

= International airport =

An international airport is an airport that offers customs and immigration facilities for passengers travelling between countries . International airports are typically larger than domestic airports and often feature longer runways and facilities to accommodate the heavier aircraft commonly used for international and intercontinental travel . International airports often also host domestic flights . Some , such as Frankfurt Airport in Germany are very large ; others such as Fa 'a' International Airport in Tahiti , are quite small .

Buildings , operations and management have become increasingly sophisticated since the mid 20th century , when international airports began to provide infrastructure for international civilian flights . Detailed technical standards have been developed to ensure safety and common coding systems implemented to provide global consistency . The physical structures that serve millions of individual passengers and flights are among the most complex and interconnected in the world . By the second decade of the 21st century , there were over 1 @, @ 200 international airports and almost two billion international passengers along with 50 million metric tonnes of cargo were passing through them annually .

= = History = =

In August 1919 , Hounslow Heath Aerodrome , in London , England was the first airport to operate scheduled international commercial services . It was closed and supplanted by Croydon Airport in March 1920 . In the United States , Bisbee @-@ Douglas International Airport in Arizona became the first international airport of the Americas in 1928 .

The precursors to international airports were airfields or aerodromes . In the early days of international flights , there was limited infrastructure , " although if engine problems arose there were plenty of places where aircraft could land " . Four @-@ engined land planes being unavailable for over @-@ water operations to international destinations , thus / therefore flying boats became part of the solution . At the far end of the longest international route ( which became the Kangaroo Route ) , on @-@ water landing areas were found in places such as Surabaya and in the open sea off Kupang . In Sydney , Rose Bay , New South Wales , was chosen as the airport landing area .

International airports sometimes serve military as well as commercial purposes and their viability is also affected by technological developments . Canton Island Airport , for example , in the Phoenix Islands ( Kiribati ) , after serving as a military airport during World War II , was used as a refuelling stop by commercial aircraft such as Qantas which stationed ground crew there in the late 1950s . The advent in the early 1960s of jet aircraft such as the Boeing 707 with the range to fly non @-@ stop between Australia or New Zealand and Hawaii , meant that a mid @-@ Pacific stop was no longer needed and the airport was closed to regular commercial use . Other international airports , such as Kai Tak Airport in Hong Kong , have been decommissioned and replaced when they reached capacity or technological advances rendered them inadequate .

= = Design and construction = =

The construction and operation of an international airport depends on a complicated set of decisions that are affected by technology , politics , economics and geography as well as both local and international law . Designing an airport even for domestic traffic or as " non @-@ hub " has , from the beginning , required extensive co @-@ ordination between users and interested parties ? architects , engineers , managers and staff all need to be involved . Airports may also be regarded as emblematic of national pride and so the design may be architecturally ambitious . An example is the planned New Mexico City international airport , intended to replace an airport that has reached capacity .

Airports can be towered or non @-@ towered , depending on air traffic density and available funds . Because of high capacity and busy airspace , many international airports have air traffic control located on site .

Some international airports require construction of additional infrastructure outside of the airport , such as at the Hong Kong International Airport , which included the construction of a high @-@ speed railway and automobile expressway to connect the airport to the urban areas of Hong Kong . Construction of the expressway included the construction of two bridges ( the Tsing Ma suspension bridge and Kap Shui Mun cable bridge ) and the Ma Wan viaduct on Ma Wan island to connect the bridges . Each bridge carries rail and automobile traffic .

= = Operations and management = =

International airports have commercial relationships with and provide services to airlines and passengers from around the world . Many also serve as hubs , or places where non @-@ direct flights may land and passengers may switch planes , while others serve primarily direct point @-@ to @-@ point flights . This affects airport design factors , including the number and placement of terminals as well as the flow of passengers and baggage between different areas of the airport . An airport specializing in point @-@ to @-@ point transit can have international and domestic terminals , each in their separate building equipped with separate baggage handling facilities . In a hub airport , however , spaces and services are shared .

Airport management have to take into account a wide range of factors , among which are the performance of airlines , the technical requirements of aircraft , airport @-@ airline relationships , services for travelling customers , security and environmental impacts .

= = = Standards = = =

Technical standards for safety and operating procedures at international airports are set by international agreements . The International Air Transport Association ( IATA ) , formed in 1945 , is the association of the airline companies . The International Civil Aviation Organization ( ICAO ) is a body of the United Nations succeeding earlier international committees going back to 1903 . These two organizations served to create regulations over airports which the airports themselves had no authority to debate . This eventually sparked an entire subject of air travel politics . In January 1948 , 19 representatives from various US commercial airports met for the first time in New York City to seek resolution to common problems they each faced , which initiated the formation of the Airport Operators Council , which later became Airports Council International ? North America ( ACI @-@ NA ) . This group included representatives from Baltimore , Boston , Chicago , Cleveland , Dallas , Denver , Detroit , Jacksonville , Kansas City , Los Angeles , Memphis , Miami , Minneapolis @-@ St. Paul , New York @-@ Newark , Philadelphia , Pittsburgh , St. Louis , San Francisco and Washington .

= = = Flight logistics = = =

International airports have extensive operations in managing flight logistics , such as air traffic control . The latter service is provided by ground @-@ based controllers who coordinate and direct aircraft on the ground and through controlled airspace . Air traffic control also provides advisory services to aircraft in non @-@ controlled airspace .

= = = Customs and immigration = = =

Airports with international flights have customs and immigration facilities , which allow right of entry . These change over time but are generally designated by law . However , as some countries have agreements that allow connecting flights without customs and immigrations , such facilities do not define an international airport .

= = = Security and safety = = =

The current trend of enhancing security at the cost of passenger and baggage handling efficiency at international airports is expected to continue in the future . This places financial burden on airports , risks the flow of servicing processes , and has implications for the privacy of passengers . International flights often require a higher level of physical security than do domestic airports , although in recent years , many countries have adopted the same level of security for both .

Most international airports feature a " sterile lounge " , an area after security checkpoints within which passengers are free to move without further security checks . This area can have services such as duty @-@ free shops that sell goods that have been selected and screened with safety in mind , so that purchasing and bringing them on board flights poses no security risks . In addition to employees , only processed passengers with a valid ticket are allowed inside the sterile lounge . Admittance into the sterile area is done in centralized security checkpoints in contrast to e.g. individual checkpoints at each gate . This allows for more efficient processing of passengers with fewer staff , as well as makes it possible to detect both delays and security threats well ahead of boarding .

To ensure the viability of airport operations , new and innovative security systems are being developed . For instance , the old security checkpoints can be replaced by a " total security area " encompassing an entire airport , coupled with automatic surveillance of passengers from the moment they enter the airport until they embark on a plane .

Passengers connecting to domestic flights from an international flight generally must take their checked luggage through customs and re @-@ check their luggage at the domestic airline counter , requiring extra time in the process . In some cases in Europe , luggage can be transferred to the final destination even if it is a domestic connection .

In some cases , travelers and the aircraft can clear customs and immigration at the departure airport . As one example of this , are airports in Canada with United States border preclearance facilities . This allows flights from those airports to fly into US airports that do not have customs and immigration facilities . Luggage from such flights can also be transferred to a final destination in the U.S. through the airport of entry .

A crucial safety aspect of international airports is medical facilities and practices . In particular , controlling transmissible disease , such as SARS , is deemed important at international airports . While these standards are regulated by ICAO Standards And Recommended Practices ( SARPs ) and WHO 's International Health Regulations ( IHR ) , local authorities have considerable say in how they are implemented .

== = Transportation == =

Among the most important airport services are further transportation connections , including rail networks , taxi and shuttle services at curbside pick @-@ up areas , and public buses . Large areas for automobile parking , often in co @-@ located multi @-@ storey car parks , are also typical to find at airports . Some airports provide shuttle services to parking garages for passengers and airport employees . Due to the very large scale of international airports , some have constructed shuttle services to transport passengers between terminals . Such systems operate for example , in Singapore Changi Airport and Zurich Airport .

At some U.S. international airports , such as O 'Hare International Airport in Chicago , some seating and waiting areas are located away from the terminal building , with passengers being shuttled to terminals . These areas may be referred to as ground transportation centers or intermodal centers . Amenities at ground transportation centers typically include restrooms and seating , and may also provide ticket counters , food and beverage sales and retail goods such as magazines . Some ground transportation centers have heating and air conditioning and covered boarding areas ( to protect passengers from the elements ) .

== = Services and amenities == =

Standard amenities include public restrooms , passenger waiting areas and retail stores for dining

and shopping , including duty @-@ free shops . Dining establishments may be consolidated in food courts . Some international airports may offer retail sales of luxury goods at duty @-@ free stores , such as at Terminal 3 at Indira Gandhi International Airport in India . This terminal has been described as having become a significant retail destination in India . Wi @-@ Fi service and access , offices for bureau de change ( currency exchange ) and tourism advice are common , although the availability of service varies across airports . Some international airports provide secure areas for stranded passengers to rest and sleep . The more usual service is hotels that are available on the premises .

= = = = Customer satisfaction awards = = = =

The World Airport Awards are voted by consumers in an independent global customer satisfaction survey . Singapore Changi Airport has been the first @-@ place winner in 2006 , 2010 , 2013 and 2014 . Other winners include Incheon International Airport ( South Korea ) and Amsterdam Airport Schiphol ( The Netherlands ) .

= = Airport names = =

Toponymy is one of the most common sources for the naming of airports . A number of areas close to them have lent their names , including villages , estates , city districts , historical areas and regions , islands and even a waterfall . Cataratas del Iguazú International Airport and Foz do Iguaçu International Airport are named after the Iguazu Falls in Argentina . Domodedovo International Airport is named after the town of Domodedovo . Sometimes the toponym is combined with or renamed to incorporate another name from another source such as from one of the following :

Aviators , such as pilots ( civil and military ) and others who played a role in the development of aviation . Sydney Airport is also known as Kingsford Smith Airport , named after Charles Kingsford Smith ; and Comodoro Arturo Merino Benítez International Airport , in Chile , is named after Arturo Merino Benítez .

Cultural leaders ( poets , artists , writers , musicians ) such as Leonardo da Vinci ? Fiumicino Airport , named after Leonardo da Vinci ; Liverpool John Lennon Airport , named after The Beatles member and Liverpool local John Lennon ; Tom Jobim Airport , at Rio de Janeiro named after the composer Antonio Carlos Jobim . Václav Havel Airport Prague , named after writer / philosopher / statesman Václav Havel . Budapest Ferenc Liszt International Airport and Warsaw Chopin Airport were both renamed after musicians , the former after Franz Liszt on the 200th anniversary of his birth and the latter after Frédéric Chopin .

Ethnic groups , such as Minangkabau International Airport in Padang , Indonesia , named after the local Minangkabau people .

Ideals in combination with toponyms , such as Newark Liberty International Airport .

Mythology and religion , such as heroes of epics and myths , church hierarchs and saints and similar names . Manas International Airport ( or Bishkek ) in Kyrgyzstan is named after Manas in the Kyrgyz national epic poem .

Politicians and statesmen , such as Heads of State , Members of parliament and leaders of political parties as well as high @-@ ranking military personnel . Examples include : Paris @-@ Charles de Gaulle Airport , named after Charles de Gaulle , John F. Kennedy International Airport ( in New York City ) , named after John F. Kennedy , the 35th President of the U.S. There are two international airports named after Simón Bolívar , one in Venezuela , and one in Colombia ; Netaji Subhas Chandra Bose International Airport , formerly known as Dum Dum Airport , is named after Subhas Chandra Bose and Québec City Jean Lesage International Airport , named after former premier Jean Lesage .

Public figures ( advocates , engineers , doctors , teachers , journalists or sportpeople ) , such as George Best Belfast City Airport , named after footballer George Best , who came from the city .

Royalty , such as King Fahd International Airport at Dammam , Chhatrapati Shivaji International Airport at Mumbai , Tribhuvan International Airport at Kathmandu are all named after royalty .

Scientists such as Bologna Guglielmo Marconi Airport , named after Guglielmo Marconi .

A study concluded that an average of 44 percent of the world 's airports are named by toponyms . Thirty percent for politicians and only seven percent for aviators . Mythology and religion ( three percent ) , public figures ( two percent ) , people of science ( two percent ) and other ( one percent ) .

= = Notable airports = =

= = = By historical event = = =

1919 ( August ) Hounslow Heath Aerodrome begins operating scheduled international commercial services from England to France .

1933 Douglas International Airport in Arizona is honored by Eleanor Roosevelt as " the first international airport of the Americas " , having reached this capacity in 1928 .

= = = By passenger numbers = = =

As of 2012 , Hartsfield Jackson Atlanta International had the greatest number of travelers of all international airports with a total of 95 @, @ 462 @, @ 867 passengers , 13 @. @ 5 million more than the next busiest airport which was Beijing Capital International with 81 @, @ 929 @, @ 359 passengers . The following year , Hartsfield retained its place as the busiest airport but with only 94 @. @ 4 million passengers .

Los Angeles International Airport ( LAX ) is considered to have the greatest number of passengers who start or end their travel there as opposed to continuing on to a connecting flight . Overall , LAX is considered to be the 7th busiest airport in the world .

London Heathrow is the busiest airport in Europe , with 73 @, @ 405 @, @ 330 counted passengers in 2014 , almost 10 million more than the second busiest , Paris @- @ Charles de Gaulle Airport . It is also the second busiest in the world when measured by international passengers , beaten only by Dubai International Airport .

= = = Other = = =

Svalbard Airport in Svalbard , Norway is the northern @- @ most airport to which tourists can book tickets . It is primarily used for transporting miners to and from a cluster of islands with a heavy mining industry .

King Fahd International Airport , Dammam , Saudi Arabia is the largest airport in the world , encompassing over 300 square miles ( 780 km2 ) .