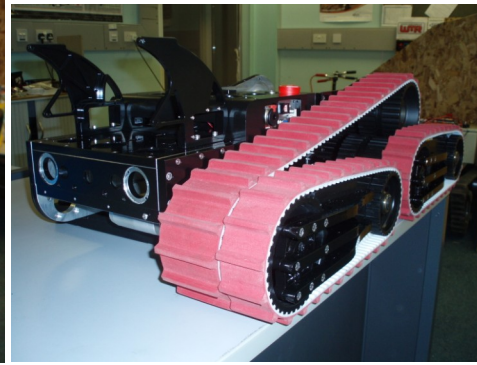The new chassis is being assembled with several sub-assemblies complete including the new lid.

The Remote Technology Open Day at Sellafield was a very worthwhile visit with a well received practical demonstration. Other applications of small mobile vehicles were discovered, with one company very interested in the flipper arm design for their reservoir cleaning robots.

Advanced mapping techniques were also observed in other university projects and the possibility of future University of Warwick collaboration on nuclear industry research was discussed.


The first autonomous tests using the actual robot chassis have been performed. Watch a video of autonomous operation and a promotional video demonstrating the search capabilities of the robot arm on the WMR YouTube channel.

www.mobilerobotics.warwick.ac.uk/media/videos

Progress has been made on the development of intelligent autonomous turning. This is designed to replace the current system of dead-reckoning turning which has proven inaccurate and inconsistent. The intelligent turning system works by taking a snapshot of the LiDAR information before starting the turn, then cross-correlating the snapshot against the current readings to determine their offset and therefore the angle turned. This system has been tested in the java simulator and will be tested on the new robot as soon as it is assembled.

The IR blob detection code has been successfully integrated and tested with the robot's computer and sensor systems. The functionality of the software has been significantly expanded with the addition of a GUI window on the java client. As you can seen from the screenshot, the frame retrieves the thresholded black and white image produced by the robot-side code, shows a red cross-hair displaying the centre of any large blobs found and displays information about the large blob (if found). It also gives the user options to start and stop the algorithm remotely and change the brightness and blob size thresholds on the fly, so the code can easily be calibrated and adapted for different heat or lighting conditions.
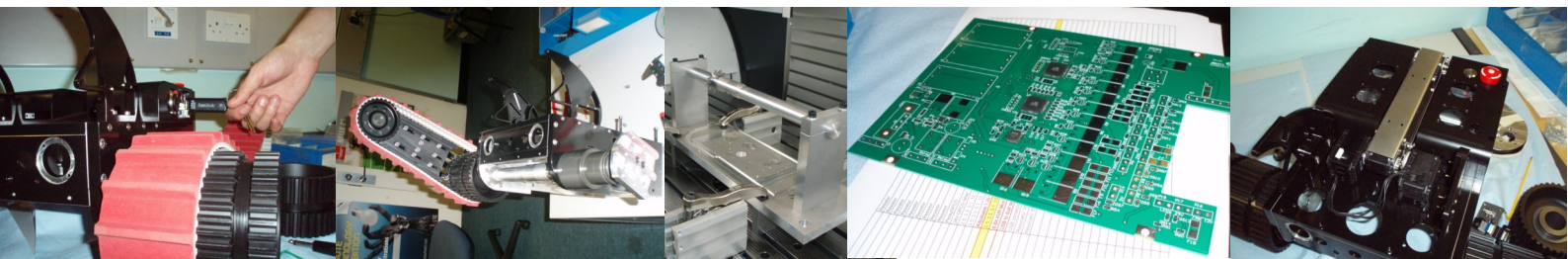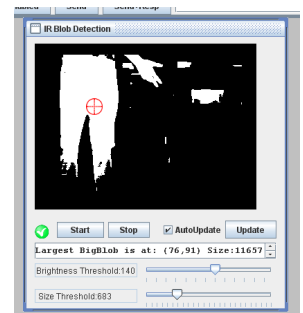
New Parts have been manufactured