20 Oct saw the launch of the RAF Leeming Hackspace, where personnel from across RAF Leeming can come together to work on all kinds of projects, from coding to woodworking. The occasion was marked with a mini-hackathon, where technicians from 90 Signals Unit had their ability to think quickly and solve complex engineering problems tested by racing robot cars.

When most people hear the word "hack", their first thoughts are probably of cyber security and data breaches. However, the popularity of the maker movement and websites such as lifehacker.com have given the word another meaning. Put simply, a hack is creating an innovative solution to a problem. This could be anything from refurbishing discarded furniture into something new, to using open source hardware or software such as a Raspberry Pi around the home. The concept of a Hackspace (also known as a Makerspace) is not new; there are over 100 in the UK including in Leeds and York. Hackspaces come in all shapes and sizes but they all share the aim of providing a space for people to work on projects, learn and collaborate in a social environment (it's not uncommon for Hackspace meets to finish with a trip to the local pub).

The RAF Leeming Hackspace has been established to provide somewhere for personnel from across the Station and its lodger units to build, learn and share ideas. The Hackspace is run as a Station society and already has a small pool of equipment and tools for members to use. Projects already under way include media centres using Raspberry Pi computers, an advanced baby monitor to log and analyse conditions in a nursery, and a miniature robot car which can navigate around a race track with no human input.

It was this robot car which formed the basis of the challenge set to 90 Signals Unit technicians at the mini-hackathon. Each team was given a car with basic functionality, a guide on the hardware and software used, and 3 hours. The challenge - improve the car to complete the course in the fastest time possible, with bonus points available for top speed, style, and smoothness. The Hackspace team were on hand to offer assistance throughout, answering questions and providing guidance. After a frantic 3 hours of coding, optimising and customising it was time for the race. Group Captain Andy Cooksley, Commanding Officer of 90 Signals Unit, was on hand to judge the style element and all the teams managed at least one timed lap around the track - even if there was some questionable interpretation of the track limits. The eventual winner was 5 (Information Services) Squadron who overcame a poor style score (sticking a plastic cup on the front does not really count as customisation) with an impressive lap time and the smoothest run of the day.

Squadron Leader Dave Collins, who heads up the RAF Leeming Hackspace committee, said "I was delighted to see how the technicians tackled the challenge. Some of them clearly had some previous experience coding, but others didn't - what was common across everyone was their enthusiasm and ability to think on their feet. The Hackspace is an opportunity for those who want to hone their skills or learn something new in a community of like-minded people."

Group Captain Cooksley, added that "Encouraging our personnel to engage with STEM activities is not limited to supporting external events, but helping our people follow their interests in developing technology. Empowering our technicians to develop and improve themselves is critical to realising the RAF ‘Thinking to Win’ vision of finding novel and innovative ways to meet the varied challenges we face”.

The RAF Leeming Hackspace meets every Thursday at 1500 in Building 29 (shared with the Sub-Aqua Club). For more information contact leeminghackspace@gmail.com.