

# Union helps students train for robotics competition

## *Plumbers and Fitters Local 290 opens part of its training center so that high school students can test their robots in scrimmages*

The 2008 Oregon Regional FIRST Robotics Competition wrapped up last weekend at Memorial Coliseum. And for the first time ... ever ... organized labor was involved.

FIRST (For Inspiration and Recognition of Science and Technology) is a national non-profit organization that each year conducts a national robotics contest for high school students. The organization was founded by Dean Kaman (the man who invented the Segway transporter).

This year, 55 teams from a half-dozen Western states and Canada competed at Memorial Coliseum — one of 41 regional events held nationwide.

From its inception seven years ago, large corporations such as Xerox, Hewlett Packard and Mentor Graphics have participated as sponsors and mentors. This year, Plumbers and Fitters Local 290 and IBEW Local 280 of Tangent got involved — Local 290 as a regional sponsor and Local 280 as a co-sponsor for teams from Corvallis.

Debra Mumm-Hill, regional director for FIRST Pacific Northwest, said Local 290 is the first union in the nation to be involved in the competition as a sponsor.

At the contest kick-off Jan. 5, Local 290 made arrangements to accommodate more than 400 students and parents at their training center in Tualatin, feeding them breakfast and hooking up a satellite feed with NASA so that the students could learn what their project would be. NASA is a major sponsor of the competition. Then on Feb. 16, the union hosted a scrimmage at the training center. This allowed any team that wanted to come and test their robots on a replica track set up by Local 290 Business Agent Jerry Moss.

“We’ve never had scrimmages before, because we’ve never had a facility that could do it,” said David Porter, a mechanical engineer and Volunteer Coordinator for Oregon. “This is excellent.”

Both Mumm-Hill and Porter believe it is critical to link educators, industry and labor together to work with students. “When FIRST started, the assumption was that the kids competing would all go to MIT,” Porter said. “That has evolved.”

Mumm-Hill said that for every engineer “you need a team of seven to 10 skilled workers — machinists, plumbers, electricians — who can do the work. It’s a real team effort.” She said Local 290 “has gone out of its way to help us” and that Moss has opened a lot of doors for the organization.

“We look forward to our partnership with the labor unions as we continue to reach more and more high school students in Oregon,” she said.

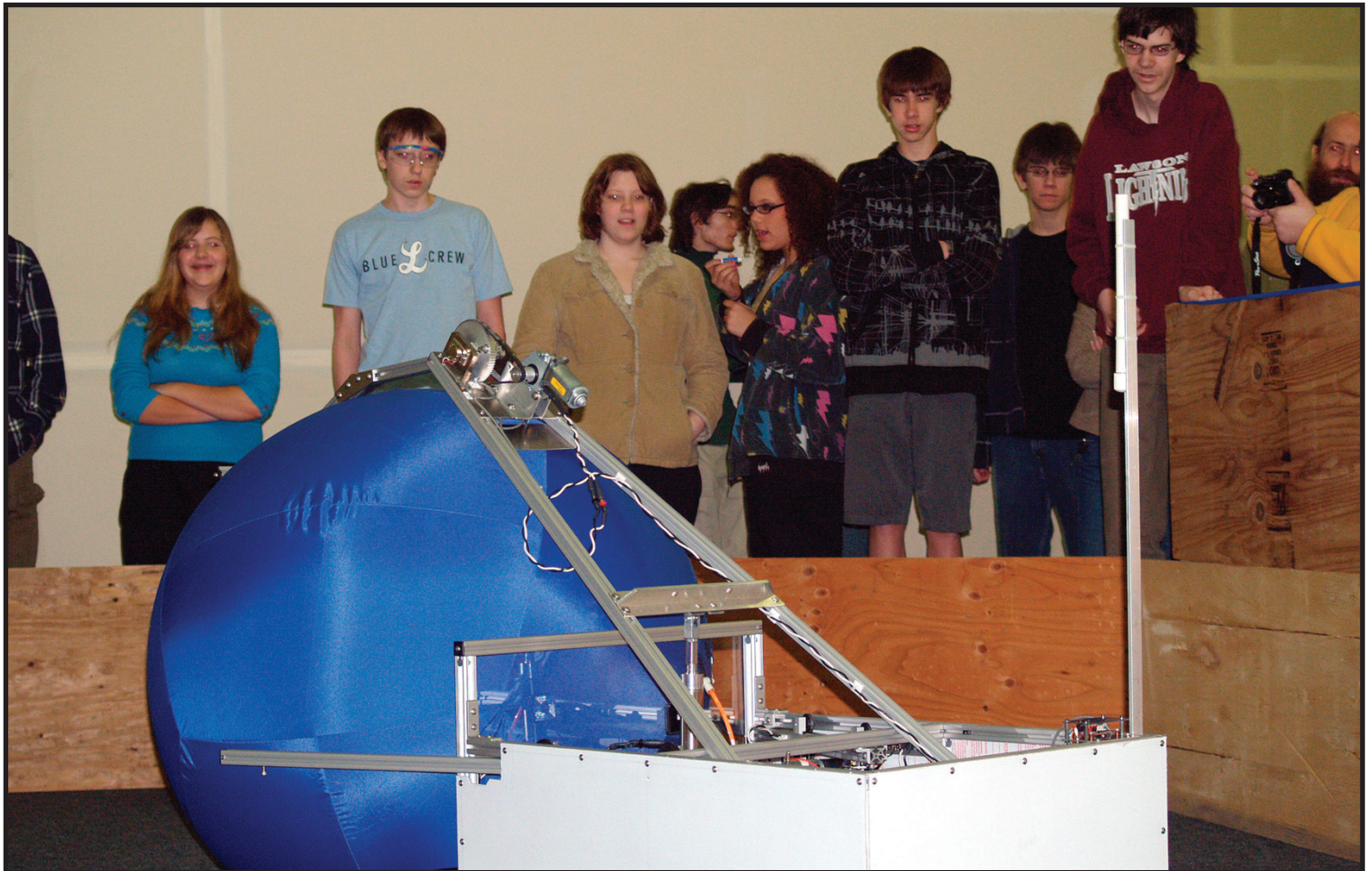
Here’s how the competition works: Teams (which can range from four students to more than 30) are presented with a kit of parts made up of motors, batteries, a control system and a mix of automation components — but no instructions. Working with mentors, students are given six weeks to design, build and test their robots to meet the year’s challenge designed by a committee of engineers and other professionals.

In this year’s game, robots are designed to race around a track knocking down 40-inch inflated Trackballs and moving them around the track, passing them either over or under a 6’6” overpass.

Moss has since joined the board of directors for FIRST Northwest (as has Labor Commissioner Dan Gardner) and is now in training to become a contest judge. For his efforts, he was awarded the group’s “Volunteer of the Year” at the regional finals March 1.

“We’ve been trying for a long time to let schools in our area know that we exist,” Moss said. “What’s neat is that this has actually opened doors for us. I’ve had a lot of positive feedback from teachers and parents.”

Moss would like to see more unions and signatory contractors get involved



(ABOVE) Students from nearly a dozen area high schools converged on the Plumbers and Fitters Training Center in Tualatin Feb. 16 to scrimmage robots in preparation for the Oregon Regional FIRST Robotics Competition held Feb. 29-March 1 at Portland’s Memorial Coliseum. (BELOW) A team from the Beaverton Education Foundation cheers on a competitor at the Oregon Regional.



as sponsors, mentors and volunteers. “This is a great way to build student interest in math, science, and technology. You have to remember, these kids are the workforce of the future,” he said.

For more information, call Mumm-Hill at 503-657-0774 or Porter at 971-678-1189.

***This season, more than 1,500 teams — including a record 316 rookie teams — will participate nationwide. Top finishers at the 41 regional competitions advance to the national championship in Atlanta April 1–19.***