

# ENGINEERING TAKES OFF AMONG YOUNGSTERS

by Sholain Govender

Hundreds of Crawford College pupils received a thrilling introduction to mechanical and aeronautical engineering through a University of Pretoria air show. Several workshops on building paper planes and designing air-water rockets were also held.

The 500 Grade 000 to Grade 3 pupils gathered at Harlequins cricket field adjacent to the schoolgrounds to watch as students and lecturers from the University of Pretoria's Department of Mechanical and Aeronautical Engineering manoeuvred radio-controlled aircraft, including jets, aerobatic planes and gliders.

"The University of Pretoria started the collaboration with the school as part of an initiative to encourage youngsters to pursue a career in engineering," says organiser Prof. Leon Liebenberg. Collaboration includes workshops for 120 Grade 3 pupils on the design and construction of airplanes constructed of paper and balsa wood.

Each of the Grade 3 classes had the assistance of one final-year student from the University of Pretoria, who showed the children how small details like a fold in the right place could help make a paper plane.

Grade 3 teacher, Lee-Ann Walter, said the children immediately got involved in the project. "They've definitely been exposed to stuff that we, as teachers, would not have had the knowledge to teach them about," Walter said. She said the children were enthusiastic about making more planes and even used glue strategically for the tips of the planes to increase speed and flight angles after being taught about it by Prof. Liebenberg and his students. "They've learnt very quickly and we will definitely encourage them to learn more," she said.

Three Grade 3 pupils were awarded prizes for their winning planes after they had raced them. Second-prize winner Jordan Schroeder (8) said he would like to become



Leon Liebenberg

→ Teachers and learners from Crawford Preparatory School in Pretoria look on as Prof. Nick Dekker of the University's Department of Civil and Biosystems Engineering and student Grabe de Villiers from the University's Department of Mechanical and Aeronautical Engineering make final adjustments to a student-designed short take-off-and-landing wing

an engineer after being taught how to make a proper jet and was getting support from his parents to achieve his new career ambition. "I watch airplane investigations on TV and also learn about them from there," he said.

Deputy Principal Karen Horne said the children also learnt how to build air-water rockets, an activity which the children and teachers enjoyed immensely.

Final-year mechanical engineering students flew three radio-controlled model aircraft with short take-off-and-landing capabilities, which was part of their final-year project in the subject Aeronautics. The students designed and built these special wings, which can be used for rescue operations or where limited landing or take-off distances are available.

Teacher Mel Newman, who accompanied some of the Grade 000 pupils to the event, said, "It's quite nice to have a partnership like this with the University of Pretoria and I'm looking forward to much more." 📍

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