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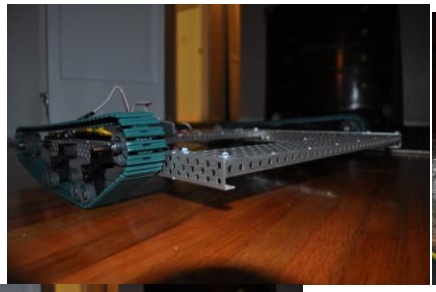
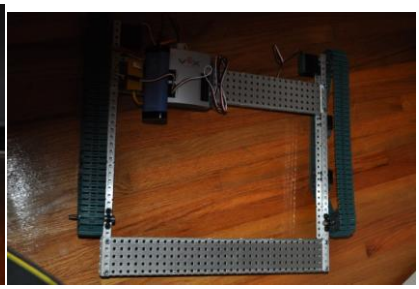
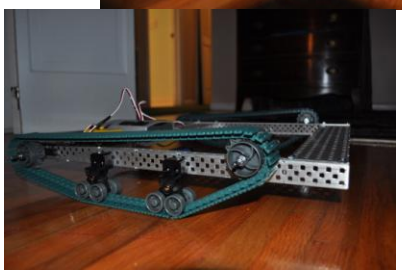
A.T.S. (Autonomous Targeting System)

The thought of running into a war is a scary thought for any man, but the thought of having to sneak behind enemy line so that you can target a strategic building for destruction can be even worse. What many do not realize is that the buildings you see being destroyed by smart bombs are being “painted” by someone not far in the distance.

The idea is to have a small lightweight robotic system that can be given precise coordinates and travel there. Once at the location the robot will relay a message to the area command. From there the command will take control of the targeting system. The Advance Laser Targeting System (ALATS) locates and designates targets for precision delivery of laser-guided munitions both day and night, and provides general battlefield surveillance. A highly flexible and adaptable system, the basic ALATS consists of a Ground Laser Target Designator (GLTD) II, mounting platform, tripod, and power source. Without the tripod the ALATS would be mounted to the all terrain robotic vehicle.

The current robotic vehicle has a wide set base with high rise tank treads. The targeting prototype is mounted on top with a hydraulic lift system for aiming on the Y axis. The autonomous system for movement runs off the VEX programming language. The prototype will be using drive by direction programming but the finished models will us GPS to find direction. Below is the driving design with autonomous driving system. High rise tank treads allow this robot to cover most terrain.