**AIRPORT SECURITY WITH PROXIMITY SENSOR FOR BOMB DETECTION**

**AIM:**

The main aim of the project is to provide security to the airport with automatic door open and close system.

**PURPOSE:**

The purpose of the project is to develop a system using proximity sensor to detect the bomb and IR sensors to count the people.

**CONTROL SECTION:**

**MICRO CONTROLLER**

**AT89S52**

**POWER SUPPLY**

**LCD DISPLAY**

**(16 X 2 LINES)**

**PROXIMITY SENSOR**

**DOOR**

**(MOTOR)**

**IR SENSORS**

**DRIVER CIRCUIT**

**SWITCH**

**DOOR**

**(MOTOR)**

**DOOR**

**(MOTOR)**

**power supply:**

**STEP DOWN**

**TRANSFORMER**

**BRIDGE**

**RECTIFIER**

**FILTER**

**CIRCUIT**

**REGULATOR SECTION**

**DESCRIPTION:**

In our project IR sensors are used of persons entering into the airport will be displayed on the LCD and provides the delay to the DOOR to open for some time. The proximity sensor is used for checking the person whether he/she is carrying any metal. If it finds any metal it intimates the security through the buzzer and the DOOR will not be opened. A switch is provided in order to operate (i.e., to open) the door from inner side.

**HARDWARE COMPONENTS:**

1. Microcontroller (AT89S52)
2. LCD Display (16x2 lines)
3. Door system
4. Proximity sensor
5. IR SENSOR

**SOFTWARE TOOLS:**

1. Kiel U vision
2. Express PCB
3. ISP

**RESULT:**

By using this we can implement a system to provide security to the airport with automatic door open and close system.