

## Aussie robot to compete in international football competition

February 17 2010



(PhysOrg.com) -- Well before the Socceroos travel to the 2010 FIFA World Cup in June, another Australian team hopes to be kicking goals for its country at an international football tournament with a difference.

The team, known as 'The Thunder Down Under', is comprised of more than 20 Sydney high school students who have designed and built a football-playing <u>robot</u> to represent Australia for the first time ever in the FIRST Robotics Competition, held annually in the United States.

The students will ship their 55 kilogram robot, affectionately named 'Wombot', to New Hampshire in late February and will head over themselves a few days later for the start of competition on 4 March.



They will be accompanied by their mentors - university students and qualified Australian engineers from sponsoring firms like National Instruments, Altium, De Rossi Industrial and BAE Systems - and their project co-ordinator, Associate Professor Mike Heimlich, an American who was recruited by Macquarie University specifically to get Australian high school students involved in the competition.

"This year more than 1800 teams from 12 different countries are building robots to participate in this competition," Heimlich said. "Thousands of fans will be there to cheer on their favourite teams - I like to think of it as the State of Origin of engineering."

Heimlich said the aim of the competition was to capture the imagination of young people well before they start thinking about their career options.

"We have set out to create a world where engineering is celebrated and where young people dream of becoming science and technology heroes," he said. "Australia doesn't produce enough of its own engineers and we can't afford to wait until kids are at HSC level before we start trying to get them interested."

## **RULES OF THE COMPETITION**

The FIRST Robotics Competition will be held from March 4 to 6 and Australia's robot will be shipped to the U.S. on 23 February.

Robots are built in six weeks from a common kit of parts provided by FIRST. The task assigned to the robots changes each year - in 2010 they must be able to kick or push a soccer ball around an 8.2 x 16.4 metre sports field while successfully navigating bumps set up deliberately to put them through their paces.



Being new to the competition and an international team, 'The Thunder Down Under' isn't eligible to win the major competition this year, and will instead compete in the Granite State Regional FIRST Robotics Competition, where they hope to win the Rookie All Star Award. Winners of the rookie award may then compete in the international competition the following year and go on the win the Championship.

'The Thunder Down Under' team is sponsored and supported by Macquarie University, National Instruments, De Rossi Industrial, BAE Systems, Altium, Institute of Instrumentation, Control and Automation and Phoenix Robotics.

More information: For more information, visit the website.

Provided by Macquarie University

Citation: Aussie robot to compete in international football competition (2010, February 17) retrieved 25 April 2024 from <u>https://phys.org/news/2010-02-aussie-robot-international-football-competition.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.