

## AIRTRANSPORTCHARACTERISTICS

- Air transport is an aircraft design for transporting passengers and freight from one location to another in the air using airplanes, jets, rockets helicopters, and drones.
- Each of these type of air transport has a unique way of achieving speed and the sustainability of it voyage,

## Types of Air Transport

- Commercial airplanes
- Helicopters
- Private planes
- Hot air Balloons
- Hang gliders
- Zeppelin
- Parachute

## Advantage of Air Transport

- High Speed
- Comfortable and Quick Services
- No Investment in Construction of Track
- No Physical Barriers
- Easy Access
- Emergency Services
- Quick Clearance
- Most Suitable for Carrying Light Goods of High Value
- National Defense
- Space Exploration



## **Limitation of Air Transport**

- **Very Costly:**

- It is the costliest means of transport.
- The operating cost of aero-planes are higher and it involves a great deal of expenditure on the construction of aerodromes and aircraft.
- The fares of air transport are so high that it is beyond the reach of the common man.

- **Small Carrying Capacity:**

- Its carrying capacity is very small and hence it is not suitable to carry cheap and bulky goods.

- **Uncertain and Unreliable:**

- Air transport is uncertain and unreliable as it is controlled to a great extent by weather conditions.
- Unfavorable weather such as fog, snow or heavy rain etc. may cause cancellation of scheduled flights and suspension of air service.

- **Breakdowns and Accidents:**

- Air transport is the most risky form of transport because a minor accident may put a substantial loss to the goods, passengers and the crew.
- The chances of breakdowns and accidents are high as compared to other modes of transport.
- Hence, it involves comparatively greater risk.

- **Large Investment:**

- It requires a large amount of capital investment in the construction and maintenance of aero-planes.
- Further, very trained and skilled persons are required for operating air service.

- **Specialized Skill:**

- Air transport requires a specialized skill and high degree of training for its operation.

- **Unsuitable for Cheap and Bulky Goods:**

- Air transport is unsuitable for carrying cheap, bulky and heavy goods because of its limited capacity and high cost.

- **Legal Restrictions:**

- There are many legal restrictions imposed by various countries in the interest of their own national unity and peace.

## Airport Layout

### Airport

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

### Characteristics of good airport layout

- Landing, Take off and taxiing – Independent operations
- Shortest taxiway
- Safe runway length
- Safe approaches
- Excellent control tower visibility
- Adequate apron space
- Terminal building facilities
- Land area for future expansion
- Cost effective construction, maintenance and operation

# **Components of An Airport Layout**

1. Runway
2. Terminal area
3. Apron
4. Taxiway
5. Hangar
6. Control Tower
7. Parking

