Airline operations

Transportation, Airlines

“ The world commercial airline industry is one of the most diverse, dynamic and perplexing in the world ” (Globale Airline Industry Program). The airports are exceptionally complex facilities and highly renowned for the variety of services and resources it provides to both the airlines and its users. Airlines and airports are inextricably intertwined together and none of them can survive without the other. The aviation industry is growing at an exponential rate. The demands for an effective and efficient ground handling system became the fundamental standards in successful aircraft operation and increase in airline image.

The directives adopted by the 15 member states are divided into three general models, US, EU and third party models. In the US model airlines independently provide ground handling services to their airlines and manage airport terminals activities. In the other hand EU model, airports are heavily involved in ground handling services for airlines. The third party ground handling service is provided by other agencies usually contracted by airports along with supervision from airport operators.

Even though contracting a third party into operation is in itself a challenge; operators have to make sure that those contracting agencies comply with ground handling standards and provide a top quality service continuously. Achieving those standards is one thing but when it comes to employment, operators have to either assume or take the necessary measures to insure handlers come with quality and an ideal price that would match their serviceability. Ground handling services are divided in to two major parts terminal services and airside services.

As airlines grow in size and their flight route operations became international, airports started to play a major critical role in providing facilities and services to accommodate long and short haul flights. As airlines are the most important customers for airports, they made mutual contract agreements to join forces and provide flawless services to the passengers and air cargo linking them through vast transportation network around the world. Passenger travel became more and more frequent the past 20 years common difficulties the air transportation industry faced were environmental, and safety concerns.

For example when finding an appropriate location to build an airport it is crucial to consider the surrounding environment. If a designated location was found airport designers had to take into consideration weather conditions and other hazard constraints such as bird strikes. With the development of turbine engines in the new aeronautical age. Recent bird strikes on a turbine engine showed that it shatters the blades and cause blocking of the airflow rendering the engines inoperable during flights and in some cases causing catastrophic accidents.

Another unavoidable environmental concern is the noise and pollutions generated by aircrafts and airport operations. The pollution generated by aircraft engines during takeoffs and landings stir concerns among near living communities. Since airports rely on the revenue stream generated by their associates (airline), and passengers for their very existence , airport operators tried to implement new technologies and infrastructure to minimise any environmental concerns and raise awareness to ensure

environmental friendliness, passenger safety and others during flight and airport operations.

Since government deregulation, airlines financial revenues fluctuated as passenger numbers increased. Major airlines introduced a hub and spoke route structure to maximise the number of passenger yield. Airlines that operated a hub and spoke in particular airport connected passengers from bigger cities to smaller cities to attract more consumers and as well operate frequent flights to wide array of destinations. With more and more people wanting to travel around the world their numbers inflated from approximately half a million to 50 million individuals in one single airport terminal.

Thus building new terminals and terminals expansion projects had to be undertaken to make it more efficient for passenger travelling between them. Introduction of decentralised airports reduced walking distance from one terminal to another. Even to a point where passengers who opted to fly in one individual carrier didn’t have to walk miles and miles to get to their carriers terminal. For example Dallas-fort Worth international airport consists of five terminals each offer their own parking areas and a short distance walk from the car park to the terminal.

On the marketing side the aviation industry became more and more competitive. Airlines fare prices have risen and declined. Carriers adopted strategic approaches to out compete with other airlines by introducing low cost carriers as well as maintaining their full service carriers. Not only airlines opted new strategies in making profit airports as well started to increase their revenues by charging aircraft parking fees, landing fees, air

traffic charges, handling services and fuel taxes to the airlines to make up payments for infrastructure costs and other internal services costs.

Safety record and providing top quality services to passenger and airlines establishes the basis of well operated airport system. Airports are regarded one of the most prominent facilities in the world, thus any terrorist attacks would deal unspeakable damages to the country and lose of citizens lives. Governments rely heavily on airport generating tourist revenues, if any vicious attacks were to be carried out in an international servicing airport it would cause a major economical and social instability to its owning country.

Before September 11 airports and the air transportation industry was regarded the safest most reliable efficient manmade transportation system. Airport security was undoubtedly secure. Terrorist sought out another means to significantly damage governments and as well as increase number of body counts. As the aviation transportation became highly political, economical and social terrorist decided to shift their focus and attack at the heart of the transportation industry. After September 11 attacks security became extremely tight at airports and extreme measure were taken to identify any possible threats.

Airport operators around the world introduced highly sophisticated technology equipments that detect explosives or any other harmful devices. One highly controversial and yet front of the line top security equipment was the full body scanner first introduced by Netherlands. The full body scanner system makes for a virtual strip search kind of experience with the difference that the individual doesn’t have to physically strip of all their cloth instead the scanner generates a nude image of the person and then it can be

examined by the security officials to detect any hidden and harmful materials.

Although so many privacy concerns issues surrounded this new technology it is still the governments point of view that this new security system could definitely be the only chance that they have to fight back terrorism and ensure safety for passenger travels around the world. In the air transportation industry a wide range of ground services are provide in the airports to airlines. The stand outs are on-ramp aircraft servicing, onboard servicing and ramp handlings.

In Australia, Melbourne international airport there are five different ground handlers offering services to international and domestic airlines. As soon an aircraft lands ground handlers use aircraft tow tractors to align it with the passenger bridges for a safe unboarding. After the last passenger has unboarded; the ground handlers go to the next phase of ramp serving. They begin physical checks, minor fault checks that have been reported by the captain and any other damages on the aircraft that do not necessitate aircraft withdrawal from service.

Simultaneously while general aircraft checks are being conducted with supervision of a certified station engineer; cleaning personal enter the aircraft and comprehensively clean the cabin changing blankets, pillows, vacuuming and removal of all litter from the floor. Toilets are drained externally by using a special portable pumping unit. Restocking food and drinks take place after cleaning and strict hygiene standards are followed when handling of foods and drinks. Aircraft fuelling can be supplied by mobile trucks or apron hydrant systems.

Airports use both of these facilities to give maximum flexibilities of fuel apron operations, and to ensure competitive pricing from suppliers . Ramp layout can seem very difficult yet its complexity coupled with precision operation it can be completed without delays. Another very important factor with apron handling devices is that the equipments used to load passengers and cargo must be compatible to the aircrafts height. Aircrafts are extremely expensive and fragile requiring constant vigilant attention.

To ensure coordination and efficient completion of ramp operations supervision is required. Ultimately working as a ground handler has its own hazards and injuries. Workers who have headsets and ear protection are more prominent to accidents and injuries since their surrounding environment is noisy. Thus staff members undergo riggers trainings, and adhere to safety procedures and ultimately preventing serious accidents. Ground handlings liable responsibilities differ not only from country to country but from airport to airport .

In Melbourne international airport ground handling services are conducted by aero-care, Menzies Aviation, Patrick Air Services, Qantas Airways and Toll Dnata. For example Qantas freight operates ground handlings for both its fleets and to other major international carriers. Controlling ground handling efficiency; airports and airlines use systematic reporting systems to keep level of operational acceptability. Punctuality reports are prepared by managers in a monthly basis. Reporting any flight delays and the particular aircraft involved.

Including comprehensive details of the incidents and measures taken to prevent or reduce such delays. The financial effect of aircraft departure

being delayed entirely falls on the airlines. Airline owners know, any aircraft that is on the ground does not generate revenue only aircrafts that are flying generate revenue. As a result ground handling operations before departure are kept monitored by airline agents or airport authorities to make sure efficient use of equipments and on time departures.

Despite ground handlers facing increase in competition forced low heiring fees for services. Employees were payed according to their level of skills and labour. Decrease in salaries meant in some locations quality of staff reduced subsequently effecting standards and safety procedures. Even though facing these constraints; ground handlers around the world continue to on providing reliable top quality services evident today with flight schedules departing on time and safety standards being met across the world.