



THE Breaker Buzz

Providing Electrical Solutions Worldwide VOL. XVI

DECEMBER 2017

Vacuum Interrupters Debuts Multifunctional VITS60M Tester

THE DEVICE PERFORMS INSULATION RESISTANCE TESTING WITH AUTOMATED POLARITY INDEX AND ABSORPTION RATIO TESTING AND CAN SERVE AS A STAND-ALONE 60 KV DC HIPOT TEST SET.

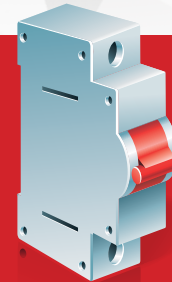
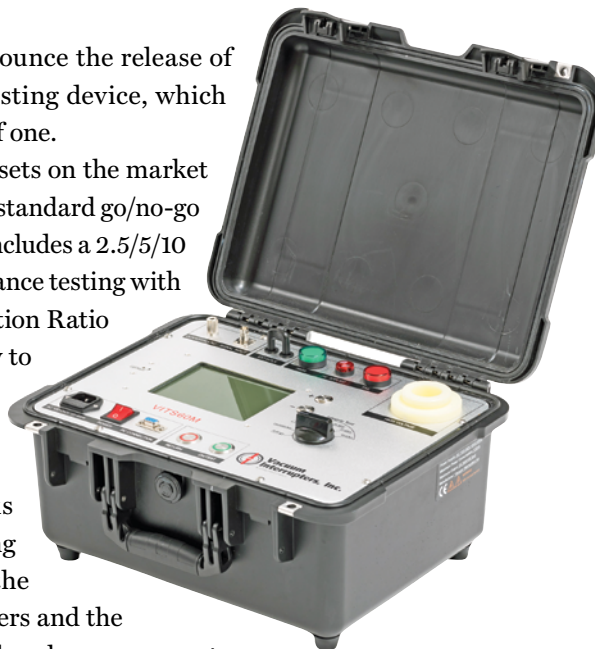
VACUUM INTERRUPTERS, INC., is proud to announce the release of the VITS60M vacuum interrupter testing device, which performs three test sets for the price of one.

Unlike other vacuum integrity test sets on the market today, the VITS60M not only performs standard go/no-go tests on vacuum interrupters but also includes a 2.5/5/10 kV megohmmeter for Insulation Resistance testing with automated Polarity Index and Absorption Ratio testing routines and has the capability to serve as a stand-alone 60 kV DC high-potential (HiPot) test set for most types of insulation testing.

This simple-to-operate set walks technicians through setup, generating a visual go/no-go result for testing the vacuum integrity of vacuum interrupters and the dielectric strength of various vacuum breaker components during regular maintenance while offering fully programmable leakage current thresholds and test durations.

VITS60M features and benefits include:

- Safety features with auto discharging, interlock, and safety control button
- 2.5/5/10 kV megohmmeter
- Integrity test, Insulation Resistance test, Absorption Ratio test, and Polarity Index test all in one — lower price, more functions



INSIDE THIS ISSUE

Page 2

A Time for Pride and Gratitude

Page 4

Hurricane Harvey Brings Out the Best in CBS&R

A Sincere Thank-You

Page 5

AEAMC Pulls Together to Weather the Storm

Remembering Kristina Schwantes

Page 6

CBS Northeast Promotes From Within

WES Workers Connect During Vancouver Outage

WES Gets the Star Treatment

Page 7

MAC-TS4 Demo Scores a Hit With BP Refinery

Vacuum Interrupters Takes Road Trip to Mumbai

Page 8

Smooth Operators: Spotlighting Longtime Group CBS Employees

Page 9

PEARL Technician Certification Distinguishes WES From Competitors

Tommy Phillips Makes History at AAA Nationals

Page 10

Group CBS Affiliates

Trade Show Calendar

Continued on page 3

THE VIEW FROM FLIGHT LEVEL 410

By *Finley Ledbetter*, CEO and Chief Scientist,
Group CBS, Inc.

A Time for Pride and Gratitude

Here we all sit — less than a month left in 2017, having had a very good year and just trying to get year-end projects completed and Christmas done before the year-end festivities start the time of year I hated as a young man. No one wants to work, no one wants to conduct commerce, the phone goes dead, the fax machine stops ringing, the emails stop coming (at least the ones from the U.S.), and commerce crawls to a slow burn. I firmly believe that when I stop feeling this way, it is time to retire, go to the ranch, and spend my days on brush control, cows, and my old car collection.

Well, I'm still here and hating this time of the year, so bah humbug and all that, I guess.

I love the people who work for GCBS, and it's clear that the holidays, the parties, and the bonus checks make the world go 'round. Everyone wants to perform and do well for their families, and the holidays allow us all to show that in some way or another.

I lost my parents early in life — both before I was 20 — so for many years the holiday brought me real anguish. But GCBS and my children have replaced that family, and soon my kids will replace me and they will have their own families, I guess.

So what does this have to do with GCBS and the Breaker Buzz? Not a lot, but I want to be clear that my family is my wife, my kids, my grandkids, and all who work for GCBS. I have a big family — one to be proud of and one to be thankful for.

I get to spend all my time with that family, one or another, and that is something I'm also thankful for every day.

As for the GCBS report, let's start with what a great year we have all had: record sales, record growth, and really a lot of fun to be around. *Upbeat* is a word that I have heard a few times lately from outsiders who are around us. And we should all be proud of that.



Progress is another key word, with the VIM facility being built and slowly coming to life, as well as the new startup in Crown Point, IN, where CBS Midwest is really powering through its first six months of operation. Plus, look for a new acquisition that will be closed on and announced in the next bimonthly video and Breaker Buzz. We will be adding two new service shops to GCBS' existing operations. These shops have more than 20 years of operations with key accounts and have key people who are exactly like the type of people we already have, servicing clients exactly as we already do. We get stronger, we get bigger, and we get better, all in one stroke of the pen, along with a big check — let's not forget that part.

**What a great year we have all had:
record sales, record growth, and
really a lot of fun to be around.
Upbeat is a word that I have heard
a few times lately from outsiders
who are around us. And we should
all be proud of that.**

We have been busy developing several new products, including our switchgear Guardian product, our VITS60M test set, and the newest release in our Tough Duty EP pole and breaker program — the 50 kA, 3000 amp replacement TD breaker and pole for legacy GE PowerVac replacement.

We are starting to gear up for the NETA PowerTest


Continued on page 3

Continued from page 2

.....
conference, where we will have a three-hour workshop in medium-voltage breaker life extension. Email me (finley@groupcbs.com) and ask, and I will send the paper out to you in advance. It is 28 pages of insightful details that will take some time to digest. Then you can come prepared to challenge my always somewhat on-the-edge commentary.

More consolidation has occurred in our market with consolidators buying up testing companies. It seems to be an arms race between three or four of them. It will be interesting to see how it turns out as they are all exiting the equipment and service shop world.


With GE selling to ABB, the GE name as we know it will start to finally fade from our industry. Support for GE legacy equipment will start to fade even more, and the almighty meatball will fade. I hate to see this, but it will be good for us and ABB. I expect that GE will re-enter the service business and be a major player again.

Well, enough rant and enough of me. To all at GCBS and others around the world who subscribe to the Buzz — now more than 2,500 strong — we salute you and hope to see you all at PowerTest in 2018. 

Vacuum Interrupters Debuts Multifunctional VITS60M Tester

Continued from page 1

- Tough dual-case design
- Operates in 1 kV DC increments
- CE-certified
- Lightweight
- Failure indicator LED makes it easy to interpret results (green light: pass; red light: fail)
- Available with optional five-year warranty with loaner service included. Never be down more than a day.

Customers who want to learn more about the VITS60M can contact Info@VacuumInterruptersInc.com or call 214-442-5877 for an on-site demonstration. 

Want to know how long that interrupter will last?

.....
Vacuum Interrupters' MAC-TS4 uses the Penning Discharge Principle to predict the remaining life of vacuum interrupters in the shop or field based on trend analysis of leak-rate current tests taken over time.
.....



Shermco Tours Group CBS Headquarters

A video crew recently accompanied managers and sales personnel from Shermco Industries as they visited the Group CBS research and development lab.

Group CBS CEO and chief scientist Finley Ledbetter demonstrated the company's testing procedures, prototypes, and products, including the MAC-TS4 attached to a Shermco project to test the remaining life of a vacuum interrupter. Shermco Industries continues to strengthen its partnership with CBS's newest branch in Crown Point, IN.



<http://bit.ly/2j4AUDZ>

Hurricane Harvey Brings Out the Best in CBS&R

By Staff

THE SCENE IN HOUSTON was troubling to say the least. Historic rainfall as a result of Hurricane Harvey plagued the Texas Gulf Coast. Friends, families, and complete strangers suffered together, but the determination and commitment to recovery was a common bond that elevated our region to hope for a new beginning. As August quickly expired and September brought overwhelming realities, Circuit Breaker Sales & Repair rallied in many ways.

Industry along the Gulf Coast was halted by the storm, and CBS&R stepped in to provide expedient service and solutions. Refineries and products that our country rely on were at a standstill, and help was needed. The team at CBS&R was a remedy preferred by many in the region, and the Houston-based heroes

claimed victory for three key facilities along the Gulf Coast.


“Our guys were ready at the drop of a hat to not only help each other, but also to assist our customer base in getting back on line,” says Lee Heine, CBS&R vice president of sales. “The phone would ring, our trucks would hit the road, and our team was in the shop working around the clock. Sometimes we would be shorthanded because our employees were facing flood damage at home. It was incredible to see everyone lay it all on the line for their jobs only to leave and face new battles in their own homes.”

The extent of the damage varied within the CBS&R family. Some suffered minor damage; some lost everything. In response to the devastating blow, Group CBS formed a GoFundMe campaign

to assist the many CBS&R employees impacted by the storm.

“We can assure you the collective spirit was boosted by the support provided by so many,” says Heine.

To say that these donations provided a bright light in such a dark time is an understatement. CBS&R employees are forever grateful and indebted to those who provided the funds that have helped with the recovery (see sidebar).

As the dust continues to settle and the recovery efforts remain steady, CBS&R stands proud for many reasons. Optimism and a commitment to excel serve as a beacon of hope for so many. Resilience and determination will always keep families, friends, and neighbors safe and at the forefront of what CBS&R does each day. 

A Sincere Thank-You

Group CBS Family and Friends:

The staff at Circuit Breaker Sales & Repair would like to thank everyone for their efforts and donations for the Hurricane Harvey GoFundMe relief fund. I want to apologize for the delay in expressing our thanks as we have just now begun to settle back into our normal daily business routine. The expedient response and gracious contributions assisted nine CBS&R employees affected by the storm.

Despite the hurricane’s tragic impact on our employees, we can assure you that the support boosted our collective spirit. To say that these donations provided a bright light in a dark time is an understatement. Our employees are forever grateful and indebted to those who provided the funds that have helped with our resurgence.

CBS&R disbursed the funds fairly to our employees according to individual needs and damages. Knowing that Hurricane Irma was bearing down on Florida, we felt it was important to set aside some funds for our brothers and sisters on the East Coast so they too could rebuild. We used what we felt was needed and left some for Florida. Your contributions helped not only Houston but some of those affected in Florida.



A satellite photo shows the eye of the storm as Hurricane Harvey makes landfall.

We want to thank everyone for their kind words, prayers, and calls during this time. Group CBS is a family, and our employees are comforted knowing they have the support of so many. The slogan in Houston since the storm has been #HoustonStrong. We are also proud to say we are all #GroupCBSStrong. God bless.

Lee Heine, CBS&R Vice President of Sales

AEAMC Pulls Together to Weather the Storm

By Bill Schofield, President, Advanced Electrical & Motor Controls, Inc.

WE ALL KNEW it was coming. Hurricane Harvey was busy churning up the Gulf of Mexico and headed toward Texas. It had been 12 years since a hurricane of this size had hit landfall in the United States, and this one promised to be a doozy.

As predicted, Hurricane Harvey hit the Texas coast the week of Aug. 28 as a Category 4 storm and caused more than \$200 billion in damage. During our weekly Advanced Electrical & Motor Controls (AEAMC) staff meeting, I told our folks to be ready: This is what we and our vast inventories are here for, and we would no doubt be called into action.

That Friday, Sept. 1, we got the first of the response calls. Shermco Industries, a NETA service company and one of our largest customers, was on the other line and wanted to know how quickly could we turn around 1,200 motor control buckets to replace ones that had gone under water. (No other information, such as make and type, was available.)


At AEAMC we average 50 buckets a month, so 1,200 is an impossible quantity. But as you can imagine, the sales manager (me) was creative and replied with, "No problem."

I told them we would hire a giant tent for the parking lot to stage the stuff and a security guard to keep an eye on it, and that I could bring in more staff. Shermco agreed, but it would be the start of the following week before the water subsided and we could begin. I rounded up all the staff and told them to go home and enjoy their Labor Day weekend since it might be the last free weekend for a while.

The following week, the fun began in earnest. The 1,200-bucket end customer decided to move/scrap his plant, so we did not get that order. But between the city of Houston, Goodyear, the Omni Hotel, and CP Chem, we were involved in 600 to 700 buckets' worth of remediation. Be it supplying complete replacement buckets or the components to fix existing buckets, it was "all hands on deck" for eight weeks.

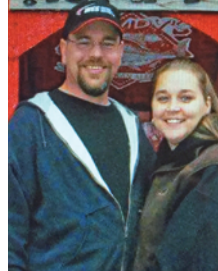
Fortunately, we had the resources to supply or find all kinds of components. Several of our folks worked 12-hour days for weeks, and the entire staff participated to reschedule existing work and get Houston back on line. Our inventory system was tested, our shipping systems were tested, our organizational skills were tested, and even our resolve was tested (seemed like some of us lived at the office).

Thankfully, this is our place in the electrical distribution world, and we performed admirably. Better yet, we saw some ways we can be even more prepared for the next one — because there is always a next one.

Kudos to all. 

Remembering Kristina Schwantes

By Craig Archer, CEO, Western Electrical Services



Wally and Kristina Schwantes

IT IS WITH a heavy heart that I inform you of the passing of Wally Schwantes' wife, Kristina, early in November. Kristina was a beloved member of the Western Electrical Services extended family, and many of you knew her as a fun and caring person, and a loving, compassionate wife. She will be missed deeply by those of you who have worked closely with Wally, as she

was often by his side on many projects.

Wally would like to share a few words about Kristina and the WES family:


I would like to take this time to thank everyone for the support and love that my family and I have received during this very tough time.

I was married to Kristina Schwantes for 13 years, but we were together for 16 years total. In that time, she showed me what true and unconditional love really was.

Throughout her illness, Kristina gave me all the love and support she had in her body and heart to give. This allowed the WES family and me to solidify the company's ability to become a powerhouse in this industry — which really proves that there is such a thing as true and unconditional love and support in this crazy world we live in.

Kristina was loved and respected by a lot of people. Big-hearted and willing to help in any way she could. She was a very big part of my life; she was my best friend, lover, wife. She always made me laugh and smile, and is still doing so to this day.

If she could say one last thing, she would tell everyone to stay strong — she is in heaven. Hold your wife and kids close (especially with our busy schedules), and remind them how much their love and support make everything happen. Finally, make sure you tell them you love them to the moon and back.

Group CBS and WES are truly a family, not just a place to work. 

CBS Northeast Promotes From Within

By Brian Constantino, Operations Manager, Circuit Breaker Sales Northeast, Inc.

IN 2017, CIRCUIT BREAKER SALES NORTHEAST, INC. (CBS Northeast) experienced substantial growth in our circuit breaker and field service departments. Record sales in both areas have prompted us to expand our team by promoting from within.

Dan Page: Field Service Supervisor



Safe and successful field service requires a leader with extensive product knowledge, field experience, and grit to get the job done, no matter what the conditions. Dan Page is that leader. Recently promoted to field service supervisor, he has been part of the CBS Northeast

fabrication and field service team supporting our customers for the last three years.

Dan has more than 15 years of industry experience, previously working at Schneider Electric and DES. With this promotion, Dan will take on an expanded role managing and leading projects at CBS Northeast. Dan has a vast depth of knowledge about switchgear and fabrication that only comes from years of service in the power distribution industry. We are looking forward to Dan's leadership and continued success in this next step of his career here at CBS Northeast.

Ashley Peck: Breaker Department Supervisor



Challenging times require great leaders to guide their team through any storm. Ashley Peck has helped lead the breaker department as the production planner, together with Dan Wilson, the active department supervisor, over the last two years. In

her role, Ashley has done a great job keeping everyone on schedule and meeting our customers' needs.

Because of Ashley's ability to organize, lead, communicate, and get results, we have promoted her to CBS Northeast breaker department supervisor. She and Dan Wilson will assume all day-to-day operations, which includes managing employees, process improvements, and the successful shipment of each job on time and at a profit.

Ashley has worked for eight years in the industry in many different roles, and she has succeeded in all of them. She will do the same in her new role: exceeding the expectations of our customers and technicians.

WES Gets the Star Treatment



WESTERN ELECTRICAL SERVICES was the subject of a feature article included in the August issue of Global Energy News. In the article, WES president Craig Archer outlined the company's service and capabilities, going into detail about WES's electrical power distribution services, field service division, and much more.

Congratulations to Craig and all at WES for a well-deserved industry shout-out!

WES Workers Connect During Vancouver Outage

A TEAM OF 32 Western Electrical Services (WES) employees recently completed a two-day maintenance shutdown at WES' Vancouver, WA, facility. Moments like these do not come around very often for a field service company. After the shutdown, the entire WES production team enjoyed a barbecue, where we were able to rub elbows with folks from all four divisions: apparatus, engineering, field service, and sales.



MAC-TS4 Demo Scores a Hit With BP Refinery

By Staff

GROUP CBS CEO Finley Ledbetter traveled to CBS Midwest in October to demonstrate the MAC-TS4 vacuum interrupter tester for a BP refinery located in Crown Point, IN.


BP sent to CBS Midwest's shop a tie breaker VCP-W with high-contact resistance readings. Ledbetter MAC-tested that breaker, which was manufactured in 2005, and got mid-E-03 PA results. He also MAC-tested a GE PowerVac that was in the shop, since BP uses this type of breaker.

In addition, BP asked CBS to do a one-week turnaround on a contactor for MAC-TS4 test and inspect. The refinery wanted a compressor breaker that sees a lot of operations tested as

well to compare it to results shown by the tie breaker, which is mostly in the open position. The CBS team delivered on both customer requests.

BP was so impressed with the MAC-TS4 testing and CBS Midwest operations that they purchased a unit from us.

Paul Toth assisted with the demo and gave BP staff a CBS ArcSafe demo and shop tour. "I was very impressed with Paul. He handled himself really well with the customer," Ledbetter says. "Paul will definitely be a good addition to Group CBS."

Ledbetter will now will work on getting Toth and Tim Chicki trained up to be his MAC-TS4 experts in the Midwest. 



Vacuum Interrupters Takes Road Trip to Mumbai

By Jay Zhu, Chinese Business Manager and Mechanical Engineer, Vacuum Interrupters, Inc.

EARLIER THIS YEAR, I traveled to Mumbai, India, on behalf of Vacuum Interrupters, Inc., to give a demonstration of the MAC-TS4 vacuum interrupter tester and to talk about testing vacuum breakers to two potential customers.

I gave the first presentation to Tata Power Company Limited, which supplies 70% of Mumbai's power. Tata wanted to learn about test setup and procedure for the MAC-TS4.

The second session was demo testing and training for Tata Power and Reliance Industries Limited (RIL), an Indian company that had purchased the MAC-TS4. We were led to a big breaker room, where we tested some 1970s GE PowerVac




Workers from Tata Power gathered to learn and ask questions about testing vacuum breakers.

breakers using the MAC PowerVac sets. Both companies were very impressed with the ease of setup and speed of the test.

One lead technician told me they had never taken the breaker in parts before, and they didn't know how to clean the poles. I was also told that they test these breakers once a year, and they only do contact resistance tests — no high-potential (HiPot) tests

and no timing tests. Technicians also didn't know how to measure the contact wear.

Representatives of both firms asked a lot of good questions, and we will stay in touch with them in the upcoming months so they can learn about NETA standards, as well as our PowerVac maintenance procedure, service, and cost. 

SMOOTH OPERATORS

SPOTLIGHTING LONGTIME GROUP CBS EMPLOYEES

By Craig Archer, CEO, Western Electrical Services

TWO WES MANUFACTURING VETERANS MARKED 17 YEARS WITH THE COMPANY IN 2017, SO WITH THAT MILESTONE IN MIND, WE DECIDED TO CHAT WITH BOTH.



Ryan Herbst

RYAN HERBST IS THE WES Southwest apparatus shop supervisor in Phoenix. At his shop, workers rebuild industrial circuit breakers, and Ryan oversees a staff of seven.

ANOTHER 17-YEAR WES employee is manufacture quality consultant Munzell Huffman, who splits his time between the Sumner, WA, and Phoenix offices. In his role, Munzell oversees CAD drawing and quality inspection of electrical parts, along with some design work for WES' manufacturing division.

A 35-year veteran machinist, Munzell spent the early part of his time at WES as a manufacturing foreman. But his fertile imagination led the company to move him to an area that could tap into his creativity.

"I've trained a replacement as foreman and now I'm more into the design and quality aspects," he says.

Prior to coming to WES, Munzell worked in the plastics industry as a tool and die maker, specializing in injection molding. Even though he does a lot of hands-on computer-based graphics work, he marvels at the advances he's seen in his career.

"Something like 3D printing, I couldn't have even imagined when I started," Munzell says. "The technology that's available now is just amazing."

Like Ryan Herbst, Munzell is a born tinkerer. Away from work he's a part-time mechanic and enjoys building motors and engines.

"Because I work in the design end, it's fun for me to have an idea for a machine in mind and make it become reality," Munzell says.

Ryan joined WES at the behest of his uncle, company CEO Craig Archer. But the family connection didn't mean Ryan had it easy — far from it.

"I learned on the job by disassembling and reassembling circuit breakers," Ryan recalls with a laugh. "There was a lot of throwing wrenches at equipment."

As arduous as that learning curve was at first, the constant education is now his favorite part of the job. "You learn something new every day," Ryan says. "You hardly ever see the same part twice or run into the same issue twice."

Ryan got his love of tearing down and rebuilding equipment from his dad, who was a high school auto-body shop teacher. Even away from work, Ryan's pride and joy is his rebuilt 1969 Camaro.

He brings the same enthusiasm to the workplace. "I take pride in making production go smoothly," he says.



Munzell Hoffman

PEARL Technician Certification Distinguishes WES From Competitors

TECHNICIANS MUST BE KNOWLEDGEABLE ABOUT THE ELECTRICAL EQUIPMENT THEY RECONDITION AND CAPABLE OF SAFELY PERFORMING RECONDITIONING TASKS.

By Matt Zemanek, Vice President of Apparatus Sales & Services, Western Electrical Services, Inc.

YOU MIGHT KNOW that the Professional Electrical Apparatus Reconditioning League (PEARL), through its Technician Certification program, offers individuals the chance to become a Certified Electrical Equipment Reconditioning Technician. The certification designates a professional who inspects, tests, evaluates, and reconditions electrical equipment to make sure that it will perform safely and reliably when returned to service.

What you might not know is that Dan Hook, president of Western Electrical Services, Inc., sits on PEARL's board of directors and is the organization's current vice president, indicating that Dan's expertise is widely acknowledged in the industry. As chairman of the PEARL standards committee, Dan is also hard at work trying to get the PEARL Electrical Equipment Reconditioning Standard recognized by ANSI.

"This certification is a key differentiator for WES," Dan says. "Certified technicians performing reconditioning activities in accordance with the established standard sets us apart from other companies in the industry."

Level I and Level II certifications are currently available from PEARL. Through a combination of years of practical hands-on experience, training, and successful completion of an online certification exam, technicians obtaining certification through PEARL will have demonstrated their ability to perform specific

reconditioning tasks by virtue of their technical knowledge and experience.

At WES, technician certification provides a sense of accomplishment for technicians in the industry who have proven their competency over the years. It also lays out a defined career path for new technicians.

WES established a goal of 75% of shop technicians being certified by the end of 2017 and gets closer to reaching that objective as the year winds down. 



Learning in a group environment is all in a day's work at WES. The company aims to have 75% of shop technicians recognized as Certified Electrical Equipment Reconditioning Technicians by year's end.

Tommy Phillips Makes History at AAA Nationals



TOMMY PHILLIPS and his CBS ArcSafe/K&N team drove to the Super Gas title at the 2017 AAA Fall Nationals at the Texas Motorplex in Ennis, TX. The win made Tommy both the winningest Super Gas racer in National Hot Rod Association (NHRA) history and the only sportsman racer in NHRA history to win that event nine times.

"It is, of course, my home race, and we usu-

ally have ArcSafe customers, vendors, and employees out there," says Tommy. "It is the largest NHRA drag race in the state both in attendance and participation."

Adding to the drama was that in the final, Tommy had to race Jerry DeBusk, a longtime friend of Group CBS CEO Finley Ledbetter. Tommy's CBS ArcSafe Corvette edged Jerry out in a 9.916-second to 9.931-second victory.

**Advanced Electrical & Motor Controls Inc.
AEAMC.com**

Advanced Electrical & Motor Controls is a certified UL508A industrial control panel builder and specialist in the sales and service of insulated case circuit breakers, molded case circuit breakers, bolted pressure switches, panelboards, switchboards, motor control, bus plugs, bus ducts, and renewal and replacement parts.
Irving, TX — Ph: 800-289-2757

**CBS ArcSafe, Inc.
CBSArcSafe.com**

Remote racking systems, remote switch actuators, and handheld motorized racking tools for low- and medium-voltage switchgear.
Denton, TX — Ph: 877-4-SAFETY

**CBS Nuclear Services, Inc.
CBSNuclear.com**

Specializes in shop and on-site field servicing of Class 1E safety-related low- and medium-voltage switchgear and circuit breakers. Also services industrial and non-nuclear-related circuit breakers and related switchgear and substations.
Matthews, NC — Ph: 704-882-1875

**CBS Power Products, Inc.
CBSPowerProducts.com**

New alternative utility and industrial power products: transformers, switchgear, and other power apparatus.
Gainesville, TX — Ph: 940-665-4444

**Circuit Breaker Analyzer, Inc.
CBAnalyzer.com**

Providing new circuit breaker testing methods that utilize vibration analysis combined with internet data transfer and sophisticated condition-based analysis to determine the condition of all types of circuit breakers.
Farmers Branch, TX — Ph: 972-290-0074

**Circuit Breaker Sales Co., Inc.
CircuitBreaker.com**

World's largest inventory of low- and medium-voltage circuit breakers and parts. Complete service, remanufacture, upgrade, and life-extension services. Also offers CBS MagVac magnetic latching medium-voltage breakers and Tough Duty Power/Vac® roll-in replacement breakers.
Gainesville, TX — Ph: 800-232-5809

**Circuit Breaker Sales Co., Inc.
CircuitBreaker.com**

One-stop service for circuit breakers, switchgear, transformers, protective relays, loadbreak switches, motor controls, unit substations, renewal parts, and repair, upgrade, life extension, and maintenance services.
Lakeland, FL — Ph: 800-232-5809

**Circuit Breaker Sales Co., Inc.
CircuitBreaker.com**

Provides electrical equipment, repair, remanufacturing, and life-extension services to commercial and industrial customers in the Midwest.
Crown Point, IN — Ph: 800-232-5809

**Circuit Breaker Sales & Repair, Inc.
CBSalesAndRepair.com**

Servicing the Gulf Coast with shop or field service, repair, upgrade, or replacement of power system apparatus.
La Porte, TX — Ph: 281-479-4555

**Circuit Breaker Sales NE, Inc.
CircuitBreakerSalesNE.com**

A leader in providing power distribution products and services, specializing in life-extension services and offering an expansive inventory of new, surplus, and reconditioned circuit breakers, switchgear, motor control, transformers, and other power apparatus.
Seymour, CT — Ph: 203-888-7500

**Circuit Breaker Sales Southeast, Inc.
CBSSEsoutheast.com**

CBS Southeast provides sales and repair, upgrade, reconditioning, and life extension services of utility-industrial circuit breakers, motor control, switchgear, substations, transformers, and other electrical equipment.
Gonzales, LA — Ph: 225-673-2278

**Circuit Breaker Store, Inc.
CBStore.com**

Your online source for all Group CBS products; a powerful solutions provider with a specialty vendor network that can supply factory new, surplus new, and reconditioned circuit breakers, electrical distribution, control equipment, parts, and remote racking equipment.
Gainesville, TX — Ph: 855-227-8673

**Group CBS, Inc.
GroupCBS.com**

Headquartered in Addison, TX, Group CBS includes affiliated electrical equipment, service, and engineering companies throughout the U.S., UK, Middle East, and Pacific Rim, providing premier products and services to the industrial, utility, electrical distribution, and repair markets worldwide.
Addison, TX — 972-250-2500

**Solid State Exchange & Repair, Inc.
SolidStateRepair.com**

Quality, reliable, on-time service and support for all brands and types of solid state power electronics, including circuit breaker trip devices, protective relays, motor overload relays, and rating plugs.
Denton, TX — Ph: 877-TRIP-FIX

**Transformer Sales Co.
CBSales.com/transformers/index.htm**

Offers a complete line of new, surplus, and reconditioned dry-type, cast-coil, and liquid-filled power transformers from 1000 to 5000 kVA with primary voltages from 2400 V to 34.5 kV.
Gainesville, TX — Ph: 940-665-4484

**Vacuum Interrupters, Inc.
VacuumInterruptersInc.com**

Provides replacement vacuum interrupters, MAC-TS4 predictive vacuum interrupter and CBT-1201 for circuit breaker test sets, and new replacement encapsulated poles for Power/Vac® circuit breakers.
Farmers Branch, TX — Ph: 214-442-5877

**Western Electrical Services, Inc.
WesternElectricalServices.com**

Serving the Southwest with superior quality on-site electrical testing, maintenance, and repair services as well as rebuild, upgrade, and life extension services for switchgear, circuit breakers, and motor controls.
Phoenix, AZ — Ph: 888-395-2021

**Western Electrical Services, Inc.
WesternElectricalServices.com**

Providing electrical equipment sales, testing, repairs, and emergency service to the southern California market.
Chino, CA — Ph: 888-395-2021

**Western Electrical Services, Inc.
WesternElectricalServices.com**

Field services group providing maintenance and acceptance testing to the Reno/Sparks market.
Reno, NV — Ph: 888-395-2021

**Western Electrical Services, Inc.
WesternElectricalServices.com**

The only full-service electrical testing and maintenance company in the intermountain region.
Salt Lake City, UT — Ph: 888-395-2021

**Western Electrical Services, Inc.
WesternElectricalServices.com**

The Northwest leader in electrical testing, maintenance, and power switchgear services, providing on-site electrical testing and maintenance, electrical engineering studies, and sales, repair, upgrade, and life extension services for circuit breakers, switchgear, motor controls, and transformers. Also custom manufacturing of engineered and reverse-engineered parts.
Sumner, WA — Ph: 888-395-2021

**Western Electrical Services, Inc.
WesternElectricalServices.com**

One-stop shop for all electrical equipment sales, testing, and engineering needs and a utility-class service provider to the Northwest T&D market.
Vancouver, WA — Ph: 888-395-2021

GROUP CBS TRADE SHOW CALENDAR**NEAS Safety Conference**

TUSCON, AZ

January 29, 2018

NETA PowerTest

WASHINGTON, DC

February 26–March 2, 2018

IEEE PES T&D Conference and Expo

DENVER, CO

April 16–19, 2018