FOR IMMEDIATE RELEASE

Contact:
John Dees
Project Communication Coordinator
NSF/ATE Troubleshooting Grant: Northern Oklahoma College
john.dees@north-ok.edu
512.237.0423
www.processtroubleshootingskills.com

First National Simulation Troubleshooting Shootout Crowns
Champion Team; University of Alaska-Fairbanks Team Places Second

Tonkawa, OK, April 27th 2012 — Teams of college students gathered from across the country in Northern Oklahoma on April 21st to compete in the First National Simulation Troubleshooting Shootout, with a team from Alaska taking top honors in the inaugural competition.

The eight three-member teams came from college Process Technology programs to join in this competition, including a team from University of Alaska-Fairbanks (UAF). The UAF team consisted of students Jason Dahlke, Jay Ranson, and Derrick Dieringer. The team was coached by Robert Hook.

The competition was funded by a National Science Foundation (NSF)/Advanced Technology Education (ATE) grant awarded to Northern Oklahoma College (NOC) Tonkawa campus. The Process Technology program teaches operation skills required in industries such as petrochemical, power generation, pharmaceuticals, food & beverage, and related fields.

The three-round competition tested the teams’ troubleshooting skills on recognizing and resolving problems with various process-related scenarios, using computer-based simulation software. Troubleshooting is a capstone course for Process Technology programs, which typically confer a two-year Associates degree. Students learn about equipment, safety, quality, instrumentation, systems, and operations—all of which they must understand when troubleshooting problems with a process.

-more-
**Troubleshooting Shootout Crowns Champion**

Simulation software for the process industries works a lot like its popular relatives, simulation-based video games, where various real-world factors are modeled into an environment and users must interact with them. With this simulation software, a plant process is modeled to show equipment like pumps, pipes, valves, and tanks on-screen. Variables such as temperature and pressure are changed dynamically by the software, generating a problem and setting off alarms. The user must then find and correct the error(s) using troubleshooting skills.

Just like pilots use flight simulators to learn before flying a commercial aircraft, process technicians learn to run units in a real world environment without the risk of damage or injury. Simtronics, one of the competition sponsors and a world leader in computer-based simulation software, provided the software used for the event.

“Troubleshooting skills are critical for workers in many types of industries, including process industries,” said Sarah Olson, Principal Investigator on the “Developing Students’ Troubleshooting Skills in the Energy Industry” grant and an instructor at NOC. “In the real world, problems in a process can result in thousands, if not millions, of dollars in bad product, or potentially cause harm or death to people and damage to the environment.”

Along with the teams and their coaches, Process Technology instructors from the participating schools, industry representatives from Chevron, Eastman Chemical, and ConocoPhillips attended the competition and watched the proceedings. These companies also sponsored various aspects of the competition such as awards, t-shirts, and a mixer where the teams got to meet and talk “shop”.

“It was impressive to observe the critical thinking skills and teamwork displayed by each team as they worked together to recognize and respond to real-life process problems. These are the competencies required by Process Technicians to operate our plants both safely and efficiently,” said Mike Tucker of Eastman Chemical, who works in learning and development for the company.

-more-
Troubleshooting Shootout Crowns Champion

A team from Kenai Peninsula College – Anchorage Extension Site in Alaska won first place, while the teams from University of Alaska-Fairbanks and South Central Louisiana Technical College in Louisiana placed second and third, respectively. “This was a great competition, and every student on the teams was high caliber,” said Martha McKinley, Project Director for the grant. “All of the industry representatives watching said these were the types of students they want to hire.” According to McKinley, many of the student competitors are graduating this month and will soon find jobs in industry.

Along with establishing the simulation troubleshooting competition, the grant will be used to develop no-cost troubleshooting educational and training materials for use at colleges and in industry. Next year’s competition again will be held at NOC April 12-13, with teams for the national shootout determined by regional competitions.

The grant is a partnership between education and industry. According to the NSF, the Advanced Technological Education program “focuses on the education of technicians for the high-technology fields that drive our nation’s economy. The program involves partnerships between academic institutions and employers to promote improvement in the education of science and engineering technicians at the undergraduate and secondary school levels.”

For more information about the troubleshooting competition and grant, contact John Dees at 512.237.0423 or john.dees@north-ok.edu.

# # #

Photo: UAF Team.jpg

Cutline: University of Alaska-Fairbanks team members participate in the First National Simulation Troubleshooting Competition Shootout (L to R): Troubleshooting Grant Project Director Martha McKinley, Derrick Dieringer, Jay Ranson, Jason Dahlke, Grant Principal Investigator Sarah Olson