## SURFACE TO AIR MISSILES (Stationary SA-9)

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This report contains the detailed discussion of the project entitle "Stationary SA-9" also known as "Surface to Air Missiles". Is a mechanism that can target a moving object, follow the moving object and lunch a missile towards the target. It consists of two main parts, the first part is the rotating plane and the second one is the concrete base. Inside the rotating plane there will be four circuits situated inside the rotating plane. The four circuits include an ultrasonic motion detector, a PIC micro controller circuit, a stepper motor controller circuit and a servo motor controller circuit. On top of the rotating plane we have a launching pad that is used to launch the missiles. We used four small wheels to support the rotating plane. The concrete base acts as a support foundation for the rotating plane. We used a servo motor to contact the rotating plane and the concrete base together.

The report consists of three main parts namely introduction, body and conclusion. Introduction gives the reader a general idea about the project. The body helps to highlight the methods used to design the project, all the calculation and theories applied with detailed explanations. The conclusion includes all the important observations and findings with comment and recommendations, it gives the reader a summary of all the outcomes. Further developments and cost analysis of the project is also discussed in this session.