Cal Poly Tractor Design Team Takes First

SAN LUIS OBISPO – Students from Cal Poly’s BioResource and Agricultural Engineering Department scored a national first place finish in team presentation with the unveiling of their “PolyBuilt” Quarter-Scale Tractor.

The competition was sponsored by the American Society of Agricultural and Biological Engineers (ASABE). The students were required to use a specified stock engine. From there, they had to design and manufacture their own frame, drivetrain, hitch, clutch, weight brackets and other parts.

The goal of the competition is to illustrate the gap between conceptual design and the reality of a product that can be manufactured efficiently and effectively.

The Cal Poly team developed a tractor that addressed all the needs of the Pipeline/Aqueduct Industry. The end product was the Pipeline Maintenance Tractor 50 Horsepower (PMT-50). It featured two-passenger offset seating, a low-profile frame, four-wheel drive, joystick and electric steering, and throttle control. The 100 percent student-run operation began design in October and construction in January.

While the students had fun, it was a serious proposition. Tractors had to go through technical inspection prior to the competition and drivers were required to wear fire suits for the tractor pull finale.

"Overall, it was a fantastic year with a great team and a good looking tractor to show for all of our hard work,” said Dan Holtz, Quarter Scale Team Member.

For more information on the Quarter Scale Tractor Design Team, contact Pat Broering, 805-756-3269.

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