recipient need not be an ISPA member. The recipient may qualify for this award only once in a lifetime.

- **The Keith Burbridge Service Award** is presented to a Society Member, or participating group, who has provided substantial volunteer service to ISPA in a manner supporting the principles and goals of the Society. This award was renamed in 1996 to honor Keith Burbridge, an ISPA Founder. For this award, the recipient(s) must be ISPA members. Repeat awards are allowed.

Instructions: Provide the following information in an email, with attachments as needed for justification, **not later than May 15, 2010** (three weeks before the conference):

- Full name of the nominee with professional affiliation (employer), postal address, telephone number, and identification of award for which being nominated.
- Full justification for the award with factual and concise substantiating information:
 - Focus on current achievements and contributions, not just past awards.
 - Describe specifically how the candidate meets the requirements of the award.
- Full name of the nominator(s) with postal address, email address, and telephone number.
- Submit nomination (and endorsements, if any) by email to:

Henry Apgar

2010 ISPA Professional Awards Committee Chair
happgar@mcric.com (805) 402-4132

Previous ISPA Award Winners

| Year Presented | Clyde Perry Parametrician of the Year Award | Keith Burbridge Service Award | Frank Freiman Award |
|----------------|---|-------------------------------|---------------------|
| 1981 | Robert Gafney | | |
| 1982 | Keith Burbridge | | |
| 1983 | Jim Wilder | | Larry Putnam |
| 1984 | Darryl Webb | | Randy Jensen |
| 1985 | Sylvan Pinsky | | Bill Cheadle |
| 1986 | Henry Apgar | | |
| 1987 | Clyde Perry | | |
| 1988 | Alan Mayer | Jack Griffin, Seb Botta | Barry Boehm |
| 1989 | | Henry Apgar | |
| 1990 | Dan Ferens | Cindy Castellana | Gerald McNichols |
| 1991 | Marilee Wheaton | Clyde Perry | Don Reifer |
| 1992 | Peter Korda | Charles Mauro | Keith Burbridge |
| 1993 | | Nina Tahir | Peter Korda |
| 1994 | Gary Constantine | Madeline Ellis | |
| 1995 | Bruce Fad | Seb Botta | |
| 1996 | Meinolf Wenzel | Marilee Wheaton | |
| 1997 | Sherry Stukes | Ron Larson | Tony DeMarco |
| 1998 | Pierre Foussier | | Henry Apgar |
| 1999 | William Rutledge | Paul Lubell | Dan Ferens |
| 2000 | Georg Reinbolt | Sherry Stukes, Karen Davies | Don MacKenzie |
| 2001 | | Tom Brents | Dan Galorath |
| 2002 | Arlene Minkiewicz, Karen McRitchie | Gary Constantine | Charles Hopkins |
| 2003 | David Eck | Clyde Perry | Darryl Webb |
| 2004 | Jairus Hihn | Giancarlo Filippazzo | Joe Hamaker |
| 2005 | | Georges Teologlou | Steve Book |
| 2006 | Richard Stutzke | Quentin Redman | |
| 2007 | William Brundick | Diana Patane | Humbolt Mandel |
| 2008 | Herve Joumier | George Stratton | |
| 2009 | Christian Smart | Hank Apgar, Madeline Ellis | Dale Shermon |

2010 ISPA BOARD ELECTIONS

The nomination period for the ISPA 2010 International Board of Directors Elections has now closed. The list of candidates' biographies, pictures, and additional election information will be posted on the ISPA website at <http://www.ispa-cost.org/elections.htm>. We are pleased to have eight (8) candidates which are listed on the right.

If you would like to add to the list of nominees - either an individual or yourself— please complete the Petition for Nomination form provided on page 11 and mail or fax the information to me by **April 15, 2010**. You will need the signatures of five members in good standing (currently paid members) and a short biography/ statement of qualifications along with a photograph of the candidate you wish to nominate.

The ISPA International Board Elections Committee:

Rich Harwin (Chair)

Doug Howarth

Erick Canche

ISPA Members can vote for up to five (5) candidates for the Board and one (1) for Treasurer, either on-line through the ISPA website, by mail, or in person at the ISPA/SCEA Joint Conference in June. A postage paid envelope will be sent out with the ballots to facilitate voting by mail.

The Elections Committee is working to the established 2010 schedule in accordance with our by-laws:

Ballot Distribution Begins

20 April 2010

Voting Period Closes

28 May 2010

(Must be received by email or postal mail no later than this date.)

9 June 2010

(In Person voting at the conference— by 12 Noon)

Newly Elected Board Members

Announced at the 10 June ISPA/SCEA Awards Banquet

The Elections Committee looks forward to your participation in this election!



Rich Harwin, Chair

2010 ISPA Elections Committee
richard.a.harwin@boeing.com
(562) 797-3869
or fax (562) 797-5618

2010 ISPA International Board Candidates



Andy Prince
(incumbent)



Greg Kiviat
(incumbent)



Arthur Griffiths
(incumbent)



George Stratton
(incumbent)



Bruce Minett
(incumbent Treasurer)



Madeline Ellis
(new candidate)



Kurt Brunner
(new candidate)



Mark Schankman
(new candidate)

Petition for Nomination

**Elections Committee
c/o Rich Harwin
19228 Seabrook Circle
Huntington Beach, CA 92648
Fax: 562-797-5618**

Dear Election Committee:

I would like to nominate _____ to serve as ☐ Director or ☐ Treasurer of the International Society of Parametric Analysts (ISPA). A copy of his/her qualifications and photograph is attached. The Nominee is a member in good standing and is willing and able to contribute his/her time and talents to ISPA.

In accordance with ISPA bylaws, a total of (5) ISPA members must sign this petition, affirming the nomination.

1. _____, Member in Good Standing
Signature Printed Name

2. _____, Member in Good Standing
Signature Printed Name

3. _____, Member in Good Standing
Signature Printed Name

4. _____, Member in Good Standing
Signature Printed Name

5. _____, Member in Good Standing
Signature Printed Name

**Rich Harwin
Chair, 2010 ISPA Elections Committee
richard.a.harwin@boeing.com
Phone: 562-797-3869 or cell 714-716-7166**



We invite you to join your peers and cost community experts from government, industry, and academia to share ideas, techniques, and knowledge through keynote speeches, panel discussions, workshops and training.

Invited Conference Speakers

Charles Frank (Charlie) Bolden, Jr., the current Administrator of NASA, accepted our invitation to be our June 9 Keynote Speaker.

Mr. Bolden is a retired United States Marine Corps Major General and former NASA astronaut. A 1968 graduate of the United States Naval Academy, he began his career as a Marine Aviator and test pilot. After his service as an astronaut, he served as the Deputy Commandant of Midshipmen at the Naval Academy. Mr. Bolden is the virtual host of the Shuttle Launch Experience attraction at Kennedy Space Center. He also serves on the Board of Directors for the Military Child Education Coalition. Charles Bolden commanded the STS-60's six-person crew aboard Discovery. This was the historic first joint-American/Russian Space Shuttle mission in which Russian cosmonaut Sergei Krikalyov participated as a mission specialist crew member.

Our June 9 afternoon program will feature **Dave Burgess**, director of the cost department for the Naval Air Systems Command SES NAVAL 4.2.

A "mini panel" is planned for the morning of June 10. The panel will consist of:

- **Kathy Hedges**, SAIC Senior Vice President, Corporate Director of Program Execution
- **Susan Coté**, Northrop Grumman Vice President, Corporate Contracts, Pricing and Supply Chain

The June 10 afternoon speaker will be **Stan Soloway**, CEO of PSC (Professional Services Council)—the national trade association of the government professional and technical services industry. PSC is a highly respected industry voice and leader on legislative and regulatory policy issues related to government procurement, outsourcing and related business policy. PSC helps shape public policy, leads strategic coalitions, and works to build consensus between government and industry.

Training Workshop Program

We plan to again offer our highly successful training program with 12 sessions in each of three tracks: **Fundamentals**, **Practitioner**, and **Integration**.

The Training sessions will be an opportunity to learn, share, and network with experts in the field and your peers with an added bonus: the scenic beauty of San Diego Bay—just steps away from our hotel—where you can relax and unwind during your breaks.

ISPA-specific training based on the *Parametric Estimating Handbook* (4th edition) will be offered to attendees who want to learn or brush up on parametric estimating techniques and/or prepare for the CPP exam to be held on Saturday morning—June 12.

And for the first time ever, CEU credits will be given not only for training but also for certain professional presentations.

Speakers' Workshop Presentations - 8 Tracks

**Estimating
Methods**

**EVM/Scheduling
Models**

**Life Cycle
Risk**

**Management
Software**

We plan to offer **8 tracks** (listed above) and a total of **89 papers**:

Our extensive program covers every cost estimating discipline so plan to stay for the entire conference. Don't regret leaving before the conclusion of the conference and miss out on the opportunity to see "live" that certain paper that could help you solve your particular work problem and do your job better.

Banquet on Thursday Night—San Diego Air & Space Museum



We have reserved the San Diego Air and Space Museum (a Smithsonian Museum affiliate) located in Balboa Park for our [Awards Banquet](#) to be held on Thursday night. Admission to tour the museum exhibits before and after the banquet is included in the conference and guest banquet fees. We have arranged for chartered buses that will pick you up from the hotel and drop you off at the Museum and transport you back to the hotel after the banquet. The museum is an exciting place to tour and enjoy, and we hope you will join us for an evening that promises to be a highlight of the conference.

What to Wear

The Conference attire is *Business Casual*. San Diego in June has temperate weather so pack your summer clothes and toss in a sweater for those evening strolls along the beach at sunset.

Hotel Information

Host Hotel: Sheraton San Diego Hotel and Marina—San Diego, California. The hotel is just minutes away from the *San Diego International Airport (SAN)*, with free shuttle service provided by the hotel every 30 minutes. The hotel offers spectacular views of the San Diego Bay, 120,000 square feet of meeting space, and over 1,000 guest rooms. The hotel features biking and jogging paths, a spa and fitness center, tennis courts, sailboat rentals, and two (2) pools.

Room Rates & Reservations

The conference rate is **\$199** per night, available until May 17th or until the group block is sold out.

Reservations can be made by calling **1-877-734-2726** and requesting the “*ISPA/SCEA 2010*” rate. Reservations can also be made by logging into the following website: <http://www.starwoodmeeting.com/StarGroupsWeb/res?id=0912115434&key=BDE4A>.

The government rate is **\$147** per night. Reservations for government rate rooms can be made by phone—be sure to request the “*ISPA/SCEA Government Block*”—or by going to the following website: <http://www.starwoodmeeting.com/StarGroupsWeb/res?id=1001118097&key=5F978>. A valid government ID or government travel orders must be shown at check-in to be eligible for the government rate. If ineligible for a government rate room, regular hotel rates will apply. Please take advantage of any corporate rates your company may offer in addition to the conference rate.

Conference Hotel’s Internet Access

In-room internet access costs \$11.95 per day. The hotel offers **complimentary internet access in the hotel lobby** “connection destination” which provides free Wi-Fi access. Free PC workstations and printing capability are also available in the hotel lobby for registered hotel guests.

Parking at the Hotel and Off Site

Self-parking at the Conference hotel is available for \$22 per day, with in/out privileges. A nearby, lower cost parking option (\$16 per day) is available at the San Diego Airport Long Term Parking facility located at 3015 North Harbor Drive. You may take the parking lot shuttle to the airport terminal and connect with the free hotel shuttle. Information about Long Term Parking operated by the airport facility is available at <http://www.san.org/sdia/parking/default.aspx>. For information about other parking options: <http://www.aboutairportparking.com/san-diego-international-airport-parking>.

Meals and Refreshments at the Conference

Continental breakfast and mid-morning and afternoon refreshment breaks will be provided on Tuesday through Friday; and lunch will be served Tuesday through Thursday. Also included in the conference fee is a reception in the hotel on Tuesday evening and the Banquet at the San Diego Air and Space Museum on Thursday.

Exhibits and Sponsors

Company representatives will be available at exhibit booths to answer your questions and discuss their products and services. Below is a partial list of exhibitors at the conference with more expected to sign up soon:

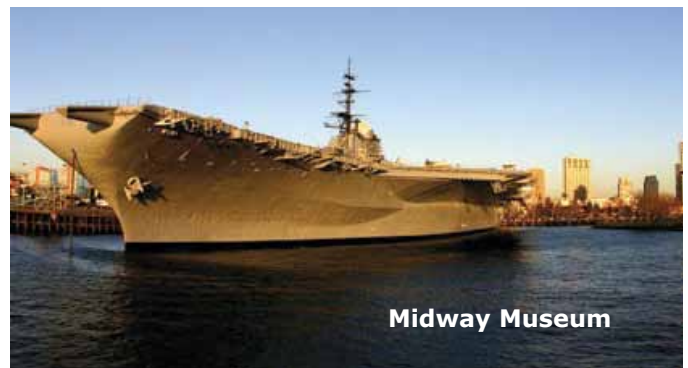
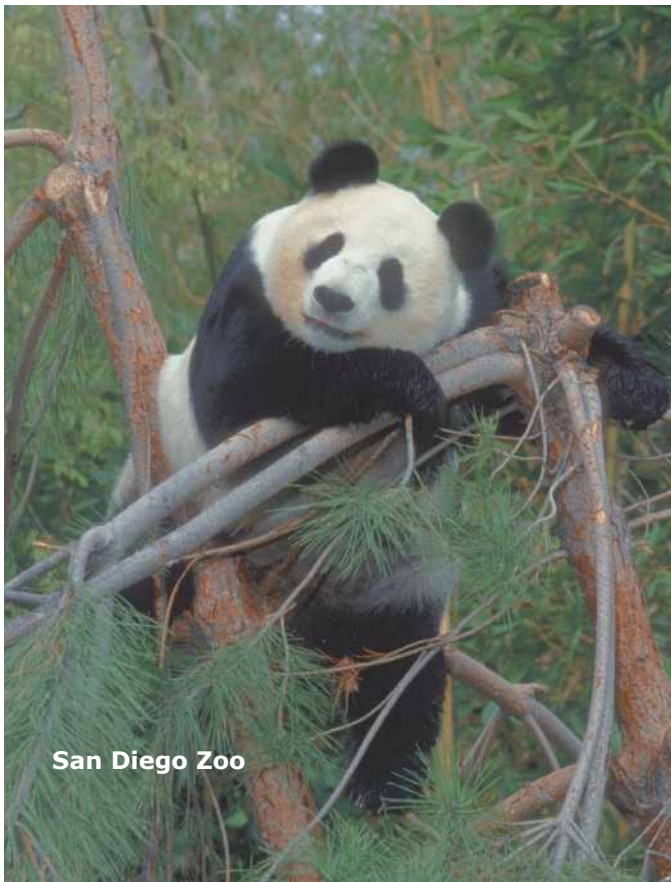
ACEIT, Boeing, Booz Allen Hamilton, Galorath, PRICE, Quantech Services, TASC, Technomics and Wyle.

If your company would like to be a conference exhibitor or sponsor, please contact *Erin Whittaker* at 703-938-5090 or email erin@sceaonline.org for availability and pricing.

Informal Guest Program

On Tuesday and Wednesday mornings a representative from the San Diego Convention and Visitors Bureau along with an ISPA-appointed host will assist your guests in planning outings to the city’s points of interest. The hotel is perfectly situated for convenient access to all San Diego attractions. Your guests can walk along the picturesque streets to dining and shopping areas or rent a car and drive to Mission Beach, the famous San Diego Zoo, the Gaslamp District, Old Town, Temecula Wineries, and four world-class theme parks (including Sea World and Legoland).

THINGS TO DO IN SAN DIEGO



2010 Joint Conference and Training Speakers' Program

The response to the call for papers has been tremendous! We have received over 90 abstracts. If the quality and content of the abstracts are any indication, the papers will be excellent. On the following pages is a list of the accepted papers and their associated tracks. As you can see, we will have a wide range of papers covering many important and timely topics such as joint cost/schedule risk analysis, the impact of cloud computing on IT cost, and system of systems cost. We also have a broad cross section of authors from industry, government, and academia, including several from Europe and Asia. The authors include past award winners as well as folks new to our conference.

To accommodate all of the papers, we have expanded to eight tracks. The list of our tracks is as follows:

- **Estimating**
- **Life Cycle Cost**
- **Methods**
- **Risk**
- **EVM/Schedules**
- **Management**
- **Models**
- **Software/IT**

The deadline for submitting draft papers and presentations was February 28, the final paper and presentation deadline is March 31. If you have questions or need additional information about the Workshops, please contact **Andy Prince** at andy.prince@nasa.gov (256) 544-8360 or **Paul Marston** at pmarston@mcri.com (978) 528-4394.

We look forward to seeing you in San Diego!

Preliminary List of Accepted Papers

(note: only primary author shown):

Imran Ahmed, USAF and SMC: Basis of Estimate (BOE) Evaluation — **Management Track**

Robert Benson, Sigmatech, Inc.: Parametric Analysis of Army Unmanned Aerial Systems Contractor Logistics Costs — **Models Track**

Noel Bishop, Dept of Army: Return on Investment Metrics: An Army Perspective — **Methods Track**

William Black, Scitor Corp.: Time-Phasing Cost Estimates in MS Excel Models — **Models Track**

Blake Boswell, BAH: Capturing Risk Interdependencies; The CONVOI Method — **Risk Track**

Ryan Boulais, Scitor Corp.: Understanding Risk in the Budgeting Process from a Portfolio Mgmt. Point of View — **Risk Track**

Melvin Broder, The Aerospace Corp.: Review of Three Small-Satellite Cost Models — **Estimating Track**

Lawrence Brown, Northrop Grumman: Detecting Anomalous Data in an Integrated Data Warehouse — **Methods Track**

David Brown, LMI: Use of Life Cycle Cost Estimates in OMB-300 Budget Reporting — **Life-Cycle Cost Track**

Michael Brozyna, U.S. Army: Federal Appropriation Process — **Management Track**

Jeff Carroll, Wilbur Smith Assoc.: Developing Reliable Planning Level Cost Est.-GDOT's Innovative Process — **Models Track**

Kevin Cincotta, LMI: New Research on GERM Significance Testing — **Methods Track**

Richard Coleman, TASC: A Case Study in EAC Growth — **EVM/Scheduling Track**

Edwin Dean, Consultant: Neural Network Cost Estimating Relationships — **Methods Track**

Edwin Dean, Consultant: The 1989 NASA Space Exploration Initiative Cost Risk Est. and Related Issues — **Management Track**

Simon Dekker, Dekker, Ltd.: Programs and the Future of Project Management — **EVM/Scheduling Track**

Nancy Droz, Air Force: Integrated Master Plan Formulation-PMAG Approach — **EVM/Scheduling Track**

Eric Drucker, BAH: JCL in a Nutshell: Exploring the Math of Joint Cost & Schedule Risk Analysis — **Risk Track**

John Erkoyuncu, Cranfield Univ.: Service Cost Estimation with Uncertainty Using Agent Based Simulation — **Management Track**

Daniel Feldman, MCR, LLC: Testing for the Significance of Cost Drivers Using Bootstrap Sampling — **Methods Track**

Amanda Flynn, Northrop Grumman, TASC: Determining the Cost of the Certification and Accreditation Process using the Delphi Technique and Monte Carlo Simulation — **Estimating Track**

Continued on next page.

Continued from previous page.

Kevin Foley, BAH: Developing Far-Term Portfolio Cost Estimates—**Estimating Track**

Pierre Foussier, 3F: Improving CER Building, Getting Rid of the R2 Tyranny—**Methods Track**

Peter Frederic, Tecolote Research, Inc.: Budget-Constrained Joint Confidence Level Approach—**Risk Track**

Kishore Gagrani, PRICE Systems, LLC: Estimating Life Cycle Cost of System of Systems—**Life-Cycle Cost Track**

Dan Galorath, Galorath, Inc.: Dan on Estimating—**Management Track**

Brett Gelso, BAH: Applications of Parametric Bootstrapping to Cost Estimation: What to do When You Do Not Know the Underlying Distribution—**Methods Track**

Robert Georgi, BAH: Lessons Learned from New Subsystem Development in Manned Space—**Estimating Track**

James Glenn, Technomics, Inc.: Modeling of Inflation Uncertainty in Cost-Risk Analysis—**Risk Track**

Charles Gu, BAH: Logistics Reqmts. Funding Summary Cost Est. Tool Suite-A Quick Cost Est. for Logisticians—**Models Track**

Gilbert Haddad, CALCE: Economic Analysis of PHM Implementation in Electronics: An Options Approach—**Life-Cycle Cost Track**

Eddie Hall, The Aerospace Corp.: Control Account Manager (CAM) Notebook Evaluation—**EVM/Scheduling Track**

Peter Hantos, The Aerospace Corp.: Who Moved My Milestone? Cost and Risk Implications of Selected Changes in the New DOD5000 Defense Acquisition Framework—**Management Track**

Jairus Hihn, JPL: Risk Identification and Visualization in a Concurrent Engineering Team Environment—**Risk Track**

Shu-Ping Hu, Tecolote Research, Inc.: Simple Mean, Weighted Mean, or Geometric Mean?—**Methods Track**

David Hull, ODASA-CE: Applying the Army Fully Burdened Cost of Fuel Methodology to Anal. of Alternatives—**Estimating Track**

Bob Hunt, Galorath, Inc.: Estimating Issues Associated with Agile Development—**Estimating Track**

Zachary Jasnoff, PRICE Systems, LLC: Cost Benefit Optimisation to Achieve Affordable Force Structures—**Models Track**

Zachary Jasnoff, PRICE Systems, LLC: Developing an Efficient and Repeatable Life Cycle Cost Estimation Process Within an IPT Framework by Leveraging Parametric Tools and Constant Client Communication—**Life-Cycle Cost Track**

Herve Joumier, ESA/ESTEC: Innovative Procurement Approach for Satellite Constellations on Instit. Market—**Management Track**

Sung Jin Kang, National Defense Univ: Study on Dev. CERs with Insufficient Data in Korean R&D Environment—**Methods Track**

Robert Koury, PRICE Systems, LLC: Standardizing Space Systems O&M Cost Estimating—**Models Track**

Mun Kwon, Dr. Mun Kwon Consulting: Risk Based Integrated Program Management—**Risk Track**

Jerry Le May, Raytheon: Cost Benefit Analysis for Prognostics and Health Monitoring Systems—**Estimating Track**

Angela Lemke, U.S. Army PEO, Aviation: Using Fourier Analysis in Evaluating Program Office Estimates—**Methods Track**

Jennifer Leotta, Navy Eng Logistics Office: Software Cost Estimating Relationships—**Software/IT Track**

Laura Lucas, AFCAA: Change Management Data Collection Tool—**Management Track**

Dale Masel, Ohio University: Adapting Bottoms-up Cost Estimating Relationships to New Systems—**Models Track**

Christopher Mehl, Omnitec Solutions, Inc.: Probability Bounds Analysis for S-curve—**Risk Track**

Arlene Minkiewicz, PRICE Systems, LLC: Costs of Achieving Software Technology Readiness—**Software/IT Track**

Arlene Minkiewicz, PRICE Systems, LLC: Estimating S O A, As Easy as 1 2 3—**Software/IT Track**

Tucker Moore, Northrop Grumman: Introduction to Function Point Analysis—**Software/IT Track**

Neslie Morrison, U.S. Army ISEC: ICEs for Defense Personal Property Systems—**Estimating Track**

Karen Mourikas, Boeing: Simulation-based Experimentation Cost Estimating Methodology & Toolkit—**Models Track**

Robert Nelson, USAF AEDC/FMP: Developing a Government Cost Estimate Under Constraints—**Methods Track**

Brian Opaska, OPS Consulting: Improving Software Cost Estimates Using the Univariate Model—**Software/IT Track**

Beth Overstreet, BAH: Cost Benefit Analysis for COTS Procurement for a Revenue Cycle Software Purchase—**Software/IT Track**

Paolo Ponzio, ESA: Calibration and Validation of Complex Cost Models: a Bayesian Approach—**Methods Track**

Donna Pucciarello, BAH: Integrated Critical Scheduling—**EVM/Scheduling Track**

Continued on page 18.

Continued from page 17.

James Quilliam, Tecolote Research, Inc.: The Importance of Schedule Analysis (SA) and Schedule Risk Assessment (SRA) in Formulating a Joint Confidence Level (JCL) Analysis—**Risk Track**

Saravanan Rajendran, Univ of Sheffield: Life Cycle Cost Assessment of Recycled Polymers for Structural Applications—**Life-Cycle Cost Track**

J.D. Reeves, NASA (Langley): A Cost Model of the Risk Management Process—**Risk Track**

Donald Reifer, Reifer Consultants, Inc.: Comparative Analysis of Software Maintenance Modeling in the COCOMO II, SEER, SLIM and True S Cost Models—**Software/IT Track**

Donald Reifer, Reifer Consultants, Inc.: Software Maintenance: Debunking the Myths—**Software/IT Track**

Ann Repczynski, BAH: The Economics of Cloud Computing—Addressing the Benefits of Infrastructure in the Cloud—**Software/IT Track**

Francisco Rojo, Cranfield Univ.: A Cost Estimating Framework for Materials Obsolescence in Product-Service Systems—**Life-Cycle Cost Track**

Wilson Rosa, AFCAA: Improving ERP Cost Estimation in the DoD: Practical Metrics for Estimating ERP Acquisitions—**Estimating Track**

Shawn Rudolph, Technomics, Inc.: Analysis of Earned Value Management Data: Utilizing Constrained & Unconstrained Nonlinear Regression to Formulate Estimates at Completion—**EVM/Scheduling Track**

Sidharta Sahirman, West Virginia Univ.: Estimating Life-cycle Cost of West Virginia Fiber Reinforced Polymer (FRP) Bridge Decks—**Life-Cycle Cost Track**

James Samuelson, Applied Data Trends, Inc.: Integrating—Customer Cost Estimates/Contractor Price Estimates/Earned Value Management Plan for Project Success—**EVM/Scheduling Track**

Mark Schankman, Boeing: Advancing the Art of Technology Cost Estimating—a Collaboration between NASA and Boeing—**Models Track**

Daniel Schwartz, ODASA-CE: Using the Joint Integrated Analysis Tool (JIAT)—**Models Track**

Paul Shields, C.I. Consultants Ltd.: Cost Factors Contributing to the Choice of Aerospace Advanced Materials—**Estimating Track**

Chadd Sibert, ODASA-CE: Developing a Milestone—A Analysis of Alternatives Cost Estimate—**Life-Cycle Cost Track**

Christian Smart, SAIC: Here, There Be Dragons: Considering the Right Tail in Risk Management—**Risk Track**

Alfred Smith, Tecolote Research, Inc.: Build Your Own Distribution Finder—**Risk Track**

Justin Smith, BAH: Intelligence Community Case Study: Moving Desktops to the Cloud—**Software/IT Track**

Stanton Smith, Northrop Grumman: Transforming Estimating and Pricing Organizations to Attract and Leverage the Strengths of the New Workforce—**Management Track**

Sarah Springer, MCR, LLC: Software Schedule Estimating Linked to Cost Estimates—**Software/IT Track**

Zoltan Stroll, The Aerospace Corp.: Managing Software Intensive Programs Workshop—**Software/IT Track**

Wesley Tate, ESC/FMC: ESC Acquisition Support Factors and CERs ("Kanter's Factors"): Past, Present and Future—**Models Track**

John Teal, BAH: Business Modeling: Cost Analysis in The Operations Environment—**Management Track**

Mike Thomas, Lockheed: Program Sustainment Assessment Using Parametric Estimating Techniques—**Estimating Track**

Brian Torgersen, Technomics, Inc.: Competition in DoD Systems Acquisition: Past Lessons and Future Considerations—**Management Track**

Nhung Tran, USAF & SMC: Technical Content and Risk-Based IBR—**EVM/Scheduling Track**

Minh Truong, MCR, LLC: Cloud Computing: Security and Cost Concerns for Government Agencies—**Software/IT Track**

David Wang, The Aerospace Corp.: Collaborative Government and Industry Partnership in Integ. Program Management—**Management Track**

Brian Welsh, TASC: What About Program Management Costs?—**Estimating Track**

Jennifer Woolley, Scitor Corp.: Server Virtualization and Government Organizations—**Software/IT Track**

Christian Smart

**2009 Best Overall Conference
Speaker Award Winner**



Jointness Committee Update

Your Jointness Committee Members (George Stratton, Andy Prince, and I) have supported the development of a prospectus for the Journal of Cost Analysis and Parametrics (JCAP). The prospectus is a request for proposal (RFP) that will invite prospective publishers to describe their experience and capabilities so that we might negotiate a business relationship with one of them.

The prospectus describes our professional disciplines (cost estimating, economics, engineering, financial management, statistics, earned value management, and parametric modeling). Our current audiences, benefits from reading the Journal, and related journals are also identified in the prospectus. And, finally, the prospectus describes our current editorial and publication process, with emphasis on paper selection and refereeing.

ISPA and SCEA have self-published since the inception of each journal (30 years ago for ISPA), mostly with volunteer or subcontractor labor. We expect that a professional publisher will increase our distribution, enhance our presence on the internet, and extend writer participation. Our selection of a publisher depends on several criteria, including relevant experience, good fit within our two societies, range of editorial services, publication turn-around time, extent of internet search programs, and distribution channels. From thirty candidates, we have narrowed the list to six top candidates. One of our main criteria is to preserve, or even enhance, the already high standards of our JCAP.

We are seeking additional volunteers, or nominations, to fill two JCAP oversight groups: Associate Editors (real workers) and Editorial Advisors (policy makers). These groups are in addition to our cadre of paper reviewers who are selected by our Editors in Chief, **Dr. Stephen Book** and **Dr. Tony White**. Our Managing Editor remains **Dr. Christian Smart**.



Hank Apgar

Member — ISPA/SCEA Jointness Committee

hapgar@mcricri.com

Planning & Governance

ISPA International Board Elections:

As I mentioned in the last issue of Parametric World a change in our election procedure is coming. This year we will send you a ballot electronically so that you can cast your vote on line. We hope this convenience will increase voter participation. Please update your email address and any other contact information that has changed through the joint business office at: ispa@sceaonline.net. If we don't have your current email address, you will receive a ballot in the mail as usual. Ballot distribution will begin in April.

Strategic Planning:

The Finance Subgroup is in the process of updating ISPA's five year plan with actual costs from 2009. The update will be ready soon



and will enable us to make accurate forecasts of future expenditures and strategic adjustments in activities necessary to keep the Society in the black.

George Stratton

Planning and Governance

Parametric World Report



Joe Hamaker has graciously accepted our invitation to coordinate our Q&A column "**Ask a Parametrician.**"

Do not hesitate to submit your questions to Joe, and he will find a subject matter expert to respond. Did you ever wonder: "Why are cost estimates ALWAYS

WRONG??" Now's your chance to get an answer to all of those burning questions.

We plan to continue to provide our members with an outstanding professional newsletter. Please feel free to contact me, Nina Tahir, or anyone on the ISPA Board of Directors with suggestions.

Madeline Ellis

Chairperson-Parametric World
madelineellis@socal.rr.com

Certified Parametric Practitioner Program

Have you started studying for your Certified Parametric Practitioner exam yet? The exam will be offered at the 2010 Joint ISPA/SCEA Conference on Saturday morning, Jun 12—the morning after the conference ends. This year's conference will be held at the Sheraton San Diego Hotel and Marina in San Diego, California and will once again feature a Joint Training Workshop.

While the Training Workshop is a great place to enhance your knowledge of parametrics and the methodological processes of cost, schedule, and parametric analysis, there are other sources of information available if you wish to study before the conference. As an organization dedicated to parametric cost modeling techniques and methodologies, risk analysis, econometrics, design-to-cost, technology forecasting, and cost management, ISPA maintains a web portal at www.ISPA-Cost.org where you can find the application forms for the exam, the ISPA Parametric Estimating Handbook (PEH) which is the primary source for questions found on the exam, and other examination details. Please contact me, Dr. Roy Smoker, at rsmoker@mcri.com, and I will

send you the latest sample exam questions to help guide your study.

We would like to congratulate two new CPPs who passed the Certified Parametric Practitioners exam given at the June 2009 conference:

Mr. Rick Battle

Mr. Lance Echternach

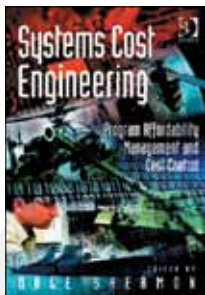
We wish you well on taking the exam this year and look forward to seeing you at the 2010 ISPA/SCEA Joint Conference in June.



Dr. Roy Smoker

Dr. Roy Smoker, (CPP)
Chair, Certified Parametric
Practitioner Program
rsmoker@mcri.com

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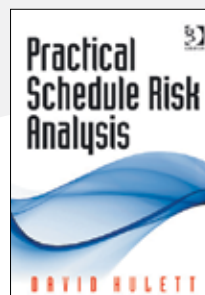


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Dale Shermon

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August 2009 328 pages
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David Hulett

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CER BEST-FIT METHOD "FIT-OFF" – LOLS, IRLS and ZMPE

Don MacKenzie, MacKenzie Consulting, Inc.
DWMACKENZ@comcast.net



Which regression best-fit method used to develop cost estimating relationships is best? A study conducted last year focused on how well each of three frequently used methods predicted costs of known underlying relationships. The methods studied were: (1) Log-

Transformed Ordinary Least Squares (LOLS), (2) Iteratively Reweighted Least Squares (IRLS, also known as Minimum Unbiased Percent error, or MUPE)¹ and (3) Zero-Bias Minimum Percent Error (ZMPE)².

Experience using the LOLS and ZMPE methods for several years at the NRO CAIG indicates that each of these methods is best about half of the time. Meanwhile, Air Force Unmanned Spacecraft Cost Model (USCM) CERs have been developed predominantly using IRLS, so no comparative information was available for IRLS.

A simple criterion was used to express relative "goodness": how close each method came to estimating the value of Y from a CER of the form $Y = AX^B$ – when using the same set of Monte Carlo samples for X and Y. The test was applied at three points along the X axis: the mean value of X, the maximum X and a point mid-way between the two. However, attention was focused on the results for maximum X values (different for each Monte Carlo sample of X-Y data points). This approach gave emphasis to predicting "high-end" costs, a challenge often faced by estimators.

Figure 1 shows each method's best-fit equation and the known ("exact") curve for a CER data set of ten data points. The LOLS error at the maximum X is indicated on the right side of the graph. Both IRLS and ZMPE were closer to the exact Y, with ZMPE coming away as the "winner."

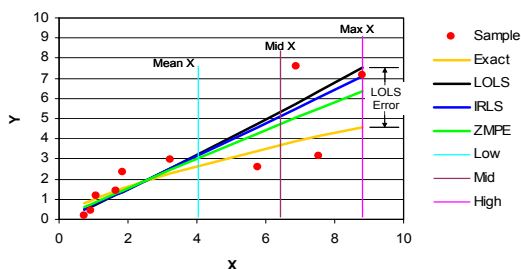


Figure 1. Typical Best-Fit Comparison

It is important to note that any given sample of data points may be very unrepresentative of underlying

behavior. None of the regression equations in Figure 1 are close to the underlying "exact" relationship. Even with much larger data sets (e.g., 25 data points), regression equations can still be pretty far from the exact equation. This observation makes it obvious that acquiring more data points is a very useful thing to do and getting rid of old data points is not a good idea – unless they are flawed, in which case they probably shouldn't have been used in the first place.

Lognormal distributions were assumed for both X and Y variables in the study. This is supported by a large amount of actual CER data³. The primary study parameters were the number of data points in the simulated CER data sets; the degree of dispersion in the Y data, as measured by the Standard Percent Error (SPE); and the value of the exponent B (typically in the range 0.5 to 1.0). Each analysis "case" consisted of 200 data set samples, each fit with the three best-fit methods. The number of data points, SPE and exponent B were constant for each case. The results of the Fit-Off are shown in Table 1 below, by case:

| Case No. | Data Points | Avg. SPE % | Exp. B | Winning Percentage at Maximum X | | | % IRLS 1st or 2nd @ Max X | |
|--------------------------|-------------|------------|--------|---------------------------------|------|------|---------------------------|------|
| | | | | LOLS | IRLS | ZMPE | | |
| 1 | 10 | 63.0 | 0.7 | 45.5 | 18.5 | 36.0 | 95.0 | |
| 2 | 15 | 65.3 | " | 43.5 | 23.0 | 33.5 | 92.5 | |
| 3 | 25 | 64.7 | " | 47.5 | 19.0 | 33.5 | 94.0 | |
| 4 | 50 | 66.5 | " | 43.5 | 25.0 | 31.5 | 96.5 | |
| 5* | 10 | 63.1 | 0.7 | 47.0 | 10.5 | 42.5 | 98.0 | |
| 6* | 25 | 64.5 | " | 41.5 | 20.5 | 38.0 | 96.0 | |
| 7 | 10 | 36.4 | 0.7 | 54.0 | 7.5 | 38.5 | 97.5 | |
| 8 | 25 | 37.0 | " | 48.0 | 13.5 | 38.5 | 97.0 | |
| 9 | 10 | 36.4 | 0.5 | 54.0 | 7.5 | 38.5 | 97.5 | |
| 10 | 25 | 37.0 | " | 48.0 | 13.5 | 38.5 | 97.0 | |
| 11 | 10 | 36.4 | 1.0 | 53.5 | 7.5 | 39.0 | 97.5 | |
| 12 | 25 | 37.0 | " | 48.0 | 13.5 | 38.5 | 97.0 | |
| 13 | 10 | 95.0 | 0.7 | 46.0 | 22.0 | 32.0 | 92.0 | |
| 14 | 25 | 98.6 | " | 47.0 | 26.0 | 27.0 | 90.0 | |
| 15 | 10 | 95.1 | 0.5 | 46.0 | 22.0 | 32.0 | 92.0 | |
| 16 | 25 | 98.6 | " | 47.0 | 26.0 | 27.0 | 90.0 | |
| 17 | 10 | 95.1 | 1.0 | 46.0 | 21.5 | 32.5 | 92.0 | |
| 18 | 25 | 98.6 | " | 47.0 | 26.0 | 27.0 | 90.0 | |
| * Uniform X Distribution | | | | Min | 41.5 | 7.5 | 27.0 | 90.0 |
| | | | | Avg | 47.4 | 17.9 | 34.7 | 94.5 |
| | | | | Max | 54.0 | 26.0 | 42.5 | 98.0 |

Table 1. Analysis Case Summary

Cases 7-12 have lower SPEs than Cases 1-6, and Cases 13-18 have higher SPEs. All cases have lognormal X distributions, except Cases 5 and 6, which have uniform X distributions.

The LOLS method had the most wins of the three methods -- 41.5% to 54.0% of the CER sample data

This research was sponsored by the Air Force Cost Analysis Agency (AFCAA), based on work conducted by the National Reconnaissance Office Cost Analysis Improvement Group (NRO CAIG). However, the views expressed in this article are those of the author and do not necessarily reflect the official policy or position of the AFCAA, the NRO IG or any other organization of the U.S. government.

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sets, depending on the analysis case. The IRLS method won least often, with winning percentages from 7.5% to 26.0 %.

From comparing the results for Cases 5 and 6 with corresponding Cases 1 and 3, the ranking of the methods seems insensitive to whether the X distribution is lognormal or uniform. It also appears to be insensitive to the level of dispersion (SPE) and exponent B, as shown by the several combinations of these parameters in Cases 7-18.

Although winning infrequently, the IRLS method was either first or second place most of the time -- 90.0% to 98.0%, depending on the analysis case (see the last column in Table 1). This is a result of consistent behavior patterns where IRLS curves lay between the LOLS and ZMPE curves at the high end of the X range. Figure 1 is an illustration of this behavior. This pattern occurred in 78% to 93% of the CERs, depending on the case.

If only one method is used to develop CERs, IRLS would be the natural choice since it is likely to be either best or second-best most of the time. If two methods are used, then the natural choice would be LOLS and ZMPE, since one of these methods is likely to be best most of the time. Thus, both the NRO and USCM CER development practices are supported by these study results!

The IRLS method does somewhat better, and the ZMPE somewhat worse, for CER data sets with high dispersion. This can be seen by comparing the IRLS and ZMPE winning percentages for Cases 7-12 (low dispersion) with the corresponding cases having high dispersion (Cases 13-18). The IRLS winning percentages are substantially higher in Cases 13-18, and the ZMPE percentages are correspondingly lower. The LOLS winning percentages were not impacted much by SPE or B.

Figure 2, for Case 1, shows how IRLS wins tend to be at higher SPE values and ZMPE wins tend to be at lower SPEs.

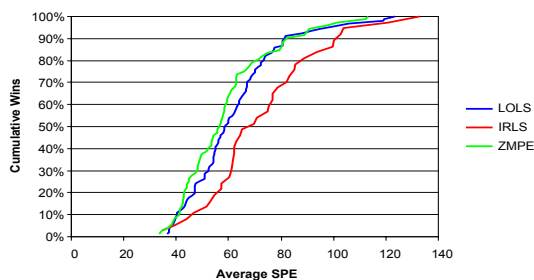


Figure 2. Cumulative Percent Wins vs. Standard Percent Error

It's common knowledge that data points at the high end of the X range typically influence regression equations a lot if they don't happen to "line up" with the other CER data points. In other words, if a high end data point is close to the best fit equation with the data point excluded, it will not influence the CER

much. However, if the data point is well above or below this best fit equation, it can have a strong influence on the CER.

CERs can also be strongly influenced by data points nowhere near the high end of the X range. For example, an interesting ZMPE behavior pattern occurs when there is a data point with a large (positive) percent error in the low end of the X range. Figure 3 shows one of these cases.

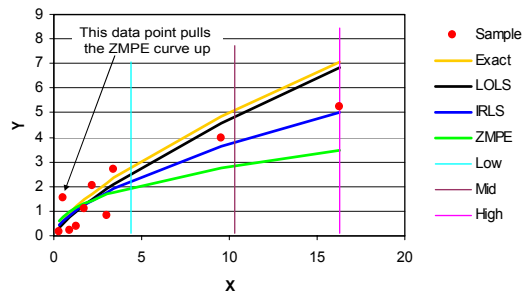


Figure 3. ZMPE Low-End Data Point Pull

The data point identified in the figure "pulls" the curve upwards to reduce the point's percent error. Because of the way the rest of the data points are positioned, this causes the ZMPE exponent B to be reduced – much more than the IRLS exponent.

Figure 4 shows the percent errors for each method. The ZMPE percent error has been reduced well below the IRLS error by reducing the exponent B. Thus, IRLS appears to be less sensitive to low end positive percent errors.

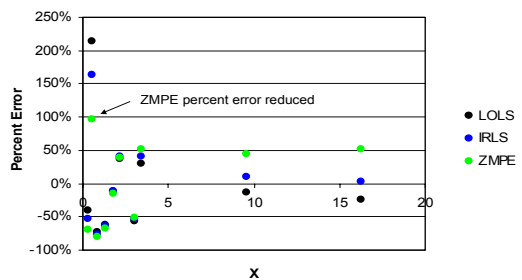


Figure 4. Percent Errors – ZMPE Low End Pull

Figure 5 shows how sensitive the ZMPE solution is to the Y value of our "culprit" data point. Its Y value, originally 1.56, was progressively reduced in four steps. A new ZMPE regression was performed at each step, giving rise to the series of regression lines in the figure. The percent error for the data point was driven to zero in the last step, "neutralizing" its impact on the regression.

The ZMPE regression line in Figure 5 was far away from the exact equation with the original Y value. The predicted Y value at the maximum value of X

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was less than half of the corresponding exact Y. After neutralizing the data point, the predicted Y was slightly higher than the exact Y! This example illustrates how important it is to carefully assess the

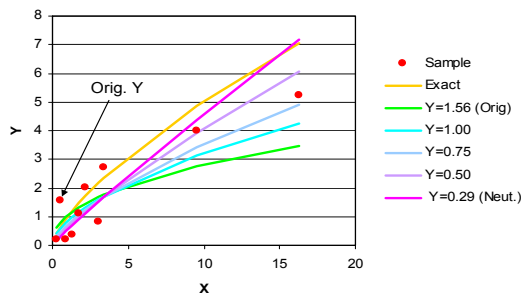


Figure 5. Impact of Neutralizing ZMPE Data Point

impact of low-end data points on a ZMPE regression equation.

Another situation to watch for is when low end data points impact LOLS regressions. Figures 6 and 7 illustrate this type of situation. The LOLS fit is poor, while the IRLS and ZMPE fits are not.

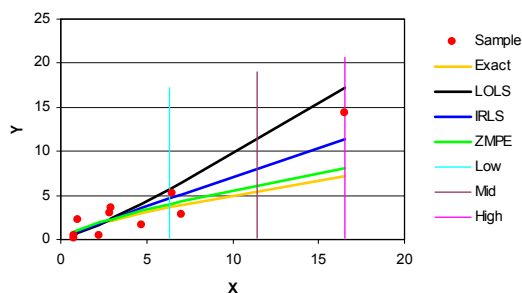


Figure 6. Poor LOLS Best Fit

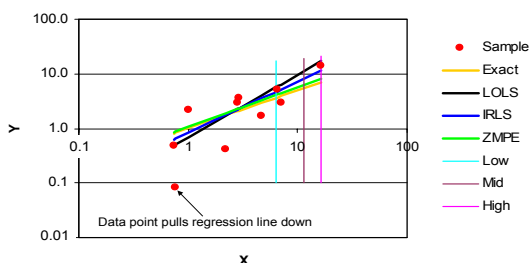


Figure 7. LOLS Low End Pull

The cause of the poor LOLS fit becomes obvious when the same information is shown on a log-log graph in Figure 7. The data point at the low end of the X range is pulling the LOLS regression line down, resulting in a high exponent B. Data points above the regression line at the low end of the X range can have a similar impact on a LOLS regression equation, except the exponent B is reduced instead of increased.

To recap, the following steps are recommended

when developing CERs, particularly for data sets with few data points and/or high dispersion:

1. Do not use either LOLS or ZMPE without checking the other method. If the regression equations are not close to each other, look for influential data points in each case.
2. Check ZMPE and IRLS regressions for low-end pull like that in Figures 3-5 by removing the data point in the low end of the X range with the largest positive percent error (i.e., the data point is above regression line).
3. Check LOLS for low-end pull like that in Figures 6 and 7. Always create both linear and log-log graphs when using LOLS.
4. Check all methods for influential data points at the high end of the X range by removing them one-at-a-time from the regression data set.

The presence of an influential data point is not necessarily bad. For many data set samples in the study, an influential data point caused the regression equation to be closer to the exact equation – not farther away. Thus, the CER developer usually faces a dilemma: whether or not to include an influential data point in the CER.

Something to consider are the values of the CER constants and exponents. Are they in the same range as those for similar products? For example, space hardware CERs with weight as the independent variable usually have a weight exponent in the 0.6 to 0.9 range. If a trial CER with an influential data point has an exponent nearer the middle of the range than the same CER with the data point excluded, then the logical choice is to retain the data point in the CER.

Generally, influential data points should not be eliminated simply because they cause a higher SPE. If they are excluded for this reason, the resulting regression equation should at least be about the same as it was originally. The primary focus should be on getting the most realistic regression equation – not on getting a tighter fit.

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This research was sponsored by the Air Force Cost Analysis Agency (AFCAA), based on work conducted by the National Reconnaissance Office Cost Analysis Improvement Group (NRO CAIG). However, the views expressed in this article are those of the author and do not necessarily reflect the official policy or position of the AFCAA, the NRO CAIG or any other organization of the U.S. government.

ISPA Southern California Chapter News

BY KURT BRUNNER, CHAPTER PRESIDENT AND SHERRY STUKES, CHAPTER VICE PRESIDENT



ISPA/SCEA Workshop hosted by RAND Corp – Santa Monica, California – 12/17/09

Sixty-nine attendees participated in our workshop (including seven virtual participants) hosted by RAND Corporation and the Southern California Chapters of ISPA and SCEA. This workshop ranked second for best attended workshops held in recent times. All of the topics were well received, very informative, and provided the impetus for lively discussions.

- **Michael Rich**, RAND Corporation, "Welcome Address"
- **Robert Leonard**, RAND Corporation, "Weapon System Cost Growth in the New Century: Is it Increasing?"
- **Dr. Barry Boehm**, USC Center for Systems and Software Engineering, "Software Cost Estimating and Metrics Study for AFCAA"
- **Sherry Stukes**, JPL, "Software Cost Estimating" (Training Topic)
- **Joseph Lavender**, Lavender and Associates, "Capability-Based Cost Estimating is a Reality"
- **Mike Ross**, Tecolote Research Inc., "Joint Cost and Duration Confidence Probability for Software Estimates"

In conjunction with our ISPA membership drive **Steve Sterk**, member of ISPA's International Board and our outstanding Membership Chair, raffled off prizes (pictured here) at the workshop—a gorgeous NASA medallion constructed of metal flown to the moon and back and an Apollo 40 year commemorative cup. The lucky winners were **Hoyt Sumerel** and **Miles Nesman**.



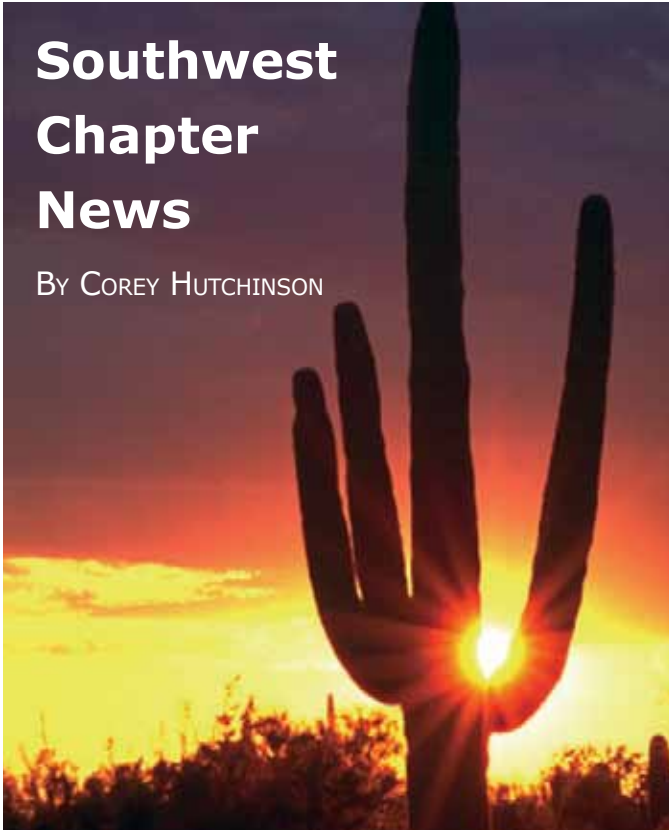
Only ISPA members were eligible for the drawing, so if you are not a paid-up member and would like to participate in future drawings (which have included a laptop and GPS at our annual conferences), please renew your membership and ask others to join. The \$55 annual membership is an exceptional value for a great investment in your career!

You won't want to miss our joint **ISPA/SCEA Spring 2010 workshop** which will be held at the **Lockheed Martin Space Systems** facility in **El Segundo, California**, on **17 March 2010**. We have an exciting program lined up, full of thought-provoking and informative presentations, including a CPP training topic. Be sure to wear green as it will be Saint Patrick's

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Southwest Chapter News

By COREY HUTCHINSON



Due to family and health issues, I was unable to work with the Southwest Chapter Board to make the December 2009 workshop happen. But we are very excited about our first chapter workshop of 2010 planned for April 13 at the Boeing Helicopters facility in Mesa, Arizona. Once our program is firm, we will send out the agenda via e-mail. I encourage all current members, your co-workers, or anyone that you feel would benefit from our program to register for the workshop. As is the custom, there is no fee for attending the workshop.

Our membership continues to grow — we added 3 more new members since my last report. To increase chapter membership and participation, I spent considerable time contacting people on the phone and through emails as well as speaking directly with co-workers. I hope you will do the same. If we work as a team, our membership will continue to grow, and we will all benefit from increased awareness and greater participation in our Society.



On behalf of the Southwest chapter, we wish you a great 2010, and we look forward to seeing you at the next workshop.

Corey Hutchinson

Southwest Chapter President

corey.s.hutchinson@boeing.com



**Mid-Atlantic Chapter Contact:
Ron Larson**

ronald.k.larson@nasa.gov

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Day! Additional details about the workshop will be provided in the next issue of Parametric World and will also be posted to the ISPA Web site under "Southern California Chapter news." Also, if we have your current e-mail address taken from past workshop attendance lists, an e-mail notification and reminder was sent to you.

Here is a current list of the ISPA Southern California Chapter Board of Directors :

- President — Kurt Brunner
- Vice-President — Sherry Stukes
- Secretary/Treasurer — Charles Wheeler, III
- Directors — Hank Apgar; Doug Howarth;
Paul Killingsworth; Nina Tahir; and Scott Tobin

We look forward to seeing you at the next workshop!



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Sherry Stukes

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Notes from René Berghuijs – Brussels, Belgium



Happy New Year to all of you! I hope that 2010 will be a very good year for us.

At the end of last year I had an informal meeting at our house in Belgium with **Jason Dechoretz** and **Hervé Joumier** of ISPA; and **Arno Rol** and **Jaap de Kleijn** of DACE.

In a relaxed atmosphere we got to know each other and discussed how we could work out a cooperative arrangement between DACE and ISPA. The proof of the pudding is in the eating, and I had a fridge full of ingredients for a home cooked dinner. Plan B was a restaurant in Brussels, but these gentlemen voted to cook their own dinner and really, they could cook! So I am confident that this cooperation will extend beyond our cooking adventure, and we will work well together. ISPA will arrange for a number of presentations on Parametric Estimating on March 4 which we hope will be the beginning of a parametric estimating initiative in the Netherlands.

My plans for this year: I am looking forward to exchanging ideas and planning the 2012 conference with **Hervé Joumier**. We plan to visit potential host hotel locations together to come up with the best property choices for our event. This is a new activity for me, and I hope to learn from Hervé's experience—he chaired the very successful 2008 conference in Noordwijk. I also hope to attend the conference in San Diego this year.

Wishing you all the best for 2010,

Réne Berghuijs

NATO Air Command and Control System (ACCS)
Management Agency

Notes from Arthur Griffiths – The UK



Goodbye 2009—in what must have been one of the gloomiest periods memorable, most people will be glad to see the back of the year. However, before we look forward to 2010 I must first congratulate our UK weather forecasters for predicting a glorious Autumn. Not only did it become a reality but it has given them such confidence they are now predicting a fantastic hot summer for

2010. Some say that this is due to the fact that the Met Office has increased the number of climate change advisors; others are still considering the statements with a 'use with caution' caveat.

The Autumn brought many initiatives from the UK Government with a demand to improve processes

and review cost estimating and analysis techniques in order to provide increased confidence in our financial and schedule estimates for capital investment programmes.

Much has been made of the UK Ministry of Defence (MoD) report "A Review of Acquisition" (more commonly referred to as the Bernard Gray report) which was finally published after a delay of several months. To the study team's credit, a lot of the report is devoted to quantitative analysis and is available to download in various forms from www.mod.uk.

The report focuses on project and financial management in the MoD and provides the public with a greater insight into the behaviour of this large Government Department's decision making process. The report generates data and provides estimates based on explicit methods and makes recommendations for better cost information and improved skills. To this end, the use of parametrics has come out well and is, in fact, promoted as an estimating technique that should be encouraged.

There is no doubt that what we have is a reasoned and evidence based report of great value to the Government and the British Public. As a result, many departments are now reviewing and benchmarking their cost estimating and risk management processes to obtain greater confidence in 'best practice.' In many ways these reviews are to be applauded. There is no doubt that the recommendations will create changes within the UK MoD costing community and places significant emphasis on parametric techniques and the need for increased staff skills in costing techniques for early project/programme phases, relevant qualifications and possibly 'licensing' too. It is too soon to say what the detailed changes will be and how they will impact CAAS but the report places the costing community squarely in the headlights.

The economic situation has not improved and is putting enormous strain on progressing planned capital investment programmes and the sustainment of legacy infrastructure and capability. Added to that is the upcoming general election (no date yet but May is the likeliest). If this follows previous patterns we can expect a 'no decision' period for several months (pre and post election) causing more angst for the portfolio of programmes waiting in the wings.

Notices in the press say that Airbus are considering terminating the US\$30Bn A400M transport aircraft programme as deliveries are some 3 years late and it is affecting the commercial aircraft business; there is also a question over the sustainment of NATO in its current form and a UK Spending Review post the election is bound to affect many high profile projects.

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All this doom and gloom. Let's talk about cost modelling and what is being seen and heard by people in the business. There seems to be a desire for more "open" models where the data and the CERs can be understood by the user; however the average user does not appear to be prepared to invest the time and effort to understand the statistical methodologies that drive the underlying calculations so more effort is needed on both sides to close the understanding gap.

In the same breath there is a move to "localise" models such as the new PRICE Systems models as they allow the user to construct a CER within the True Planner framework. There are also initiatives such as the Galorath Cost IQ solution that allows the user to focus on capability to generate baseline early phase estimations.

Another area of interest is the ability to derive indicative costs for budget setting from a capability statement; this is being addressed by both BAE Systems via their TRAiDE solution http://www.tsorg.com/Salamander_PDFs/TRAiDE.pdf and Lockheed Martin with their OMEGA/IMPACT solution <http://www.maritime-index.com/newsdet.php?id=3079>).

In addition, there is a desire amongst users and business managers to develop risk adjusted outcomes from parametric estimating models. RiskHive is partnering with both Galorath and PRICE to start to address this. It is somewhat hindered by the lack of standard terminologies and approaches between the UK and US. This is becoming clearer but still needs some additional effort; the new ISO 31000:2009 does start to address this area and there is also a complementary ISO Guide 73:2009 Risk management vocabulary but this is aimed more at the management of risk rather than the application of risk to estimation. I am sure that both SCAF and the ACostE would be keen to work with ISPA and other industry bodies to investigate this area.

I mentioned in the last PW that the term 'estimating confidence' has recently become more significant. RiskHive Ltd. is involved in a joint 'confidence calculation' for both cost and schedule. It is early days yet but the company is looking for partners who want to invest with RiskHive in this development area.

Now to finish off on an upbeat note for 2010, attendance at focussed cost estimating workshops was up by 15% in 2009 and initial enquiries for the 2010 events would suggest that this strong support will continue. Also, the publication of the 'Cost Forecasting Guide—First Edition,' primarily intended for UK MoD staffs provides a sound general background to forecasting (early estimating) techniques; it is available for download from www.aof.mod.uk or alternatively if anyone wants to, andy.nicholls400@mod.uk; Andy will forward an electronic copy. The Guide will be hosted on other

websites eventually. Andy will welcome comments on content, errors etc.

As I write this article it is now snowing to such an extent that has not been seen in the South of England for over 20 years – not sure about these weather forecasters yet!!!! Many thanks to Andy Nicholls (MoD), Grahame Jones (PRICE Systems) and Andy Langridge (RiskHive) for their support and contribution.

Arthur Griffiths

Decision Analysis Services Ltd.

Calendar – Europe

April 21, 2010

SCAF Workshop

Theme: Defence Indecision – Cost and Schedule Implications

The BAWA Centre, Filton, Bristol

Information: Max Murray-Brooks

mmbrooks@dstl.gov.uk or www.scaf.org.uk

May 11-12, 2010

SSCAG/SCAF/EACE Joint Int'l Workshop

German Space Agency, Berlin, Germany

Information: David Pine

dpine2@cox.net or ssacg.saic.com

May 19, 2010

SEER by Galorath Users Conference

Williams Formula 1 Conference Center

Grove, Wantage, Oxfordshire, UK

Information: Keith Garland

+ 44 (0) 207 788 9042

kgarland@galorath.com

September 21, 2010

SCAF Annual Conference

Royal Institution of Naval Architects, Victoria, London

Information: Max Murray-Brooks

mmbrooks@dstl.gov.uk or www.scaf.org.uk

October 6-8, 2010

PRICE Systems 29th Annual

International Symposium

Gran Hotel Princesa Sofia, Barcelona, Spain

Information: Website: www.pricesystems.com

E-mail: Barcelona2010@pricesystems.com

November 23, 2010

SCAF Workshop

Theme: Whole Life Costing Case Study –

At the Concept Phase

The BAWA Centre, Filton, Bristol

Information: Max Murray-Brooks

mmbrooks@dstl.gov.uk or www.scaf.org.uk

SECRETARY'S REPORT

By GREG KIVIAT



As we move into the new decade, ISPA continues to offer many opportunities for the professional growth of its members through participation in society functions and committees. The ISPA Board of Directors hold periodic meetings for society planning

and status review with Committee Chairs, Regional Chapters and other ISPA leadership and members. These committees and regional chapters are the core of the organization enabling planning and production for everything from Conference Planning, Training and Publications to Awards, Audit, Chapter Development and Public Relations. At the recent January Board meeting each committee reviewed its progress and provided recommendations for the committees as needed. The following outlines some of the highlights of that meeting:

ISPA/SCEA Conference

The ISPA/SCEA Conference in San Diego scheduled for June 7-11, 2010 has received nearly 100 papers submitted for review and presentation. Each paper will be reviewed for acceptance to the conference and will then be judged for each track and overall conference for "best paper" awards. The committee is finalizing the keynote speakers for the conference that will include high ranking managers in the aerospace industry and government. A presentation track for Operating and Support cost will be included in the conference for the first time.

Joint training with SCEA is a highlight of the conference enabling participants to gain new knowledge and professional certification with courses that will include: Parametric Estimating, Risk, Earned Value Management (EVM), and Scheduling. Training tracks are updated and improved each year and are taught by experts in these areas with years of experience applying the tools and methods in government and industry.

Last year more than 430 people attended the St. Louis conference. Early indications are for even greater attendance in San Diego with expanded speaker, presentation, networking and training offerings.

European Society Alliance

ISPA is actively working to team with European cost societies to promote the benefits of Parametrics, increase networking opportunities, share methodologies and education programs in the area of cost engineering, and participate in ISPA functions and journal activities. A Memorandum

of Understanding is being developed and reviewed to define the objectives and responsibilities of the association. One goal of these relationships is to enable creation of a new European ISPA chapter to further improve attendance and content at the European ISPA/SCEA conference conducted every four years.

Membership

The ISPA Membership committee is working to enhance membership benefits with a new society web site. The site will provide members a resource to view current and past copies of ISPA publications, opportunities to share questions, issues and documents with other members and provide an online membership directory. A secure area for online membership renewal is also under development. The site is in beta test and is expected to be released early this year.

Regional Chapters

Regional Chapters continue to provide local content to the membership with ongoing workshops and networking opportunities. The Southern California chapter held its last workshop Dec 17, 2009 at RAND Corp. and has plans for three workshops a year through 2011 to be hosted by Lockheed Martin, MCR Federal, Boeing, SAIC, Galorath and BAH. These workshops provided by the Southern California and other regional chapters provide excellent resources to improve your understanding of important issues, techniques and tools for the cost estimator. Other local chapters include Southwest and Mid Atlantic Regions. ISPA is working with SCEA to strengthen regional chapters for both organizations.

The many objectives and obligations of ISPA's ongoing activities provide many opportunities for participation as an attendee, presenter, committee member or leader to gain recognition from your peers, managers and direct reports. Please consider volunteering for one of the committees or running for elected office.

Greg Kiviat

ISPA Secretary

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NASA's REDSTAR Library
Contact: Mary Ellen Harris,
REDSTAR Librarian
(256) 971-6425
mary.e.harris@saic.com**

ISPA Prepares to Launch

By STEVE STERK

Roll out of our new and enhanced website is almost here and just in time for our 2010 Annual Conference. Our website will offer many new benefits of ISPA membership—and just a click away.

With a limited budget I eagerly took on last spring the leadership of revamping our website. I found a very talented web designer, Mr. Grant McBride (*Wavmixer.com*), and with the help and guidance of Sherry Stukes (NASA), Desiree Davis (Raytheon), and members of our ISPA Boards and others who were generous with their time, we accomplished the first phase of our website redesign—with more to come. We used vBulletin written in MySQL, a commercial, off-the-shelf software (COTS) successfully launched by 100,000 websites. I feel confident that we selected the correct program that provides a solid foundation for a dynamic website which will allow us to build on it for years to come. As with any website design, there are gives and takes to accommodate the wants and needs of the business culture. Our website is not built on static display; our goal was to facilitate membership interaction.

Here are some of the exciting new features you can expect:

- The *forum* design—overseen by a moderator—will facilitate stimulating dialogues with members and experts in the field of parametrics. You will be able to share information and opinions about what works and what doesn't for specific estimating challenges, and get connected with people you don't normally see at local meetings and workshops to give you a broader sense of what is going on in the estimating community in other parts of the country and beyond.
- The website will be *accessible from PDAs* such as Blackberries, iPods, and other hand held communication devices.
- Members-only access through our secure portal will enable you to pay on-line *free of charge* through our PayPal account. Renewing your membership will be a snap!
- Need to update your address, phone number or other personal profile information? No problem. You can now update your information on-line.
- Ease of use of the website will enable chapters to post information about up-coming workshops and afterwards, upload the latest workshop papers, abstracts, and authors' biographies within days after the event!

- From the members-only section of our website, past *Parametric World* publications and conference materials will be available for download in PDF format.
- Chapter and international elections will be conducted electronically—a convenience for you, and a cost-saving benefit to our Society.
- An electronic version of our *Membership Directory* with an advanced sort capability by company or agency, member's name, and date of membership enrollment.

You will receive a temporary password via email and can log on at the upper right-hand corner of ISPA's home page. Your user name has been pre-loaded: *last name, space, first name*. For example, my name was loaded as *Sterk Steve*. Once you've logged on, please go to the gray bar titled *User Control Panel* located on the left-hand side underneath the ISPA Logo and change your temporary password to something you can easily remember. Also change any of your personal profile information that you find to be inaccurate.

If we can get 80% of our membership to log in by the end of the 2010 Conference, then I declare our undertaking to modernize our website a huge success! And by the way, your Board has approved a very nice give-away for our membership drawing at the Conference—an iPad. To be eligible to win you must be a paid member, you have to comply with your employer's regulations that pertain to receiving gifts, pay the sales tax, and allow us to take your picture for publication.

With the smash hit **Avatar** showing all over town and up for many awards, just what is an *avatar*? According to Wikipedia, an avatar is a computer user's representation of him or herself or an alter ego. It can be in the form of a three-dimensional model used in computer games, a two-dimensional icon or picture, a text construct found on early systems such as MUD (multi-user domains), or a one-dimensional user name to access internet forums and other communities. So fellow avatars, prepare to launch!



Steve Sterk (CPP)

ISPA Membership Chair
steve.a.sterk@nasa.gov
(661) 276-2377

CALENDAR OF EVENTS



March 17, 2010

ISPA/SCEA SoCA Chapters Workshop
Host: Lockheed Martin Space Systems
El Segundo, California
Information: Kurt Brunner
kbrunner@tecolote.com

April 13, 2010

ISPA Southwest Chapter Workshop
Host: Boeing Helicopters — Mesa, Arizona
Information: Corey Hutchinson
corey.s.hutchinson@boeing.com

April 21, 2010

SCAF Workshop
Theme: Defence Indecision — Cost and
Schedule Implications
The BAWA Centre, Filton, Bristol
Information: Max Murray-Brooks
mmbrooks@dstl.gov.uk or www.scaf.org.uk

April 26-29, 2010

22nd Annual Systems & Software
Technology Conference (SSTC)
Salt Palace Convention Center, Salt Lake City, Utah
Information: sstc-info@ext.usu.edu

May 11-12, 2010

SSCAG/SCAF/EACE Joint Int'l Workshop
German Space Agency
Berlin, Germany
Information: David Pine
dpine2@cox.net or sscag.saic.com

May 19, 2010

SEER by Galorath Users Conference
Williams Formula 1 Conference Center
Grove, Wantage, Oxfordshire, UK
Information: Keith Garland
+ 44 (0) 207 788 9042
kgarland@galorath.com

June 8-11, 2010

ISPA/SCEA Conference & Training Workshop
Sheraton San Diego Hotel and Marina
San Diego, California
Information: Erin Whittaker, Joint Business Office
scea@sceaonline.org or (703) 938-5090

September 21, 2010

SCAF Annual Conference
Royal Institution of Naval Architects, Victoria, London
Information: Max Murray-Brooks
mmbrooks@dstl.gov.uk or www.scaf.org.uk

October 6-8, 2010

PRICE Systems 29th Annual International
Symposium
Gran Hotel Princesa Sofia, Barcelona, Spain
Information: www.pricesystems.com
Barcelona2010@pricesystems.com

November 23, 2010

SCAF Workshop
Theme: Whole Life Costing Case Study — At the
Concept Phase
The BAWA Centre, Filton, Bristol
Information: Max Murray-Brooks
mmbrooks@dstl.gov.uk or www.scaf.org.uk

We Need Your Input for Our Calendar

The deadline for our next issue is April 1.

Send your suggestions to:
NinaTahir@aol.com



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