

ANATOMY OF THE AIRPORT

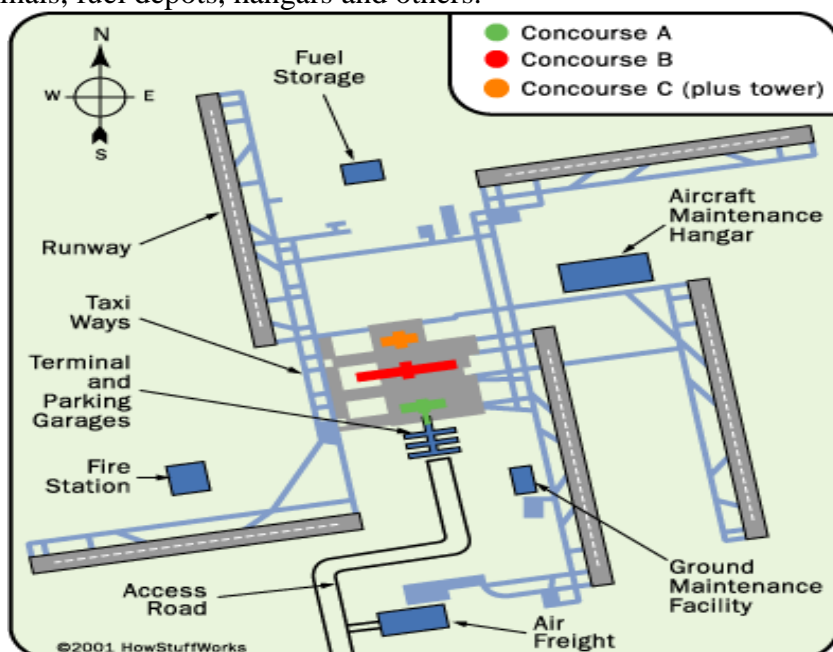
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Airports are amazing "mini-cities," providing services to all sorts of people and companies.

It's a typical airport layout, based on the layout of Denver International Airport. Airports have facilities to meet all of needs of pilots and other crew members. They have runways, terminals, fuel depots, hangars and others.



An airport is a location where aircraft such as fixed-wing aircraft, helicopters, and blimps take off and land. An airport consists of at least one surface such as a runway for a plane to take off and land, a helipad, or water for take offs and landings, and often includes buildings such as control towers, hangars and terminal buildings.

Airports provide services in their concourses and terminals, the heart of any airport. There you'll find the space for airlines to handle ticket sales, passenger check-in, baggage handling and claims. While the terms are often used interchangeably, we'll define concourses as the long halls and large, open areas where you'll find shops, restaurants and lounges, and terminals as long halls lined by the gates where you board and disembark airplanes.

A runway (RWY) is a strip of land at an airport on which aircraft can take off and land and forms part of the maneuvering area. Runways may be a man-made surface (often asphalt, concrete, or a mixture of both) or a natural surface (grass, dirt, gravel).

Taxiway connected to the runway, and building technical services are connected to the apron to inbound air transport could drive to the parking lot and then get a proper post-flight maintenance. Moreover firefighters and police use taxiways to quickly get to an accident place.

Parking allows short- and long-term storage of automobiles. Parking can be on or off airport grounds, and some parking systems are run by private vendors under airport regulation. Hartsfield has 30,000 public parking spaces.

The task of ensuring safe operations of commercial and private aircraft falls on air traffic controllers. They must coordinate the movements of thousands of aircraft, keep them at safe distances from each other, direct them during takeoff and landing from airports, direct them around bad weather and ensure that traffic flows smoothly with minimal delays.

How airport security works. Terrorism has been a problem for airlines and air travelers since the 1970s. The first line of defense in airport security is the most obvious: fences, barriers and walls. One of the most important security measures at an airport is confirming the identity of travelers.

All public access to an airport is channeled through the terminal, where every person must walk through a metal detector and all items must go through an X-ray machine. Since different materials absorb X-rays at different levels, the image on the monitor lets the machine operator see distinct items inside your bag.

In addition to passenger baggage, most planes carry enormous amounts of cargo. All of this cargo has to be checked before it is loaded. One old-fashioned method of bomb detection still works as well or better than most hi-tech systems - the use of trained dogs, called K-9.

Any major airport has lots of customers, most of them passengers. To meet passengers' needs, an airport must:

- be accessible by roadways and public transportation, plus have plenty of parking;
- have areas for ticketing, check-in and baggage handling;
- keep the passengers safe;
- offer food and other services;
- maintain areas for the customs service.

The gates are where the airplanes park for passenger boarding and deplaning. Passengers wait in the immediate area of each gate to board the plane. Gates are rented by each airline from the airport authority, and some airlines may rent a whole terminal building in their "hub" airport, in which case the rental fee alone can run into the millions of dollars.

You've probably been to airports many times - they are so familiar you may not pay much attention to them anymore. But if you go behind the scenes, airports are amazing "mini-cities," providing services to all sorts of people and companies. Air travelers, airlines, private pilots and freight carriers all use airports in completely different ways.

You can get an idea of just how amazing airports are when you consider this: At a typical large airport in the United States, over 100-million people can flow through in just one year. When you consider that the population of the United States is only 300-million or so, that's a pretty startling statistic!