

Tech team

Students, engineers join for robotic project

BY LARRY O'CONNOR
STAFF WRITER

A group of high school students with their unorthodox ideas have invaded the cubed confines of a Farmington Hills engineering company.

The results have teens and engineers alike jumping through hoops to make sure no inner tubes are left on the floor.

Project Robo-Hawk involves Harrison High School kids and TRW engineers constructing a robot, which picks up inner tubes with a gripper and places them on a rack. The 3-foot by 3-foot by 4-foot contraption will weigh 120 pounds.

Robo-Hawk will be entered in the FIRST (For Inspiration and Recognition of Science and Technology) competition. The program, sponsored by U.S. First, draws school/company teams from around the country.

Entries are judged on creativity, design, performance, quality and weight of the robot, as well as teamwork, animation, and logo.

TRW is paying the team's way to Illinois for the regional competition March 6-8 and the nationals in Disney World's Epcot Center April 10-12.

Those trips are overshadowed by looming deadlines. Robo-Hawk has to be shipped to Chicago by Tuesday.

"We could drive it there," said Mary Raber, an engineer who is program development manager. "But that would be five precious hours. I'm sure we'll be working up until the last minute."

Deadlines are just one part of the corporate world students are experiencing.

"We've learned to love meeting agendas," said Harrison senior Rob Avie, within earshot of TRW engineer Ernie Pacsal who produces the voluminous tasks lists. Pacsal is the project manager

'We could drive (the robot to Chicago). But that would be five precious hours. I'm sure we'll be working up until the last minute.'

Mary Raber
—TRW engineer

and Avie is captain of the animation team.

Animation is one of four squads involving the 164 students, teachers and engineers.

The TR group is putting together a video and scrapbook, which will be entered to vie for the Chairman's Award. The honor recognizes those teams who show the best spirit. Their deadline is Thursday.

The animation group is shooting for the Autodesk Animation Award, which recognizes the top entry in the video and computer animation category. Their work has to be done March 6.

The mechanical group is putting together the robot's drive train, arm and gripper while the electrical team is busy wiring the controls.

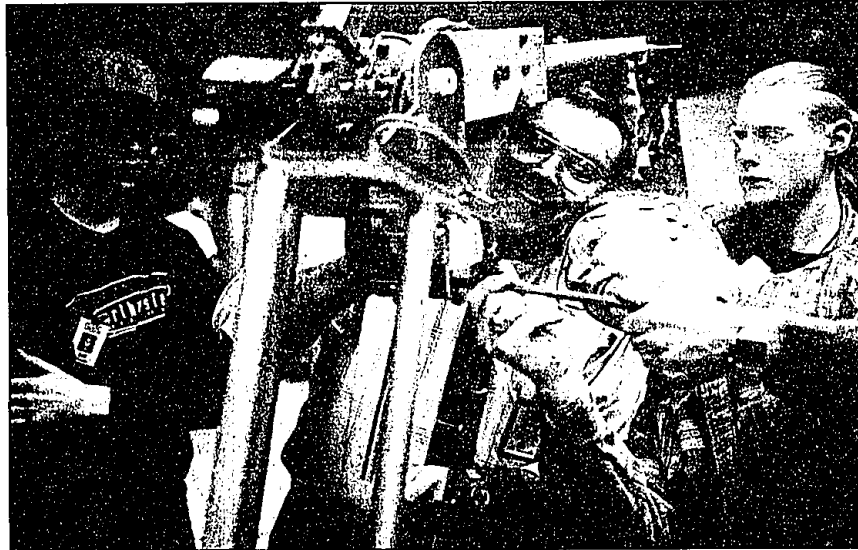
This has people scurrying around TRW's offices off 10 Mile Road two nights a week and six hours on Saturday. Students and teachers worked on the project through winter break.

All teams in the FIRST competition get the same parts and are given six weeks to construct a robotic project. One purpose of the program — in its sixth year — is to expose high school students to engineering.

Harrison senior Gonzalo Ubillus said he already wants to be an engineer.

"And you still want to be one?" asked engineer Al DiBoni, who was watching Ubillus thread a screw.

The mechanical group is feel-



STAFF PHOTOS BY SILVANO LAMBERTI

Tech tutors: TRW Engineers Ed Van Elslander and Lou Brown (holding the screw driver) work on the robot while Ari Shuwayder and Mike Brahm observe. Harrison High and TRW are teaming up to compete in FIRST regional and national competitions in March and April. Deadline to finish the robot named Robo-Hawk is Tuesday.

ing the crunch. While they've been putting the finishing touches on Robo-Hawk, the electrical group has been trying to wire the elusive gizmo.

"We didn't realize how big the task was and we're paying for it," DiBoni said. "It's been a lot of hours, but they've been good hours."

Said Ubillus, who designed the team's name and logo: "I guess it's harder than school. You have to meet a deadline where a teacher is more flexible."

At a pep rally for the FIRST team Feb. 13, the Harrison jazz band played the theme from "Mission Impossible."

Their no sense of self-destruction, though. Students and engi-

neers have turned into a cohesive bunch.

Engineers and teens in the electrical group were still raving about the excellent meal put together by Andrea Gherghel the previous night.

Like the engineering cohorts, 22 kids and eight faculty members sport TRW laminated building badges.

The project generates interest beyond the 27 engineers directly involved. Other TRW employees stop by to watch the teams at work and offer suggestions.

"It kind of revitalizes the engineers and kind of reminds them of why they became engineers," Raber said.



Screen scene: Metallurgical engineer Stephen Sexton works with Rob Avie on a 30-second animation spot that needs to be produced for the project.

DAR chapter names 3 teens as good citizens

Three Farmington Hills senior high school students have been named Good Citizens by the Daughters of the American Revolution.

Melissa Lee DiMaio of Harrison High, Ava Lala of North Farmington, and Rebekah Joy Pugno of Plymouth Christian Academy were honored Feb. 8. Pugno lives in Farmington Hills.

Students and their parents were honored at a luncheon at the home of Margaret Steward in Bloomfield Hills hosted by John Sackett Chapter Daughters of the American Revolution.

DAR Good Citizens are chosen by their high schools for dependability, community service, leadership and patriotism. In addition, each student composed an original essay on the theme "Our American Heritage and Our Responsibility to Preserve it."

DiMaio is the daughter of Lee Hickcox and John DiMaio. At Harrison, Melissa has been a violin section

orchestra leader, co-captain of the cheerleading squad, involved in Interact Community Service Group, Global Awareness Program, is a National Honor Society member and the National Art Honor Society treasurer.

DiMaio has also been in the honor guard for the Thanksgiving Day Parade, Harrison High's representative to Girl State, received the Student Excellence Award and was a National Merit Scholarship semifinalist.

Lala is the daughter of Sharookh and Zenobia Lala. She has been four-year letter winner on the North Farmington High cross country team and received the Most Valuable Player award as a member of the Raiders girls track team.

Lala has also been involved with the school's Varsity Club, Students Against Driving Drunk, Japanese Club and the National Honor Society. She's yearbook editor this school year.

She took part in the Easter Seals 24-Hour Relay and participated in the In Service to Humanity program where students rehabilitate house in the South during spring break.

Pugno is the daughter of Charles and Janet Pugno. She attends Plymouth Christian Academy where she has been junior class secretary and student body vice president.

She has been honored by the National and German honor societies.

She has volunteered at the University of Michigan Hospital entertaining children and went on a mission trip to build houses in Mexico. She also tutored inner-city children, helped at the St. Leo's soup kitchen in Detroit and volunteered at the Plymouth Fall Festival.

Each student will be a contender for the state competition at Michigan State April 9.



Rebekah Joy Pugno



Ava Lala



Melissa Lee DiMaio

AGENDAS

Farmington Hills City Council
City Hall
7:30 p.m. Monday, Feb. 24

Agenda items:
■ Consider rezoning request for 27686 Halstead from Office Research to Industrial Research Office.

■ Consider amending city code regarding "definitions related to building height."
■ Consider modifications to the current contract with Waste Management of Michigan, Inc. and approval of the annual recycling fee.

■ Consider reduced rates at the ice arena for summer hockey leagues and a contract with Suburban Hockey Schools, Inc.

■ Setting a public hearing for March 17 on the 1997-98 Community Development Block Grant programs.
■ Council advisement on the

emergency purchase of 200 tons of rock salt for \$18,890.

Farmington Hills Zoning Board of Appeals
City Hall
7:30 p.m. Tuesday, Feb. 25

Agenda items:
■ Consider a variance to the permitted 40-foot height requirement to allow Airtouch Cellular to build an 80-foot tower on the grounds of East Western Hotel at 12 Mile and Orchard Lake. Item was tabled last month.
■ Consider a variance to the permitted 40-foot height requirement to allow AT&T Wireless to install nine antennas at the top of an existing chimney that is 65 feet above the grade at 28830 W. Eight Mile. The antennas will not extend above the existing chimney.

■ Consider permission for a temporary use to tether a balloon

with a banner on the roof of Lois Gross Cleaners, 33210 W. 12 Mile, for an annual sale.

Farmington Board of Education
Schulman Administration Building
City Hall
7:30 p.m. Tuesday, Feb. 25

Agenda items:
■ Consider supporting guiding principles for a healthy and diverse community.
■ Consider approval of the new K-5 English/language arts curriculum, as presented by the English Language Arts committee.
■ Consider awarding a bid on the replacement of lockers at Warner Middle School.
■ Receive information on continuing the Summer Extended Learning Program, with a proposed tuition of \$100 per student.



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