Table of Contents

BUILDING INFORMATION MODELING (BIM)				
BIM-3072	The Constructible Process – Moving Beyond BIM to Build with Confidence	Jon Fingland		
BIM-3097	Application of BIM in Earned Value Management for Large-Scale Complex Construction Projects	Xuejiao Liu; Chunfu Xu; Liqiu Kang		
	CLAIMS AND DISPUTE RES	OLUTION (CDR)		
CDR-3110	Concurrency and Pacing - Does Intent Matter?	Josh Chittick;		
CDR-3145	Perfecting the Fixed Perspective Windows Delay Analysis	John C. Livengood, Esq. CCP CFCC PSP FAACE John Jackson		
CDR-3147	A New Role for Project Control Professionals on Dispute Boards	James G. Zack, Jr. CFCC FAACE Hon.Life		
CDR-3162	Identifying the As-Built Critical Path Using Recommended Practice 29R-03	Andrew Avalon, PE PSP; Christopher W. Carson, CEP DRMP PSP FAACE; John J. Ciccarelli, PE CCP PSP FAACE; Kenji P. Hoshino, CFCC PSP; John C. Livengood, Esq. CCP CFCC PSP FAACE; and Mark C. Sanders, PE CCP CFCC PSP		
CDR-3167	Home Office Overhead – Which Formula Should You Use?	Mark F. Nagata, PSP		
CDR-3173	Defending Against Loss of Productivity Claims	Dr. Tong Zhao, PE PSP; J. Mark Dungan; Xuyang Liu		
CDR-3178	Overhead Costs in Delay and Productivity Claims	Christi Fu, PE		
CDR-3193	How to Best Prepare for and Navigate a Subcontractor Default Insurance (SDI) Claim	Michael J. Oliveri, PSP; Joseph W. Wallwork, PE CCP CFCC PSP FAACE		
CDR-3214	Understanding and Applying the Elements of Constructive Acceleration	Cory R. Milburn, CFCC PSP; Brian J. Furniss, PE CFCC PSP; Matthew Nichols, PSP		
CDR-3228	Hot Tubbing Expert Witnesses – Does It Work?	James G. Zack, Jr. CFCC FAACE Hon.Life		
CDR-3250	Legal and Practical Challenges to the Implementation of the Time Impact Analysis Method	Dr. Waleed El Nemr; Hossam Eid Mohamed, EVP		
CDR-3254	Claims Avoidance in Infrastructure Megaprojects: A Process Framework for Design-Build Contractors	Rahul S. Mulik, CCP		
CDR-3260	Damages Without a Cause: Liquidated Damages Are a Penalty When Owners Recover Damages for Their Own Delay	Christopher J. Brasco; Kathleen O. Barnes; James G. Zack, Jr. CFCC FAACE Hon. Life; Kenji P. Hoshino, CFCC PSP; Matthew D. Baker		
	COST AND SCHEDULE CO	ONTROL (CSC)		
CSC-3107	The Power of Projections: Innovative Schedule	Ken Carrico; Eric Dembert, PE; Mike Hollowell;		
CSC-3132	Forecasting Techniques The Clear Flow Matrix: An Effective Production Control Technique Using Crew Level Planning	Jeff Johannsen, PE; Jesse Lund, CCP PSPi Augusto Tiezzi; David Lott, PE; Wayne Lott; Dr. John D. Borcherding; Dr. William J. O'Brien		
PROFESSIONAL DEVELOPMENT (DEV)				
DEV-3045	Problem Analysis using Statistical Safeguards	Gregory J. Whiteside, PE CCP; James D. Whiteside II, FAACE		
DEV-3224	14 Key Areas to Improving Your Cost and Schedule Team's Performance	Stephen M. Beck, CCP		
ESTIMATING (EST)				
EST-3184	Estimate Validation and Bias Assessment: Ratio-to- Driver Method	John K. Hollmann, PE CCP CEP DRMP FAACE Hon.Life		
EST-3201	Predictive Analytics Can Improve Cost Estimating for Smart City Projects	Anthony DeMarco; Richard Mabe; Grady Noll		

EST-3252	Cost Estimating in Hyperinflation Economies	Francis Lira Vargas			
EARNED VALUE MANAGEMENT (EVM)					
EVM-3155	Use of Earned Value Management as a Communication Tool With the Project Team and the Client	Edward M. McNamee; Charles W. Immonen			
EVM-3161	EVM Application: Quantifying Values in Various Industries and Project Phases	Pranab Kumar Deb, P.Eng PSP; Jatin Jajal, P.Eng. CCP CEP EVP			
EVM-3165	Unpacking Earned Value Management for Oil and Gas Projects	Anton W. van der Steege			
EVM-3251	How to Calculate Estimate at Completion at a Project Level	Mostafa AbdelRazik, EVP PSP			
EVM-3265	Earned Value Challenges in Projects With Different Project and Functional Currencies	Petronella Anna Cronje, CCP EVP			
EVM-3271	Emergent EVM Techniques for Construction Schedule PerformanceMeasurement and Control	Farah S. Demachkieh; Mohamed-Asem Abdul-Malak			
EVM-3272	Comparative Analyses of Construction Cash Flow Predictions Using Empirical S-Curves	Farah S. Demachkieh; Dr. Mohamed-Asem Abdul-Malak			
INFORMATION TECHNOLOGY (IT)					
IT-3064	Standard Cost Management from Spreadsheets to Automation	Ashley Garza; Sharla Gill			
IT-3089	Cloud-Based DMS for Large and Complex Projects	Lan Zhang; Hao Hu; Zhiyang Ji			
IT-3289	Integrated Software Based Project Controls on Major Capital Projects	Abhoy Ganguli, CCP CEP			
	OWNER ISSUES (OWN)			
OWN-3056	Reference Class Forecasting: Theory and Practical Application	J. Michael Devine, CCP; Rob Adkison, PE CCP			
OWN-3109	How Can Nuclear Construction Costs be Reduced? Five Practical Tips to Improve Nuclear Project	Arnaldo M. Angelini PE; Apostolos (Tolis) Chatzisymeon;			
OWN-3168	Economics Estimating the Optimal Size of the Project	Sean T. Regan CCP EVP CEP PSP FAACE Aileen A. Jamieson			
OWN-3185	Management Team Planning the Future: Estimating U.S. Nuclear Stockpile Infrastructure Costs	Fana Gebeyehu-Houston; Charles Loelius; Cash Fitzpatrick; Dipali Amin; Julie Anderson; Charles Ballowe; Jeff Beck; Chad Daughters; Connor Jones; Al Levinson; Christopher Massey; Matt Proveaux			
OWN-3187	Los Angeles Metro Fast-Track Capital Program Management Best Practices	Julie K. Owen, CCP PSP FAACE; Sean A. VonFeldt			
OWN-3196	The Role Owner Project Control Plays in Contract Administration	Christopher Michalak; Paul G. Williams			
OWN-3222	Progress Measurement for Owners	Ferdinand R. Karbowski, Jr. PSP			
OWN-3229	What if the System Doesn't Fit? (A Proposal for Classifying Nuclear Tooling & Maintenance Project Estimates Using GAO's Technical Readiness Assessment)	Shoshanna Fraizinger, CCP			
OWN-3236	Optimizing Your Management Reserve	J. Gustavo Vinueza C.			
PROJECT MANAGEMENT (PM)					
PM-3062	Pre-qualifying Contractors for Today's Project Delivery Needs	H. Lance Stephenson, CCP FAACE			
PM-3085	Portfolio Management: Case Study of a Brazilian Mining Company	Ricardo Gonçalves Alves			

PM-3105	Program Management Lessons Learned: Alaskan Way Viaduct Replacement Program	David Sowers, PE; Harry Jarnagan, PE CCP; Brian Smith, CCP			
PM-3124	Disruption Quantification in Small and Medium EPC Projects: A System Dynamics Model	Michael Mac Guinness			
PM-3134	Aerial Data Collection Accuracy and Insights to Infrastructure Decisions	Blaine Horner; Ryan Mextorf; Kyle Schroeder; Shanna Hawley; Timothy Bail; Travis Featherby; Vinay Nair, PE			
PM-3151	Optimized Cash-flow: Opportunities for Finance Solutions for Contractors and Owners	Ashraf Elazouni			
PM-3246	Performance Measurement of Egypt's Construction Industry Using Key Performance Indicators	Ahmed Bahaaeldin I. Ghonamy; Dr. Mohamed A. El-Mikawi			
PM-3259	Introducing Safety Measures Early in the Project Improves Success	Chantale Germain, P.Eng.; Dr. Nathalie Drouin			
	PLANNING AND SCHEE	DULING (PS)			
PS-3047	The Art of Decoding Manipulated Schedules for Forensic Schedule Analysis	Gayathri Shetty, PSP; Rachel Domingo, PSP			
PS-3082	Float Consumption and Resiliency Theory Put into Practice	Greg M. Hall, PSP			
PS-3086	The Great Debate: Owners vs. Contractors - Are We Done Yet?	Jeffrey Milo, PSP; John P. Orr, PSP			
PS-3087	Examining Schedule Performance in Phase Transitions on Vertical Construction Projects	Daniel P. Gilmour, PSP; Matthew L. Pringle, PSP			
PS-3101	Schedule Trend Control Charts in Excel	Bryan Eaton, CCP PSP			
PS-3112	Capital Improvement Program Stage-Gate Planning & Scheduling	Mir M. Ahmad; Christopher W. Carson, CEP DRMP PSP FAACE			
PS-3120	Integrating the Last Planner System® into the Critical Path Method Schedule	Jonathan R. Hunt; Hannah E. Schumacher, PSP			
PS-3141	Benchmarking As-Built Lags	Ronald M. Winter, PSP FAACE			
PS-3181	Who Owns the Dates of the Procurement Package Status Report? Practical Application on a Megaproject	Lise Bouchard, CCP; Stefan M. Sonnenberg, PSP			
PS-3217	Mastering Out-of-Sequence Progress – Part 3	Ronald M. Winter, PSP FAACE			
PS-3243	Which Schedule Quality Assessment Metrics to Use? and When?	Shoshanna Fraizinger, CCP			
PS-3244	Understanding Risk in Design-Build Schedules	Jessica M. Colbert, PSP; Kimberly D. Forbes, PSP			
PS-3255	The Benefits of the Linear Scheduling Method for Reviewing Non-Linear Projects	Stanko Pavlovic, P.Eng. PSP			
PS-3261	Reporting Tool Primavera P6 Visualizer	Marina G. Sominsky, PSP			
PS-3283	The Habits of Highly Effective Scheduling	Sylvia M. Donado			
PS-3293	Lessons Learned on Integrating Linear Schedule with the CPM Schedule	Kristy Kastner, PSP			
DECISION AND RISK MANAGEMENT (RISK)					
RISK-3037	Combining Parametric and CPM-based Integrated Cost-Schedule Risk Analysis	Colin H. Cropley			
RISK-3055	Holistic Risk Management	Eric Ho			
RISK-3078	Cost and Schedule Risks Interact in Megaprojects	Dr. David T. Hulett, FAACE; Waylon T. Whitehead			
RISK-3111	Identifying the Most Probable Cost – Schedule Values from a Joint Confidence Level (JCL) Risk Analysis	Samuel Steiman, PE; Dr. David T. Hulett, FAACE			
RISK-3129	Lessons from Financial Risk Management	Eric Ho			
RISK-3175	Actions for Improving Risk Management Culture	Aaron P. Ingebritson, PE			

RISK-3208	Risk Allocation to Assess Public Contract: Particular Case - Brazil	Helber Cunha Macedo; Carlos Eduardo M. F. Braga; Cesar Teodoro Ferreira; Fabrizio Cesar R. Fonseca		
RISK-3294	Some Key Points of Contingency Drawdown Curves	Kim Kozak, PE; David A. Norfleet, CCP CFCC DRMP		
	TOTAL COST MANAGEI	MENT (TCM)		
TCM-3049	Sensitivity Analysis of Discount Rates for Life-Cycle	Dr. Robert L. Schmitt, PE;		
	Costing of Pavements	Dr. Samuel Owusu-Ababio, PE		
TCM-3063	Strategic Portfolio Management: Supply Chain Methodologies?	H. Lance Stephenson, CCP FAACE		
TCM-3106	Accurate Quantity Update: A Key for Project Management Success	Huimin Shi, CCP PSP		
TCM-3189	An Integer Programming Model for Capital Project Portfolio Planning	Michael Matosin		
TCM-3245	Cost Engineering as a Driver of Capital Efficiency	Anthony M. Bazzini; Robert F. Addotta		
TCM-3291	The Case for a Recommended Practice for Project	Bryan Payne, PE CCP CFCC Esq.;		
	Procurement in Public Construction	H. Lance Stephenson, CCP FAACE		
TOTAL COST MANAGEMENT ANALYTICS (TCMA)				
TCMA-3054	Data Analytics to Drive Reporting and Insights for Timely Decisions and Improved Business Performance	Aleshia Ayers; Susan Bomba, PE; Lamis El Didi		
TCMA-3130	Implementing UniModel in an Owner Environment	John B. Newman, CCP CEP;		
		Philip D. Larson, CCP CEP PSP FAACE		
TCMA-3227	Forecasting Cost to Complete on Major Projects	Christopher Ronak		
TCMA-3278	Developing and Implementing Visual Dashboards Using P6 Data	Gino Napuri, EVP		
TCMA-3285	Optimizing Construction Projects through Effective Information Governance and Data Analytics	Sean Callahan; Heather Leins; Sarah Lounsberry; Vinay Nair, PE; Trent Williams		