Certification: A Portfolio of Distinction

AACE International Election Voting Is Now Open!

Understanding and Applying the Elements of Constructive Acceleration
SAVE THE DATE!

June 28 - July 1, 2020
Hilton Chicago
Chicago, Illinois, USA
How supply chain transparency can help the planet

Given the option, few would choose to buy products that harm the earth — yet it’s nearly impossible to know how most consumer goods are made or where they’re sourced from. That’s about to change, says supply chain innovator Markus Mutz. He shares how he used blockchain technology to track Patagonian toothfish on their journey from ocean to dinner plate — and proved it’s possible to offer consumers a product they can trust.

Markus Mutz is the CEO of Open SC, a social venture cofounded by the World Wildlife Fund (WWF) and BCG Digital Ventures. Prior to launching Open SC, he was a director at BCG Digital Ventures in Sydney and a founding member of Digital Ventures Asia.

Source: www.ted.com
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The Top 10 Reasons
To Join AACE International

Ready to advance your career and begin enjoying the advantages that our members enjoy? Whether you are an experienced cost engineer or a student, we have a membership ready for you.

1. **Time**
   Gain access to a wealth of resources that will save you time and money! You’ll stay informed about the complexities of the cost and management profession - plus you’ll have access to discounts on educational programs, publications, and more!

2. **Information**
   Locate thousands of technical papers and publications in the Virtual Library. AACE’s database is keyword searchable for quickly locating appropriate reference articles.

3. **Career**
   Members can post resumes at no additional cost in our Career Center and keep your career on track through information sources such as our annual Salary and Demographic Survey of Project and Cost Professionals.

4. **Learning**
   We offer numerous online learning courses on estimating and project management. The Approved Educational Provider program helps maintain high quality development courses and providers. AACE also holds many seminars throughout the year.

5. **Resources**
   Starting with the TCM Framework and Recommended Practices that are available for free only to members to our bi-monthly publication Cost Engineering featuring articles for cost professionals around the world. Through the AACE International website, the Cost Engineering journal is a great current resource for members and as a member, you gain access to an archive of past issues.

6. **Technical Development**
   Increase your knowledge and expertise by joining one of AACE International’s many technical subcommittees, subcommittees, and Special Interest Groups (SIGs) at no additional cost to members. Discuss industry problems with your peers or help experts develop new and improved techniques and practices for the profession.

7. **Networking**
   By attending a local section or our Annual Conference & Expo for interesting speakers, informational tours, social dinners and much more. The online Membership Directory is an excellent source for a list of contact information on thousands of members. Join one of our many technical subcommittees and participate in the AACE Forums - a great way to tap into the collective wisdom and experience of our world-wide membership.

8. **Excellence**
   Our certification programs are independently accredited by the Council of Engineering & Scientific Specialty Boards. AACE certifications are a recognized credible standard in the cost management field. A recent study shows that individuals with an AACE Certification earn 17.4% more than their counterpart without a certificate.

9. **Discounts**
   On products and services ranging from AACE International Conference & Expo registration fees, archived webinars and presentations, certification examination registrations, and more!

10. **You!**
    We are your professional partner bringing you information and support you can trust. Join and become part of a unique network of individuals who are dedicated to improving the cost and management profession.

JOIN TODAY! web.aacei.org
Mark Your Calendar to Attend the Upcoming AACE Conference & Expo

BY DOUGLAS W. LEO, CCP CEP FAACE Hon. Life, President, AACE International

Preparation is well under way for the AACE International Conference and Expo to be at the Chicago Hilton June 28 – July 1. Mark your calendars and make this a must attend educational and networking opportunity for you and your professional team.

This will be my 23rd consecutive AACE International Conference and Expo. Throughout my professional career the AACE International Conference and Expo has been the one priority technical event of each year. I have walked away from each of the AACE International Conference and Expos with new ideas, that have immediately been able to be incorporated into my professional life. Every presentation from those given by the new practitioner to those presented by our expert level presenters, hold potential of immediate process improvements in my day-to-day projects.

I’ve always asked what produces this level of presentation excellence? Each year in early autumn, when the first abstracts are submitted, through the actual submission of the technical papers, to their subsequent development into a technical presentations, there is a defined, and constantly developed vetting process, that the AACE International Technical Associate Board executes to ensure only papers and presentations of the highest quality make the Conference and Expo’s Technical Program. The vetting process, that our Technical Associate Board executes with regards to potential papers, strives to produce papers that are technically sound, accurate, do not include plagiarized content, are coherent and easily understandable.

The same technical paper vetting process is a part of the actual Conference and Expo presentations. This QA/QC process ensures that presentations faithfully convey the same message as was developed in its corresponding technical paper. Technical Associate Board Chair Todd Pickett and VP Technical Larry Dysert need to be congratulated along with their board members and all of the technical sub-committees for the quality of our yearly Conference and Expo technical program. Add networking opportunities with world-wide project execution leaders, a full schedule of 1-1/2 day technical classes (seminars) and the AACE International Conference and Expo is the world class event that needs to be attended. I look forward to seeing many of our members in Chicago between June 28 and July 01.

Our member to be highlighted this month comes to us from our AACE International Brazil Section. This last year Henrique Takemoto stepped down as Section President after serving four years on the Section Board. Henrique thankfully will still remain active promoting AACE even after retiring from his Section Board activities. Henrique has shared some of the accomplishments that have been realized by the Brazil Section over the last several years. The Brazil Section has held 23 events and two international training events throughout the country. Numerous partnerships have been forged with universities in Brazil and other project and cost engineering associations within the country. I share his thoughts, that his work has contributed to the construction of a more robust and prepared AACE International in the Brazil cost engineering market. Thank you, Henrique, for a job very well done and thank you for your continued efforts on behalf of AACE International.

And in closing for this month, I encourage you to make good use of the AACE International Technical Body of Knowledge. Become experts in the information contained on the AACE International website. The TCM Framework, the Recommended Practices and the Professional Practice Guides all comprise the core competencies of AACE International. As core competencies, I offer to you, that this knowledge is unique, value adding and not easily duplicated. Make good use of it. Your greatest strength as a member of AACE International comes from possessing and using the information contained in our Technical Body of Knowledge in your professional project’s career.

If you would like to contact our current president with questions or comments about The President’s Message please address your e-mail to president@aacei.org. To engage in other discussions, check out AACE International’s online Communities at communities.aacei.org.
Many capital-intensive organizations now use project delivery systems as a part of corporate governance. This is a recommendation borne out of significant technical research from AACE International and other capital project, best practice organizations such as Construction Industry Institute (CII) and Independent Project Analysis (IPA). These same companies often have project management system requirements for stakeholder measurement and reporting.

Major projects are subjected to periodic audits and reviews for the ‘health’ of the investment. Despite the prevalence of these three elements, the failure rate for major projects remains high. We can conclude, therefore, that each independent element is necessary but not sufficient for the mitigation of capital cost overrun risk. This brief article and a more-detailed technical paper at the 2020 AACE International Conference & Expo will explore the relationship between a company’s project delivery system, project performance management requirements, and the organization’s assurance regime.

AACE’s Total Cost Management (TCM) Framework, describes approaches for quantitative planning, measurement, and assessment of the total life cycle costs investment in its portfolio of assets. Quantitative approaches are reinforced by the management of human resources. The TCM outlines important considerations for the organization structure design and deployment, as well as competency models. Project delivery systems are frequently underpinned by a stage gate process. The typical arrangement is three project phases prior to full-funds authorization and two project phases after the project is sanctioned. The first of these three phases are often referred to as Front End Loading (FEL), which focuses on early identification of the development option best suited for the company and market. This process, frequently referred to as project shaping, is one the key contributing factors to a successful capital project. When done well, this shaping period of the project ensures the appropriate amount of definition is achieved before a project advances from one stage to the next. [3]

After authorization, project performance management is used, which includes a series of cascading meetings and reporting requirements that allow empowered and accountable project team members to make data-driven decision using a single source of truth. Central to this is the establishment of a Project Control Room (War Room) which has clear and visible KPIs that are available to everyone, all the time. High performing project teams are appropriately ‘wired’ such that individuals’ roles, measurements, and incentives align with the operating strategy allowing everyone to pull in the same direction. [4] This requires clarity on what is required to fulfill the project charter and on how to do those things well. Everyone must understand what a good day looks like in his or her area (output KPIs) and works on the things that they can manage (input KPIs) to deliver it. Progress is tracked and reviewed with individuals held accountable. Improvement is not a one-off event but rather a continuous process that is owned and driven by the front line.

Finally, project assurance aims to provide independent and objective oversight of the likely, future project performance, typically through internal and external (independent) reviews. These reviews are conducted throughout the project’s lifecycle with the goals and objectives of each review informed by project delivery stage-gate reviews, as well as negative trends that are revealed through project performance management. The discipline of project assurance developed in the late 2000s in response to recurring safety, social, economic, cost and schedule problems with major projects. Such reviews are now mandated by many governments, insurers, and financing entities. Project assurance, as practiced today, is additive to a stage-gate process. The field is still evolving and there is no dominant or generally accepted model. Most often it relies on a small group of project experts reviewing a project between the official stage-gate reviews. A robust project assurance framework considers a series of questions which are then tailored to the timing of the review as well as the project’s risk profile. [2]

Capital project overrun risks will never be completely eliminated. Projects are delivered in VUCA (volatility, uncertainty, complexity, and ambiguity) environments by individuals with varying technical and leadership capabilities. [1] Yet, it is possible to more fully integrate the project delivery system, project performance management requirements, and assurance programs to develop an early warning system that detects capital cost overruns and provides a framework for repairing these troubled projects. [5]

REFERENCES:
AACE International’s Certification Program is undoubtedly a portfolio of distinction. Our certifications are not easily achieved, by design, and are intended to represent the education, training, professional experience and competencies, and the commitment to personal and professional growth of those individuals who successfully achieve one or more AACE certifications.

At the close of 2019 there were 4,280 active AACE certificants worldwide. Among those the most popular Certifications are the Certified Cost Professional (CCP) and the Planning and Scheduling Professional (PSP).

AACE’s Certification Program is developed and maintained through the Certification Associate Board and is accredited through the Council of Engineering and Scientific Specialty Boards (CESB). CESB accreditation ensures our certification process and related operation conform to accepted standards and best practices in the engineering and scientific specialty community and within the credentialing industry. Maintaining CESB accreditation status enhances the value of AACE’s credentials by demonstrating a successful completion of the rigorous application and examination process that has been peer reviewed and found worthy of accreditation through an independent third-party organization.

AACE’s Certification Program is designed to be challenging and relevant to individuals throughout all phases of their careers – entry level/early career or recent college graduates; experienced practitioners and professionals who, at the professional level, have the advanced knowledge and technical know-how through actual work experience and continuing training; and an expertise level for those who through active careers have advanced to status as senior-level practitioners, specialists, decision makers, and those qualifying as expert witnesses. AACE’s Technical, Education and Certification Associate Boards work together to provide relevant technical materials for daily use in professional work engagements. In addition, the Boards provide educational materials that guide individuals in both career development and in applying practical experience and competencies with technical materials to achieve knowledge for one or more of AACE’s certifications. All levels of AACE’s certification examinations will challenge candidates in the application of education, training, practical work experience and professional competencies, which distinguishes AACE’s certifications across many industries.

AACE offers Technician level certifications for those early in their careers through the Certified Cost Technician (CCT) and Certified Scheduling Technician (CST). These certifications are complementary to and steppingstones to continuing professional development and experience that then support the eligibility of individuals to move up to the Professional level of certifications.

At the Professional level, AACE offers four certifications – Certified Cost Professional (CCP); Certified Estimating Professional (CEP); Earned Value Professional (EVP); and Planning and Scheduling Professional (PSP). This series of certifications is applicable to those industry practitioners with extensive experience and advanced experience and technical know-how.

AACE’s Expertise level certification include the Decision and Risk Management Professional (DRMP) and Certified Forensic Claims Consultant (CFCC). These certifications represent professionals, practitioners and specialists who meet a demanding set of eligibility criteria. The exams are designed to challenge and test individuals who have gained competencies through extensive experience in senior level positions of responsibility and accountability, and who work in compliance with industry-accepted ethical requirements.

The real challenge for those who have achieved AACE’s certifications is to foster the development of even more certified practitioners and professionals by encouraging, training and supporting those who we work with day in and day out to seek out and achieve AACE’s certification. For further information on AACE’s certification program go to web.aacei.org/certification, or reach out to certification staff at certification@aacei.org or 304-296-8444, ext. 1110.
WOMEN IN PROJECT CONTROLS

SPOTLIGHT ON

Lindsey Ullom

Lindsey was born and raised near Kansas City in Overland Park, Kansas. For as long as she can remember she was an athlete. She thrived off the team comradery and competition. She played all sports before she finally settled in on volleyball, which she played in college for University of Kansas. She loves math and logic and always has. This, and the influence of a family history of engineers, is what made her decide to go into engineering. Being a collegiate athlete and getting an engineering degree was a challenge. She still remembers meeting with one of her engineering advisors and trying to sort out her schedule and work it around her practice times. The advisor told her, “one day you will learn that you just can’t do it all.” Super supportive, right? Well, she accepted the challenge! She made it work and graduated with her degree in Mechanical Engineering while playing sports and did it in four years! She is very proud of her accomplishment!

After graduation, she moved back to Overland Park, Kansas, and started working as a mechanical engineer for Black & Veatch. She was put in a cubicle and told to design a FRP pipe system for the air quality program and she would be doing this for the foreseeable future. It didn’t take her long to realize this was not the career path for her. She did not enjoy focusing on one small piece of the project. It felt too small and too repetitive for her. She wanted to look bigger - to see the whole picture.

Coincidentally, she had a good friend who was in the project controls group, and the friend happened to sit by her boss. The friend mentioned to Lindsey that her boss had asked if Lindsey is interested in project controls. If so, Lindsey should go talk to him. So, Lindsey set up a meeting. Project controls seemed like the perfect answer for her. It allowed her to use all her strengths, but in a completely different way! Project controls (schedule and cost) forces you to get into the details but to keep the big picture in mind at all times. You get to use math and logic to help analyze project health and hopefully help your project team make the best decisions possible. She switched into a project controls career where she could analyze projects from start to finish, always looking at the bigger picture; the overall success of the project.

A few years later, she moved to Denver and started working for URS (was WGI and is now AECOM) as a scheduler. The next important moment in her career came when she was on a project and her project controls manager asked her if he should pull in a cost analyst and we would all be 75% busy, or if she wanted to learn cost analytics from him and be 115% busy. She chose cost and it quickly became her passion. This PCM ended up being one of the best mentors she has had along the way. He pushed her to grow and to learn more, but he also showed her it was possible to do all this work and put your family first – another challenge she eagerly accepted.

After three years with URS, her sister reached out to her to let her know Burns & McDonnell was starting a project controls group and told her she should apply. This was her company. This company had the team spirit she needed to really thrive. Since they are all employee
owners, there is a sense of pride and support she had never felt before. If she succeeded, everyone succeeds and so everyone around her was so willing to teach and help. This culture still thrives today and is one of the main reasons she loves where she works!

About four years ago, she was approached with another pivotal opportunity. Her supervisor asked her to be the project controls lead on this large, fast-paced, difficult engineering, procurement and construction project. But she had a choice to make. She could stay in her comfort zone and do the cost analytics on the project or she could take on the schedule and be in the field for the duration of the project. She spent 2.5 years in the field on this assignment as the lead scheduler while mentoring a new cost professional and it taught her so much!

Shortly after, the project controls department manager position was available. She remembers thinking, “This is not the right time! I’m not ready. I need another year or two of experience just to meet the minimum requirements.” She also knew she wanted it, so she applied anyway. She was not sure the exact number of candidates who applied for the position, but she knew of about 10 others who did. She was the only female. She was honest in her interviews about what she knew and what she didn’t. There were many areas she knew would be difficult and where she would need to learn and learn fast.

She now manages the Project Controls Departments for Denver, CO, Phoenix, AZ and Vancouver, WA. She is also a wife and mother to two amazing children and she still plays volleyball for fun! She has been a member of AACE International for a long time, but it wasn’t until the last three years she started regularly attending the Conference & Expo. She wanted to meet others in the industry and learn from them. What was working for them, what wasn’t? What problems are they facing and how are they solving them. And how she could contribute?

This year was her first annual Conference & Expo, but she had sent others from her team to past conferences. We all agreed the technical content is good, and it is always valuable to hear and learn from others in the industry. The most valuable part though is the networking. Getting to know people who work for different companies in slightly different fields you probably wouldn’t have run into anywhere else. For example, she happened to meet a young woman from her state who was looking to get more involved in AACE and they hit it off. Those connections are so valuable!

Lindsey learned after attending the conference that there are always opportunities within AACE. If you are looking for leadership opportunities, reach out. There are always ways to get involved. Go to the conference & Expo and network with those in your area! Invest in yourself and learn what others are doing.

The best advice she can offer anyone is this: If someone offers you an opportunity to step outside your comfort zone, take it! You may have caught a theme that all the pivotal moments in her career (and her life really) came when she chose to step out of her comfort zone and take on a challenge. “Everything you’ve ever wanted is one step outside your comfort zone.” (unknown) Don’t be afraid to take that step.

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**How do I become an AACE member?**

- You must first have an AACE account, which can be created by clicking [here](#).
- If you believe you already have an account but not 100% sure, contact the membership department at [membership@aacei.org](mailto:membership@aacei.org) or 304-296-8444, ext. 1105 for assistance in order to avoid duplicate accounts.
- Once logged in to your AACE account, select “Member Join” and follow the prompts; membership is immediate upon valid payment.

**What is the difference between Membership and Certification?**

- AACE membership provides exclusive access to our TCM Framework, Cost Engineering Journal, Recommended Practices, and discounts on events, publications, etc. Membership requires annual renewal but does not have pre-requisites to join.
- AACE certification requires an individual to meet prescribed experience and/or education requirements to qualify to sit for an exam. Although membership is not required to apply or qualify for an AACE certification examination, applicants can enjoy member discounts on certification examination fees and study materials when membership is purchased first.
Mir Ahmad is a certified Project Control Professional with more than 11 years of experience in the industry. He is a senior program/project controls analyst who works with ARCADIS North America, supporting a confidential pharmaceutical client. Mir’s experience includes outstanding project control services ranging from schedule development, analysis, and management to cost controls and risk management. He has always played pivotal roles whenever involved in any program or project. His wide range of experience across different industries, such as pharmaceutical capital programs/projects, federal funded programs, environmental projects, and financial institution program, have made him a versatile project controls professional among his peers.

Mir had a rough life growing up; he was born in Kabul, Afghanistan, during the Russian invasion, which was followed by civil war. He was five-year-old when his family fled from the war to Pakistan and faced hardships, struggles, and failures. But despite the difficulties, eventually he received his bachelor’s degree in civil engineering from CECOS University of Pakistan. In 2009, Mir moved back to Afghanistan and started his career as a civil engineer with an international NGO, supporting rehabilitation of historical places in Kabul.

Mir’s interest in project controls/project management started when he was a student of civil engineering; however, his actual journey did not start until his second job, with AMEC Foster Wheeler (now it is known as Wood Group) in November 2010. Mir started as an entry-level scheduler supporting federally funded architecture and engineering services (Known as Title I services) program to help Afghan National Security Forces. Project Controls, especially scheduling, was very uncommon those days in a country that was just coming out of the civil war; changing people’s perceptions and behaviors in the industry was nearly impossible. However, Mir along with his other colleagues in Kabul took the initiative of implementing project controls for AMEC Title I services, which was very successful and considered as a pilot in the country. Mir played a pivotal role in developing the processes, procedures, templates, conduct training, and instructions as this is required for a professional project controls team.

In 2013, due to Mir’s exponential performance, AMEC decided to bring him for a week to the United States of America to share his experience and knowledge with his peers. As the US footprint started shrinking in Afghanistan, Mir transferred to Philadelphia, US, to lead a scheduling effort for another large scale project.

Since early 2017, Mir joined ARCADIS North America; He manages more than 100 plus Integrated Project Schedule (IPS) manually on behalf of a pharmaceutical client. Mir leads the early front-end planning and schedule, analysis, constructability review and review contractors schedules, improves the process, digitizes the manual processes, and helps synchronize processes and procedures globally within the organization.

(continued on next page)
Mir’s continued learning desires made him competent and marketable. He was in the first 10 people who passed the Project Management Professional (PMP) in Afghanistan in 2014, and he helped several of his fellow countrymen and colleagues to improve their project controls skills and preparing them for the PMP exam.

Mir found out about AACE International in 2013 on his trip to the United States of America from his mentor James Sobkowiak, Principle Project Controls Manager at Wood; however, being in Afghanistan, he was not able to become member of AACE International until 2017, after joining ARCADIS. Mir attend and presented for the first time at the AACE Conference & Expo in 2019 in New Orleans. He is excited and proud of this achievement as an AACE International family member. At his first presentation he co-present with Chris Carson, an industry leader, and their session on “Capital Improvement Program Stage-Gate Planning and Scheduling,” was very popular in the conference and ranked 1 of 112 with a great turnout. He is working on his second paper for the 2020 AACE conference, again co-authoring with Chris Carson.

Mir considers AACE International home and its member as family because AACE International is the only professional organization that focuses on the project controls and has wide range of attendees from entry-level raising professionals to highly experienced industry leaders and founding-fathers of project controls. The conferences and communities are the platforms where knowledge, experience, and research papers can be shared, debated and improved among the PC professionals. Mir joined the Rising Professional Committee in 2018; his vision for the committee is for RPC to be a pipeline or a bridge/platform that eliminates the gaps between young talented professionals and the industry leaders/ founding-fathers of project controls.

One of Mir’s favorite advice quotes is: “Do the right thing right” the slogan he learned from his first PC manager, Richard Campbell. Mir followed this advice religiously and would advise the young professional to take the extra mile and always try to follow the right processes, procedures and industry standards.

The show must go on; the next generation of young professionals are the industry leaders of future; therefore, Mir’s advice is to get out of your comfort zone and be a member of a great AACE International network to make connections and collaborations with you other fellow members and future industry leaders.

AACE’s 2020 Conference & Expo registration is open – and we’ve got lots of reasons to celebrate. The 2020 Conference & Expo will be June 28 – July 1, 2020 at the Hilton Chicago. For project and cost controls professionals who are seeking to learn and demonstrate the expertise to ensure successful project outcomes, AACE International is the only source for superior technical resources and connection to industry thought leaders. AACE’s Conference & Expo is the largest and premiere annual event for project and cost controls professionals.

Key features to the 2020 Conference & Expo:

• Over 100 hours of technical presentations will challenge you to better manage, plan, schedule, and implement technology for more effective and efficient business practices
• Continuing education seminars – before and after the event, including training for AACE certification
• Lots of networking events
• Exhibit hall and showcase presentations
• Hotel discounted room rate
• Hotel discount off your conference registration if you are staying at the host hotel
• Membership discounts
• Group discounts
• Continuing education units (CEUs) to help you in the recertification process

The peer-reviewed technical papers presented in the program represent the best and most current tools and techniques used in the industry covering a wide-range of programs and projects. The technical tracks include:

• Adverse Conditions, Building Information Modeling (BIM), Claims and Dispute Resolution, Cost and Schedule Control, Decision and Risk Management, Estimating, Earned Value Management, Fundamental Skills, Global Projects, IT/IM in Project and Cost Management, Owner Issues, Project Management, Planning and Scheduling, Professional Development, Total Cost Management, and Total Cost Management Analytics

The location at the Chicago Hilton provides opportunities to explore the sights and cuisine of Chicago just steps away from the host hotel. Please join AACE for the 2020 Conference & Expo. The conference web page has the latest information and will be updated as new information becomes available. Online registration through the website offers a convenient way to reserve your spot – and to ensure that you are getting the hotel discounted rate. Go here to book your hotel room (do this first to get the hotel discount) and then to register: http://bit.ly/2020ConExRegis.

We look forward to seeing you in June!
The slate of candidates for the 2020 AACE International election for both the AACE Board of Directors and for the AACE Membership Board is announced by the Nominating Committee, chaired by Past President John Ciccarelli, PE CCP PSP FAACE. A bio and goals and objectives, as well as a photo is listed for each candidate if provided by the nominees.

The AACE membership had the option to add candidates by submitting a petition signed by 20 members in good standing before Dec. 15, 2019. To add a candidate or candidates by petition, the petitioners had to obtain a signed written agreement from the candidate that they accept being added as a candidate and they will serve if elected. Included with the petition submission had to be a bio, goals and objectives and a photo of each candidate being added by petition. The AACE Nominating Committee received one petition and added one candidate as one of three now vying for the office of Vice President – Finance. See the box at right for the 2020 slate of candidates at a glance.
The slate of candidates will be posted at the AACE website and will be published in Source magazine. Electronic voting will begin February 1, 2020 and continue through 4 p.m. Eastern Time on March 15, 2020 at the AACE website, web.aacei.org. Dues paid AACE members as of Dec. 31, 2019 will be eligible to vote by logging in with their username and password. A six-digit AACE ID is required, if your member number does not have six digits, add zeros in front of your member number to make it a six-digit ID.

The AACE Bylaws call for a bio, goals and objectives and photo of each candidate to be provided to the membership by November 15 to give the membership time to review the Nominating Committee’s slate and to file any petitions to add candidates prior to the December 15, 2019 submission deadline.

Following are candidate bios, goals and objectives and photos as submitted by the candidates. Some candidates opted to submit longer bios and little or no goals and objectives and/or a photo.

ADDING CANDIDATES BY PETITION
Prior to the election start, the AACE Bylaws provide the membership the option to petition to add candidates. The Bylaws, Article II, Section 4, reads: “Other nominations for the office of Director, or the office of an Officer of the Association, except for the position of Vice President Technical Board, Vice President Education Board and Vice President Certification Board, may be made by petition signed by at least 20 members in good standing. The petitioners shall be responsible for (a) obtaining in writing the agreement of the nominee to serve if elected, (b) securing the biographical data of the nominee, (c) submitting the petitions, the agreement, and the biographical data to be received by the Vice President-Administration no later than December 15th 2019. Each candidate’s name and biographical data shall be made available to the membership no later than December 31st 2019.”

TO VOTE, MEMBERS MUST CAST A BALLOT ELECTRONICALLY ON OR BEFORE 4 PM. EASTERN US TIME ON MARCH 15
Election of officers and directors will be by use of an electronic ballot. The official election ballot for officers will be posted and available to each member and associate member on February 1, 2020.

Members will link to the voting site from the AACE website homepage. Once at the site, members will use their member ID and password to access the ballot and vote. A six-digit ID is required. If your AACE ID number does not include six numbers, just add zeros in front of the ID to make it a six-digit ID.

Each voter shall properly signify on the ballot the voter’s choice for the various offices. A security feature of the electronic voting system allows members and associate members to vote only once. A voter can print out a receipt that will include an individual verification number as proof of having voted.

For election of Directors-Region(s), these candidates will be listed as a continuing or additional page for members or associate members in the regions electing candidates during the 2020 election. Each voter shall properly signify on the ballot the voter’s choice for the director. Any member or associate member with questions or other concerns is asked to contact Headquarters for assistance.

Voting will end as of 4 p.m. eastern US time on March 15, 2020. The electronic system will block any voter from casting a ballot after 4 p.m. on March 15, 2020.

JAMES E. KREBS, PE CCP FAACE
Jim has been an active member of AACE International since 1986, all as a member of the Great Lakes Section having served as President, along with various other board positions. For his dedication to the Great Lakes Section, Jim earned the Charles V. Keane Distinguished Service Award. Jim achieved the rank of Fellow in 2012 and was awarded the O.T. Zimmerman Founder’s Award in 2019. Jim served on the Association Board of Directors as the Director of Region 4 in 2008 and 2009, and the Vice President of Administration in 2015 and 2016. Jim has presented papers and training sessions at AACE Conference & Expos and quarterly board meetings. Jim is the Senior Vice President of Administrative Controls Management, Inc. He has over 33 years of project management, project controls, and construction experience including planning, scheduling, estimating, cost controls, claims analysis and testimony, field supervision, and administrative services. His experience includes automotive, heavy construction, nuclear power, light manufacturing, refinery, and industrial projects. Beyond traditional project management, Jim has developed and implemented a computerized application for integrating cost and schedule control for a large engineering department; provided expert witness testimony for claim; written a project controls procedures manual for a major construction project; and prepared data for utility rate cases.

GOALS AND OBJECTIVES:
As an active member of AACE for over 30 years, I have gained a deep respect for AACE, its members, and staff. My prior leadership positions within AACE has given me an appreciation for the hard work, care, and passion of the dedicated volunteers that give of their time and talents for the good of AACE and the profession. To honor our volunteers, AACE must thrive and provide the highest quality technical products, comprehensive educational offerings, and unparalleled certification program. The Association needs strong and effective leadership. As the President, I will strive to:

• Work closely with the Executive Director, staff, and the Board of Directors to support and strengthen effectiveness and efficiency of the Association;
• Continue the existing efforts that are working to add value to the membership;
• Promote AACE in all regions to expand our membership, looking for new ways to reach cost engineers that would benefit from AACE membership;
• Expand the value of AACE through its body of knowledge, certifications, career development, and networking;
• Support the evolution of AACE events and activities to better serve our members in an ever-changing world with evolving ways to communicate and work;
• Assist in identifying ways to attract and energize the next generation of AACE leaders;
• Continue to be an advocate for active membership, annual conference attendance, technical and educational product development, and certification advancement;
• Strive to give back to the members and the profession the same benefits I have received for over three decades.
PATRICK M. KELLY, PE PSP

Patrick M. Kelly is a construction claims analyst and testifying expert with more than twenty years’ experience. In his career, Patrick has been a US Navy Civil Engineer Corps officer, a contract & construction manager, and a scheduler & project controls manager. He has worked on both large and small projects – for contractors and owners – on transportation & infrastructure, shipbuilding & ship repair, hotels & condominiums, and government & public facilities. He is an expert in project controls, Critical Path Method scheduling, earned value analysis, and forensic schedule analysis for delay and disruption. With this experience, he has qualified and testified as an expert in the US and internationally. He is a Professional Engineer and is certified as a Planning and Scheduling Professional by AACE. He has also written and published many articles on scheduling and Forensic Schedule Analysis and provided training on both software and CPM methodology to schedulers, analysts, and construction professionals. During his career in construction, Mr. Kelly has relied on the superior papers and Recommended Practices developed by AACE, and as a result he joined in 2007, and earned his certification as a Planning and Scheduling Professional in 2008. Since then, he has been actively involved in AACE, by submitting papers for publication in Cost Engineering journal and presentation at the Annual Conference & Expo. Additionally, Mr. Kelly held the Chair of the Claims and Disputes Resolution Technical Subcommittee for three years, served on the Board of Directors as Director, Region 2 for two years, and is currently finishing a term as Vice President Finance. His deep respect for AACE’s mission and superior technical content drives him to continue to seek ways to serve the organization and further its goals.

GOALS AND OBJECTIVES:

If elected, Mr. Kelly intends to facilitate growth and professional development among cost engineering professionals by:

• Building upon the momentum that we have created in ensuring the continued financial success of AACE.
• Providing effective support for the conduct, control, and reporting of financial transactions in accordance with generally accepted accounting practices (as provided by Headquarters).
• Coordinating closely with Manager – Accounting and Administration and the Executive Director on financial matters.
• Providing timely, clear and concise communications to all stakeholders with regards to income, expenditures, forecast and balances for the prior reporting period.
• In coordination with all relevant parties, preparing annual budgets that further the goals of AACE in the coming years.
• Maintaining awareness, and monitoring when appropriate, operations to ensure that AACE achieves its organizational goals and fulfills its vision of becoming the gathering place and source of thought leadership for professionals who drive successful project and program delivery.

FELIX SOTO, EVP PSP

Felix is a highly sought-after senior consultant in the AEC sector, having worked with almost all main companies established locally. Joining his work experience in an important construction company and as an independent, he has 23 years of career doing consulting on infrastructure projects, mining, buildings, transmission lines and industrial plants.

Felix has an excellent background in planning, scheduling, control and project management, which has led him to become in witness expert and quantum & delay analyst in construction claims.

Felix has played many roles in the Peruvian AACE Section among them as President and he is currently a member of its Board of Directors permanently.

GOALS AND OBJECTIVES:

Having developed my whole professional career based on AACE knowledge, I have become a natural promoter for AACE´s products, services and programs. One of my main goals, not only for this election but for life is to make AACE globally recognized as the champion for Cost Engineering and Project Controls. As AACE has grown over the years, it should continue to set the standard on these matters. To make our organization even better, I plan to:

• Building upon the momentum created by my predecessor
• Provide timely, clear and concise finance reports to all stakeholders in order to make timely decisions supporting institutional goals.
• Assist regional directors and section presidents with improving section’s management. This involves addressing inactive sections and challenging strong sections with new goals.
• Continue to come up with ideas that will help AACE to be the number one institution in Project Controls all around the world.
• Increase the awareness and benefits of AACE and the certification program
• Support regional translations of the main AACE products to strengthen local understanding and therefore increasing membership and retainage of membership of the region.

This nomination means a lot in my professional career and I will not consider it as a job but as a payback to the institution that has given me so much.
DANILO ARBA
Danilo is a multi-discipline project control worker with over 15 years of direct experience in design, procurement, construction stages, M&E services installations, bridges, marine works and airports, with a verifiable track record in project control of multi-million/billion-dollar construction projects. Danilo lived all his life around the world in Asia, Africa, Middle East, and South/North America and he is used to living and working in a multicultural environment. Danilo has a strong passion for project control and project management activities, such as he is currently the Director of Region 9 of AACE International.

Danilo has previously held leadership positions in the Peruvian and Italian Sections of AACE.

GOALS AND OBJECTIVES:
Danilo has taken great benefits from AACE for his career and personal growth, and if elected, intends to continue to give back to AACE and the cost engineering community worldwide.

- Continue to enhance collaboration of AACE regions to increase the awareness of AACE international, its programs to support international understanding and to retain and increase membership worldwide.
- Ensuring AACE maintains financial solidity and increases its financial strength to better support its members.
- Ensure that budgets, financial reports are provided to all relevant stakeholders on time and correctly to ensure we meet AACE targets for the coming years.
- Ensure proper coordination with all internal AACE functions regarding all financial situations.
- Continue to raise awareness globally on AACE and to increase its leadership in the cost engineering community.

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https://eballot4.votenet.com/aacei/login.cfm
SANDRA MEJIA-VILLEGAS, P.ENG.

Sandra was born and raised in Medellín, Colombia. She is currently located in Vancouver, BC and she has been living in Canada for more than 12 years. Sandra obtained her bachelor’s degree in Mechanical Engineering from Universidad Pontificia Bolivariana and her Master of Science in Project Management from George Washington University in Washington, DC.

Sandra’s experience includes Cost Control Analyst at ConocoPhillips Canada, Cost Analyst at Turner Construction and currently, Sandra works for Parkland Refining BC as Project Cost Control Analyst.

AACE International has great meaning for Sandra. All the training, seminars and webinars taken have showed her the beauty of the project controls field. AACE International offers numerous professional resources through recommended practices, online training, webinars, mentorship, technical articles, local section’s meetings and workshops, as well as networking opportunities, which are valuable to any professional in the field. Sandra is currently serving as the chair of the mentorship committee and she was previously the co-chair for Women in Project Controls Committee. Sandra is also a contributing member of the Latin America Task Force, the Raising Professionals Committee and was part of the Vision 2020 committee. She feels that the exposure to highly experienced and passionate professionals gives her the courage and support to succeed in this field, as well as enhance her leadership skills in order to continue developing her career.

GOALS AND OBJECTIVES:

My main purpose on this role is to put all my energy and enthusiasm into our members’ best interest because our association only exists due to the contribution that is offered to all of you.

• Communicating with AACE leadership about current Canadian membership needs/gaps. Always focusing on what creates the most value for our members.
• Analyze and challenge existing strategies in order to stimulate members to actively participate with the association initiatives.
• Support all the programs, products, education and services that the association has for its members.
• Focus on strategy for the future of AACE Canada sections.

MUSTANSIR RAJ, P.ENG. CCP

Mustansir is an active member of AACE since 1994. He has a passion for project control and is very involved in his local Calgary Chinook Section, where he has served as Section President in 2004, 2016 and currently serving as Director of Certification. He has also served as Director Region 1 (AACE Canada President) in 2005. He was a member of AACE Technical Board and CEP Certification Task Force in 2005. As an instructor, he has facilitated numerous CEP, CCP and S&K workshops for the Chinook-Calgary Section.

Mustansir is a Professional Engineer with over 25 years of experience in construction management, cost estimation and project controls for petrochemical and oil & gas industries. He has worked with Klockner (KHD), Saudi Basic Industries (SABIC), Bantrel Canada, Jacobs Canada, Devon and Altran in various positions from project engineer to manager of estimating. He moved to Canada in 1998 and is currently working as a senior estimator with Canadian Natural Resources Limited (CNRL). He is a certified Competent Toastmaster (CTM), Competent Leader (CL) and served as the Area Governor-Region 1 of Toastmasters International. Mustansir is active in community services for Mustard Seed Drop-In Center, Interfaith Food Bank and is serving on the Board of Directors of the registered charity, Canadian Global Care (CGC) Society.

GOALS AND OBJECTIVES:

As Director Region 1, I will take initiative to promote and grow the organization. I will be committed to building a better and more inclusive organization. I will:

• Encourage synergy and teamwork across all Canadian AACE sections in order to achieve common goals, and work to build more efficient processes.
• Bridge any communication gaps between regional needs with AACE leadership.
• Communicate the important advantages and benefits that comes with being an AACE member, through promotion of its industry grade knowledge, and access to a network of seasoned professionals.
• Grow and nurture connections with wider professional communities to help build opportunities for cross-functional knowledge sharing, team building, and collaboration. This will also support new potential members and new graduates entering the workforce.
• Promote AACE awareness and professional development efforts through networking with partner organizations, planning events and presentations at universities and businesses, and social media engagement strategies.
• Assist AACE members in professional development through workshops and webinars.
• Highlighting and promoting the various advantages of completing AACE’s international certifications.
MICHAEL J. BENNINK, PE CCP PSP PMP

Michael has been an active member of AACE International since 2002 and is currently the President of the New Jersey Section. He holds the CCP and Planning and Scheduling certifications, is a licensed professional engineer in New Jersey and Pennsylvania, and is a Project Management Professional. Michael has made numerous presentations at section meetings, the Region 2 Symposium, and the Annual Meeting. He is currently an active member of the Region 2 Symposium planning committee and is a past member of the Association Certification Board. His professional expertise focuses on claims and dispute analyses, forensic cost and schedule assessments, and project controls focused engagements. Michael is currently a Vice President at JS Held based out of New York and recently finished his term as President of the New Jersey Society of Professional Engineers. He has a BS in mechanical engineering from RPI and an MBA from Monmouth University.

GOALS AND OBJECTIVES:

• First and foremost - support the Region 2 sections and unaffiliated members administratively and provide a leadership role for section and member collaboration.
• Work to ensure the continued success and growth of the Region 2 Symposium by capitalizing on the strong leadership and extensive contributions of the organizing committee members, extensive knowledge base of the presenters, and generosity of the corporate sponsors.
• Ensure the Region 2 Symposium is aligned with the goals and requirements of the Association.
• Seek to develop new opportunities for the voice and development of rising professionals in region and section events and leadership.
• Locate opportunities to collaborate with other professional organizations on a region and local basis.
• Encourage the expansion of the use of platforms such as webinars and virtual meetings to facilitate technical development.
• Facilitate the sections ability to reach out to un-affiliated members to encourage section alignment.
• Work closely with the Board of Directors and the Associate Boards to support and communicate the Association’s goals and objectives.
• Serve as communications liaison between the Membership Board and the Region 2 sections.

PRAD MARAJ, PE PSP

Prad Maraj, PSP, has more than 36 years of construction management experience in project controls for transportation, facility and infrastructure rehabilitation projects. He manages a JMT’S project controls practice. He is the Past President of the Baltimore Section of AACE and Past Co-Chair of the Claims and Disputes Resolution Committee. Mr. Maraj has also developed and conducted training courses on CPM scheduling, claims analysis and prevention for various public agencies. Since obtaining certification, Prad has relied on AACE Recommended Practices to guide his practice and understands the importance of keeping the organization a vibrant and valuable resource to the industry. Having both international and domestic experience in construction, Prad is keenly aware of some of the challenges facing younger AACE members in becoming engaged, both in the USA and internationally.

GOALS AND OBJECTIVES:

• Foster a culture of engagement in Region 2
• Provide a roadmap to increasing member participation by outreach to schools
• Assist section Presidents to attract rising professionals
• Offer scholarships to local colleges
• Establish a mentorship program.
DAYNA ANDERSON

Dayna Anderson has worked in project controls for over 16 years. She is co-founder and Senior Partner of Breakwater Forensics LLC, headquartered in Chicago. Her work as an expert witness includes analyzing construction cost overruns and schedule delay claims, as well as counseling subcontractors, contractors, and owners on project controls recommended practices. She has worked on both small and mega construction projects ranging from residential housing to oil refineries and power plants in national and international forums. As former President of the AACE Chicago-Midwest Section and a Board member for many years, she is very familiar with AACE’s overarching goals and objectives.

GOALS AND OBJECTIVES:

• Increase AACE membership.
• Encourage local section outreach to other relevant construction-based organizations to facilitate joint meetings, which will increase the visibility of AACE.
• Encourage campus outreach to grow student membership. My experience as an Institute of Management Accountants Campus Influencer will allow me to expand AACE’s current program.
• Increase the diversity of the local section membership and leadership.
• Increase communication between local, regional and national leadership.
• Encourage local sections within Region 4 to have quarterly calls/meetings to share ideas for local and regional meeting content.
• Gain an understanding of national initiatives and assist local sections to successfully implement.

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https://eballot4.votenet.com/aacei/login.cfm
HAYA S. SALEH, PSP

Haya S. Saleh, PSP, is a planning, scheduling and claims consultant with almost 19 years of rich experience in construction industry especially in scheduling and delay analysis. Haya became a member of AACE since 2007 and she has maintained her membership ever since.

Haya holds a MSc. degree in Industrial Management and B.Sc in Civil Engineering from the University of Jordan; she is a Certified Project Manager (CPM), certified (Planning and Scheduling Professional (PSP-AACE/USA), and Associate Member Chartered Institute of Arbitrators (CIArb).

Haya is currently the General Manager and Founder of MESC, a construction management entity in Jordan. Haya started working in contracts, claims and delay analysis in 2003; during which time she worked as a scheduling and claims consultant in a large number of local and international projects.

Haya was a part-time instructor at the University of Jordan, and a trainer at the Jordanian Engineers Association, she has clocked more than 4,200 training hours in the area of planning and scheduling.

She is currently the President of AACE Jordan Section, a position she has held since 2017, and she has delivered more than 15 free seminar, workshops and training during 2018 under the name of the Jordan Section umbrella to promote AACE International in Jordan.

GOALS AND OBJECTIVES:

- Increase the awareness and the importance of AACE’s credentials and certifications.
- Increase the knowledge and skill level for the fresh graduates.
- Encourage universities, colleges and professional associations to have AACE’s courses and seminars within their curriculum and programs.
- Increase the membership in the region by encourage professionals to be a member of AACE and increase the members’ contribution to improve the region and local sections.
- Make a yearly plan for AACE activities in Region 7.
- Address educational and professional challenges in Region 7 and to be sure to meet AACE’s objectives.

LUCIA VERNON, PSP

In 2016, Lucia accepted the invitation to be part of the AACE Qatar Section Board of Directors in the role of Director of Marketing and Publicity. In 2017, she became President-Elect which was the precursor to the taking on the President role for the 2018-2019 period. In her previous roles Lucia helped the organization to host regular technical workshops, she delivered the workshop ‘Practical Training – Windows Analysis’ and helped the team to organize best practice events with industry experts to further enhance awareness of AACE International amongst professionals in the State of Qatar and the Middle East. She recently developed the recommended practice paper for AACE (CDR.2849) ‘Time Impact Analysis in Windows - Concurrency Analysis’ which was accepted for presentation at the AACE Annual Conference & Expo 2018 in San Diego, USA.

In her professional life she holds the position of Forensic Planning Director working for Quantum Global Solutions as a delay analyst with 13 years’ experience in carrying out all types of forensic delay analyses in several different countries. Recently she has been managing the planning department.

She has a sound working knowledge of planning software programs including MS Project, Primavera P3 and P6 and forensic guidelines such as AACE Recommended Practice 29R-03. She has used these expert skills across multiple sectors including hotel development, football stadia, convention center, power station construction, water and wastewater management, infrastructure, petro-chemical development, nuclear power and building construction. Lucia has an RICS recognized ‘Legal Experience Training Advanced Professional Award in Expert Witness Evidence (LETAPAEWE) accredited by Pearson Learning at a level 7 (Masters level) BTEC.’

She consistently takes a proactive approach and has good interpersonal skills which are essential elements that enable her to produce the required analysis schedules for claims and produce high quality and consistent results.

She believes that, a big part of her success story is due to reading the documentation available on the AACE International portal, being informed and adopting the knowledge which AACE offers to professionals around the world. She believes in the motto “Work hard, follow your dreams and they will come true.”

GOALS AND OBJECTIVES:

One of the main goals for myself will be to unify the Region 7 members, to give everyone the opportunity to see the benefit that AACE brings to its members in other parts of the world. Also, it is important that our organization is supported by the state authorities in the Middle East so that our members will be recognized for their knowledge that they gained from AACE membership.
JOHNSON AWOYOMI, CCP CEP
Engr. Johnson Awoyomi is the Group General Manager Engineering and Technical Division, in Nigerian National Petroleum Corporation (NNPC). He graduated from the University of Ife with a bachelor’s degree in chemical engineering in the mid ‘80s. He was the Senior Technical Assistant to Hon Minister of State for Petroleum Resources Nigeria. He oversaw transparency, accountability and efficiency (cost and contracting cycle issues, performance management, etc.) in the oil sector. His career journey in NNPC has run through NETCO, Nigerian Content Division, Transformation Office and Cost Engineering Division. He is a PMP, a COREN registered engineer and belongs to many professional associations. He is President of the AACE Nigeria Section. He has organized two Nigerian Section Annual Meetings (Lagos 2017, Abuja 2018, and the 2019 edition is scheduled in Portharcourt). He is married with three children.

GOALS AND OBJECTIVES:
My goals and objectives will include, but not limited to:

• Entrenchment of AACE Total Cost Management (TCM) principles in the management of capital program in my region by engaging key stakeholders on the value and benefits of deploying TCM. This approach is working currently.

• Growth: The growth of sections in the Region will be my priority – through publicity of the benefits of membership.

• Annual Conferences: I will ensure that each Section in the Region continues to have its own Annual Conference and encourage other Sections to start doing this.

• Regular Meetings and Effective Communication: Will encourage and ensure regular meetings or telephone calls.

• Capacity Development: I am going to encourage technical activity capacity development within the Regions by having regional workshop/seminars, etc., at least once year.

• AACE Certification: Will encourage each Section president to have a goal to increase the number of AACE Certificants in their respective Sections yearly. This will be supported by deliberate AACE Certification program.

• Attendance at AACE Annual Conferences: I am going to put in place a mechanism that will enable massive participation of our members at the AACE Annual Conferences.

• Will encourage our members to be active in presentation of technical papers at both the regional and AACE Conference & Expo; Maintaining a strong technical and educational program; Establishing local technical study groups and Coordinating technical committee activity at the Section level with the various AACE technical committees. Teamwork: I am going to work collaboratively with each of the Section Presidents to ascertain their problems and concerns and assist in resolving them. Outreach programs for both students and young graduates; Collaboration with other professional bodies; Creation of new sections as may be required.

JOAO PAULO MATOS DIAS, PSP
Mr. Dias is a certified Planning and Scheduling Professional by AACE International. He has developed his academic interests in heavy infrastructures through the Integrated Master’s Degree in Civil Engineering at the University of Coimbra, Portugal, between 2004 and 2009. Further interests in Construction Management led him to complete a Postgraduate Diploma in Project Management at the University of Lisbon, Portugal, in 2012.

Mr. Dias is a chartered Civil Engineer with approximately 10 years’ experience. Throughout this period his responsibilities included Planning, Scheduling, Cost Estimation and Control, and Change Management, performed in some of the world’s largest construction companies and in large-scale international infrastructure projects at tender and/or construction stages.

His whole career has been developed in several different countries in Europe (Portugal, United Kingdom, Netherlands, Lithuania, Latvia and Estonia), Africa (Algeria, Cameroon, Congo and Niger), Central America and the Caribbean, where he had the chance to be the counterpart of key stakeholders namely from major subcontractors, governmental clients, international consultants, among others, which has given him a truly global perspective of the construction markets and business.

GOALS AND OBJECTIVES:

• Consolidate the current Sections in the region, promoting more dynamism and networking opportunities.

• Promote the creation of new Sections in the region.

• Add greater added value to the memberships in the region, through integration activities between Sections and members, as for example: shared webinars, workshops, regular communications, etc.

• Seek greater benefits for the members of the region in relation to third party conferences and workshops, and potential other discounts.

• Implement a clear and integrated marketing strategy to attract new members in the Sections of the region, showing the benefits of belonging to the organization.

• Promote partnerships with other key organizations/association, universities and relevant working groups.

• Promote the TCM Framework and Recommended Practices across the industry and academic institutions.

• Facilitate the communication between young professionals in the region and the Rising Professionals Committee.
Understanding and Applying the Elements of Constructive Acceleration

BY CORY R. MILBURN, CFCC PSP; BRIAN J. FURNISS, PE CFCC PSP; AND MATTHEW NICHOLS, PSP

ABSTRACT
Constructive acceleration happens far more often than realized and may cause substantial consequences to both contractors and owners. This article highlights the various elements of constructive acceleration, explains the “why” behind each of those elements, discusses considerations regarding compensation for delays, and applies real-life case studies where these elements were brought to light. While describing each element, the authors will address common errors made in analyzing and responding to constructive acceleration scenarios. In addition, and perhaps most importantly, this article will include recommendations for preventing constructive acceleration claims for on-going projects. This article was first presented as CDR-3214 at the 2019 AACE International Conference & Expo.

DEFINING ACCELERATION IN THE CONSTRUCTION INDUSTRY
Acceleration is the process by which work is sped up to complete a milestone earlier than planned. [1, (6-2)] This sounds relatively easy, but acceleration in the construction industry is often more difficult and expensive than envisioned at the outset. When parties choose to accelerate, they should do so carefully and, preferably, based on a decision to improve time and, as a result, improve their financial standing in the project. Accelerating a project is not always the right choice, and, as this article will illustrate, it’s not always the accelerating party’s choice to make.

Voluntary acceleration is straightforward – the contractor voluntarily accelerates his or her work. [1, (6-4)]
Voluntary acceleration may occur when a contractor has caused, or will cause, delays or for business or financial justification, decides to accelerate to achieve an earlier-than-planned completion. The reason to voluntarily accelerate may be to mitigate delay damages caused by prior delays, maintain a positive relationship with its client, make resources available for other projects, or some other reason. The key point is that under the voluntary acceleration scenario, the contractor is the only entity responsible for the cause, cost, and outcome of the acceleration effort.1 The contractor does not argue or dispute the reason the acceleration occurred, does not make a claim for the acceleration costs, nor does the contractor dispute that it was the sole reason for the acceleration.

Conversely, directed acceleration occurs when the contractor is required to accelerate based on an outside party’s formal direction to complete the project earlier than planned or contractually required.2 Directed acceleration may originate from the owner’s direction to the contractor; it may come from a contractor’s direction to a subcontractor; or it may come from an installer’s direction to a fabricator or manufacturer.3 The key difference between voluntary and directed acceleration is that directed acceleration includes direction from one party to another to complete the work earlier than required by the contract, and voluntary acceleration is performed based upon no direction but is instead a self-imposed action. Owners will rarely direct acceleration and agree to the additional costs, and potentially the additional risks, without acknowledging responsibility for the cause of the acceleration.

Common causes of directed acceleration include mitigation of delay caused by a design change, delays as a result of abnormal weather, union strikes, or any other risk that the owner may be responsible for in the contract. As with other change directives, the owner should review the contractor’s acceleration plan, estimated acceleration costs, and risk provisions to ensure the owner agrees with the increased cost resulting from an acceleration directive. Common change order considerations for directed acceleration include review of contractor clarifications or exclusions that may “muddy” the issue later, if the acceleration does not achieve the required improvement in the completion of the work. Other considerations include confirmation of subcontractor and supplier buy-in and acceptance of responsibility for achieving the directed acceleration. The primary consideration for directed acceleration is the owner’s acceptance of the cost and risk associated with compensating the contractor (and subcontractors) for the cost to achieve an early completion.

Constructive acceleration is more nuanced than both voluntary and directed acceleration. Like directed acceleration, constructive acceleration results from the owner’s actions.4 The difference between directed and constructive acceleration is that, in a constructive acceleration scenario, to the owner does not direct the contractor to accelerate the work. Instead of providing a justified time extension when the contractor has properly requested it, the owner does not timely adjust the completion date, thereby requiring the contractor to complete the work earlier than would be allowed by the time extension. [2, (499)] This action constructively forces the contractor to accelerate to finish the work earlier than the date substantiated in the time extension request. Because of the extended time on the job, the contractor is already exposed to increased jobsite and home office management costs, but the owner’s reluctance to properly grant a required time extension increases the contractor’s exposure to liquidated damages, back charges, or other delay damages assessed by the owner.

While the nuances of voluntary and directed acceleration are important for managing projects and preventing disputes, this document will focus on constructive acceleration. The document will provide case studies of actual examples of alleged constructive acceleration to highlight key factors that may augment the determination of whether constructive acceleration occurred.

### STEPS TO CONSTRUCTIVE ACCELERATION

Prior publications have outlined the typical requirements to prove constructive acceleration, as shown in Figure 1.5 [4]

As shown in Figure 1, these events generally originate with an excusable delay, followed by the contractor’s request for additional time in compliance with the contract documents. The owner either refuses to grant the time extension, fails to respond to the contractor’s time extension request, or tells the contractor that a time extension will be considered at the end of the project. The contractor then notifies the owner of the constructive acceleration of the work, followed by the contractor’s acceleration effort.

The following subsections expand upon the steps summarily described in Figure 1.

#### Step 1: Excusable Delay Event Occurs

The first step toward constructive acceleration is that an excusable delay event occurs, entitling the contractor to recover from the delays resulting from the event.6

However, the occurrence of an excusable delay event may not necessarily justify a time extension. The contractor must next determine whether the excusable event

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1 The voluntary acceleration scenario described here assumes that the contractor accelerated its work and there is no effect on its subcontractors or vendors.
2 Directed acceleration can also be defined as “Actual Acceleration.” See [11 (6-4)].
3 This is not an exhaustive list. In essence, one party directs acceleration of another party, and the party directing the acceleration agrees to pay the price for that acceleration. To prevent duplicative listings throughout this document, the majority of the examples will focus on the parties as being an owner and a contractor, but that simplification is not intended to ignore that these same issues exist among other parties.
4 The authors also consider a “lack of action” to be an “action” in the context of this document.
5 These requirements may vary depending on the legal jurisdiction and the project facts. The authors are not attorneys, nor is their intent to offer any legal opinions within this document. The goal of the paper is to offer practical guidance to contractors and owners that face this situation, and encourage the parties to understand the risks and make the best decision for their respective organizations. The authors encourage the parties to seek legal counsel to understand the construction acceleration requirements relevant to their jurisdiction.
6 Throughout this document, the authors refer to a contract completion date as being in reference to the total project duration, but that reference is for simplicity and consistency reasons. Time extensions may be due for interim contract milestones that precede the project completion date. The delay event and subsequent time extension requests do not necessarily need to be based on the contract end date, as contracts often contain interim milestone date requirements that also result in additional costs and risks to the parties.
controlled the critical path throughout the duration of the event. The determination of whether the excusable event controlled the critical path through the contract milestone is essential to seek a time extension to the milestone. The contractor must demonstrate that the excusable event is not only on the critical path and causing delay, but that the excusable event extends the planned milestone completion date beyond the contract milestone date.  

Step 2: Contractor Submits a Time Extension Request

Step 2 begins with the review of the contract requirements for submittal of a time extension request for the delay. The contractor should review the contract requirements in detail but, at a minimum, the following items should be identified:

- **Timing for the delay notice** – Identify the timing required for issuance of a delay notice to the owner.

- **Correspondence format for notice submission** – Identify the correspondence format for the notice (email, letter, phone call, etc.) required by the contract. While providing notice in strict accordance with the contract requirements cannot be overlooked, neither can the benefit of having open conversations with the client. An informal meeting or conversation with the owner regarding the pending time extension request may benefit the relationship, communication, and trust among the parties.

- **Submission timing** – Identify if the contract prescribes a specific time period for submittal of the time extension request. For example, presume the contract requires the time extension request be submitted within 20 days after the start of the owner’s delay event. This is a different requirement than if the contract required the time extension submission within 20 after the completion of the delay event. Should the contract require a more rapid submission time, such as submission within 20 days after the start of the owner event, the contractor can submit the time extension request based on

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*The determination of an excusable event is based on the contract. Force Majeure, concurrent, unforeseeable weather, and owner-responsible delays (“owner events”) are examples of events that may cause an excusable delay. For simplicity, the remainder of this paper will often reference an “owner event” as being the basis for the delay even though other events may also substantiate an excusable delay.*
the information known at that time, and clarify that the full duration of the owner event is currently unknown and that the time extension request may be supplemented at a later date if the delay extends beyond what was shown in the original analysis. If the contract is unclear on the timing requirements for the submission, the contractor should give careful thought to erring on the side of caution and submit the documentation as soon as the analysis is completed and, again, identify that the unknown duration of the owner event may require supplementation or adjustment. In this situation, clear, open communication is of great importance for both parties.

*Delay analysis method* – Identify if the contract prescribes a specific delay analysis method and submit the time extension request in accordance with that method. It is beneficial to the contractor and owner to forecast the potential effects as soon as practicable, so that potential “what-if” acceleration or mitigation discussions can take place. In this context, a forward-looking time-impact analysis (TIA) via use of fragmentary network (fragnet) schedules may be the most-timely way to submit a time extension request [3], thereby allowing the parties to begin discussions on how to potentially mitigate the delays.

Should the contract preclude the submission of a forward-looking TIA, the contractor should comply with the method prescribed in the contract. However, even in such a case, prospective analysis and discussions may enhance the parties’ understanding of the issue and ability to mitigate the delays.

*Supporting documentation requirements* – Identify the supporting documentation required in the time extension submission. For example, the contract may require the contractor to simply submit a printout of the critical path that shows the owner event delaying the contract milestone date for the additional time requested. Other contracts may require the same print of the schedule before the event occurred and after the event occurred, submissions of the schedules in a native software format, a report that identifies all changes made to the schedule in performing the analysis, along with a narrative explaining the analysis. The submission requirements amongst different contracts and specifications vary greatly and the contractor’s adherence to those requirements are important for properly obtaining a time extension. The improper submission of a time extension may also limit the contractor’s recovery of additional costs resulting from constructive acceleration.

Should time permit, it is recommended that a meeting take place between the contractor and owner (or subcontractor and contractor) early in the process to keep the dialogue open and attempt to gain agreement on the process and information required for the submission. Regardless of whether the parties agree on the process required, follow the contract requirements, as doing otherwise could delay the resolution of the time extension, and allow the owner an opportunity to reject the time extension for non-compliance with the contract.

Finally, submit the time extension request and request a post-submission meeting with the client for a formal briefing, along with a question and answer session. Attempt to obtain agreement to a path for resolution and follow the contract requirements toward the successful resolution of the time extension.

**Step 3: Owner Fails to Provide Time Extension**

Presuming the contractor submitted its time extension request in accordance with the contract requirements, Step 3 is within the control of the owner. The owner may reject or accept the time extension request, reject or accept a portion of the time extension request, require additional detail, not respond to the request, or communicate to the contractor that the time extension will be considered upon completion of the work. If the owner rejects the time extension request or requires additional information, it is recommended that the owner cite the areas of noncompliance and justification for rejection. If the time extension request did not comply with the contract requirements, then the owner’s rejection of the time extension request may not cause the contractor to constructively accelerate.

As with the contractor, it is recommended that the owner follow the contract requirements for the basis of acceptance, rejection, or request for additional information. Creating noncontractual or unreasonable demands during the evaluation may intensify a potentially difficult situation among the parties. The prudent owner acknowledges responsibility for delays it caused and provides appropriate time extensions required by the contract. Doing otherwise may appear to be a successful negotiation tactic or a reasonable path towards “we’ll settle it later.” However, rather than strengthen the owner’s position, this approach increases the owner’s exposure to constructive acceleration costs and increases the likelihood that a resolvable change order will transform into a dispute.

For the purposes of this document, presume the owner rejected the contractor’s justified time extension. Other publications have discussed that the owner “must then act by coercion, direction, or in some other manner that can reasonably be construed as an order to complete the work within the un-extended time.”[4] For the purposes of this paper, presume that the owner’s denial of a properly submitted and supported time extension represents a requirement, or “direction”, for the contractor to finish earlier than would have been allowed by the time extension.

**Step 4: Contractor Notifies Owner of Constructive Acceleration**

An owner’s improper rejection of the time extension request causes the contractor to face a difficult decision of either: 1) complete the work late with the risk of incurring the owner’s damages and incurring the contractor’s own additional costs; or 2) choose to accelerate in an attempt to reduce exposure to these costs.

The first option increases the contractor’s costs and risk without any assurance of payment. At the same time, the contractor’s continued completion of contract work may reduce the contractor’s position to recover additional time or money. Unfortunately, the second option is the most difficult situation and may be the most practical situation for the contractor – notify the owner that because of the owner’s action or inaction, the contractor is constructively accelerating the work.

By notifying the owner that it is constructively accelerating the work, the contractor is attempting to reserve its rights for recovery of the associated costs, thereby increasing the likelihood that the contractor will recover its damages. The
The last step is the most difficult, because the owner may realize that the continued failure to timely recover for constructive acceleration, the owner's risk of having to pay additional costs (acceleration) without obtaining any benefit for those costs via improvement of the planned finish date. The owner may realize that his or her position may make the situation worse, along with its own financial exposure, causing it to take corrective action. Nevertheless, in order to recover for constructive acceleration, the contractor should notify the owner that it is constructively accelerating work as a result of the owner's failure to timely grant a justified time extension.

As with the submission of the time extension request, the contractor should ensure it complies with the relevant notice clauses regarding constructive acceleration.

**Step 5: Contractor Accelerates**

The last step is the most difficult, because it requires the contractor to take additional actions and incur additional costs in anticipation of recovering those damages at later time. This can certainly be a difficult situation for the contractor but, as discussed in the prior step, may be no less risky than the exposure to liquidated damages, owner delay damages, and the contractor's own extended costs.

This document is not intended to be a detailed article on how to properly accelerate the work, as that topic is its own specialty and requires a great deal of consideration of the project characteristics in order to be correctly planned and implemented. However, should a contractor start the constructive acceleration process, the following items may help the contractor more accurately track its costs and simplify the quantification of construction acceleration costs as part of a change order request or claim:

- **Create a detailed acceleration plan.** Identify and itemize the specific actions that the contractor plans to take to constructively accelerate the work. This plan may change and, if so, the plan should be revised accordingly.

- **Include relevant subcontractors.** It is recommended that the contractor seek options and recommendations from its subcontractors that are affected by the constructive acceleration plan.

**Discuss the situation with the project team.** The contractor's project accountants, controllers, schedulers, and field personnel need to be aware of the situation. Tracking the items contemporaneously will improve the contractor's ability to later quantify and recover costs associated with the constructive acceleration.

- **Open new cost codes to track acceleration costs.** This will allow the contractor to more easily quantify the constructive acceleration costs contemporaneously. While initially a cumbersome task requiring increased monitoring and control, this process will help to ensure that costs are being tracked properly and do not include costs or hours already planned for performance of the original contract work without acceleration. The contemporaneous tracking of the constructive acceleration costs is important, and the contractor must be careful that codes used to track the constructive acceleration effort are not intermixed with unrelated costs. In defined intervals, the contractor should review these costs and provide descriptions of what work the costs pertain to, and why those costs were incurred as a result of the constructive acceleration effort. It is recommended that this review occur on a weekly basis or, at a minimum, monthly.

**Use the schedule to plan and update the accelerated work.** Identify the planned constructive acceleration activities in the schedule. Consider changing the relevant Activity IDs, calendars, activity coding, and other items within the schedule to allow the contractor's team to identify and track the activities representing the constructive acceleration plan.

**NO REQUIREMENT TO IMPROVE COMPLETION DATE**

The contractor must reasonably attempt to accelerate the work in order to claim additional compensation for constructive acceleration. [1, (6-7)] However, the contractor's acceleration efforts may not be required to improve the planned completion date. Remember, the contractor did not voluntarily accelerate but was instead constructively forced into the situation by another party and, as such, may not be required to demonstrate that the resulting actions accelerated the completion date. Forcing the contractor to demonstrate that its constructive acceleration actions resulted in a time-based improvement would further exacerbate the contractor's burden and heighten the contractor's financial risk, especially when considering that the contractor was forced into the predicament by the owner's actions.

In addition, the constructive acceleration effort by the contractor must not result in a time-based improvement because there are multiple factors that may influence the results of the acceleration efforts. Presuming the delay was compensable, the contractor is further placed into a position where it knows it will incur acceleration costs and additional delay costs during a weakened cash-flow position. An owner's assessment of liquidated damages and other delay costs would further exacerbate the contractor's problem, potentially putting the contractor in a position where it cannot pay the contractor's employees, subcontractors, or procure other resources required for the full implementation of the acceleration effort. Further, the acceleration efforts may cause trade stacking and productivity losses, further increasing the contractor's risk of not only having to resolve its differences with the owner, but also claims from subcontractors, vendors, and other parties.

Regardless of the effect of the constructive acceleration, the owner is responsible for the additional costs incurred by the contractor resulting from the constructive acceleration efforts. These additional costs often include but are not limited to the following:

- Premium or overtime wage differential costs
- Lost or reduced productivity costs
- Additional mobilization and demobilization costs
- Expanded field supervision costs
- Increased small tools and supplies to support additional labor
- Increased safety costs
- Increased equipment costs
- Additional project management and administrative staffing costs
- Additional material costs for expedited shipping, handling, or storage
- Increased subcontractor costs for overtime and inefficiencies
CASE STUDIES ON CONSTRUCTIVE ACCELERATION

CASE STUDY #1: EARLY COMPLETION AND CONSTRUCTIVE ACCELERATION

In this case study, presume that a contractor is completing a roadway expansion project adjacent to a stadium that will host a major sporting event 30 days after the contract completion date. Assume that the contract duration is 100 days, it is a design-bid-build project, the owner is responsible for the design, and the contract specified that Day 100 is a “No Excuses” date and the contractor is required to finish by that date.

If the contractor does not complete the work within the contract timeline, the Department of Transportation (owner) will have to re-route and detour local traffic to allow for the influx of traffic into and out of the event. As a result, the liquidated damages are substantial and to offset the risk of those damages, the contractor planned to complete the work in 80 days, or 20 days less than the time allowed in the contract. Figure 2 shows the contract time available and the contractor’s planned duration to complete the project.

Thirty days into the project, the contractor's schedule showed that it planned to finish within 80 days. On Day 31, during excavation work to expand the roadway, the contractor encountered an unforeseen condition. A break in a waterline under the existing road created the potential for a sinkhole where the new and existing roadways joined. The issue required the engineer to perform geotechnical investigations before it determined that the damage was minimal. However, the following additional work was required:

- Removal of a span of the existing drainage line
- Removal and over-excavation of the material near the broken pipe
- Placement and compaction of new material
- Replacement of the drainage pipe

The contractor completed Steps 1 and 2 of the constructive acceleration process by providing notice and submitting a time extension request for 30 days of delay in accordance with the contract requirements. Figure 3 summarizes the contractor’s request:

The 30 days of additional work was critical and was forecasted to delay the contractor’s completion date to Day 110. The contractor already planned to aggressively accelerate to finish earlier than required, and the magnitude of delay caused by the broken pipe could not be mitigated. Another concern was that the date of the major sporting event could not change. Therefore, the contractor was put in the position that any subsequent delays to its work would affect the major sporting event. What time extension is the contractor due?

One could look at this scenario and determine that the contractor planned to finish the remaining work by Day 110 and, therefore, the contractor would only be entitled to a 10-day time extension to the contract completion date (10 days beyond the contract date of Day 100). Another perspective could be that the contractor now has a higher risk of delaying the sporting event and incurring significant additional costs. One could also look at the “no excuses” language in the contract and require the contractor to finish by Day 100 or otherwise be responsible for payment of the owner’s damages.

The owner decided that it could not risk having the work finish any later than Day 100, as other event staging and pre-event setup was planned to occur before the event on Day 130. Therefore, the owner rejected the contractor’s time extension and cited the “no excuses” clause in the contract as its basis for rejection.

The contractor argued that the duration of the delay and additional work could not be mitigated and that the owner did not adequately inspect prior work on the drainage line or perform geotechnical investigations that would have identified the issue prior to the discovery by the contractor. The contractor notified the owner that it was being constructively accelerated as a result of the owner’s rejection.

The contractor accelerated and finished on Day 105. The owner assessed 5 days of liquidated damages against the contractor and did not pay the contractor the “no excuses” incentive for finishing by Day 100. The contractor filed a lawsuit against the owner.

While undoubtedly a difficult situation for both the contractor and the owner, the arguments show the potential of differing interpretations of the project documents and events. Regardless of any ruling, there were opportunities to reach an agreement that could have prevented the dispute. Several options include:
1. The contractor could have modified his or her request, and instead of requesting a time extension, file a request for additional acceleration costs and an even higher incentive to achieve the Day 100 “no excuses” date. The contractor could have presented how its acceleration plan substantiated an even higher risk than was known at bid time, at no fault of the contractor, and that the additional risk should come with an additional incentive. This option may have enticed the owner if the owner was concerned about the risk of paying the contractor for the constructive acceleration costs, plus the additional risk of having to pay the contractor for the incentive costs anyway.

2. The owner could have issued a 10-day time extension for the owner’s damages portion of the contract, but not extend the “no excuses” incentive date. This would have alleviated the contractor’s risk that it would incur the owner’s additional costs for finishing late, but it would also offer the contractor a target to achieve the incentive date. The choice to pursue the “no excuse” incentive would have been a business decision by the contractor by comparing the acceleration cost to the incentive cost.

Unquestionably, there were other options available for each side to resolve the issue and not let it progress toward a constructive acceleration scenario or a lawsuit. The key factor in this example was that even though both parties had strong arguments, both assured that they would incur additional costs by not resolving the situation before the denial of the time extension request (Step 3 of constructive acceleration). Instead of guaranteeing that additional costs would be incurred, a more-prudent approach would have been for both parties to investigate opportunities to minimize each other’s costs.

**CASE STUDY #2: THE CRITICAL PATH AND CONSTRUCTIVE ACCELERATION**

In the second case study, the contractor was responsible for constructing a new water treatment plant for an owner under a design-build, Guaranteed-Maximum-Price (GMP) contract. As a cost reduction strategy, the owner sole-sourced the intake-pump manufacturing and the contract specified that the owner was responsible for procurement and delivery of the pumps to the contractor. The contractor would, in turn, inspect and install the intake pumps into the plant and accept the operation guarantees in the GMP. For simplicity reasons, assume the contract required completion in 200 days, and that the owner’s pumps were required to arrive by Day 100.

During the project status meeting on Day 80, the owner notified the contractor that the pumps would not arrive on Day 100 and that the new arrival date was currently unknown. However, the pumps had 15 days of total float relative to the planned end date of the work, which also coincided with the contract completion date. Based on the current schedule at the time, if the owner’s pumps were planned to arrive by Day 115, the critical path would continue through a path of work unrelated to the pumps. Figure 4 summarizes the contractor’s plan on Day 80.

The contractor notified the owner of the potential delay and requested a formal update from the owner on when the pumps would arrive. The owner remained silent through Day 85. On Day 90, without any new information from the owner, the contractor submitted a new schedule update that included a forecasted delivery of the pumps a month later than previously stated by the owner, which was Day 130. Figure 5 summarizes the contractor’s schedule update on Day 90.

The owner subsequently rejected the contractor’s schedule update citing the following:

- The owner had not provided a forecasted pump receipt date of Day 130 and the contractor was overstating the forecasted pump receipt date to force the critical path through the pumps.
- The contract specifications prevented the contractor from submitting a schedule showing it was late without an agreed-upon change order.
Based on the owner’s rejection of the schedule update, the contractor again requested a forecasted pump receipt date but received no response from the owner.

On Day 100, the contractor submitted a time extension request in accordance with the contract requirements. Figure 6 summarizes the contractor’s time extension request.

The contractor used a prospective TIA with the pump receipt date forecasted to occur on Day 130, as shown in the contractor’s latest schedule update. The contractor requested a time extension of 15 days to the contract completion date and reserved its rights to amend the request pending a new forecast date or the actual receipt of the pumps. The contractor also notified the owner that this delay allowed the contractor to pace other non-critical work at the site. As a result, the contractor demobilized 2 of the 6 mechanical crews at the site and rebalanced the resources to complete the remaining work without affecting the project.

On Day 110, the contractor received the owner’s rejection of the time extension request, stating the following:

1. That the contractor had overstated the delays to the pump as the owner had not provided a planned receipt date and was negotiating with the manufacturer to receive the pumps by Day 115, which would not delay the contractor’s planned completion date.
2. The owner also noted that the contractor’s critical path in the Day 80 Schedule had been delayed another 20 days since that submission. The owner alleged that based on the update to the progress of the last accepted schedule on Day 80, the owner had until Day 135 to now deliver the pumps because of the delay to the critical path work from the Day 80 Schedule.

Figure 7 contains a summary of the owner’s position relating to the contractor’s time extension request.

The contractor notified the owner that its rejection created a requirement that the contractor constructively accelerate, and then the contractor constructively accelerated.

The owner improperly rejected the contractor’s request for time extension. The contract identified that:

- The contractor was required to submit a time extension request within 20 days of the start of a potential Delay Event. The contractor satisfied this by providing a time extension request on Day 100 when it was notified about a potential delay on Day 80.

- The owner’s argument that the contractor’s information was inaccurate appeared flawed. The duration of the event was unknown due to the owner’s lack of information regarding the pump supplier date. However, the contractor sensibly forecasted when it believed the equipment would be supplied and reserved its rights to amend the analysis pending further information from the owner.

- The time extension request method in the contract required the contractor to forecast the delay from the start of the potential delay event. Therefore, time was “frozen” on Day 80 and the schedule in place on Day 80 became the basis for a prospective analysis of the effect of the potential delay event. When the owner rejected the contractor’s time extension request, it did so on Day 110. At that time, the best-case scenario was providing the pumps on Day 115 which, using the Day 80 schedule, would have shown that the pumps were at least concurrently critical.

A lesson learned from this example was for the owner’s rejection to be based on the relevant contract documents. While the owner made several good points regarding the contractor’s progress on other work, the contract requirements established a method for measuring the delays and obtaining a time extension. The owner would have been better served by performing its analysis in accordance with the contract requirements, as it would have saved the owner additional money by not making it susceptible to additional costs for constructive acceleration.

CASE STUDY #3: NO PAYMENT FOR CONTRACTOR’S EXTENDED COSTS

The final case study is based upon the construction of a government facility, wherein the prime contractor’s surety chose to complete the project using a completion contractor following default by the prime contractor.
During the project, the completion contractor experienced delays as a result of the discovery of latent defects in the prime contractor’s work. The completion contract between surety and the completion contractor allowed for the granting of additional time and compensation caused by the discovery and repairs of latent defects for which the prime contractor was responsible. As a result of the delays, the surety and completion contractor entered a single bilateral Contract Change Order which granted the completion contractor a compensable time extension of 150 days. The surety was also responsible for reimbursement for any liquidated damages withheld by the government from the completion contractor as a result of delays caused by the prime contractor’s latent defects.

Despite the bilateral agreement for a compensable time extension, the surety did not compensate completion contractor for the 150 days of delay, later arguing that the completion contractor was required to provide substantiating documentation for the agreed-upon daily rate. Despite the receipt of the supporting documentation, the surety did not compensate the completion contractor for the delays.

Because of the surety’s non-payment for the compensable time extension, completion contractor notified surety that completion contractor was being constructively accelerated. The completion contractor stated that it was accelerating the work to mitigate damages for its own extended field management costs. The surety did not respond to the completion contractor’s notice of constructive acceleration.

The completion contractor accelerated the work and was able to mitigate 45 of the 150 days of delay, resulting in a net delay of 105 calendar days. Following completion of the project, the completion contractor submitted a claim against the surety for the actual cost of the unmitigated delays and overtime premium incurred to accelerate the critical path work.

This case study is unique due to the surety’s failure to provide compensation for the delay followed by the resultant acceleration by completion contractor, which leads to the following questions:

- Was the completion contractor constructively accelerated as a result of the surety’s failure to provide compensation for delays?
- Conversely, did the surety’s granting of a time extension nullify the completion contractor’s entitlement to a constructive acceleration claim?

Despite a bilateral agreement for a compensable time extension, the failure by the surety to issue payment for the delay caused the completion contractor to evaluate acceleration of its work to mitigate its own extended overhead costs. One could argue that this simply forced the contractor to make a business decision regarding its own costs, which was to accelerate if it was more cost effective than incurring the extended cost. However, one could also argue that the contractor was forced into making this decision by the surety’s failure to pay in accordance with the contract agreement and, therefore, the contractor should not have incurred the burden of attempting to make this “business decision,” which carried a level of risk for the contractor.

No matter the outcome, an alternative approach for the surety would have been to provide compensation for the undisputed time-related costs, thereby providing at least a partial payment to completion contractor. This would have weakened the contractor’s argument for constructive acceleration costs.

**CONCLUSION**

The topic of acceleration, and more specifically, constructive acceleration, is complex and is often misapplied in the construction industry. This article explains the characteristics and types of acceleration including voluntary, directed, and constructive acceleration. Furthermore, proving a constructive acceleration claim requires an understanding of the different elements and steps required for establishing entitlement to a constructive claim. Even following these steps, the preceding case studies demonstrate that the unique facts inherent in construction projects add yet another layer of complexity to the topic of constructive acceleration.

**REFERENCES**

1. Cushman, Robert F., Craig M. Jacobsen, and P.J. Trimble. Proving and Pricing Construction Claims,

GREATER CAIRO SECTION

On 7 December 2019, the Greater Cairo Section conducted a seminar at The American University in Cairo (AUC) to discuss scheduling claims, as described in Jim Zack’s article “Scheduling Games.” The seminar was attended by industry practitioners and graduating senior students from the university’s Construction Engineering Department. The presenters were Waleed El Nemr and Hossam Kandeel. The seminar started with an introduction on AACE International then delved into some of the claim tactics mentioned in the article, with reflections by the speakers from their own professional experiences in Egypt and the MENA region.
HAWAII SECTION
On December 6, 2019, Seventeen Hawaii Section members and friends attended a section meeting at the office of Rider Levett Bucknall to watch a webinar on the topic of, “Estimate Validation and Bias Assessment: Ratio-to-Driver Method” by John K. Hollmann recorded at 2019 AACE International Conference & Expo. Mr. Hollmann presented a method called ratio-to-driver for cost estimate validation which starts with establishing an explicit cost strategy (planning for bias) in the basis of estimate and estimating requirements documents, and the validation’s purpose is to assure this strategy was achieved. He also discussed how validation provides a bias measure for parametric models of systemic risks. Finally, his study is offered as the basis for a potential AACE Recommended Practice for estimate validation.

MONTREAL SECTION
On September 18th, 2019, to kick-off the new season of meetings, the Montreal Section welcomed three speakers, Chantale Germain from Hydro Quebec, and Ashwin Lala and Les McMullan from Hatch. They each presented some highlights of the 2019 AACE Annual Conference & Expo which was in New Orleans June 16- 19, 2019.

Chantale Germain, Chef Proposition and Estimation Direction Principal Expertise at Hydro Quebec, presented salient points from John Hollmann’s presentation EST-3184 Estimate Validation and Bias Assessment: Ratio-to- Driver Method. This paper describes the practice of cost estimate validation including a method called ratio-to-driver and will be the basis of a new Recommended Practice.

Ashwin Lala, Regional Manager of Project Controls – Western North America at Hatch, presented highlights of TCMA-3054 – Data Analytics – Data Analytics to Drive Reporting and Insights for Timely Decisions Improved Business Performance by Susan W. Bomba and Aleshia. This paper focuses on four key areas to consider when developing a standard report framework including data automation, assessing effectiveness of key performance indicators, layered reporting that caters to different audiences and current systems and tools along with integration of business intelligence BI and data visualization solutions.

Les McMullan, Global Director of Project Controls at Hatch, presented highpoints of Shoshanna Fraizinger presentation PS-3243 - Which Schedule Quality Assessment Metrics to Use? And When?. This paper proposes a scaled correlation of schedule health checks metrics to the schedule classifications in AACE’s Recommended Practice 27R-03.

All three speakers captivated the audience of 37 attendees and did an amazing job at delivering the original authors’ presentations which were followed by discussions and a question and answer period. The audience was truly impressed with the in-depth knowledge of the subject matter at hand and appeared to truly appreciate the information provided.
The Norwegian Section hosted its 6th annual conference, October 31st 2019. An impressive audience of 50 participants showed up for the event at Bane NOR’s headquarters in Oslo (National Railway Owner). Theme of the Conference was “Back to Basics.” Shown above Lars Stenberg Berg, President of the Norway Section, presents speaker Aashild Baasen with a speaker’s gift following her conference presentation.

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On December 5, 2019, the Toronto Section hosted its 2019 holidays social and end of the year networking event. Members and section friends came together to celebrate the festive season and the end of a great year. contributed and helped making this day a success!

On November 7, 2019, the section participated in the Toronto International Project Management Day (IPMD). IPMD is a worldwide event that takes place on the first Thursday of November each year, in celebration of the contributions that the project management profession makes to society. The Toronto Section partnered with the event organizers and provided the attendees with an introduction about AACE International activities, membership benefits, and the role the organization plays in elevating the industry.

On Tuesday, October 29, 2019, the Toronto Section conducted its last technical meeting of the year 2019. The event kicked off with a brief from the Toronto Section team on the major highlights of the 2018 AACE International Salary and Demographic Survey Results. Guest speaker and lean construction expert, George Zettel, from Turner Construction presented the latest developments in lean construction and integrated project delivery model and provided real life examples of how cost and schedule benefits can be achieved through collaborative contracting and the alignment of stakeholders interests.
SUBMITTING SECTION NEWS: We invite all sections to submit news and updates to be included in the International Bulletin section of each Source issue. Please submit any and all text as a part of the e-mail or as a Microsoft Word file attachment. Please submit any photos as individual attachments in JPG formats. Do not embed photos in Microsoft Word files. For photos to be used, we require either large original files or print size photos at 300 dpi (dots per inch). For photos to be published, they must be in focus, of print quality, and of sufficient resolution.

Please include the names and titles of each person shown in any photos. Please list names from left to right or refer to those shown as being above left or right. For group photos please list names from left to right, beginning with the front row and working to the back. All submissions should be e-mailed to editor@aacei.org. Please use the official name of the Section as approved by the AACE Board when the Section’s charter was approved. Within 2 to 3 business days of submitting a “Section News” item, you should receive a return confirmation e-mail that your submission was received at AACE headquarters.

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**SUBMISSION DATES**

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Any Section representative with questions is advised to e-mail editor@aacei.org or call the Managing Editor during regular business hours, 9 a.m. to 5 p.m. Eastern Standard Time, Monday-Friday, except holidays and special closings.
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12  CONSTRUCTION NETWORK, LA COUNTY DEPARTMENT OF PUBLIC WORKS CAPITAL PROGRAM UPDATE
Long Beach Marriott
4700 Airport Plaza Dr., Long Beach, CA
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13  CONSTRUCTION NETWORK, DIFFERING SITE CONDITIONS
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18  CONSTRUCTION NETWORK VIP BREAKFAST
LA Aerial Rapid Transit presentation by David Grannis and Holly Rockwell.
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MARCH

9-12  ASSOCIATED GENERAL CONTRACTORS OF AMERICA AGC ANNUAL CONVENTION
Las Vegas
info@agc.org

APRIL

16  SEAOI MIDWEST BRIDGE SYMPOSIUM
Maggiano’s, 111 W. Grand Ave., Chicago, IL
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MAY

5-6  SECOND ANNUAL MODULAR, PREFAB AND CONSTRUCTION TECH SENATE
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12-13  EMERGING WATER TECHNOLOGY SYMPOSIUM
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JUNE

3-5  AEC NEXT AND SPAR 3D CONFERENCE
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