Air Traffic Control

By John Allison and Elijah Witsenhausen

This is a model of the software required to run an air traffic control tower. In this model we will simulate various airplane flight paths in relation to the simulated airport we will have a variable number of runways and flight connections. We will also simulate joy rides in small airplanes and helicopters. It is possible that we will have a military base as well.

We will have different sizes and types of aircraft in the simulation. If possible the simulation will map out flight routes according to weather. To have the best possible operating conditions we will have this control tower link up with other simulated control towers.

The optimal program will have each of the flight paths of the jets computed as well for maximum fuel efficiency. The simulation will link to current weather conditions at the location of the airport. The planes will be on a schedule from each of the connected airports with a random amount of joy rides and medical emergency flights. The joy rides will be dictated by a random number generator with conditions of wealth, season and weather of the area. Population and hospital locations will dictate medical emergencies.