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**Brentwood School Engineers Enter Robot Wars Arena**

The cage is set for Sunday night’s gripping episode of BBC Two’s Robot Wars and the appearance of the aptly named Expulsion – Brentwood School’s fighting machine with a deadly secret weapon.

A spinning disk with four steel spikes, the students’ robot has the ability to spin one way to slash the opponent and the other way to skewer them: a robot kebab with blades which move at an impressive 20 times a second.

The innovative 'blade sandwich' design came about after some unusual brainstorming. Team Captain Georgina Henwood explained: “"We were really hungry when we first sat down to start designing. We were thinking about bagels and the whole ‘ring with spikes sandwiched in between’ came out of that train of thought!"

Sunday’s much-anticipated episode will see the young team, all pupils studying Design Technology, Physics and Mathematics, up against some of the UK’s finest engineers. What they lack in age, experience and budget, these budding engineers certainly make up for in tenacity and cutting-edge invention.

Expulsion’s strengths, its innovative design and military grade weapon, impressed fellow competitors, the show’s producers and presenting duo Angela Scanlon and Dara O'Briain alike.

It is the first time a team from the School have been invited to take part in the iconic programme and Design and Technology teacher Thomas Walland, who led the project, praised the students for their “fantastic concept design which was talked about constantly by both other competitors and the producers of the show.”

Expulsion weighs in at 105kg and was built inside of two months on a budget of just £1000. It boasts a unique spinning disk made out of 10mm military grade steel, which has four spikes hidden inside. The spikes only protrude once the weapon gets up to full speed - preventing opponents from trying to slow it down.

Mr Walland added: “The blades move at 77.3mph at top speed. The tip of the blade at full speed has been measured to exert the same pressure if you were 10,000,000 metres underwater!

“Taking part in the competition was a remarkable experience for our students and, until we arrived, we had no idea how huge and powerful the machines were. It is a fantastic achievement to even be selected to take part in the show and during the course of the week-long contest the students took every opportunity to get involved and learn from their opponents.

“Each student took away both an increased understanding of engineering but also an experience which will stay with them for the rest of their lives. Robot Wars allows them to use their STEM subjects in a real world way and the very real risk of failure makes it an ideal way to develop innovation.

“Expulsion has formed an integral part of the work we have done with other pupils and has allowed our learning to be based around some of the issues faced with building a robot.

“Being involved in Robot Wars has changed the way pupils take on challenges. Over the last few months I have seen these pupils grow from Sixth Form students into true engineers.”

Seventeen-year-old Georgina added: ‘For that week we were immersed in a different world where everyone lived and breathed engineering. It was a fantastic experience. We learnt so much in such a short space of time'

Chief Engineer Henry Wenham, also 17, said: “As an aspiring engineer I found the real risk of failure meant we had to think outside the box if we were to be up against world class engineers.”

Chief Physicist Nicole Guo and Chief Designer Ethan Goodbody, both aged 16, completed the four-man Expulsion team which was ably supported by a sub-team of Ruben Wantling (Design Engineer), Sabrina Skilling (Engineer), Rebecca Ashford (Designer), James Cromarty (Weapons Coordinator), and Henry Rappolt (Robotic Engineer).

Headmaster Ian Davies, who will be tuning in to watch on Sunday, commented: “It is thrilling to note the involvement of so many of our girls as well as boys showing great commitment to Science, Mathematics, Engineering and Technology projects of this nature. It should make good viewing on Sunday!”

Each member of the team is looking at Engineering-based careers in the future and built Expulsion in Mr Walland’s Robotics Club. In this third episode of the new Robot Wars series, the team will be pitched against £20,000 contenders.

Expulsion uses a two-wheel drive system and features a large box-shaped chassis with a unique curved front end. Its armour features several holes in it to save weight, and the robot's top is decorated with flame graphics and the Brentwood School logo.

And the story doesn’t end with Robot Wars. The School’s Robotics Club is busy working on Expulsion: The Next Generation and will be taking part in competitions across the country including “Robots Live” and “Extreme Robots”.

Find out how the Brentwood School team fared by tuning into BBC Two’s Robot Wars at 7pm on Sunday night.