

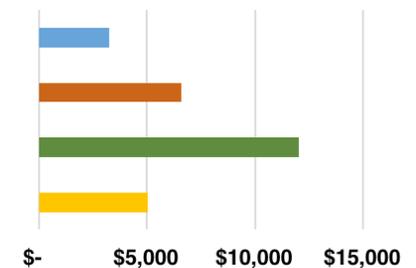


FOCUS ISSUE

August 1, 2016, Issue 1162

TRENDLINES

Incentive compensation spending



The overall median for total incentive compensation spending per employee is \$5,021. But for very high profit firms, the median is \$12,043. For high profit firms, the spending per employee is \$6,579, while spending per employee in average profit firms is \$3,268, according to the 2016 Incentive Compensation Survey.

(Special discount to TZL subscribers: Use code TLICS2016 to order this survey at 15 percent off on zweiggroupp.com)

COUNTDOWN

Until Zweig Group's 2016 Hot Firm and A/E Industry Awards Conference!

Collect your money

“There’s a process you need to follow. Your bills need to look a certain way. Certain things should generally happen at certain times.”



Mark Zweig

EDITORIAL

The subject never gets old and you can’t talk about it enough. Collecting money. Architects and engineers are horrible at it!

There are several reasons for this problem, including:

- 1) Poor self-image.** If you don’t think you deserve to get paid – guess what? You won’t get paid! That applies to so many architects and engineers who willingly take the abuse from bad clients who mistreat them. As someone who is a real estate developer myself I can tell you 80-90 days to pay a professional service provider is **NOT** normal. I feel bad if we take 30 days to pay ours. You should not work for a client and expect to be treated poorly! You deserve to be treated well!
- 2) Can’t get bills out.** Some firms simply won’t send bills out. A geotech we have used, for example, has sent us some bills as long as eight months after the service was provided. We have to call them and ask them to bill us. Sorry, but that’s ridiculous! Should never happen. Your clients should not be calling you asking for an invoice. And the longer you wait to bill – the less likely you’ll ever collect. Hire someone if you have to and get the damn bills out.
- 3) Won’t use “good cop/bad cop.”** The actual people who are the front-line service providers (i.e., principals and PMs), should not be the ones asking the client to pay them unless there’s a problem related to what they did. This is the domain of the F&A people (finance and accounting). Use them for it! Protect the relationship from awkwardness by putting your accounting folks out there to do your dirty work. They don’t mind. They really just want to get paid so the firm can pay its bills!
- 4) Won’t follow proven, established**

See MARK ZWEIG, page 2

MORE COLUMNS

■ CONTINUING ED: Crisis mode Page 9

■ FROM THE CHAIRMAN: Know your client’s business Page 11

Water quality

Page 3



Hot Firm focus

Pages 5-8

BUSINESS NEWS

AECOM AND TRIMBLE PIONEERING USE OF MIXED-REALITY TECHNOLOGY FOR ENGINEERING AND CONSTRUCTION

AECOM and Trimble are collaborating on the world's first use of Microsoft HoloLens "mixed-reality" technology for engineering and construction. AECOM has launched a pilot program with Trimble to apply the technology to projects on three continents.

Through a headset, HoloLens technology adds holograms of 3-D objects into a user's view, allowing interaction with these virtual objects as if they were present. Trimble's innovative mixed-reality solutions allow AECOM to feed 3-D engineering models into the HoloLens world, including models of large or complex projects.

AECOM is deploying HoloLens devices and Trimble technologies to real-world projects, including the Serpentine Galleries' annual architecture program in London. The mixed-reality technology supplements conventional working practices and improves communication, collaboration, and visualization.

"Exploring complex structures in a mixed-reality environment has huge potential to accelerate the engineering design process," said AECOM President Stephen Kadenacy. "With this technology we can gain greater clarity earlier in the design review process than with 2-D drawings or 3-D models on screen, and team members in different locations, each wearing a headset, can simultaneously explore the same holographic projections. We're very excited to be working with Trimble at the cutting edge of mixed reality."

With the Serpentine Galleries, AECOM and Trimble pioneered the application of HoloLens-enabled technology to the built environment.

This year the Serpentine Galleries' program includes four Summer Houses with complex, unconventional structures and the new technology has aided in visualization and design review.

"As an early adopter of Microsoft HoloLens, AECOM is already demonstrating the value of mixed reality in the architecture, engineering and construction industry," said Bryn Fosburgh, Trimble's vice president. "Aided by Trimble solutions and the HoloLens in a business setting, the company is learning first-hand how the technology can improve efficiency and enable effective collaboration throughout the design process."

With Trimble solutions, AECOM designers and engineers can view a complex structure as if it were a 3-D model placed on a table, or zoom in for a 1:1 view that simulates what it would be like to move through its structural framework.

This shared experience allows team members to physically point out potential difficulties or unforeseen conflicts in an evolving design. Trimble's solutions allow participants to log observations and create a group action plan during the session.

As part of Trimble's Mixed-Reality Pilot Program, AECOM is deploying HoloLens devices in London, Hong Kong, and Denver. Engineers and architects in these different continents can share the same holographic models simultaneously, with their movements and interactions linked together via the internet connected by Trimble solutions.

MARK ZWEIG, from page 1

procedures. There's a science to this stuff. We have written a million articles on it as have many others. Do certain things and you'll get paid faster. Don't do those things and you won't get paid. Don't over-complicate it and don't act like you are the first firm in the world to deal with this problem. You aren't! There's a process you need to follow. Your bills need to look a certain way. Certain things should generally happen at certain times. And by the way – don't let any principal who wants to stop the process stop it. That's bull.

This week's issue is all about our Hot Firms and Best Firms to Work For. These companies are generally much better business people than the norm for our industry. Look at how they do things. Copy. Repeat. And then maybe we can all be partying together at next year's Black Tie Dinner and our Hot Firm Conference and A/E Industry Awards Conference (we're at the Arizona Biltmore in Phoenix this year!).

Meanwhile, collect your money!! ▀

MARK ZWEIG is Zweig Group's founder and CEO. Contact him at mzweig@zweiggroup.com.



TALK TO US Do you have an interesting story to tell? Is your company doing things differently and getting results? Let us know. We'd love to contact you and feature you in an upcoming case study. If interested, please email rmasse@zweiggroup.com.

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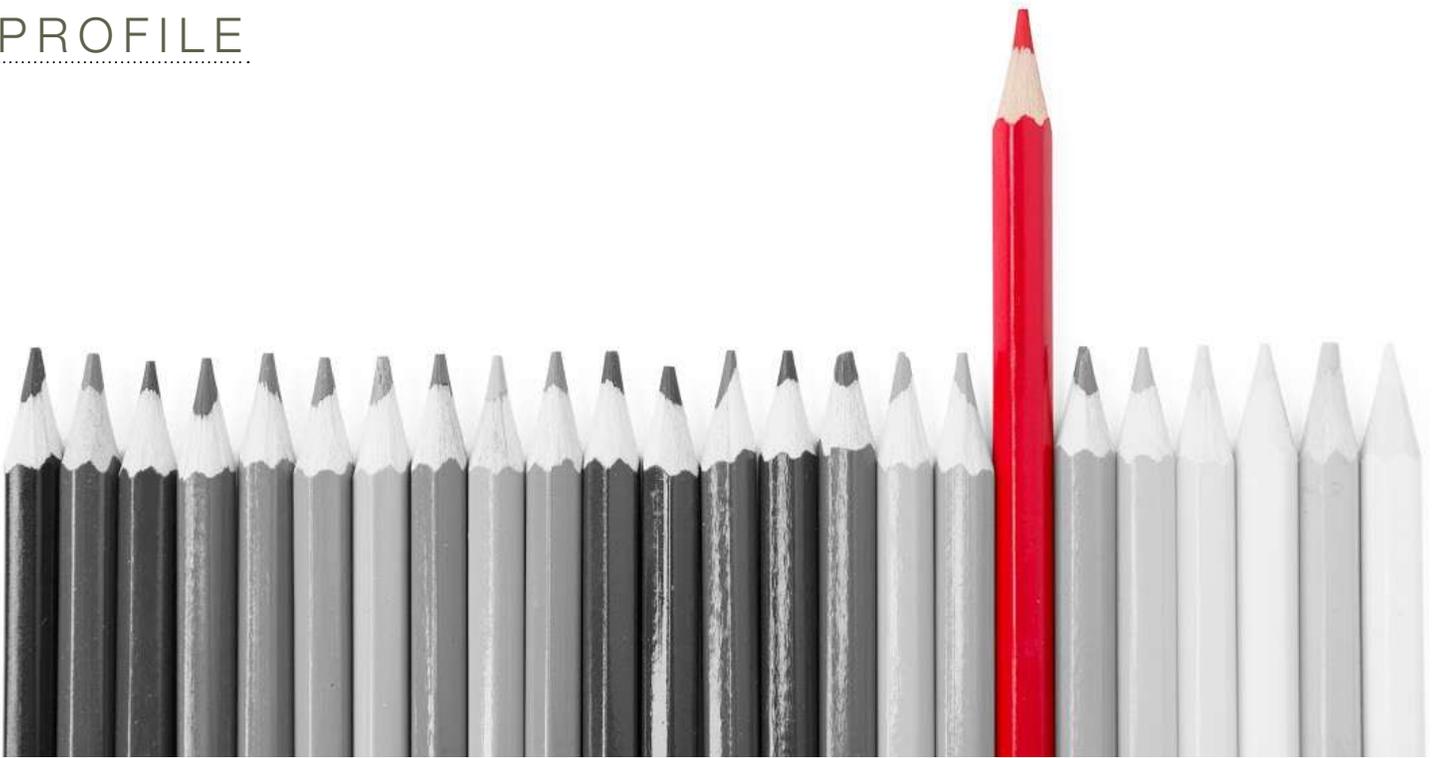
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PROFILE



Water quality

Independent environmental firms are increasingly rare, but out on the East Coast, CEO Eileen Pannetier has succeeded by sticking to her small-firm roots.

By LIISA ANDREASSEN
Correspondent



Eileen Pannetier, Founder and CEO, Comprehensive Environmental Inc.

Prior to founding **Comprehensive Environmental Inc.** (Best Firm #3 Environmental for 2016), CEO Eileen Pannetier worked for a national A/E consulting firm. It was there that she first developed her vision for CEI's culture – an independent company where professionals could realize their ambitions without sacrificing their personal lives.

“I wanted to remove the barriers that large businesses can often create and provide our engineers and scientists with challenging work, professional support, and opportunities to grow technically and within the firm,” she says.

CEI recently inked an important contract with the U.S. Army Corps of Engineers, was featured in *Stormwater* magazine, and presented at the 27th Annual Nonpoint Source Pollution Conference in Hartford, Connecticut. The firm has five offices in four northeastern states, and has grown to about 30 people. Having struck out on her own in 1987, it's apparent that Pannetier has achieved what she set out to do, even if there is still work to be done.

A CONVERSATION WITH PANNETIER.

The Zweig Letter: How have you seen CEI evolve since its founding?

Eileen Pannetier: In 1987, when I first did the incorporation paperwork for CEI, I'm sure I did not suspect that so many consulting firms today would be on a consolidation binge and that small firms would be as rare as they are. My goal was to offer a great place to work where professionals of all types could make a difference while working on challenging projects, but still have a life after-hours. What I did suspect was that many big firms had already lost sight of the client and their best interests in the struggle for utilization in the post-construction grants days. For younger folks, those days were full of 90-percent construction funding, by the government, for water and wastewater projects, and when that ended, life in all engineering/environmental firms likely got a lot harder. Enduring a couple of recessions since then, CEI has slowly and organically grown to about 30 professional staff who serve the northeast. Our services have grown and expanded from water supply and water quality projects for municipal clients to hazardous waste, stormwater engineering, water treatment facility design, sustainability, geotechnical, and wastewater for major federal and state agencies.

TZL: Do you have advice for others who want to strike out on their own?

See Q&A, page 4



Q&A, from page 3

EP: An MBA would have helped me to start, along with more knowledge of financial planning and accounting for service firms, but the most important characteristic is enthusiasm and an understanding that you will have to work a lot harder than you ever have before.

TZL: What are your key strengths? What are the key strengths for an effective leader?

EP: Persistence and determination. When things don't go well, look to what you personally can change or fix, or examine your outlook, rather than finding fault with others. Never be afraid to self-evaluate and correct as needed.

“When things don't go well, look to what you personally can change or fix, or examine your outlook, rather than finding fault with others.”

TZL: How would you describe your leadership style?

EP: I have high expectations of myself and others, and I also jump in when needed. I am trusting of staff who have proven themselves.

TZL: To date, what has been your greatest challenge and how did you deal with it?

EP: Hiring the best staff did not come naturally to me, and it took a long, hard look at failures to learn how to trust my “gut” in hiring. Once that happened, bad hires have been rare. The last recession was also tough, but we got through without any layoffs by tightening belts, working harder and self-funding payroll on a couple of occasions. If you don't believe in your business, then the banks won't either.

TZL: What is your vision for the future of CEI?

EP: To continue to grow as an independent firm in service areas and geographically. We've been able to do this through the years while managing to avoid the growing pains and pitfalls that others have fallen into when growing too fast.

TZL: Tell me about a recent project you are especially proud of and why.

EP: There are many, but if I had to select only one of the leading contenders, it would be a project with EPA Region 1 where CEI's engineers are constructing innovative nitrogen treatment units on Cape Cod as a pilot for municipalities facing MS4 permits in coastal areas and the Connecticut River among others. It was featured in *Stormwater* in May.

TZL: How have you helped your firm to outperform some competitors?

EP: We have extremely low project manager turnover rate. This allows us to provide the consistency, technical quality, and responsiveness that our clients expect.

TZL: Is there any news you care to share about CEI projects or anything else?

EP: We are extremely excited to have just been awarded, as part of a joint venture, an IDIQ contract to provide the U.S.

Army Corps of Engineers New England Division with architect-engineer services for hazardous, toxic, and radiological waste projects within the North Atlantic District. This five-year, \$2.5 million contract is the result of more than a year of planning and a significant step in our efforts to increase our federal service sector.

TZL: Are you married? Children? Pets?

EP: I am married with two adult children and four “fur-kids:” two Humane Society cats and two German Shepherds.

TZL: What's one thing most people at the firm don't know about you?

EP: My great, great aunt was the first French journalist to interview Sigmund Freud and she also greeted Charles Lindbergh when he landed, according to a family history journal.

TZL: Best vacation spots?

EP: Bali, Indonesia, and Alaska are two of my favorites, but I also enjoy many of the U.S. parks and the Caribbean.

TZL: What is the last book you read?

EP: I'm the type of reader who will stay up all night reading any “entertainment” book, so I rarely do so. Instead, it's business books all the way. I have no problem putting those down at bedtime! My most recent favorite is by Scott Burnam, *Drafting and Analyzing Contracts: A Guide to the Practical Application of the Principles of Contract Law*.

TZL: What's the best piece of work-related advice you've ever received?

EP: Whenever you think everything is going superbly, beware of “drinking your own Kool-Aid.”

“My goal was to offer a great place to work where professionals of all types could make a difference while working on challenging projects, but still have a life after-hours.”

TZL: Who is a leader you admire? Why?

EP: There are two West Point graduates – Army Capt. Kristen Griest and Army 1st Lt. Shaye Haver. They are the first women to pass the 60-plus day Army Ranger School. That took a lot of determination, strength of body, mind, and purpose! They are real groundbreakers for other women in the future.

TZL: When you're not working, what types of activities do you enjoy?

EP: Family, photography, and gardening. I'm also a complete news junkie.

TZL: What's your favorite lunch?

EP: As long as I can eat it outside on a sunny day, it doesn't matter. ▀

HOT FIRM FOCUS ISSUE

EXCEPTIONAL FIRMS



GATE MAINTAINS HOLD ON TOP SPOT DURING TOUGH MARKET FOR OIL AND GAS For the second year in a row, **GATE, Inc.** (Houston, TX) claimed the top spot on Zweig Group's Hot Firm List, a feat accomplished during a historical slump in the oil and gas industry. The 305-person firm, which specializes in oil and gas engineering consulting, has had a steady climb up the rankings, going from #63 to #1 in a seven-year span, and holding onto its position in the eighth year.

"For the second time in a row, our Hot Firm #1 position underscores our ability to grow in a difficult market due to a well-established and focused management team, hard-working and dedicated staff, strategic plans designed to maximize our backlog and provide new and challenging opportunities to our staff, and bring premium value to our clients and shareholders," says Grant Gibson, Gate's founder and CEO.



ACQUISITIONS ARE KEY FOR LJA ENGINEERING'S PROLONGED GROWTH, POSITION NEAR THE TOP **LJA Engineering Inc.** (Houston, TX) maintained its hold on #2 for the second consecutive year. LJA Engineering is the largest employee-owned civil engineering firm in its hometown, with more than 480 owners. LJA is a multidiscipline consulting engineering firm with an expertise in public infrastructure and land development, among other service lines. A big part of LJA's growth and profitability is based on its aggressive campaign of acquisitions. From 2012 to 2014, LJA acquired eight firms. In 2015, LJA acquired RVE Inc., WORTECH Land Surveyors Inc., and Carroll & Blackman Inc.

"We are proud of LJA's growth and team effort as we continue to make our way to the top," says Calvin Ladner, LJA's president. "As an employee-owned firm, each employee has a vested interest in the firm's success. We believe in a 'grow or die philosophy.' Diversification of our services into new markets with strategic acquisitions along with key hires, places LJA in a position to increase our market and client base. This formula reinforces our path to achieving national recognition."



EN ENGINEERING CONTINUES ITS STEADY CLIMB UP THE TOP 10 RANKINGS **EN Engineering** (Warrenville, IL) claimed the #3 spot this year, up four places from its 2015 ranking of #7. The firm provides comprehensive engineering, consulting, design, integrity management, corrosion protection, and automation services to pipeline companies, utilities, and industrial customers. In June the firm announced the acquisition of CNA Inc., a professional engineering services firm based in Forest Hill, Maryland. EN Engineering broke into the Hot Firm top 10 in 2014, when it came in at #8.

"It is an honor and a great responsibility to appear on the Zweig list," says Tom Ziegenfuss, En Engineering's president. "This appearance recognizes the efforts of our team members in growing our business both organically and through key strategic acquisitions. Our rapid growth is only possible through the commitment and dedication of our team, and the close partnerships we have built with our customers. We have been on a growth trajectory since 2006 when we had just over 100 employees and two locations. Today, we have 15 locations and more than 1,000 employees – and we are adding new professionals every week. An expanding staff and service footprint are necessary to support the growth needs of our customers. This growth also requires vigilance to ensure our teams continue to provide superior service for our customers."



HILL INTERNATIONAL A FIXTURE ON HOT FIRM LIST FOR THE LAST DECADE Philadelphia-based **Hill International Inc.**, the largest firm on the Hot Firm List, clocks in at #31 this year, a 35-point climb from last year's position of #66. Hill, a publicly traded firm that specializes in construction claims and project management, does most of its work abroad. The firm is currently overseeing construction of the Grand Egyptian Museum in Giza, an \$800 million project. Hill has been on the Hot Firm List more than a dozen times, including a decade straight from 2006 to 2016, hitting the #1 spot in 2009. Hill joins other big firms like **Huckabee** (#4), **Hargrove Engineers + Constructors** (#7), and **Langan Engineering & Environmental Services** (#13), which have enjoyed long-term runs in the top 100.

"It is a great honor to be included on this year's Hot Firm List," says David L. Richter, Hill's president and CEO. "Having been ranked on this prestigious list for 14 out of the past 15 years is an incredible accomplishment of which our entire company should be proud."

HOT FIRM STATISTICS

YOUNGEST FIRMS

Est. 2009:

- Big Red Dog Engineering & Consulting, #22
- HMT Engineering & Surveying, #83
- Metro Consulting Associates, #94
- Atwell LLC, #96

OLDEST FIRM

- Mead & Hunt Inc. – est. 1900

NATIONAL EXPOSURE

- Hot firms in 34 states
- West, Southwest, Midwest, Southeast, Northeast

STATES WITH MOST HOT FIRMS

- Texas: 8
- California: 7
- Minnesota: 7
- Michigan: 7

CITIES WITH MOST HOT FIRMS

- Houston: 7
- Minneapolis: 5
- Cincinnati: 3

SIZE BY STAFF

- Largest firm: 4,800, Hill International Inc.
- Smallest firm: 25, Evista Industries Inc.

ANNOUNCEMENT

Hot Firm/Best Firm winners announced!

The Zweig Group 2016 Hot Firm and A/E Industry Awards Conference on Sept. 22-23 at the Arizona Biltmore in Phoenix will celebrate growth and success.

The Best Firms To Work for Awards honor the creation of outstanding workplaces in architecture, civil, environmental, multidiscipline, surveying, and structural engineering firms. These firms have been recognized for their ability to inspire their teams to perform at the highest levels and create an environment where their people feel valued, can make a difference, and can clearly see their contribution to the overall mission and success of the firm.

Firms that applied for this prestigious ranking were evaluated comprehensively on company culture, workplace practices, employee benefits, employee retention rates, professional development, and more – both from the management and staff’s perspectives. Scores were based on a corporate survey given to firm leaders and an anonymous employee survey given to employees. Firms who met a minimum score were ranked according to the categories they entered.

“We love to see the promotion of this achievement, it gives firms credibility in everything from recruiting talent to getting new projects,” says Christina Zweig, marketing director at Zweig Group. “The employee survey results and benchmarking reports given to all award entrants are a big added perk of participating in this awards process.”

Many firms improved their position on the list, and a number of first time participants also won awards. **Choice One** (Sidney, OH) took home first in Civil Engineering for the second year in a row, **Garver** (North Little Rock, AR) took home first place in Multidiscipline, **TowerPinkster** (Grand Rapids, MI) was first in Architecture, **Capaccio Environmental Engineering** (Marlborough, MA) was

first in Environmental, **Structural Focus** (Gardena, CA) was first in Structural, and **Jones | Carter** (Houston, TX) was first in Surveying.

Zweig Group’s Hot Firm List honors the top 100 firms that have achieved outstanding growth in the A/E/P and environmental consulting industry. Placement on the Hot Firm List is based 50-50 on percentage revenue growth and dollar revenue growth over a three-year period compared to the other entrants.

GATE, Inc. (Houston, TX) was the number one Hot Firm for the second year in a row.

“Being on our Hot Firm List is harder than ever and even more of an accomplishment, as the overall A/E industry is hotter than I have seen it in over 36 years,” says Mark Zweig, founder and CEO of Zweig Group. “Firms on the list should be proud of their accomplishment. They are building value, creating good jobs, and truly making our world a better place.”

Twenty-nine firms made it on both the 2016 Hot Firm list and the 2016 Best Firms To Work For list.

All of Zweig Group’s award-winning firms will be honored at a black tie banquet at the 2016 Hot Firm and A/E Industry Awards Conference at the Arizona Biltmore in Phoenix on September 22-23. Anyone who wants to learn about success in the A/E/P and environmental industry is welcome to attend the conference, which has extensive networking opportunities as well as an inspiring agenda filled with speakers and breakout sessions on topics such as leadership, new technology, recruiting, workplace culture, and marketing methods. ▀



MULTIDISCIPLINE

1. Garver
2. Fitzmeyer & Tocci
3. Bowers + Kubota Consulting

CIVIL ENGINEERING

1. Choice One Engineering
2. Bowers + Kubota Consulting
3. Provost & Pritchard Consulting Group

ARCHITECTURE

1. TowerPinkster
2. Huckabee
3. JCJ Architecture

ENVIRONMENTAL

1. Capaccio Environmental Engineering, Inc.
2. P.W. Grosser
3. Comprehensive Environmental Inc.

STRUCTURAL

1. Structural Focus
2. Finley Engineering Group
3. Schaefer

SURVEYING

1. Jones|Carter
2. Frank Surveying Co Inc
3. WestLAND Group, Inc.

The complete

2016

H



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FIRM

List

1. GATE, Inc.
2. LJA Engineering, Inc.
3. EN Engineering, LLC
4. Huckabee
5. WGI, Inc.
6. The Vertex Companies, Inc.
7. Hargrove Engineers + Constructors
8. Hunt, Guillot & Associates, L.L.C.
9. Westwood Professional Services
10. WSB & Associates, Inc.
11. Ghafari Associates, LLC
12. CMTA Inc.
13. Langan Engineering & Environmental Services
14. Wakefield Beasley & Associates Architects, Inc.
15. OHM Advisors
16. Maser Consulting P.A.
17. Ware Malcomb
18. Jones|Carter
19. CR architecture + design
20. HAKS
21. CobbFendley
22. BIG RED DOG Engineering & Consulting
23. Harley Ellis Devereaux
24. BSB Design, Inc.
25. Cherokee Enterprises, Inc.
26. Slater Hanifan Group
27. Braun Intertec
28. BHC RHODES
29. Gunda Corporation
30. ESP Associates, P.A.
31. Hill International, Inc.
32. Garver
33. CRB
34. Long Engineering, Inc.
35. Rincon Consultants, Inc.
36. Brudis & Associates, Inc.
37. Alliant Engineering, Inc.
38. McAdams
39. Bowman Consulting Group, Ltd.
40. SEPI Engineering & Construction, Inc.
41. FRCH Design Worldwide
42. ESG Architects Inc.
43. RPS Klotz Associates
44. BKF Engineers
45. Arora Engineers, Inc.
46. Timmons Group
47. Olsson Associates
48. Pennoni
49. Dawson Van Orden
50. RTM Engineering Consultants, LLC
51. P2S Engineering, Inc.
52. Binkley & Barfield, Inc.
53. BL Companies
54. Marstel-Day, LLC
55. Bartlett & West, Inc.
56. BSI ENGINEERING, INC
57. CoreStates, Inc.
58. ISG
59. DCI Engineers
60. Bowers + Kubota Consulting, Inc.
61. Calvin, Giordano & Associates, Inc.
62. Coffman Engineers, Inc.
63. Humphreys & Partners Architects, L.P.
64. Apex Companies, LLC
65. Mulhern & Kulp Structural Engineering
66. Evista Industries, Inc.
67. G2 Consulting Group, LLC
68. Wade Trim
69. ECS
70. Fleis & VandenBrink
71. WestLAND Group, Inc.
72. Fehr Graham
73. T&M Associates
74. McCarthy Engineering
75. JLG Architects
76. HRP Associates, Inc.
77. The Thrasher Group, Inc.
78. Milhouse Engineering & Construction
79. Ross & Baruzzini, Inc.
80. Woodard & Curran
81. W&M Environmental
82. Simpson Gumpertz & Heger
83. HMT Engineering & Surveying
84. EAPC Architects Engineers
85. Universal Engineering Sciences
86. Tectonic Engineering & Surveying Consultants P.C.
87. Environmental Partners Group, Inc.
88. A. Morton Thomas and Associates
89. Mead & Hunt, Inc.
90. England, Thims & Miller
91. SidePlate Systems, Inc.
92. VHB
93. David Evans and Associates, Inc.
94. Metro Consulting Associates
95. Hastings Architecture Associates, LLC
96. Atwell, LLC
97. Stonebrooke Engineering
98. HR Green, Inc.
99. PM Environmental
100. SGA

CONFERENCE SPEAKERS



MARK ZWEIG Mark is founder and CEO of Zweig Group. With more than three decades of experience as a student of the industry, he is best known as the leading expert in management for the architecture, engineering, planning, and environmental industry.



JOHN M. (JOCK) HOLLIMAN III Jock has served as executive chairman and principal executive officer of Capstone Therapeutics Corp. since April 2006. He has more than 30 years of business experience, including service on the boards of more than 40 companies, and has been active in venture capital financing for more than 30 years, concentrating in the medical/biotech industries.



DAN WILLIAMS Dan, president and CEO of Garver, has over 30 years of engineering experience. His design background includes projects associated with air carrier and general aviation airports, urban and rural streets, and more. His responsibilities have also involved construction inspection, and company technology and equipment upgrades.



CHAD CLINEHENS Chad is executive vice president and chief operating officer at Zweig Group. He is a former senior vice president and chief strategy officer at Garver, and has been working in the architecture, engineering, planning, and environmental industry for 22 years.



RICHARD EARL Richard is an automotive consultant, historian, and professional speaker. He is dedicated to preserving and promoting America's automotive heritage, especially the roots and traditions of the auto design profession, and is a leading authority on American automotive history.

Additional speakers include:

- Christina Zweig, director of marketing, Zweig Group
- Randy Wilburn, director of executive search, Zweig Group
- Ted Maziejka, financial and management consultant, Zweig Group
- Jay Thornton, director of IT, Zweig Group
- June Jewell, president, AEC Business Solutions
- Laura Nick, marketing communications manager, Garver



GOOD TO KNOW

Conference registration is **OPEN!** Please visit zweiggroup.com/conference/ for more details.

CONFERENCE SPONSORS



CONFERENCE AGENDA

Zweig Group's 2016 Hot Firm and A/E Industry Awards Conference is September 22-23 at the Arizona Biltmore. Events include:

THURSDAY, SEPTEMBER 22

- **8 a.m.:** Registration, breakfast, and architecture and history of the hotel
- **9 a.m.:** Opening remarks by Mark Zweig, Zweig Group
- **9:15 a.m.:** Analysis of award winners by Christina Zweig, Zweig Group
- **10 a.m. - 11 a.m.:** The Harley Earl Story: Building the Largest Industrial Corporation in the World through Design Leadership – Richard Earl, Harley Earl
- **11:15 a.m. - noon:** The Role of Outsiders on the B.O.D – Jock Holliman, Capstone Therapeutics
- **12:30 p.m. - 1:30 p.m.:** Lunch
- **1:30 p.m. - 2:30 p.m.:** Breakouts
 - M&A Panel
 - Work/Life Balance and Millennials in the Workplace
 - Financial Topics – Ted Maziejka, Zweig Group
- **3 p.m. - 4 p.m.:** Breakouts
 - Branding an A/E Firm in Today's Market – Chad Clinehens, Zweig Group
 - A Debate on Performance Appraisals
 - Design Education Today
- **5:30 p.m. - 7 p.m.:** Cocktail party

FRIDAY, SEPTEMBER 23

- **8 a.m.:** Breakfast
- **9 a.m. - 10 a.m.:** Maximizing return on relationships
- **10:30 a.m. - 11:30 a.m.:** Building an Entrepreneurial Firm – Mark Zweig, Zweig Group
- **Noon - 1:30 p.m.:** Courage in Leadership and Marketing Excellence Awards Luncheon
- **1:30 p.m. - 2:30 p.m.:** Breakouts
 - Marketing and Recruiting Synergies That Fuel Organic Growth – Dan Williams and Laura Nick, Garver
 - Finding the Lost Dollars – June Jewell, AEC Business Solutions
 - Reducing the High-Cost of U.S. Employee Innovation through the NOW permanent R&D Tax Credit – corporate tax advisors
- **3 p.m. - 4 p.m.:** Breakouts
 - Sources of Financing for A/E Firms
 - Using Modern Methods for Recruiting – Randy Wilburn, Zweig Group
 - Coming Soon: IT Trends From Outside the Industry – Jay Thornton, Zweig Group
- **4:15 p.m.:** Closing remarks
- **6 p.m. - 7 p.m.:** Cocktails and red carpet photo ops
- **7 p.m. - 9:30 p.m.:** Hot Firm + A/E Industry black tie awards ceremony – announcement of Hot Firm and Best Firms to Work For Awards

OPINION



Crisis mode

A good communications plan is vital when things don't go your way, so put a little thought into who's going to do the talking when people start asking questions.



**Bill
Murphey**

CONTINUING ED

Not a day goes by that you can't find a story about a company trying to explain why something went wrong with their product or services.

Oftentimes, the stories are about something related to the company's performance. Chipotle recently had issues with food safety at its restaurants. Macy's and other department stores reported less than expected earnings. Lululemon, the fitness wear company, had complaints about the sheerness of its fabric.

How a company responds to a crisis can literally make or break it. Take too long to get your message out and people think you're hiding something from them. That lack of communication can lead to mistrust in your company and in your leadership abilities, and that's not good for business.

Hopefully, any incident involving your company is minor, but should it cause a death or serious injury, or a catastrophic financial loss, expect to be flooded with questions from your employees,

the media, and the community. Consider these truisms: sex sells; if it bleeds it leads. For a major happening, expect to be the lead story, online and in local and national newspapers.

"How a company responds to a crisis can literally make or break it. Take too long to get your message out and people think you're hiding something from them."

How you handle a crisis will say a lot about you and your A/E/P firm. Even minor issues can become large problems if not handled correctly and within a reasonable amount of time.

See BILL MURPHEY, page 10



TRANSACTIONS

SALAS O'BRIEN MERGES WITH MINICK ENGINEERING: NATIONAL ENGINEERING FIRM GROWS IN THE ATLANTA AREA Minick Engineering, Inc., announced they are joining forces with a leading national firm, **Salas O'Brien**. Minick Engineering is known for mechanical, electrical and plumbing engineering consulting services primarily focused on the healthcare and industrial sector, with a strong history of great projects in all markets throughout Georgia and the Southeast; Minick Engineering will adopt the Salas O'Brien name. The combined firm will serve clients nationally from 14 offices throughout the United States.

The Salas O'Brien organization now has over 280 professionals and more than 75 registered

professionals, including a talented team of more than 60 in the Atlanta offices. Salas O'Brien focuses in critical environments (data centers and telecom switches), healthcare, hospitality, educational, government, clean energy, building systems/controls, retail, and commercial markets.

"The team at Minick Engineering is excited to join the Salas O'Brien family," said Mark Minick, president of Minick Engineering. "The decision to merge with Salas O'Brien is positive for everyone involved because it opens up opportunities and strengthens both organizations."

"Mark, Debra Segal, and their team have over 35 years of success in the Atlanta region,"

said Stan Everett, managing principal of Salas O'Brien South. "We have not historically competed with them in the past because we target different markets. However, we share the same passion for providing outstanding engineering design services and value to our client base, and have complementary skills and experiences that will further drive the success of our organization. The combination of Salas O'Brien and Minick furthers the already great breadth and depth of our growing and successful organization."

Both Salas O'Brien and Minick Engineering were founded over 35 years ago and have a long history of providing outstanding design work to a loyal client base.

BILL MURPHEY, from page 9

When handling a crisis, consider several things:

- **Bad news never gets better with age.** Holding onto bad news in the hopes that your client or the community will forget or overlook an incident is not a recipe for success. Let your firm, your clients, and any other stakeholders know what has happened, so they can respond appropriately and in a timely manner. As a military commander, I gave all of my direct reports a "When to Wake Me Up" list. This helped my subordinates understand which events I deemed critical. If something occurred and it was on the list, they needed to call me immediately. If not, they could wait until the morning.

"How you handle a crisis will say a lot about you and you're A/E/P firm. Even minor issues can become large problems if not handled correctly and within a reasonable amount of time."

- **First reports are always wrong.** You may have heard this expression before. Rarely will anyone have all the facts within the first few minutes. Be deliberate and methodical in your fact-gathering and avoid guessing until a preponderance of the evidence is available. If asked for an immediate comment, leave yourself some wiggle room for when you have to correct your first report. "Based on what we know at this time, we believe ..."

- **"No comment" is no comment.** Never give up an opportunity to tell your story. If asked for a comment when you're not ready to provide a formal statement, there's no harm in responding with a placeholder such as, "Our first priority is to ensure the safety of our community as we continue to gather information about this incident. We will provide more details as we conduct our investigation."

- **Stay in your lane.** A friend of mine, a retired Navy pilot and former Blue Angel demonstration team member, was recently asked for his assessment of the cause of a fatal accident involving a Blue Angel pilot and his aircraft. Rather than speculating about causes, my friend wisely refrained from venturing into an area for which he had no first-hand information. He deflected the question with a simple answer: "I'd rather

not make guesses on what happened. I'll let the accident investigation team finish their work and then we'll all have a better idea of what happened." Avoid spreading rumors while a formal investigation is underway.

I recommend preparing your firm for the day that will, hopefully, never come. Having an already developed crisis communication plan will make the process go as smoothly as it could possibly go.

- **Designate a public relations representative within your firm.** Large firms may have a designated spokesperson, but too often it's someone in the human resources or marketing department who has never received formal training on how to handle anything more than a simple press release. Small firms should appoint someone to fill the role on an as-needed basis. In either case, your designated spokesperson must have unfettered access to your firm's senior leaders. They are the voice of the firm, so they better have access to as much information as possible.

- **Take a proactive approach.** Get out in front of the situation and let your stakeholders know you're actively working to resolve the issue.

- **Coordinate and communicate.** When handling a crisis event, bring all stakeholders together to share the currently available information. That way, everyone hears the same information at the same time. As an event progresses, you can always trim down the number of people required for each update meeting. For major events, consider setting a recurring meeting every four to six hours.

- **Attend a media training class.** As with any training program, be cautious when choosing your media consultant. Some consultants are great, while others spout theory and lack the experience of crisis communication when a fatality or other significant event is involved. You'll do your firm a disservice by sending an untrained spokesperson to face highly trained media.

Hopefully, you won't ever have to handle a major occurrence, but chances are you'll have to address some relatively minor ones. Having a plan in place will help you work through the event and can make the process a little less stressful. ▀

BILL MURPHEY is Zweig Group's director of education. Contact him at bmurphey@zweiggroup.com.

OPINION



Know your client's business

Being a great architect or engineer is not enough. To truly flourish, you have to have an intimate knowledge of what makes your clients tick.



Ed
Friedrichs

FROM THE
CHAIRMAN

Your knowledge of architecture, design, engineering, and building codes, your relationship with building and planning officials, and even your sterling reputation with the City Council, Planning Commission, and Architecture Review Board, is simply not enough today. To be truly successful and fulfilled in this business, I believe you've got to know your clients' businesses intimately.

To figure this out, you have to know enough about how that client operates in the markets they serve so that you could go to work for one of them and hold your own. My experience tells me this approach reaps great rewards in satisfied clients, performance-based innovation, reputation enhancement, add-on and repeat business, as well as personal satisfaction.

Let me give you some examples:

- In Southern California, my firm worked for many years with numerous major film studios. I became a student of how their businesses ran, both on the creative side as well as in their legal and business affairs, right down to reading the trade papers, *Daily Variety* and *Hollywood Reporter*, every day. Our work with most of our clients went well beyond designing

"I encourage you to go deep with your clients, to engage in continuous learning."

and supervising the construction of a building or an interior. Our knowledge of their business allowed us to operate strategically. We advised them on the utilization of their studio properties, on an array of organizational issues and, of course, on how to optimize their real estate value.

- When Sony bought Columbia Pictures and Warner Bros. wanted to swap the MGM Studio in Culver City (which they owned), for Columbia's one-third interest in the Burbank Studio, we worked for both

See ED FRIEDRICHS, page 11



BUSINESS NEWS

PPG FOUNDATION DONATES \$89,000 TO GREATER PITTSBURGH EDUCATIONAL INITIATIVES

PPG donated a combined \$89,000 to support educational initiatives in the Pittsburgh area, where PPG maintains its global headquarters and several facilities. The grants highlight PPG's commitment to supporting its local communities and the foundation's top priority of increasing educational opportunities for youth in the areas of math and technology.

The grant recipients and programs were:

- **Historical Society of Western Pennsylvania:** \$50,000 to support the development of Discovery Place, an interactive exhibition and learning space for children to inspire and foster science, technology, engineering and math skills
- **ASSET Incorporated:** \$15,000 to underwrite the costs of professional development programs and courses for under-resourced educators to teach inquiry-centered science, technology, engineering and math subjects. The grant also funds related research-based, hands-on learning materials for their students
- **Carnegie Library of Pittsburgh:** \$10,000 to support Super Science, a program that

provides children with opportunities to engage in hands-on science activities

- **Barrels by the Bay:** \$9,000 for a program inviting students in area schools to use vibrant paints and their imagination to decorate white plastic rain barrels for later use in lessons about water conservation
- **National Aviary:** \$5,000 to support aviary programs that bring bright feathered visitors and related education to patients at Children's Hospital of Pittsburgh of UPMC

"We are pleased to support these great educational initiatives in PPG's hometown," said Sue Sloan, executive director of the PPG Foundation. "We believe it's important to prepare today's youth for the opportunities that will be available to them in advanced manufacturing and also to stimulate their curiosity about the world around them."

AEGION CORPORATION AWARDED AN \$8 MILLION MUNICIPAL CONTRACT FROM THE CITY OF MONTGOMERY, ALABAMA

Aegion Corporation announced the award of an \$8 million contract from the City of Montgomery, Alabama for its Infrastructure Solutions platform. This project is the second and final phase of a wastewater pipeline rehabilitation project located in

the Econchate Basin, a collection system that drains into the Econchate Wastewater Treatment Plant.

The first phase of the project, also awarded to Aegion, was completed in April 2016 and included the installation of 10,000 feet of Insituform CIPP and iPlus Composite in 48-inch to 54-inch diameter pipelines. This second phase is expected to take 15 months to complete with work likely to begin later this month.

Company crews will install Insituform CIPP and iPlus Composite to rehabilitate over 20,000 feet of eight-inch to 48-inch diameter pipelines. The project also involves managing the rehabilitation of 34 manholes and the construction of over two miles of all-weather access road in the wetland area.

Frank Firsching, president of Aegion's Infrastructure Solutions platform, said, "We have over 25 years of experience working for the City of Montgomery. We are pleased to have been prequalified for and awarded this latest project and commend the City of Montgomery for their proactive approach to addressing its collection system in the Econchate Basin."

ED FRIEDRICHS, from page 12

Sony and Warner Bros. to prepare the due-diligence, budget and relocation strategy. In order to do this assignment, we needed the full trust and confidence of both clients, who were sitting on opposite sides of the deal. That trust and confidence came from our deep understanding of what they did.

- Another example of benefiting from an intimate knowledge of a client's business involved a major U.S. financial institution. When a facilities management firm took over that institution's bank-owned real estate department, they were tasked with lowering costs and reducing the number of vendors the bank was managing at the time. Originally, the number of architect/interior designers was cut from more than 100 to 16, and then to two.

I believe the major reason my firm was one of the last two vendors was the strategic work we had done with the bank over the years. We had developed a graphic icon-driven database management system that allowed us to test reconfiguration scenarios in real-time with the client. Often, we had documentation on both banks' real estate portfolios. We augmented that service with real estate analysis. When the bank acquired another bank, they often had redundant facilities – operation centers and branches. We helped determine which had better proximity to their employment base, and which were most marketable.

I am now a development partner with the \$1.2-billion West 2nd District project in Reno, Nevada (west2nddistrict.com). I am expanding my intimate knowledge of the development process – how projects are financed, how they are valued, what makes them easier to manage for both

the owner and the tenants, and what will make them more valuable over time as the tenant mix continues to evolve.

I spent an entire career working with developers, and my "graduate school" of development was my membership in the Urban Land Institute and participation on a Real Estate Development Council. My colleagues were developers, bankers, leasing agents, building managers and other real estate professionals. I learned a lot, and I'm still learning.

"It's up to you to gain the additional education necessary to truly understand the businesses of your clients."

I encourage you to go deep with your clients, to engage in continuous learning. It's up to you to gain the additional education necessary to truly understand the businesses of your clients. Yes, you should get your LEED certification. And yes, you'll need to take continuing education classes each year to maintain your professional certification. However, to be a true professional in your clients' eyes, you'll need to go much further. I did, and I can say I never could have had the career I enjoyed without doing so. It made my work that much more fulfilling and allowed me to develop the deep client relationships I've enjoyed throughout my life. ■

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