ETCP Certifiable News



Vol. 11, Issue 1 · Spring 2016

Portable Power Distribution Technician Certification Launches in July

Contents:

PPDT Certification	
Launches in July	<u>1</u>
Newly Certified Technicians	2
Early 2016 Pending Renewal	s <u>3</u>
News From the Homefront	<u>5</u>
Industry News	<u>13</u>
Our Council Members	<u>16</u>
In Memoriam	<u>18</u>
Training News	<u>20</u>
Job Board	<u>21</u>
Renewal Credit	
Opportunites	<u>22</u>

beginning July 15, 2016 and the window for paper and pencil testing will continue until August 12, 2016. The examinations will be administered in the following cities (dates TBD): New York, Los Angeles, San Francisco, Dallas, Phoenix, Chicago, and Orlando with possibilities in other cities. Each paper and pencil examination will have a different application, so candidates should make sure to fill out the application for the appropriate testing location. All applications with testing dates will be listed on the ETCP website by June 1.

ETCP is extremely pleased to announce that the new **Portable Power Distribution Technician** (PPDT) certification will be available for testing by paper and pencil

Once the paper and pencil testing window is complete, it will take approximately 4-6 weeks to determine the passing rate for these examinations, and once that is complete, the examinations will be available for computer-based testing at over 190 testing centers in North America.

Certification Manager: Meredith Moseley-Bennett

Email: etcp@esta.org

Ph: 212.244.1505 ext. 705 Fax: 212.244.1502 Web: etcp.plasa.org

Like us on facebook:

facebook.com/etcp.esta.org



ESTA 630 9th Ave. | Suite 609 New York, NY 10036 Cot any great on-the-job photos you'd like to share with us?

Send them our way, and we'll run them in one of our issues! Imail: etep@esta.org



DISTRIBUTION TECHNICIAN

Newly Certified Technicians

ARENA RIGGING

Clayton Avery William Barr **David Battaglin** Nathan Bergeron Ryan Bridges Dan Cavanaugh Mark Coburn **Christopher Doshay** Frank Drown McBrien Dunbar Cory Fisher Scott Friedrich Alex Gorman Scott Goslin Anthony Iovino **Christopher Kelly** Justin Klynsma Lucanus Lackey Steven Leick Jared Lulek

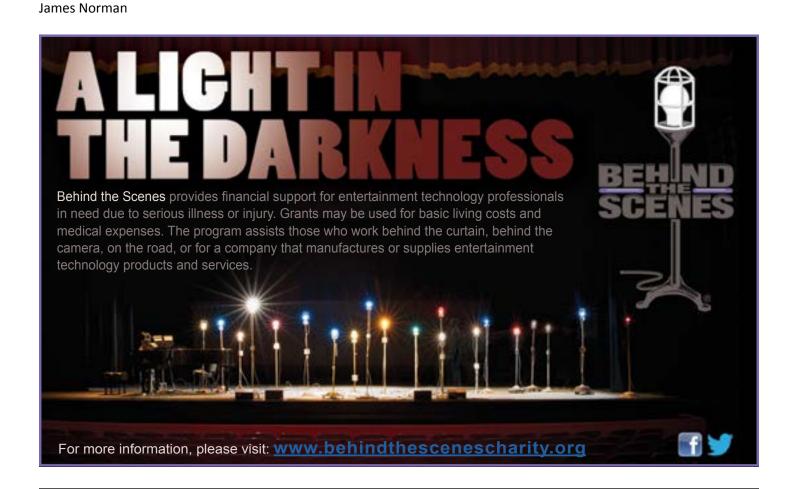
John Nussbaum Lupe Perez Clayton Petroski Robert Ruggiero Michael Ruiz **Kevin Rutherford** Darren Seagren Matthew Skowronski **Brian Smith Christopher Soto** Mike Swan **David Timm Andrew Venegas** James Wietecha Andrew Wilkinson James Wimms Tim Wratten

THEATRE RIGGING

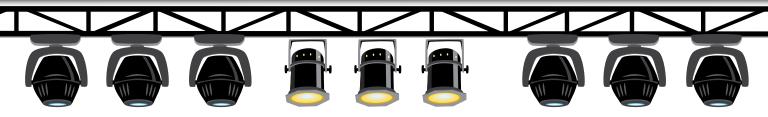
Myles Ambrose
Mark Coburn
Adam Maxfield
Brian Munroe
John Oliphant
Anthony Padegimas
Alex Perry
Ryan Riordan
Jeff Rusnak
John Salemi
Shannon Sullivan-Zurbruegg
Patrick Wallace
Matthew Welander
Jason Whicker
James Zwicky

ELECTRICAL

Myles Ambrose Jeffrey Baker **David Battaglin** James Butler Dan Carr **Chris Chambers Timothy Cook** Chris Cooke Lisa Derda Stephen Ellison Joel Farley Sean Harding Matthew Klasmeier Paul Lazaris David MacLean **Brandon Prime** Richard Reid **Daniel Swalec** Chris Tyrone Jennifer Veldhuizen



Early 2016 Pending Renewals



1 20	4.6		CD. A	0/20/2046
June 20		Coott Fallo	CR-A	8/20/2016
CR-T	• •	Scott Falbe	CR-T	8/25/2016 David Vaught
CR-T		Jacob Josef	CR-T	8/26/2016 Brian Strom
CR-T		David King	Cantana	hor 2016
CR-T		John Paul Sproule		ber 2016
CR-T	• •	Michael Sherman	CEE	9/1/2016Jon Krahenbuhl
CR-T	6/21/2016	Roger Riekena	CR-A	9/2/2016 Paul Orzechowski
July 201	16		CR-A	9/8/2016Kenny King
July 201		Diahand Canaanan	CR-T	9/9/2016 Hans Pregler
CEE		Richard Corporon	CR-T	9/15/2016
CR-A		Evan Eggers	CR-T	9/16/2016 Jason Hoegle
CR-A		Che Hicks	CEE	9/17/2016 Scott Wasserberg
CR-A&T		Jason Hildner	CR-T	9/21/2016 Kenneth Moore
CEE		Brian Aman	CR-A	9/23/2016 Ed Green
CEE		William Armstrong	CR-T	9/26/2016
CEE		Morgan Brenner	CR-A&T	• •
CEE		Ron Brodeur	CEE	9/29/2016 Brian Zimmerman
CEE		Peter Donovan	CR-A	9/30/2016 Todd Rylan Gacioch
CEE		Jeffrey Gordon	Ostabas	2016
CEE		Andrew Leviss	October	
CEE		Nicholas Opalenik	CR-T	10/7/2016 Tim Felter
CEE		Brad Robertson	CR-A	10/13/2016Ken Rose
CEE		Karl Schuberth	CR-A	10/13/2016 Jay Madara
CEE	• •	Adam Smolenski	CR-A	10/18/2016 Gary Mardling
CR-A&T	//31/2016	Paul Jacunski	CR-A	10/18/2016 Patrick Maurer
	2046		CEE	10/19/2016 William Bathgate
August		NA'-1111	CEE	10/19/2016 William Beautyman
CR-A	• •	Michael Hermann	CEE	10/19/2016Nils Becker
CR-T	• •	Shawn Anderson	CEE	10/19/2016 C. Todd Brown
CR-T	• •	Joe Barberis	CEE	10/19/2016 Troy Castelblanco
CR-T		Harry Paul Loy	CEE	10/19/2016Michael Daily
CR-T	• •	Christopher Moore	CEE	10/19/2016William Devins
CR-A		Matthew Klemisch	CEE	10/19/2016 William Doherty
CR-A		Shane Schwirtz	CEE	10/19/2016Justin Dunlap
CEE		Debra Cecil Rettich	CEE	10/19/2016 Donald Earl
CR-A	• •	Tino Wallenda	CEE	10/19/2016 Jeanette Farmer
CEE	8/19/2016	Jason Evarts	CEE	10/19/2016 Gregory Ferguson
CR-A		Tony Galuppi	CEE	10/19/2016 Brandon Fischer

2016 Pending Renewals

CEE	10/19/2016lan Foulds	CEE	10/19/2016 Jared Saltzman
CEE	10/19/2016 Tony Giovannetti	CEE	10/19/2016Harry Schaefer
CEE	10/19/2016	CEE	10/19/2016 Trisha Schleicher
CEE	10/19/2016Grant Haase	CEE	10/19/2016Ron Schwier
CEE	10/19/2016 David Hatch	CEE	10/19/2016 Dave Sowa
CEE	10/19/2016 Alan Hendrickson	CEE	10/19/2016Tim Speed
CEE	10/19/2016 Jack Hochberg	CEE	10/19/2016 Patrick Stewart
CEE	10/19/2016 Rob Holland	CEE	10/19/2016 Michael Swan
CEE	10/19/2016Michael Hrehoriak	CEE	
CEE	10/19/2016 Simon Hunt	CEE	10/19/2016 Abigail Tutorow
CEE	10/19/2016John Huntington	CEE	10/19/2016Stephen Vanciel
CEE	10/19/2016 James Jacobs	CEE	10/19/2016 Ken Vannice
CEE	10/19/2016 Jinx Kidd	CEE	10/19/2016John Welsh
CEE	10/19/2016Curtis Kucik	CEE	10/19/2016Jim Wenting
CEE	10/19/2016 Dennis Long	CEE	10/19/2016Dennis Witte
CEE	10/19/2016 John Lucas	CEE	10/19/2016 Keith Woods
CEE	10/19/2016James Maloney	CR-T	10/19/2016Jim Bailey
CEE	10/19/2016Sylvain Marcotte	CR-T	10/20/2016Robert Babich
CEE	10/19/2016Douglas McCracken	CR-T	10/20/2016William Beautyman
CEE	10/19/2016 Marty McGee	CR-T	10/20/2016 John Lucas
CEE	10/19/2016 Charles McIntyre	CR-T	10/20/2016Mark Newlin
CEE	10/19/2016 Gregory Mitchell	CR-A	10/20/2016 Masaaki Nohmi
CEE	10/19/2016Leonard Nitzberg	CR-T	10/24/2016Justin Bennett
CEE	10/19/2016Michael Novosel	CEE	10/25/2016 Josh Parker
CEE	10/19/2016Kevin O'Brien	CR-A	10/25/2016Joel Magarian
CEE	10/19/2016 Kevin Oakeson	CR-T	10/26/2016Murl Edwin Aldridge
CEE	10/19/2016 Ryan Osborn	CR-T	10/27/2016Nathaniel Wiessner
CEE	10/19/2016John Perovsek	CEE	10/28/2016Allen Hiorns
CEE	10/19/2016Brian Phillips	CEE	10/29/2016Harry Box
CEE	10/19/2016 Alexandre Picotte	CR-T	10/29/2016 Solana Bolton
CEE	10/19/2016Natti Pierce-Thomson	CR-T	10/29/2016 Benjamin Foss
CEE	10/19/2016 Brian Pratt	CR-T	10/29/2016Brian Kelley
CEE	10/19/2016James Ripley	CR-T	10/29/2016 Joseph Martin
CEE	10/19/2016 John Robinson	CR-T	10/29/2016 Heath Turner
CEE	10/19/2016 Alan Rowe	CR-A	10/29/2016 Daniel Milian
CEE	10/19/2016Patrick Ryan	CR-A	10/31/2016 Thomas Kinsella

PLEASE HELP MEREDITH!

There are so many of you recertifying that it would be super helpful to get your paperwork in as early as possible.

www.etcp.esta.org etcp@esta.org

Insurance: A Sad Story with Two Important Morals



Steven A. Adelman Adelman Law Group, PLLC Vice President, Event Safety Alliance

I received a call recently from a highly experienced, well-trained rigging professional. He was looking for a lawyer to defend him in a personal injury lawsuit in which a performer got hurt on a job on which he worked. From his description, it sounded like he was simply rounded up with the usual suspects.

This is a pretty typical scenario. At the beginning of

a lawsuit, the plaintiff's lawyer doesn't know who will be most responsible for his client's alleged damages nor who has money to pay, so the Complaint often casts a wide net and names every reasonably likely culprit. As the case proceeds through discovery, that lawyer figures out who is really responsible for whatever harm occurred. In an effort to finance his case against the main target defendant(s), the lawyer then tries to extract a more modest settlement from the small fry in exchange for dismissing them from the case, allowing them to stop the bleeding.

Even for a person or business that arguably does nothing wrong except work on a job where something bad happens, they still routinely get dragged into litigation that they have to pay to defend and then pay to get out. And by "they," I obviously mean "you."

I leave for another time and beverage any conversation you would like to have about the injustice of having to pay to defend claims that, at least as to you, have no merit.

I could not help in this case.

Our innocent rigger's second problem was that hiring a defense lawyer costs money. Normally, that solution involves reporting the claim to one's insurer, which in turn hires a lawyer from its panel of approved counsel in that state, and that lawyer will represent you. Other than companies that pay big premiums or deal with very specialized risks, you often don't get to choose your lawyer, and he or she likely won't know much about what you do for a living or how to defend the claim against you. But at least their hourly fee doesn't come out of your pocket.

Alas for the rigger in this story, who usually worked for large companies under the umbrella of their insurance policies, he was working as an independent contractor on this job, made no provision for his own insurance coverage, and therefore had none when he needed it.

When I first drafted this tale of woe, I thought our hero probably could not have bought his own coverage for this show anyway. Insurers usually charge a premium to insure risky activities that could lead to significant claims, and rigging is generally considered one of those activities. That description remains mostly correct, but I recently learned that ProSight Specialty Insurance launched a program in June, 2015 which allows Certified Technicians to buy affordable insurance coverage for themselves. Here is a description of the ProSight program from the person who put it together with ETCP, Neil Huff of insurance broker Taylor & Taylor:

The ProSight program provides a Commercial General Liability (CGL) policy with a \$1,000,000 per occurrence limit for Bodily Injury and Property Damage. The Property Damage coverage applies to property of others that is not in the care, custody, and control of the named insured (rigger, electrician, etc.). For example, a rigger drops a truss on a guitar tech causing bodily injury, and the band's equipment is damaged as well as lighting installed on the truss. The CGL policy would cover the injury to the guitar tech and the band's property, but damage to the lighting rig would not be covered. For that, ProSight also offers a Third Party Property Damage policy that would provide up to \$500,000 coverage for damage to the lighting rig (personal property of others). The combined premium for both policies on an annual basis is less than the cost of most people's homeowner's policy. If the Certified Technician also rents the gear for a show, they would need to purchase an Inland Mar ine policy to cover rented equipment. ProSight will provide a separate quote for Inland Marine, Workers Compensation, Umbrella Liability, Auto (owned and

rented vehicles), etc., for additional premium per the specific needs of the Certified Technician.

Because I didn't know about this ProSight insurance program, I thought that even after a respectable rigging career, our man lacked the scratch to buy insurance that could have gotten him out of this jam. I was wrong. Now I'm even more frustrated with his situation, because it could have been avoided.

One moral of this story involves contracts. This rigger did not require that he be added as an "additional insured" on the liability insurance policy of the vendor who hired him. This could have been written into the contract which secured his employment, along with the date of the job, the nature of his responsibilities, and his compensation. Even if those things appeared only in an exchange of emails rather than a formal document with the word "Agreement" in the title, they would have been legally binding. Even verbal agreements are legally binding, although I don't recommend them because they're obviously hard to prove. With a few keystrokes at any time during negotiations, he could have protected himself.

The second moral involves insurance. Without coverage, this rigger was going to have a hard time proving that his

work met the industry standard of care, and that nothing he did caused the performer's injuries. He was going to have to pay a local lawyer out of his own pocket, and any settlement he might pay would come from his own pocket too. All because he thought he could do one show without any insurance. Now that we all know that there is relatively inexpensive coverage available for people exactly like you, gentle reader, there is no excuse for performing your work naked anymore.

We all try to do our jobs safely enough that no one ever has to make a claim. That is obviously the best protection of all. Even careful people, however, should also protect themselves with good contract language and appropriate insurance coverage. To paraphrase Winston Churchill's famous quip about democracy, our civil justice system is the worst one ever invented, except for all the others. Contract language and insurance may be the worst systems ever devised to protect you from losses, except for all the others. Just as with every other type of personal protective equipment, the only people who should work without coverage are those who can afford to be exposed.

To discuss ProSight's insurance for Certified Technicians with Neil Huff at Taylor & Taylor, please contact him at nhuff@taylorinsurance.com or 864-836-4197.



HOLIDAY CARDS - CALL FOR DESIGNERS

Behind the Scenes Holiday Cards have become a tradition in the industry for those who want to spread holiday cheer while supporting their colleagues in need due to serious illness or injury. Each year designs have been created and donated to the charity by everyone from Tony Award winners to high school design students. Behind the Scenes is seeking designers for their 2016 cards.

The design guidelines are very simple and can be viewed at: www.behindthescenescharity.org/holidaycard_guidelines

DEADLINE IS JUNE 15th. For more information or to submit your design, please contact Lori Rubinstein at linearth-rubinstein@behindthescenescharity.org.

DON'T LEAVE YOUR COLLEAGUES IN THE DARK

www.behindthescenescharity.org

LRLR Summer 2016 Charity Ride



The Long Reach Long Riders 13th annual charity ride, the "Radioactive Ride" begins on June 4. Please support the rider as they ride to raise money and awareness for Behind the Scenes and Broadway Cares/Equity Fights AIDS. Visit http://lrlr.org to make a donation and learn more about the ride and the riders.

The ETCP Certified Technicians are:

Jonathan Deull
Sam Fisher
Scott Henkels
Adam Maxfield
Jean-Marc Montmejat
Jim Niesel
Eddie Raymond
Paul Sannerud
Bill Sapsis
Loren Schreiber
Patrick Wallace
Drew Wending



Which Electrical Certification is Appropriate for My Co-workers and Me?

All four of the examination programs administered by ETCP are rigorously developed and maintained and based on the highest levels of entertainment industry practice. In large part, this is accomplished by the dedicated participation of practitioners in each of the specialties being tested lending their expertise to validate, develop and maintain rigorous examinations. Our PPDT Subject Matter Experts (SMEs) have worked together on these examinations for over 9 months with outstanding teamwork and a passion for the work. These SMEs provided much needed input during the entire examination development process, which involved two trips to Applied Measurement Professional's (AMP, a PSI business) headquarters in Kansas City and many hours via the web.

Their dedication, hard work and collaboration shows in the final product and we could not have accomplished this without them. "The SMEs for the PPDT certification come from very different aspects of the entertainment industry and their dedication to working together to make this certification relevant to both the concerns of the working person and companies that employ them is impressive. I am in awe of these professionals who have donated significant amounts of their time to the safety and success of our industry," said Alan Rowe, Co-Chair of the SMEs.

Co-Chairing the SMEs are Alan Rowe, Co-Chair of the ETCP Entertainment Electrician SMEs and Chair of the IATSE Crafts Advancement Program and Derek Coleman,

Vice President of Power Distribution for PSAV®. Joining them are: Rob Baxter, NBA Production Electrician, and Owner; Baxter Controls; Pat Enos, Operations Manager Trade Show Electrical, GES; Kevin Felton, Director – Electrical Services, Freeman Electrical, Inc.; Lance Hughston Sr. and Lance Hughtston, Jr., IATSE Members and Owners of Hughston Engineering, Inc.; John Lacy, IATSE Member and freelance Gaffer and Best Boy; Gregg Lirosi, Regional Power Distribution Manager, Eastern United States, PSAV; Billy Peacock, Owner, Eventpower; Phil Reilly, Lighting Director, WGBH-Television Group, IATSE Member, NABET Member; Steve Terry, Vice President of Research & Development, ETC; and Christopher Wren, IATSE Member and owner, Keylight, Inc.

Perhaps the most exciting aspect of this certification is that it is entirely employer-driven — employers came to ETCP to request and sponsor the development of this program. Until now, there has been no means to define the skillsets and knowledge of those who only deal with power distribution. The creation of the PPDT exam has resulted in two different electrical certifications for ETCP (Entertainment Electrician and Portable Power Distribution Technician), and it is extremely important to the Council and SMEs to ensure that both employers and candidates understand the difference between the two certifications and which populations they are intended to serve.

For additional information, see the Scope of Work comparison on the following pages.

Scope of Work for Entertainment Electrician and Portable Power Distribution Technician Certifications

The Portable Power Distribution Technician (PPDT) program is being introduced to provide a much-needed service to the industry. This chart is intended to present a comparison of the Entertainment Electrician and the Portable Power Distribution Technician programs. Both Certifications cover portable electrical equipment within the scope of Articles 518, 520, 525 and 530 of the NEC, and Sections 44 and 66 of the CEC. The Entertainment Electrician program covers all aspects of the work and is intended for managers and supervisors, as well as the

technicians. The Portable Power Distribution Technician program covers those that work in the specific area of power distribution only, often under the supervision of an Entertainment Electrician. The body of knowledge contained in the Portable Power Distribution Technician certification is a subset of the Entertainment Electrician certification. Therefore, a certified EE is qualified to perform all tasks of a certified PPDT, but a certified PPDT is not qualified to perform all the tasks of a certified EE.

TASK	EE	PPDT
APPLY ELECTRICAL THEORY		
Apply operational theory of dimmers, electronics and power supplies	Υ	N
Perform operations and procedures for electronic and		
digital measurements	Υ	N
Calculate formulas using electrical principles	Υ	Υ
Calculate formulas using alternating current theory	Υ	Υ
Perform operations and procedures for electrical measurements	Υ	Υ
INSTALLATION		
Install permanent wiring and distribution equipment	N	N
Install portable power distribution systems in occupancies not		
covered by NEC articles 518, 520, 525, 530 or CEC Sections 44 and 66	N	Ν
Hang/rig overhead equipment	Υ	N
Specify and install rigging hardware for utilization equipment	Υ	N
Install dimming and audio equipment	Υ	N
Install portable emergency systems	Υ	Υ
Install utilization equipment	Υ	N
 Install portable power to dimming, audio equipment and 		
other utilization equipment	Υ	Υ
Install equipment around water	Υ	Υ
SET UP ELECTRICAL/CONTROL SYSTEMS		
Specify and install DMX512 and Ethernet networks, and		
other control wiring	Υ	N
Create detailed equipment lists from light plots and hookups	Υ	N
Create gel and expendable orders from light Plots	Υ	N
Perform configuration and address settings on intelligent luminaires	Υ	N
Specify and install power for on-set welding	Υ	N
Configure, install and program control consoles	Υ	N
	Υ	N
Set up control systems		

TASK	EE	PPDT
Understand and apply correct bonding techniques for portable generators	Υ	Υ
• Connect single-conductor feeders and distribution	Υ	Υ
Install portable transformers for a given load	Υ	Υ
Determine maximum load for a given power source	Υ	Υ
Understand neutral overcurrent and effects of harmonics	Υ	Υ
 Select and size portable feeder cables for a given load 	Υ	Υ
Understand and apply branch circuits and feeders		
for three-phase motors	Υ	Υ
Understand and apply Ground Fault Circuit Interrupters	Υ	Υ
Install portable generators for a given load	Υ	Υ
 Understand and apply multi-cable diversity and ampacity 		
adjustment factors	Υ	Υ
• Understand and apply NEC and CEC requirements for different		
types of venues	Y	Y
Determine total power requirements for a given system	Υ	Y
• Install distribution system from a single-line riser diagram,	Υ	V
exhibit show floor diagram, or power plot	•	Y
• Set up portable power distribution systems • Provide power for utilization equipment	Y	Y
• Assemble/install portable power distribution systems	Y	Y
Perform "live work" on permanently installed distribution equipment	N	N
Develop emergency evacuation plans	Y	N
• Perform testing of emergency lighting systems	Y	N
 Safely utilize various personnel lifting machinery Understand NFPA70E requirements for Personal Protective Equipment 	Y	Y
• Comply with all codes, standards and national laws	Y	Y
• Understand emergency evacuation plans	Y	Y
·	•	•
DETERMINE SPECIFICATIONS Determine power requirements	Υ	Υ
Determine the suitability of permanent power sources	Y	Y
• Specify portable power distribution equipment	Y	Y
• Specify cable management systems	Y	Υ
Interpret plans and create equipment lists	Υ	Υ
Specify low voltage (less than 50V) power wiring	Υ	N
• Specify control, communications, audio and data distribution	Υ	N
• Specify suspension systems	Υ	N
• Select equipment where Listing is required	Υ	N
Scient equipment where disting is required		
MAINTENANCE AND OPERATION	Y	N
MAINTENANCE AND OPERATION Maintain and troubleshoot automated luminaires and effects equipment Operate entertainment electrical equipment	Y Y	N N

Council Approves ETCP Retired Status - Remind Your Retired Colleagues!

Know and ETCP Certified Technician who has retired? Please put us in touch with them! Those requesting Retired status will be able to replace their original designation with ETCP Retired and have use of a special logo to include in their correspondence. Those who wish to come out of retirement after receiving the designation will be required to retake the ETCP Examination.

Since those who have not renewed do not receive the newsletter, ETCP will make every effort to contact those who have indicated the reason for non-renewal was due to the certificant retiring, but if you know of someone who qualifies for the status, please have them contact etcp@esta.org.



Be Sure to Wear Your SWAG!

"I hope that this is still a good email for you. I just wanted to send along a story for you that will probably be a good bit for the next newsletter, whenever that comes out next. I have just been hired for Moogfest 2016. It is a 13 venue music Festival, that has been going on for several years in Asheville, NC, but 2016 will be the first year it will be in Durham. I got the job because I was at the Farmer's Market grocery shopping a few weeks ago, wearing my ETCP swag. In the middle of an argument about asparagus with my wife, the production manager stepped in because he saw the ETCP logo. He gave me his card, and I was just officially hire this morning."

Justin Argenio, Owner and Principal To the Moon Rigging



Justin Argenio

HELP US PROMOTE THE PROGRAM!

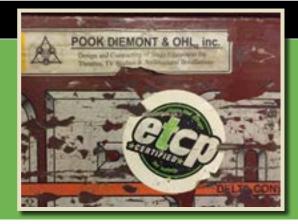


NEW STICKERS ARE AVAILABLE FOR YOUR CAR OR SHOP DOOR.

They are 5" x 4.3" and are FREE upon email request.

Please send your request to:

etcp@esta.org.



The Spring Edition of Protocol is Now in the Mail!

You can also take a look online at: http://estalink.us/protocolonline or learn more about Protocol at http://estalink.us/protocolonline or learn more about Protocolonline at http://estalink.us/protocolonline or learn more about Protocolonline at http://estalink.us/protocolonline or learn more at http://

This issue highlights include:

- Dr. Kevin Kloesel, Director, Oklahoma Climatological Survey and University Meteorologist, OU Office of Emergency Preparedness, shares a valuable tool with readers—"When Thunder Roars, Go Indoors: Lightning Safety Planning"—a must read for everyone involved with outdoor event preparation!
- Guy Holt returns with Part Two of his "Ground-Fault Protection Strategies" and the use of small portable generators in motion picture and live event production.
- In "ANSI E1.43: Performer Flying from the Ground Up," Stu Cox of ZFX details the newest ESTA TSP standard and why it's important to understand.
- "Wireless DMX: Dos, Don'ts, and Gotchas" is a compilation from City Theatrical, LumenRadio, RC4 Wireless, and Wireless Solution to make planning for the wireless for your next production more thorough.
- ProSight Insurance discusses safety documentation for live events: Nothing can prevent every mishap, but a written plan to keep guests safe—will also aid in avoiding litigation and liability.
- The second Severe Weather Summit recently concluded—learn how this industry collaboration is working to improve

weather awareness and planning for live events.

for five events.

- Another successful USITT Expo is in the books—read about the tools that caught Karl Ruling's eye on the show floor.
- Karl Ruling also shares the interesting products he discovered while exploring Frankfurt's massive Prolight + Sound.
- Monique Corbeil offers a snapshot of the vibrant CITT/ICTS association and Canadian industry.
- The North American Theatre Engineering and Architecture Conference returns in July—learn why this valuable event is an inspirational collaborative and networking "must attend" like no other.

- The ETCP News column outlines more details about the new Power Distribution Technician Certification that launches this summer!
- ESTA's Chairman Eddie Raymond discusses the value of community in his Directions column.
- The Technical Standards Program has produced over 50 ANSI-approved standards—with more in the pipeline! Read the update in TSP News from Karl Ruling.
- In Production Equipment Rental Group News, Harry Box highlights the recent PERG member meeting at NAB with an outstanding program and double the attendance!
- Behind the Scenes News focuses on the busy schedule of BTS activities and initiatives on both sides of the pond.

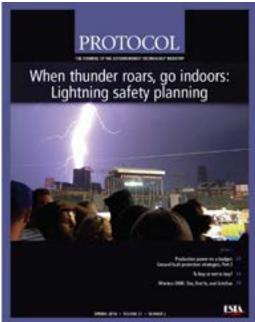
And, much more!

Protocol is now available as a free app for your smart-phone; whether you have an iPhone, iPad, or any Android device, you can now read the latest editions whenever you want and wherever you are. Visit http://estalink.us/protocolapp, click on the corresponding device in this text or search "Protocol Journal" in the iTunes App Store / Google Play Store. Let us know what you think!

We hope you enjoy your new edition of Protocol and, as always, we would appreciate any feedback and suggestions that you can email to beverly.inglesby@esta.org or call 503-291-5143.

Like us on Facebook https://www.facebook.com/ProtocolMag to receive ongoing updates in between editions!

Thanks for your support, Beverly Inglesby, Jackie Tien, and the Protocol Team



Protocol Spring 2016 Issue



VenueConnect 2016 July 23-26 / Minneapolis, MN

Register today at iavm.org/VenueConnect

Venue Connect 2016 is the **only** industry conference that provides targeted education created specifically for arena, stadium, convention center, performing arts, amphitheater/festival, college & university venue professionals.



New ETCP Recognized Employers, Labor Providers and/or Contactors

Killswitch, Inc. ~ Burbank, CA
Legend Theatrical ~ Scotts Valley, CA
On the Fly Productions ~ Greenwood, IN
Playmaker's Repertory Company ~ Chapel Hill, NC

Companies and organizations can sign a Best Practices Agreement which shows their commitment to safety and in turn, they are listed on the ETCP website. These agreements must be renewed on a yearly basis because the ETCP Council wants employers to think about who is up on their roster and whether or not they are adhering to the guidelines for the privilege of being listed on the website. In addition to being searchable on the ETCP website, these companies may use the ETCP Recognized Logos on their website and on company letterhead.

There are three designations:

Employer: For those who have full-time ETCP Certified

Technicians on staff.

Contractor: For those who use over-hire ETCP Certified

Technicians or hire other ETCP Recognized

Employers to do the work.

Labor Provider: For those who provide a workforce of

ETCP Certified Technicians.

To participate, please visit go to http://etcp.esta.org and then to the pull-down menu for "Recognized," and see which one is appropriate for you.

Industry News

NATEAC Dinner to Benefit Behind the Scenes



The director and staff of the <u>North American Theatre Engineering and Architecture Conference</u> (NATEAC) are proud to announce that the conference dinner, which will be held on Sunday night, July 17th at Sardi's, the iconic New York City theatre restaurant, has been designated a charity event to benefit Behind the Scenes, a program of the <u>Behind the Scenes Foundation</u>.

The Behind the Scenes Foundation is a non-profit, taxexempt 501(c)3 organization established in 2005 to create and support charitable programs for the entertainment technology industry. The Behind the Scenes charity program issues grants to entertainment technology professionals in need due to serious illness or injury.

Richard Winkler, the Tony Award winning Broadway light-

ing designer and Producer will be the guest speaker. "I'm thrilled to be a part of this event", noted Richard. "We'll have some fun and raise money at the same time for a very worthy organization."

The dinner, which is open to conference attendees, will cost \$100 per person, \$75.00 of which will go directly to the charity. Bill Sapsis, NATEAC director commented, "The work Behind the Scenes does for our industry is enormous and supporting them with this dinner was a very easy decision. Generous donations from PRG and Altman Lighting helped make this event possible."

Rick Rudolph, Chairperson of the Behind the Scenes Foundation's Board of Directors noted. "This is a very pleasant surprise and we're honored NATEAC has chosen to support Behind the Scenes in this manner. The support from this dinner will help us continue providing grants to people who really need the help".

NATEAC takes place in New York City at the Roosevelt hotel on July 17 and 18, 2016. Details for the conference and dinner can be found at www.NATEAC.org. For more information, contact Bill Sapsis: Bill@NATEAC.org or 267-278-4561.

Introducing the Bolt Head Capture Tool!

Looking at the current truss tools; the ratchet & socket and combo wrench; one is forced to ask,

"Is this the best we can do for Truss Tools? After all these years?"

That is the question that has been finally answered.



"NO! We can do better!"

"FINALLY! The time has arrived!"

"We have done better!"



This specialty tool is specifically designed to be used in place of that dubious "standard", the 15/16" combo wrench. Stop wasting your time, your knees and your patience on a tool that just doesn't work. Confess! You fight that combo wrench as much as you use it. You long for two socket wrenches, but the other crew needed a set of Truss Tools to do the exact same thing you're doing! Getting frustrated and wishing that lunch would come soon!

We haven't even mentioned 12" corner cubes where neither of the standard truss tools really fits or is usable. Seriously! NOT AT ALL!

Features of the Bolt Head Capture Tool

- > Specifically designed for use with 12" aluminum truss, not something just off the shelf
- > Fit easily inside a corner cube
- > Can be moved from bolt head to bolt head easily
- > Simple to use
- > Saves you frustration, time and your knees
- > AND is made right here in the USA!

The Bolt Head Capture Tool is the Truss Tool for right now! Toss that useless combo wrench back into the ammo box and take the Bolt Head Truss Tool to the job. You'll be glad you did!

Available at www.newactenterprises.com

Price \$39.95 Plus shipping and handling and applicable taxes

News and Video from BNW Rigging

Tony Bonilla, with BNW Rigging contacted ETCP with the following, "I am sending you a video of one of our more fun jobs, we rigged De Materia at the Park Avenue Armory. This featured 3 double hinged pendulums. At 30 ft. tall they were about a thousand pounds each." View here: https://youtu.be/5-TJclfBfDM.

Raising The Dauntless

iWeiss has completed another Airplane Rigging project with Century Aviation of East Wenatchee WA. Project Manager Russ Dusek worked with Century Aviation owner Mark Smith on the planning and engineering for the rigging of restored Sikorsky HRS-2 and UH-34D helicopters, along with a WW II SBD Dauntless hung — overhead in a dive attitude -for the expansion of the National Marine Corps Museum in Virginia.

For the Dauntless the factory installed lift points were designed for hoisting the aircraft onto a ship so the challenge here was to engineer new points to support the dive attitude required by the museum. Working with Mike Rolfs of Pacific Engineering, Russ & Mark designed and fabricated new attachment points that would provide the necessary strength for a "dive hang" without compromising the integrity or appearance of the 6,000 lb. aircraft -guts removed. As the plane had to be flown over an existing floor exhibit, once engineered load tests were performed we employed chain hoists to lift and laterally move the plane and place it into the desired bank and attitude. Once approved, permanent rigging cables were installed and the hoists removed.

The 8,000lb UH-34D Helicopter was mounted in a 9 degree nose down position on steel stands built by Century. As overhead lifting was not possible due to a Jet display, we employed a 12,000 lb capacity tele-handler to lift the copter from its main rotor head with a second lift at the tail wheel to achieve final attitude on the stands.



iWeiss continues its relationship with Century Aviation later this year with the installation of an F/A-18A Hornet in a newly constructed section of the museum.

See more at: http://blog.iweiss.com/2016/03/raising-the-dauntless/#sthash.5gJ73HVB.dpuf

National Sawdust and iWeiss

"Massive" black and white velour drapery surround Brooklyn's music venue, National Sawdust, creating an "acoustic envelope." We built and installed a line-shaft for lighting positions and all of the drapery is hanging on iWeiss curtain track and attached by custom brackets into the solid concrete shell.

Bureau V – Architects Arup Acoustics – Acoustic and Theatrical Consultants

See more at: http://blog.iweiss.com/2016/03/national-sawdust-and-iweiss/#sthash.OY2BiUuc.dpuf



Photo Credit: Floto Warner

Bigger Hammer Welcomes new Rigging and Safety Manager

Bigger Hammer Production Services is excited to welcome our new full-time Safety & Rigging Manager, Andrew Volk, to our production team. He found our job opening in the ETCP newsletter.

Andrew relocated from Chicago, where he worked as a Crew Chief and Production Rigger since 2006. He is an ETCP Certified Arena Rigger and worked at Soldier Field, the United Center, McCormick Place, the Field Museum, the Art Institute and many more. Andrew is experienced with events from international headliners, to cooperate

galas, museum installations, theatrical and large scale private productions. He is also an experienced rope access and rescue technician (SPRAT certified). Andrew moved to California for a change of scenery and weather, and is excited to be a part of the Bigger Hammer team.



Andrew Volk

Save the Date! TLS Productions, Inc. Open House

Save the Date! TLS Productions, Inc. Open House Thursday September 22nd, 2016! 11am - 7pm!



TLS Productions, Inc. is proud to announce our Third Annual Open House & New Product Showcase, Thursday September 22nd, 2016 from 11am to 7pm - at our headquarters in Ann Arbor, Michigan. Join us for a great

day of lighting, rigging, A/V, and special effects product demonstrations from some of the biggest names in the industry! Mark your calendar for what is sure to be a spectacular event, free of charge! Meet our staff! Tour our facilities! Enjoy complimentary food and beverages, prizes, entertainment, and much, much more!

We're also excited to announce that we'll be offering several training courses on Tuesday, Wednesday & Thursday - 9/20, 9/21, & 9/22!

Thanks to Our Council Members:

































InterAmerica Stage, Inc. Tackles Major Theater Rennovation

InterAmerica Stage, Inc. recently completed work at the William and Joan Lehman Theater in Miami, Florida. The theater is located on Miami Dade College's North Campus and dates back to the 1960s as part of the William D. Pawley Creative Art Center. The Center undertook a massive renovation of the 457-seat main stage theater to improve the sound systems, production systems, rigging systems, acoustics and interior design. In addition to the main stage renovations, the Center also improved the dressing rooms, constructed a new green room built outside the main hall, added a black box theatre with full rigging and lighting systems, and gave the building a new entrance with a Broadwaystyle marquee.

InterAmerica Stage, Inc. made significant contributions to several aspects of the renovations in the main theatre space. Work began with the demolition and removal of the preexisting counterweight rigging system, followed by the installation of a new, automated hoist system. The Vortek® hoists by Electronic Theatre Controls (ETC) mechanize and automate hoisting in theatre, providing push-of-the-button control of give fixed lifting speeds, soft starts, and maximum lift. InterAmerica Stage, Inc. installed 28 Vortek® hoists as part of Lehman's new system. A custom-created steel structure





ETCP Certified Riggers on the job!

was also installed into the existing head block to mount the Vortek® hoists vertically instead of horizontally, thereby tailoring the Vortek® hoists to the space.

InterAmerica Stage. Inc. removed the fire curtain from the 44-footwide proscenium, installed a new brail curtain for the main stage, and restored the theatre's projection screen's soft goods and tracks. A new dead hung rigging position for the main traveler and a dead hung rigging position for the projection screen were added. The team demolished the old access bridge, and then extended the existing catwalk system into the house. A custom HVAC access platform was installed, and additional structural steel work was also performed

InterAmerica Stage, Inc. assigned four ETCP-certified riggers to the project. Solana Bolton served as Project Manager and stated, "Having an ETCP-certified staff involved with [the] project allowed us to bring high-level rigging expertise to the design and installation of the project." Greg Keatley, dualcertified in both theatre and arena rigging, served as Head Senior Supervisor for the entire project. Mark Powell served as Senior Supervisor for the project, and Jason Hastings led the Commissioning Team.



DON'T LEAVE YOUR COLLEAGUES IN THE DARK

To support a Long Rider: www.behindthescenescharity.org/IrIr

Lindapter's New Type ALP Lifting Point Suspends Helicopter Display

Lindapter's lifting point was recently supplied to The American Helicopter Museum for the suspension of an Enstrom F28A Helicopter. The helicopter was suspended using a single lifting point fitted with an eye bolt. The helicopter weighed in at over 700kgs; well within the capability of the Lindapter assembly.

This project demonstrates the extensive range of applications in which Lindapter connections are used. Lindapter's lifting solutions have also been specified in arenas and theatres in lighting and sound rigging applications and in sports facilities to suspend punch bags and secure temporary seating. The benefits of an adjustable, high capacity and easy to remove connection system are transferable to an array of industries beyond Construction and Structural Engineering.

Click here for further information about Lindapter's Lifting Points, including the New Type ALP. Click here to see our new product videos.

In Memoriam

James Segura

James was born on 7/30/66 and started with IATSE Local 16 on 05/01/96. He became Journeyperson on 10/6/99. He was a stage electrician and moving light operator at many venues around the Bay Area. He was a loyal friend, father and husband and an avid knife collector.

James passed away on 2/2/16 leaving behind his wife Catherine Miller, daughter Grace Miller Segura (10), and many good friends he considered family at Local 16 in San Francisco.

He will be greatly missed by all who knew and loved him.



Garry J. Conrad

Garry J. Conrad of New York City, formerly of Saugus, MA, died suddenly in NYC on May 18, 2016. Garry was born January 24, 1970, and graduated from Malden Catholic High School in 1988. He developed his love of education and theater at Emerson College, Boston.

During his 27 years as a stagehand and certified electrician, Garry became a member of the International Alliance of Theatrical Stage Employees Union Local 11 (Boston) and Local 1 (NYC). He proudly worked on Broadway productions such as Mary Poppins, Legally Blonde, and The Phantom of the Opera. His local experience included fibre optic installation for the Boston Symphony Orchestra, Harbor Lights, and he earned pyrotechnic special effects credits for feature films such as 21. He was also instrumental in organizing Harbor Lights into IASTE Local 11.



Garry J. Conrad

Garry's family was always very proud of him and were there, along with friends, to support his endeavors and to celebrate his accomplishments, projects and tours through the years.

Harrington Hoists, Inc. Presents our

Theatrical Hoist Repair School

The Harrington TNER Repair School consists of classroom work followed by the hands-on training of disassembling and assembling our TNER Theatrical Hoists. Each person attending will receive the TNER presentations, TNER Owner's Manual and a certificate stating they are qualified to make repairs to Harrington TNER hoists. Our class is approved for ETCP renewal credits.

Space is limited so please contact your Harrington Sales team today if you are interested in attending.





Venue: Harrington Hoists, Inc. - Headquarters

401 West End Avenue, Manheim PA

Date: November 16, 2016

Time: 8:00 AM - 5:00 PM

Presenting: Theatrical Hoist Repair School

TNES Inspection, Repair, & Electrical Troubleshooting Itinerary

Wednesday, November 16, 2016

8:00 am – 8:15 am Welcoming Remarks and Introductions

8:15 am – 8:30 am Plant Tour

8:30 am – 10:15 am TNER Electrical Troubleshooting Presentation

10:15 am - 10:30 am Break

10:30 am – 12:00 pm TNER Electrical Troubleshooting Lab

12:00 pm – 1:00 pm Lunch (Harrrington takes group to lunch at Cat's Meow)

1:00 pm – 1:30 pm TNER Electrical Troubleshooting Exam

1:30 pm – 2:30 pm TNER Inspection, Repair, & Maintenance Presentation

2:30 pm – 3:15 pm TNER Inspection, Repair, & Maintenance Lab

3:15 pm - 3:30 pm Break

3:30 pm – 4:15 pm TNER Inspection, Repair, & Maintenance Lab (continued)

4:15 pm – 4:45 pm TNER Inspection, Repair, & Maintenance Exam

4:45 pm – 5:00 pm Closing Remarks and Graduation

Training News

USITT's Jay O. Glerum Rigging Masterclasses, Electrician Class Set for June

The first Jay O. Glerum Masterclasses are set for June 13 to 14 in Denver, with two-day workshops in advanced rigging and entry level rigging. An Electrician Masterclass is being offered at the same time.

The Entry Level Rigging track is geared toward educators and students and covers counterweight and automated rigging safety operations. It will be led by Ed Leahy of Chicago Flyhouse, Bridget Cox of JR Clancy, and Shane Kelly of DePaul University. The cost is \$150 for two days of classes at Metropolitan State University of Denver. Grants are available to cover travel expenses for secondary school teachers. Register at www.usitt.org/glerumentrylevel.

The Advanced Rigging Track, Building Blocks of Stage Hoist Automation, is for professionals and qualifies for 12 ETCP renewal credits. It will be led by Eric Rouse of Denver Center Theatre Company, Peter Svitavsky of JR Clancy, Joe Champelli of Entertainment Project Services, Paul Kelm of iWeiss, and Gareth Conner of Creative Conners. The cost is \$350 for the two days. Register at www.usitt.org/glerumadvanced.

The <u>Electrician Masterclass</u> is designed to give the early/mid-career participant a better understanding of electricity and the hazards and consequences of working with it in the entertainment industry. It will be taught by Mitch

Hefter of Philips Lighting and Ken Vannice, of Kenneth Vannice, LLC, both ETCP-recognized trainers, and qualifies for 12 ETCP renewal credits.

The cost for the electrics workshops is \$350 for the two days if registered by May 14. After that date, the cost increases to \$400. Register at www.usitt.org/elexmc.



Jay O. Glerum

Hotel housing for participants is available at the Holiday Inn Express Downtown Denver at a rate of \$170 per night. Book housing here.

The Jay O. Glerum Masterclasses honor the memory of master rigger and rigging safety advocate Jay Glerum, who died in 2014. They will be held in a different location each year.

The USITT Electrical Workshops have been offered regularly since 2001 at USITT Conferences and other events. These programs serve USITT's mission of providing year-round, life-long educational opportunities to members of its backstage community.

Caption This...

Caption Contest

"What is Uncle Bill saying this time?"

The top three captions will be published in the next edition of ETCP Certifiable News, and the top winner will recieve a free ETCP Beanie!

Submit your captions to Meredith: etcp@esta.org.



Job Board

COMPANY: FTC

Middleton, WI LOCATION

Rigging Rockstar (Field Service Engineer) **JOB TITLE:**

MORE INFO: http://jobboard.plasa.org/jobs/8097413/

field-service-engineer-rigging

COMPANY: Heartland Scenic LOCATION: Omaha. NE

JOB TITLE: Rigging Dept. Manager

MORE INFO: http://jobboard.plasa.org/jobs/8093605/

rigging-department-manager-installer

COMPANY: Westview Productions

LOCATION: Denver, CO

JOB TITLE: Theatrical Rigging Technician

MORE INFO: http://jobboard.plasa.org/jobs/8091534/

theatrical-rigging-technician

COMPANY Grand Canyon University

LOCATION: Phoenix. AZ

JOB TITLE: Technical Director/Master Electrician MORE INFO: https://gcu.wd1.myworkdayjobs.com/

en-US/GCU/job/AZ-Phoenix/Technical-Director-Master-Electrician R00004269-

1?source=Indeed

COMPANY: **SESCO Lighting**

LOCATION: Tampa, FL

JOB TITLE: Sales Representative Lighting Controls MORE INFO: http://jobboard.plasa.org/jobs/8130965/

sales-representative-lighting-controls

COMPANY: iWeiss LOCATION: Fairview, NJ

JOB TITLE: **Automation Technician**

MORE INFO: http://www.iweiss.com/articles/automa-

tion-technician-00602.html

COMPANY: Encore Event Technologies

LOCATION: Las Vegas, NV

JOB TITLE: **Rigging Supervisors** *ETCP Certified Technicians Only

MORE INFO: erik.ornberg@encore-us.com

COMPANY: iWeiss LOCATION: Fairview, NJ

JOB TITLE: Project Manager

*ETCP Rigging Certification a Plus!

INFO: http://www.iweiss.com/articles/project-

manager-00552.html

COMPANY: Syracuse Scenery and Stage Lighting, Inc.

LOCATION: Syracuse, NY

Full Time Installation Crew Members JOB TITLE: MORE INFO: http://www.syracusescenery.com/id11.

html

Cirque Du Soleil **COMPANY:**

LOCATION: Various **JOB TITLE: Head Rigger**

Technicians - Rigger

MORE INFO: https://www.hrapply.com/

mgmresorts/AppJobView.

jsp?link=177835&page=AppJobList. jsp&skimSessionName=com.hrlogix.view. cont.app.JobListTable&skimName=requisi tion.requisition id&skimNdx=14&op=rese

t&electronic referral=indeed

COMPANY: Norwegian Cruise Line

LOCATION: **Traveling**

JOB TITLE: Lighting Technician, Lounge Technician

and Automation Technician

MORE INFO: https://career8.successfactors.com/

career?company=NCLPROD&career ns=job listing&navBarLevel=JOB

SEARCH&career job req id=9168&jobPipeline=Indeed

There were also many jobs found here:

http://www.indeed.com/q-Stage-Production-Rigging-

jobs.html

Post. Interview. Hire.

Need to Hire Someone New?

Post your jobs and access industry professionals at a fraction of the cost of commercial boards and newspapers.

Jobboard.esta.org +1 212 244 1505

Looking for a Job?

Post your resume or CV online for FREE for potential employers to view. Search jobs and update your account as needed.



www.esta.org

Renewal Credit Opportunities 2016

Recognized Training Programs and Providers:

APT Entertainment Electrics:

Entertainment Electrics Workshop for Audio, Lighting, & Video Techs
June 21 & 22, 2016 Bangalore, India

Entertainment Electrics 3-Day Class

Rensselaer Polytechnic Institute
June 27-29, 2016 Albany, NY
http://empac.rpi.edu/events/2016/spring/entertain-ment-electrics-workshop

Entertainment Electrics 3-Day Class

Production Academy
September 12-14, 2016 Chicago, IL
http://store.aptxl.com/Entertainment_Electrics_Training_p/eets-chi2016.htm

Entertainment Electrics 3-day Training

December 14-16 **2016 Burbank, CA**http://store.aptxl.com/Entertainment_Electrics_Trai-ing_Burbank_Dec_2016_p/eets-la2016.htm

Advanced Topics in Power Distribution 1-day Class October 19, 2016 LDI, Las Vegas www.ldishow.com

Entertainment Electrics Hands-On 1-day Workshop October 20, 2016 LDI, Las Vegas www.ldishow.com

http://etcp.esta.org/cert_recognized/training_programs/electrical Academy Production Technology.htm

CM-ET:

2016 Otto Systems RTC Certification School Two-Day Course (Earn 12 ETCP Credits)

Year after year, Otto Systems in Santa Fe Springs, CA, has offered high-quality product training schools. This year is no different. Otto Systems and CM-ET, a division of Columbus McKinnon, will be offering a Road Technician Certification class. Tools will be provided, but students can bring their own tools if they prefer.

Date: June 14-15, 2016

Location: 12010 Bloomfield Ave, Santa Fe Springs, CA

562.462.1612

To register for the class, contact Otto Systems by phone at 800-596-7392 or via email at sales@ottosystems.com. You can also visit their website at www.ottosystems.com. For more information contact Herb Hart (herb.hart@cmworks.com) or Dave Carmack (david.carmack@cmworks.com)

CM-ET Ultimate Mega School

10-Day Course (Earn 36 ETCP Credits)

Date: August 15-26 **Location:** Orlando, FL

This one-of-a-kind class combines our 5-day Mega School with a 5-day Rope Access Certification course. It's the ultimate entertainment rigger training!

Seating is limited. Sign up today!

CM-ET Mega School

This five-day course will cover everything in our Road Hoist Technician Certification course as well as our Entertainment Rigging Seminar course. To register for this class, individuals must have successfully completed the one-day <u>CM-ET Basic Introduction and Maintenance School</u> within the past three years and work with Lodestar or Prostar hoists on a regular basis.

The first half of this ETCP-recognized training course will cover all aspects of the design and operation of hoists, maintenance needs, inspection requirements and troubleshooting procedures. This course also delves deep into electrical theory and troubleshooting of the popular Lodestar and Prostar hoists.

Participants will receive 12 points towards the renewal of their ETCP Certification. Upon passing, participants will also receive a CM-ET certification card and document, both of which are good for five years.

The second part of this course is an intense exploration of rigging terminology, equipment and concepts for the entertainment industry.

Renewal Credit Opportunities 2016

Rope Access Certification Course

Rope Access Professionals is proud to team up with Columbus McKinnon to offer another training and certification to the robust Mega School curriculum. Rope Access Professionals has been training students to certify to become a SPRAT Rope Access Tech since 2010, teaming up with hundreds of students and numerous companies.

The Rope Access Certification Course will be a 5-day course consisting of four days of training and one day of evaluation. This class will encompass everything a prospective student will need to understand and demonstrate the skills needed to achieve rope access certification. From understanding anchors to performing a rescue of your fellow technician, it's all covered and practiced.

Not able to make the 10-day class? You can also sign up for these classes individually below:

- CM-ET Orlando Mega School
- Rope Access Certification Course

For more information, please contact <u>Rob Hassler</u> or Dave Carmack.

**CM-ET also offers online training for 4 renewal credits

http://www.cmcodepot.com/cm-et-lodestar-online-training.aspx

ETC:

SCHEDULE FOR EDUCATION CENTER OUTPOST

Ion	DATES June 1-3 Orlando, FL	CLASSES Level 1: Essentials Level 2: Enhanced Skills Level 3: Advanced Programming
lon	June 7-10 Hollywood, CA	Level 1: Essentials Level 2: Enhanced Skills Level 3: Advanced Programming Expert Topics: Effects, Pixel Mapping and Various other topics

Ion	June 20-22	Level 1: Essentials
	New York, NY	Level 2: Enhanced Skills
		Level 3: Advanced
		Programming
Element	July 19-21	Level 1: Essentials
	New York, NY	Level 2: Enhanced Skills
		Expert Topics: Effects
Ion	Apr 5-8	Level 1: Essentials
	Hollywood, CA	Level 2: Enhanced Skills
		Level 3: Advanced
		Programming
		Expert Topics: Effects,
		Pixel Mapping and
		Various other topics
		Expert Topics: Effects

You may attend one or all days depending on your level of Advancedise. Visit us at www.etcconnect.com/education for updated information on these and our other live training events as well as links to online training materials.

 ${\color{red}\textbf{Contact}} \ \underline{\textbf{Ellen.White@etcconnect.com}} \ \text{for more information}$

http://etcp.esta.org/cert_recognized/training_programs/
electrical ETC.htm

Gravitec Systems, Inc.:

Competent Fall Protection Person All courses are in Poulsbo, WA except where indicated.

Fall Protection Competent Person

June 6-10, 2016 July 11-15, 2016 August 8-12, 2016 August 29 - September 2, 2016 September 12-16, 2016 (Hawaii) September 19-23, 2016 October 3-7, 2016 October 17-21, 2016 (Alaska) October 31 - November 4, 2016 December 5-9, 2016

Refresher Course

June 8-10, 2016 July 13-15, 2016

Renewal Credit Opportunities 2016

August 10-12, 2016 August 31 - September 2, 2016 September 14-16, 2016 (Hawaii) September 21-23, 2016 October 5-7, 2016 October 20-22, 2015 (Alaska) November 2-4, 2016 December 7-9, 2016

Fall Protection Program Administrator

May 24-26, 2016 August 23-25, 2016 November 7- 9, 2016

Fall Protection Qualified Person

June 13-17, 2016 August 22 - 26, 2016 October 24 - 28, 2016 December 5 - 9, 2016

**Follow this link for additional courses: https://www.gravitec.com/fall-protection-training/training-calendar/

http://etcp.esta.org/cert_recognized/training_programs/
rigging_Gravitec.htm

Harrington Hoists and Cranes:

TNER Theatrical Hoist Inspection All courses take place in Manheim, PA November 18, 2015

http://etcp.esta.org/cert_recognized/training_programs/rigging_Harringtonhoists.html

Navigator Control Systems

Nav 102- Practical Hardware for Automation September 12-15, 2016

Nav 103- Basic Navigator July 11-14, 2016 October 3-6, 2016

December 5-8, 2016

Nav 104- TAIT Automation Products

May 19-20, 2016 June 23-24, 2016 Nav 201- Advanced Cue Programming and Rules

August 1-4, 2016

October 31- November 3, 2016

Nav 208- IO, Axis IO and Tuning Basics

May 14-29, 2016 August 15-18, 2016 November 14-17, 2016

Nav 301- Objects and Lace Attachments

October 17-21, 2016

http://etcp.esta.org/cert_recognized/training_programs/electrical Navigator.htm

Stage Rigging:

All courses take place in Redwood City, CA

Course 6 - Hands on Rigging June 13

Course 1 - Wire Rope, Slings and Hardware July 18

Course 2 - Math, Part One August 22

Course 3 - Truss and Math, Part Two September 19

Course 4 - Hoists October 17

Course 5 - Fall Protection ,November 21 Course 6 - Hands on Rigging December 12

http://etcp.plasa.org/cert_recognized/training_programs/rigging_Stage_Rigging.htm

Vari-Lite:

All Training Dates are in Dallas, TX

Upon successful completion of this class, technicians will be certified to perform Warranty Service on all Vari-Lite Luminaires. An examination is given. The class is extremely hands on. All fixture types will be disassembled to the sub-assembly level. Maintenance and trouble-shooting techniques will also be covered. Attendees will receive printed material relating to the service of all fixture types as well as access to the service portion of the Vari-Lite website.

2016 Dates:

 June 13-17
 July 11-15
 August 8-12

 September 12-16
 October 10-14
 November 14-18

 December 5-9

http://etcp.esta.org/cert_recognized/training_programs/
electrical_varilite.htm