Air Traffic Control is a service that regulates air traffic, preventing collisions between aircraft, collisions between aircraft and <u>obstructions</u> on the ground, and expediting and maintaining <u>the orderly flow of traffic</u>. Air Traffic Control is provided by Air Traffic Controllers who <u>rely on air traffic control</u> <u>systems</u> to safely and efficiently control aircraft.

Surveillance is <u>a key function</u> of air traffic control. Surveillance systems are <u>the "eves"</u> of air traffic controllers; they show <u>who</u> is in the sky, <u>where</u> they are and <u>when</u> they were there. They are at the beginning of <u>the air traffic control process</u>. Surveillance systems <u>detect</u> aircraft and <u>send detailed information</u> to the air traffic control system allowing air traffic controllers to safely guide the aircraft. Air traffic control is not possible without <u>surveillance systems</u> mainly in the areas of high traffic intensity. Surveillance is most widely provided by <u>primary and secondary</u> <u>radars</u>. However <u>new surveillance technologies</u> such as <u>GPS-based and ADS</u> <u>systems</u> are progressively being used nowadays.