

Aussies Fishing From The Edge Of Space

By The reel.SMRT Project

Dated: May 09, 2009

A local Sydney couple are looking for gravity 30km high in the Arctic Circle

Campbell Pegg, of Gordon, and Katherine Bennell, of Curl Curl, are literally aiming for the stars. Both 24 years old and a couple of five years, they have travelled together around the world in pursuit of their dream to become Astronauts.

Currently studying in Kiruna, above the polar circle, they are part of a European Space Agency sponsored student team that shall fly a standard fishing reel to the edge of space. Challenging convention, they aim to produce a new low gravity balloon-borne platform. The experiment is called reel.SMRT (“real smart”) and shall be launched from the Arctic on a high altitude balloon at the end of 2009. If successful, this project may offer a commercially viable alternative to the existing weightlessness platforms of parabolic flights and drop towers. This shall allow student teams and researchers more opportunities to test their experiments in low gravity environments, which can enhance the production and development of electronics and equipment for space.

“We want to create a new platform for low gravity study, where the low gravity lasts longer than conventional systems. At thirty kilometres above the ground, where the balloon shall fly, falling objects are almost weightless. We will make use of that.” explains Katherine, the Project Manager. “Our experiment consists of a falling object which is connected to the balloon through a fishing line. While the object falls, it is weightless”. Afterwards the object is reeled up again using a standard fishing reel, and the experiment shall be repeated. The design is challenging, “It can get down to -75 degrees Celsius, and near- vacuum conditions”, Campbell, Mechanical Subsystem Leader, says. “Under these conditions everything freezes, aerodynamics change; we have to be prepared for that.”

After studying double degrees in Space/Aeronautical Engineering and Physics at Sydney University, where they met, Campbell and Katherine moved abroad, excited by the opportunities in the European Space Industry. They are currently studying for a double Masters degree as part of the Erasmus Mundus ‘SpaceMaster’ programme, from which they will graduate in 2010. This involved a first semester in Wurzburg, Germany and their second above the Arctic Circle in Kiruna, Sweden, where they are currently studying. This course enabled them to form a team of nine for this project, who, together, represent Australia, Austria, Britain, the Czech Republic, Germany, Mexico and Thailand.

So, what’s next for this young couple, who are racing each other to be Australia’s next Astronaut? Both Katherine and Campbell have been awarded scholarships to attend the prestigious 10 week ‘International Space University’ Summer Session at NASA Ames this June. They have also been invited to stay on at NASA Ames for a month and work with experts on NASA’s ‘Hover Test Vehicle’ for ‘Near Earth Objects’.

Reel.SMRT is launched as part of the annual BEXUS (Balloon-borne Experiments for University Students) programme, which allows students from universities across Europe to carry out scientific and technological experiments on high altitude balloons. The programme is realised under a bilateral Agency Agreement between the German Aerospace Centre and the Swedish National Space Board. Experts from the European Space Agency also provide technical support to the student teams throughout the project.

More information may be found at the BEXUS programme website www.rexusbexus.net, the SpaceMaster website www.spacemaster.se and the International Space University Homepage www.isu.net.

###

Katherine and Campbell are part of an International Master Student Team, designing a high altitude stratospheric balloon platform for low gravity experiments.

To follow the progress of this project visit: <http://smrt.name/bexus>

Category	Lifestyle, Education, Aerospace
Tags	bexus, space, european space agency, science, Technology, balloons
Email	Click to contact author
State/Province	New South Wales
Country	Australia
Link	http://prlog.org/10233152



Scan this QR Code with your SmartPhone to-

- * Read this news online
- * Contact author
- * Bookmark or share online