- The aircraft may have a relatively short station stop which precludes the handling of air cargo, or may limit total volumes handled.
- The maximum weight payloads of the aircraft may be limited because of the nonstop distance of the flight. Extra fuel will be required, with increased gross takeoff weights.
- Some flights may operate at times in which cargo traffic cannot be serviced. Cargo staff may not operate full shifts, or customs officers may not be on hand to process incoming shipments.
- Cargo payloads may be limited if the flight operates on overwater stages. It must carry sufficient fuel to reach alternate airports. Safety devices such as liferafts may take up additional weight.
- Passengers and checked baggage are usually given a higher priority than air cargo. If passengers have large quantities of checked baggage, revenue cargo will be displaced.
- Some flights involve a large number of station stops. Passenger baggage must be separated by individual hold or unit load device or partitioned by netting within the hold. Space utilization will suffer as a result.
- . If passenger loads are unpredictable ie. if a route is characterized by a large number of no-show passengers or last-minute standbys, the airline must plan cargo loads conservatively. Many flights will contain empty space.
- . Certain hazardous materials cannot be carried onboard passenger aircraft. Some can be carried, but only in limited quantities.
- . The need to balance the aircraft for takeoff may require that certain rearward or forward holds cannot be used for cargo.
- . Certain stations may lack the necessary loading equipment to handle containerized shipments, particularly for 747 freighter or combi equipment.
- Many shippers prefer to tender air cargo in unit load devices. They are usually charged a flat fee per container, although a sliding scale will be assessed if the gross weight of the container exceeds a certain value called the "pivot weight". The shipper will strive to make the optimum use of the container but will be limited by the volume available. The effective capacity of the aircraft will then depend on the shipper's behaviour and his/her efficiency in utilizing the space purchased.
- Capacities may vary among specific aircraft of individual airlines. Some aircraft may be configured for high density seating. The higher passenger loads that result will be accompanied by an increased demand for belly space to convey checked baggage. This is particularly significant with wide body aircraft. Some carriers place their galleys in the belly, so that additional passengers can be seated on the main deck. The additional checked baggage makes substantial demands for cargo space, which itself has been reduced because of the location of the galleys.

