



IPAA/PESA Energy Education Center

FALL 2017 | WINTER 2018



INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA

PETROLEUM EQUIPMENT & SERVICES ASSOCIATION

The 2017-18 school year started in Houston two weeks late due to the impact of Hurricane Harvey. Fortunately, none of the four Houston **IPAA/PESA-supported Petroleum Academies** were seriously impacted. Many activities were still able to be provided for the students in the five **IPAA/PESA-supported high school Petroleum Academies**, but some needed to be rescheduled to the spring 2018 semester. These activities would not have been possible without the tremendous support of the many companies, organizations and individuals who have helped sustain the work of the **IPAA/PESA Energy Education Center**.

To prepare teachers for the upcoming school year and to set them up for classroom success, teacher training took place in summer 2017 through the generous support of **Core Laboratories, Dale Carnegie Training, Energy Training Resources, LLC, NAPE** and **Southwestern Energy**. Teachers received oil and gas industry overview training, **Dale Carnegie** professional development training and campus-specific academy training. Additionally, in the summer, our graduates were invited, along with **IPAA Emerging Leaders**, to participate in the **Houston Young Professionals** group mixer.

We are very thankful for the involvement of the following organizations that provided field trip sponsorship, locations, camps and support for our students, many on multiple occasions: **Consumer Energy Alliance's Houston Energy Day, Fort Worth Museum of Science and History, incoming freshman summer camps, Gulf Publishing's Women's Global Leadership Conference, Halliburton, Marathon Oil, Offshore Energy Center Career Day**, and the **Shell**-sponsored **INROADS** college support program.

This year, we continued our major competitions starting with the **Shell STEM Showdown** at the **University of Houston** with involvement by **Rice University, University of Houston, University of St. Thomas**, and **Texas Southern University**, with 840 students participating to date. We are excited to already have **Shell's** commitment for the November 2018 competition. The 2018 spring semester will include the annual **PetroChallenge** competition with sponsorship by **Occidental Petroleum, Schlumberger** and the **Schlumberger** company, **NExT**. *continued on page 2*



Barry Russell
President & CEO, IPAA

Oil & Gas Overview Course



IPAA has partnered with **Energy Training Resources** to provide Oil & Gas industry overview courses with the proceeds helping support the **IPAA Educational Foundation**.

2018 PUBLIC COURSES:

- **Monday, February 5**
George R. Brown Convention Center as part of the NAPE Summit week
- **Wednesday, August 14**
George R. Brown Convention Center as part of Summer NAPE

Valuable continuing education credits are available.

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Marathon Oil Donates Ship Model to Milby High School

Marathon Oil Company generously donated a model ship, an LNG carrier, the **Polar Eagle/Arctic Sun**, to **IPAA/PESA Petroleum Academy at Milby High School**, where it is proudly displayed.

August Board Meeting

The bi-annual **IPAA/PESA Education Advisory Board** meeting was held in Houston on August 14th. Board members and guests heard from **Ryan Sitton**, Commissioner, **Railroad Commission of Texas**, along with junior students representing the 2017 externs and graduates completing their college studies.



To further support the IPAA Educational Foundation's educational outreach efforts, IPAA, through its partnership with Energy Training Resources, was excited to launch its **elearning courses: Geology for Non-Geologists and Mineral Rights and Leasing**

In March 2018, **Drilling** will be released. Also available is the popular video, **Oil and Gas Drilling: From Planning to Production**, which provides a comprehensive overview of the industry.

www.ipaa.org/elearning



IPAA/PESA
**Energy Education
Center**

Barry Russell *continued from page 1*

In Fort Worth, the annual **Southwest High School Professional Speaking Competition** will take place with judges from the oil and gas industry.

The **Guest Speaker Lecture Series Conference** continued in Houston at **Milby** and **Westside High Schools** to model how students should prepare for and conduct professional presentations. These conferences were attended by a total of 350 students and made possible through the support of **Newfield Exploration** and **Weatherford**, along with keynote speakers and **IPAA/PESA Education Advisory Board** members, **Jim Eisterhold** and **Lane Sloan**.

Additionally, guest speakers from the following organizations presented to academy students, many on multiple occasions at multiple academies: **Apache**, **Barnett Shale Energy Education Council**, **EOG Resources**, **Grojean & Associates**, **Jamie Vazquez**, **Limerock**, **Lockheed Martin**, **Texland Petroleum**, **Weir Oil and Gas**, and **XTO Energy**.

In the fall 2017 semester, students began preparing for the summer **2018 extern program** where they will experience the real world of work in Houston and Fort Worth oil and gas organizations. Students have been receiving training in resume and application preparation and will continue their professional development training in the spring 2018 semester. Through the generous support of **SM Energy**, new **extern program** technology was introduced to support and manage the **extern program**.

Summer 2018 will be the ninth year of the **extern program** and it has progressed well with a large number of applicants and the commitment of generous host companies: **Cameron**, **Core Laboratories**, **Distribution NOW**, **ExxonMobil**, **Gardner Denver**, **Halliburton**, **Marathon Oil**, **Newfield Exploration**, **Occidental Petroleum**, **Oceaneering**, **Schlumberger**, **Shell Oil**, **SM Energy**, **Southwestern Energy**, **Statoil**, **TechnipFMC**, **Texland Petroleum**, **Weatherford**, **Weir Oil & Gas Houston** and **Fort Worth**.

Externs will receive college scholarships provided by their host company. Additionally, graduating senior scholarships are being generously provided by **EOG Resources**.

Thank you again to all the many and various organizations and individuals who contributed to this past semester's success and helping to **"Create the Next Generation of Talented Energy Professionals."**

PESA Explorers of Houston Committee Award to Shell Oil

On November 16th, the **PESA Explorers of Houston Committee** honored **Shell Oil** for innovation in STEM Education recognizing **Shell's** outstanding commitment to STEM and energy education and their long term support of the **IPAA/PESA Petroleum Academies**.



Bruce Culpepper, Shell U.S. Country Chair & President, **Shell Oil Company** was selected to receive the **2017 Explorers of Houston Award for Leadership and Innovation in Education**. **Scott Ballard**, Executive Vice President of Human Resources, accepted the award on Bruce's behalf. Pictured (from left to right): **Michael Alvarez**, Shell Oil Company, **Scott Ballard**, Shell Oil Company, **Chuck Chauviere**, Baker Hughes, a GE Company and Chairman, PESA Explorers of Houston Committee, **Leslie Beyer**, PESA President.



Summer Teacher Training

The **IPAA/PESA Energy Education Center** kick-started the 2017-18 school year with our annual training for educators. This training, in three parts, would not have been possible without the generous support of **Core Laboratories**, **Energy Training Resources, LLC**, **Southwestern Energy**, **Dale Carnegie** and **NAPE**. Teachers participated in Oil & Gas industry overview training at **NAPE**, **Dale Carnegie** professional development training at **Southwestern Energy** and Academy-specific training.



INROADS Workshop

INROADS is a national college program aimed at teaching STEM and business majors about professional development and career recruitment and placing the students in summer internships with companies around the nation.

Pictured is **Omar Talsam** with **Michael Alvarez** and **Patrick Ellis (Shell)** attending the **INROADS** information session on Saturday, August 5th.



Southwest High School Leadership Camp

Incoming freshmen at **Southwest High School** participated in a leadership camp in August. The students enthusiastically participated in activities coordinated by Leadership on the Move and enjoyed a pizza lunch supported by the **IPAA/PESA Energy Education Center**. All of the freshmen were given a t-shirt recognizing the event that was designed by our own sophomore, **IPAA/PESA Petroleum Academy** student, **Luis Tinoco**. Several senior **Petroleum Academy** students also participated to welcome the incoming freshmen.



Emerging Leaders/Young Professionals in Energy (YPE) Meeting 2017

This past summer, **IPAA Emerging Leaders** partnered with **Young Professionals in Energy-Houston** to host a school supply drive for the **Big Brothers and Big Sisters Program**. With over \$3,000 raised and countless connections made, the evening was a big hit. Graduates of the **Petroleum Academies** were invited to attend and start building relationships with other like-minded young professionals. From entering the **IPAA/PESA Energy Education Program** as high school freshmen to shaking hands with professionals from around town, we certainly are proud to see our students shining in their community.



Junior Achievement Educator of the Year

We are pleased to announce that **Katricia Conner** from the **Academy at Southwest High School in Ft. Worth** has been awarded the **Junior Achievement Educator of the Year**. This award is based on teacher support and their willingness to go above and beyond to make the programs work at their highest level. Katricia's expectations of students uphold a very professional standard, and her students flourish as a result of her dedication. Katricia leads the **IPAA/PESA Extern Program** on her campus and she was recognized in 2014 as the **IPAA/PESA Teacher of the Year**.



XTO

Danielle Baldino and **Randi Bleeker**, from **XTO** spoke to the **Southwest High School Petroleum Academy** juniors in November. Both are from the marketing department and explained scheduling the pipelines in order to move natural gas from one location to another. The details of the process and the problem solving involved was fascinating and it kept the students attentive and engaged.



Texland Petroleum

Jim Wilkes and **Kelly Jordan** from **Texland Petroleum** spoke to freshmen students at **IPAA/PESA Petroleum**

Academy at Southwest High School in September on Engineering & Petroleum Engineering. This is also the fifth year that Jim and Kelly have spoken to our petroleum academy students. Jim is the President, Director & Co-Owner of **Texland Petroleum**. Kelly is an Operations Engineer at **Texland**. Both of them hold Petroleum Engineering degrees from **Texas A&M University**. **Texland** is also an extern host company.

Barnett Shale Energy Education Council

Ed Ireland became the founding Executive Director of the **Barnett Shale Energy Education Council** in 2007, an organization that provides energy education in the Barnett Shale region of North Texas. Ed has been the first to speak to the Freshmen students that have joined the **Petroleum Academy at Southwest High School** for the past five years. He provides great foundational knowledge about gas drilling and production in the Barnett Shale region. The students were inquisitive and the talk proved to be engaging to the students at the beginning of their journey of learning about the oil and gas industry.



Homecoming Parade

Southwest High School celebrated 50 years during Homecoming Week celebrations with numerous activities planned including a parade. Student representatives from the **IPAA/PESA Petroleum Academy at Southwest High School** participated in the parade.

Pictured from left to right: **Vanessa Diaz**, **Margaret Green-Wallace**, **Francia Valdez Moreno**, and **Rachelle Harris**.



Fort Worth Natural History Museum

Energy Blast at the **Fort Worth Museum of Science and History** was the prime focus of the field trip taken by freshmen in late October. The exhibit featured interactive stations for the students to explore, including a 50,000-pound seismic vibroseis truck, a 30-foot model of a drilling apparatus and a model city where students used renewable and non-renewable resources to "power" the city. The students also embarked on a **"Journey to the Center of the Barnett Shale"**, by viewing and experiencing the 4-D film. The video explained how natural gas formed within the shale deposits of North Texas. The field trip concluded with the Coral Reef Adventure at the Omni.

Shell STEM Showdown



On September 29th, 120 high school students who participate in one of the five **Petroleum Academies**, supported by the **IPAA/PESA Energy Education Center** gathered at the **University of Houston** to compete in a nationally acclaimed **Science, Technology, Engineering, and Math (STEM)** competition. This event was generously powered by **Shell Oil Company** and developed by **Great Minds in STEM**. Each team worked alongside college students from local universities who are majoring in STEM fields and had the opportunity to interact with professionals from **Shell** who helped mentor throughout the competition. The competition had two primary challenges, creating a self-made robotic arm from a variety of basic supplies, which was judged on its ability to function and designing a foam rocket, judged on its trajectory and accuracy. Students left feeling fired-up after understanding how STEM parallels exciting careers in math, science and engineering.

Winners are as follows:

Showdown Champions – \$3,500 grant will be awarded to the high school to develop or enhance a STEM Club, **Energy Institute High School & University of Houston**

2017 Runner-Up Partnership – \$1,500 grant will be awarded to the high school to develop or enhance a STEM Club, **Young Women's College Preparatory Academy & Rice University**

1st Place Winners – **Energy Institute High School & University of Houston High School** [Tablets] | College Captains [\$1,000 Scholarship] Scholarship Recipients

2nd Place Winners – **Young Women's College Preparatory Academy & Rice University** [Syma X5C Explorers Quadcopter Drones]

3rd Place Winners – **Energy Institute High School & University of Houston** [Fujifilm Instax Mini 9 Cameras]

Spirit Award Winners – **Westside High School & Texas Southern University** [Thump Bluetooth Speakers]

Safety Award Winners – **Southwest High School (Ft. Worth ISD) & University of St. Thomas** [Virtual Reality Goggles]



Above from top, left to right: **Energy Institute High School** and **Texas Southern University** Spirit Award Nano Tech; **Energy Institute High School** and **University of Houston** 3rd Place Mechanical Engineers; **Young Women's College Preparatory Academy & Rice University** 2nd Place Individual Geologist; **Energy Institute High School** and **University of Houston** 1st Place Individual Forensic Scientist; **Energy Institute High School** and **University of Houston** 1st Place Overall; **Southwest High School** and **University of St. Thomas** 2nd Place Individual Mechanical Engineer; **Young Women's College Preparatory Academy** and **Rice University** 2nd Place Overall.

Guest Speaking Lecture Series Conference at Westside

Over 200 freshmen, sophomore & seniors at **Westside High School** participated in the third annual **Guest Speaking Lecture Series Conference** in early October. Students learned about different careers and opportunities in the energy industry from the keynote speaker, **Jim Eisterhold, IPAA/PESA Education Board Member** and former Vice President at

Newfield Exploration. Speaking to students on the energy panel were engineers from **Newfield Exploration**, who exposed the students to all the opportunities available by sharing their experiences in the field and on the importance of working in teams.





Guest Speaking Lecture Series Conference at Milby

About 150 sophomores and juniors participated in the **Guest Speaking Lecture Series Conference** at **Milby High School** in early November. **Milby** seniors facilitated the conference by introducing the keynote speaker and **IPAA/PESA Education Advisory Board** founding member, **Lane Sloan**, and moderating the speaking panel. They also spoke about their externship experience. **Lane's** passion is leadership mentoring. His eclectic background includes 29+ years at **Shell Oil Company** with 15 years in Senior Management, five years as an Executive Professor teaching Strategic Leadership, and over a decade as a Silver Fox Advisor. The panel was comprised of **Weatherford** professionals **Jessica Lovorn**, **Sarah Richard**, **Charity Kohl**, **Laura Muth** and **Shanta Eaden**. The **Education Center** is very grateful for the time these professionals have so graciously given to provide **Milby** students with possible opportunities available in their futures.

- ♦ Strive to excel and achieve
- ♦ Look forward not backward
- ♦ Seek options not excuses
- ♦ Be respectful avoiding treachery
- ♦ Lead from strengths, follow to win
- ♦ Proact to create your destiny



Energy Day

This past October, the **Consumer Energy Alliance** and the **Consumer Energy Education Foundation** hosted their annual **Energy Day** in Houston, Texas. Students from the **Energy Institute**, **Young Women's College Preparatory Academy**, **Milby High School**, and **Westside High School** all attended this interactive event showcasing how important careers in energy are to our city. Students spent the day intermingling with nearly 70 booths that provide hands on learning to help bridge how science, technology, engineering and math provide the foundation of the energy industry. This year, the **IPAA/PESA Energy Education Center** was proud to sponsor the winning award for the **Science and Engineering Fair of Houston**.

Offshore Land Game

Young Women's College Preparatory Academy participated in the Offshore Land Game led by **Alicia Elias**, Senior Offshore Landman at **Apache** and **IPAA/PESA Education Advisory Board** member. Grouped as technical teams for different oil and gas companies, students went through the bidding process to obtain a lease from the government, including learning how to take risks and partner with the other companies.



Jamie Vazquez Guest Speaker

IPAA/PESA Education Advisory Board member, **Jamie Vazquez**, presented to over 100 students at **Young Women's College Preparatory Academy** about what it is like to be a woman in the energy industry. The girls learned how important it is to commit themselves to studying science, technology, engineering, and mathematics and to stay confident and believe in their skills.





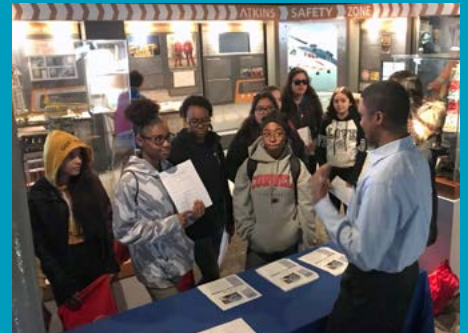
Women's Global Leadership Conference

Students and teachers from the **Energy Institute High School** and the **Young Women's College Preparatory Academy** attended the 15th annual **Gulf Publishing Company Women's Global Leadership Conference** in Houston. Their participation was made possible by the generous sponsorship of **Gulf Publishing Company** and this brings to date 120 senior female high school students from the **IPAA/PESA sponsored Petroleum Academies** who have participated in the conference. We are very grateful to **Gulf Publishing** for hosting their annual silent auction as part of the conference, a fundraiser for the petroleum academies.



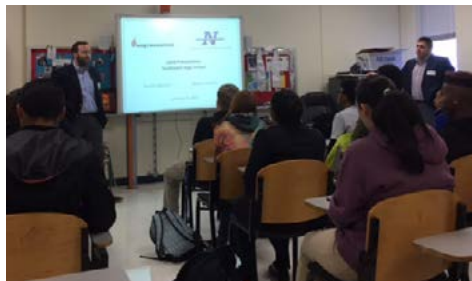
Burger Sales Fund Scholarship

The **IPAA/PESA Petroleum Academy at Southwest High School** team of teachers gives a \$500 scholarship every year to one deserving senior. In order to raise money for this scholarship, **In-N-Out Burger** offered to sell hamburgers to the students and in return **Southwest High School** received 75% of the sales to go towards the scholarship. We are very pleased to announce that we raised \$825. We are looking forward to awarding an **IPAA/PESA Petroleum Academy** senior this Spring. Thanks so much to **In-N-Out Burger** for their generosity.



Offshore Education Center Career Day

This past December, 350 of our **Petroleum Academy** students attended the annual **Career Fair** at the **OceanStar, Offshore Drilling Rig Museum and Education Center** in Galveston, Texas. While at the museum students had the opportunity to tour a retired drilling rig and learn about career opportunities in the energy industry. A variety of exhibiting organizations, including service, drilling companies, operating companies, and universities and colleges took the day to speak with our students and encourage them to continue their STEM education.



Southwest High School Alumni Guest Speakers

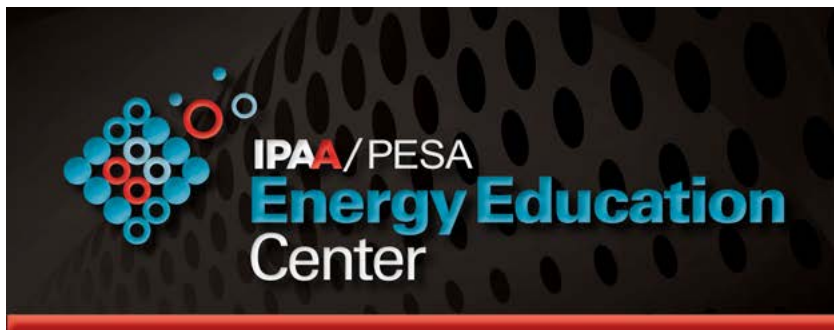
Dustin Bynum, from **EOG Resources** and **Blaine Gamble** from **Norwood Land Services, LLC** spoke to the **Southwest High School Petroleum Academy** sophomores about what it is like to be a landman. Both were able to share a lot of their unique experiences from working in the industry. Neither of them even knew what a landman was when they started college! Blaine, an alum of **Southwest High School**, spoke about how there are different concerns in different regions when negotiating for mineral rights. Dustin and Blaine were able to describe how different their job is from day to day while giving the students a good overview of what to expect in the life of a landman.



Interactive Engineering From Lockheed Martin at Southwest

Alicia Grabiec and **Marco Hanna** from **Lockheed Martin** presented to the **Southwest High School Petroleum Academy** seniors on October 18th. They provided a hands-on interactive engineering activity for the students to design and build a rocket that would travel the furthest. The students had to build a rocket out of construction paper and create air to propel the rocket out of a bottle and PVC pipe.





IPAA firmly believes that **EDUCATION** is important in **EVERY** stage of life, whether you are new to the industry or have had a successful career and just need a refresher.

IPAA and the **Petroleum Equipment & Services Association (PESA)** are committed to educational outreach through the Houston-based IPAA/PESA Energy Education Center. For over a decade, the Center has inspired students in enhanced STEM curriculum and has **prepared the next generation** for successful careers in our industry. The Center supports five engineering, geoscience, and leadership academies at high schools in the Houston and Fort Worth Independent School Districts. Today, **more than 2,600 students** have graduated from a Petroleum Academy through the IPAA/PESA Energy Education Center and 1,500 are currently enrolled. Two-thirds of the student population is under-privileged and 40% are female.



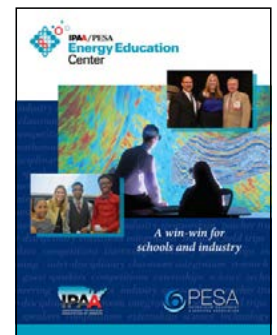
INDUSTRY TRAINING

IPAA offers an in-person **Oil & Gas Industry Overview Course** several times throughout the year and has partnered with **Energy Training Resources, LLC** to launch a series of industry-focused **eLearning** courses that are available online. Proceeds benefit the IPAA Educational Foundation.

Petroleum Academies we support with your sponsorship: Energy Institute High School, Houston • Milby High School, Houston • Southwest High School, Fort Worth • Westside High School, Houston • Young Women's College Preparatory Academy, Houston.

Sponsor the IPAA/PESA Energy Education Center

<input type="checkbox"/> DIAMOND	\$15,000+	<ul style="list-style-type: none"> Sponsor logo on website, banner that is used at multiple events, brochure, newsletters(2), and featured in <i>IPAA Access</i> magazine, <i>IPAA Membership Directory</i>, <i>Oil & Gas Producing in Your State</i>, and publication ads
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 George R. Brown Convention Center, Houston
Hosted by NAPE Expo, LP



ADDITIONAL COURSE INFORMATION
www.ipaa.org/events/oil-gas-overview-course-february-2018

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ADDITIONAL COURSE INFORMATION
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To confirm SPONSORSHIP availability, contact Tina Hamlin at 202-857-4768 or thamlin@ipaa.org.



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