

RESPONSIBILITY OF AIRPORT MANAGER

Guided By

Vinay Sharma (**Head – Training & Development**)
Contemporary Training Pvt. Ltd KOLKATA

A DISSERTATION REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR

BBA < Aviation Operation >

OF

CENTRE FOR CONTINUING EDUCATION
UNIVERSITY OF PETROLEUM & ENERGY STUDIES, DEHRADUN





ACKNOWLEDGEMENT

This is to acknowledge with thanks the help, guidance and support that I have received during the Dissertation.

I have no words to express a deep sense of gratitude to the management of "University of petroleum Energy Studies" for giving me an opportunity to pursue my Dissertation, and in particular Vinay Sharma, for his able guidance and support.

I must also thank Samriti Mahajan, Suman Grover and Aparna Chaudhary for their valuable support. I also place on record my appreciation of the support provided by Dr. Ranjana sinha Thakur.

INDRANIL MUKHERJEE JAMSHEDPUR 9631004415





A Declaration by the Guide on Company Letter Head

Declaration by the Guide

This is to certify that the Mr INDRANIL MUKHERJEE, a student of (BBA Aviation Operation), SAP ID 500063410 of UPES has successfully completed this dissertation report on "RESPONSIBILITY OF AIRPORT MANAGER" under my supervision. Further, I certify that the work is based on the investigation made, data collected and analysed by him and it has not been submitted in any other University or Institution for award of any degree. In my opinion it is fully adequate, in scope and utility, as a dissertation towards partial fulfilment for the award of degree of BBA.

Vinay Sharma

(Head – Training & Development) Contemporary Training Pvt. Ltd KOLKATA 8582979926

Vinay.sharma@contemporaryonline.co.in





Table of Contents

Acknowledgment

List of Tables and Illustrations

Executive Summary / Abstract

Chapter 1: Introduction

Chapter 2: Literature Review

Chapter 3: Research Design, Methodology and Plan

Chapter 4: Findings and Analysis

Chapter 5: Conclusions

Bibliography

References

Appendix: Interviewer Script











Airport is one of the most complex facilities which connect several business units to fulfil their roles within the air transport industry. Managing these entire business networks is one of the challenging areas. The characterization of the airport manager is a network of multiple organizations and their relationship. It encompasses suppliers, airlines, airport operators, government agencies such as customs, security and immigration and other service providers. The purpose of this paper is to analyse the airport manager work in airports and identify opportunities for enhancing airport performance.

Airports play a critical role in promoting trade, tourism and economic development of a country. During the last two decades, an upward trend in international tourism and globalization significantly increased traffic rates in the aviation sector.

Airport management is to manage the three major part of airport i.e., city side, terminal building and air side. This entire department have different manager but airport manager is all in one so he/she has to supervise them. The main aim of the aviation is to provide all securities and facilities to passengers. So this all thing airport manager should see that all things are in going in perfect way so that day by passenger increased in airport.











The Airport today is not just a place from where passengers board their planes but it has turned into whole experience. Airports have retail stores in them, restaurants, food courts, duty free shops and many more. Hence, we require a responsible and qualified person to manage all of this. Airport managers have a quite hectic and responsible job, but the work is important. To know more about this job profile, read the airport manager job description.

The main function of the airport manager is to look after all the work that is taking place in an airport. There are scores planes that land in the airport; all of them need careful coordination with the control tower of the airport, which guides them while landing. The manager has to be in charge of the control tower and handle all the employees in it. All of this has to be done by the book and the manager is in charge of all the Federal Aviation rules being implemented.

They have to look after the budget of the airports, not to mention the salaries of the employees. There are scores of people working at the airport, and if the airport is an international terminal, the number could go up in hundreds, even thousands. The manager has to look after all of them; they have to assign the employees some duties and hire heads of each separate department. They have to take reports from the heads of department.

Security is another huge issue at the airport. The manager has to coordinate with the security manager and make sure all the security procedures are in place and are up to the mark. They, along with the security head, have to inspect all the security aspects of the airport and fix the problems they come across. Even these are just a few duties of the airport manager, to have the absolute detail, see the airport manager job description given below along with some qualifications and more.

- An airport manager's job is to keep people moving in the right direction. That means decreasing flight delays as much as possible.
- Airport managers handle everything from signing leases with airlines and
 concessionaires to meeting safety regulations. They prepare for emergencies and deal
 with foul weather. They also plan for the future growth of their airports. And they
 make sure the books stay in the black.
- Across America, airport managers are dealing with stricter safety rules put in place to prevent terrorism. While these rules have created headaches for managers, most agree with their intent.
- Larry Adams is an airport manager. "Fencing and controlled access gates are being placed at airports of almost all sizes," he says. Managers must oversee the construction.

"The [safety] rules have always been there, there's just been more emphasis placed on them by the FAA," says Adams. The rules, he adds, create an "awful lot more work."





- Managers work for private airports or cities or towns. They may run passenger airports, cargo airfields or sites that handle both. While many are licensed pilots, it's not always a requirement for the job. When large airports go searching for someone to oversee operations, they are often more interested in finding someone with management experience.
- Airport managers often deal with routine items -- deciding how many parking spaces an airport should have or how much taxi space. They also make sure the airport doesn't exceed noise limits or fly past curfew hours set to limit disturbances to neighbour's. Baggage handling, newsstands and even shoe shining shops are all under their control.

Managers often report to airport committees or oversight groups. These boards usually have the final say in many decisions -- but a strong manager can help an airport grow by justifying the expense of improvements to private or public investors.

• Airport managers with environmental and ecological education are especially desirable. "That is becoming really, really big," says Adams. "Particularly in the areas of storm water management, noise pollution and air quality."

According to Adams, airport managers only started dealing with these issues regularly in the early '90s. But today, environmental knowledge is imperative.

The added workload for managers, notes Adams, means greater pay. Adams has had to attend seminars and professional meetings to learn the environmental aspects of airport management.

OBJECTIVES OF THE STUDY

- To study the responsibility of the airport manager
- To find the information of airport manager duty in different department of airport airlines.





ONIVERSITI WITH A FOR OUE







Various studies on Investment & behaviour of airport manager had been connecting with different department. Depending on the various issues of airport manager, the review has been discussed in brief as:

Airport managers are the decision-makers and policy-makers for airports. They create jobs and oversee the management of each airport department. The job is multi-faceted and vital to aviation safety. Large airports that serve commercial airlines need managers to oversee several departments, but smaller airports may need airport managers to be more hands-on with areas such as finance, security, maintenance, and more.

Airports often are one of the largest employers in a local area. Major airports like JFK in New York can have upwards of 30,000 people employed. Small airports may employ only an airport manager and a couple of linemen. Regardless, someone has to manage the daily operations and plan for the future, and that job lies with the airport manager.

Airport Manager Duties & Responsibilities

This job generally requires the ability to do the following work:

- Comply with FAA regulations and other guidelines.
- Supervise managers and staff.
- Plan budgets.
- Adapt to outside factors, such as weather.
- Work with community leaders.
- Maintain accurate records.
- Oversee the maintenance and repair of airport equipment.

Airport managers often are employed by the city where the airport is located, and they are responsible for all airport operations. The airport manager oversees all other employees and departments and manages the day-to-day operations as well as future airport planning. They may deal with many different issues, but they are primarily responsible for airport safety, regulations, and budget planning.





Airport managers may have to deal with noise complaints, emissions testing, and airport equipment management. They work closely with the Federal Aviation Administration (FAA) and other industry groups to manage and develop air traffic procedures, install air navigation equipment, mitigate safety hazards, and manage the airport budget. They must work closely with numerous people, including the FAA, National Transportation Safety Board (NTSB), airline management, air traffic controllers, fire-fighters, security personnel linemen, and maintenance personnel, administrative staff, food staff, and sometimes retail managers.

Airport managers generally work with city, state, and federal officials to make their airports safe and efficient while following rules and regulations. They sometimes lobby to make important changes and work with legislative officials to promote aviation.





RESEARCE RESEARCE VERSEARCE VERSEARC





An Airport Manager administers and supervises the business of the airport, including budgeting, terminal operations, contract and grant administration, marketing and promotion, public information, ground transportation, and other matters of concern pertaining to the safe and efficient operation of the facility. Whether large or small, there are a huge variety of functions at an airport besides planes taking off and landing, Terminal, Landside and Airside. In This section I'm going to discuss about airport Manager Concern on Terminal, Landside and Airside.

Terminal Area

A terminal building could be made for passengers, cargo and for any other specific purposes. A PTB (Passengers Terminal Building) comprises the basic physical parts as

- 01. Front side of the PTB or the veranda
- 02. Visitors Area
- 03. Check-in Area
- 04. SHA or Security Hold Area (sterile area)
- 05. BMA (Baggage Make Up area)
- 06. BBA (Baggage Brake Up area)
- 07. Passengers Meet and Greet area
- 08. Airlines offices
- 09. Office of the regulatory agencies
- 10. Lounges of Business class or Executive Class passengers
- 11. Check-in counters
- 12. Frisking booths and XBIS machines





- 13. Various concessionaires
- 14. Counters for Tour and Travel agencies
- 15. Counters for Taxi services

Terminal building is the main building where passengers embark and disembark aircrafts. The terminals are the 'front door' to the Airport and serve as the public interface between the airside and landside elements. This Include Check in counters, Departure lounge, Arrival lounge, Custom check, Immigration check, Baggage conveyor belt, Driveway to drop and pick passengers, Health quarantine Animal & plant quarantine ,Baggage collection lounge, Baggage disposal conveyor, Security office Information panel displays, Baggage x ray machines, Human metal detectors ,Toilets ,Retail shops Other facilities ,Public PA system ,CCTV,Passengers aerobridges ,Departure secured rooms.

Where to Locate a Terminal, Key Considerations:

- 1. Proximity to Runways and Taxiways
- 2. Accessibility and Road Access
- 3. Room for Expansion
- 4. Availability of Services and Utilities
- 5. Impact on the Environment

Terminal Design – Key Considerations Balance Between:

- Utilization of Facility
- Facility Investment
- Operational efficiency
- Architectural

Passenger terminals serve the needs of different types of users by:

- Processing check-in, security, border controls
- Aircraft boarding and disembarking
- Baggage handling for travellers





- Providing for passengers waiting for flight or transferring between flights
- Providing passenger and airport visitor facilities, including food and beverage, toilets, shopping & other activities.

Any airport's aim is to provide high quality terminal facilities because:

- To handle the passengers traffic flows effectively.
- To provide a quality experience for customers, because terminals provide the first and last impressions for visitors to the airport.
- To become a HUB
- To ensure that terminal areas must serves and meets all the criteria that passengers demand

Key factors to build an ATTRACTIVE & EFFECTIVE airport terminal building are:

- Easy Access from road or rail
- Efficient Baggage Delivery
- Full range of services
- Convenient parking, ground transportation
- Clean building
- Simple procedures that is not confusing
- Safe & Secure Environment

Airside

The airside installations, operation and its effective management are vital for every airport. It basically includes

- 01. Runway
- 02. Taxiway
- 03. Holding bays
- 04. Apron
- 05. Bays/stands





- 06. Runway lights
- 07. Runway markings
- 08. Navigational aids or NAVAIDS as
- NDB (Non directional beacon)
- DVOR
- DME
- Localizer
- Glide Path
- Outer marker

A Runway is the basic requirement of an airport. The pavement where aircrafts land, roll and take off is called a runway. Regulations regarding the management and planning of runway is governed by ICAO SARP Annex-14. As per the guidelines the runway is properly painted with various markings and equipped with visual and instrumental aids.

Runway lighting is extremely important for night time aircraft operation or in poor visibility weather conditions. There are three kind of light arrangements in and around the runway.

- Approach lighting systems
- Visual glide slope indicators
- Runway end identifiers

The major function of taxiways is to provide access for aircraft to travel to and from the runways to other areas of the airport. Taxiways are identified as

- Parallel taxiways
- Entrance taxiways
- Bypass taxiways
- Exit taxiways





A parallel taxiway is aligned parallel to an adjacent runway. Exit and Entrance taxiways are typically oriented perpendicular to the runway or the parallel taxiway. Entrance taxiways are located near the departure end of runways; exit taxiways are located at various points along the runway to allow landing aircraft to efficiently exit the runway after landing. By pass taxiways are located at areas of congestion at busy airports. They allow aircraft bypass other aircraft parked on the parallel or entrance taxiways in order to reach the runway for take-off.

Taxiway markings: The taxiway centreline is a single continuous yellow line, 6 to 12 inches in width. Taxiway edge marking is continuous markings consisting of a continuous double yellow line, with each line being 6 inches in width spaced 6 inches apart.

Taxiway lighting: Many airports are equipped with taxiway lighting to facilitate the movement of aircraft on the airfield at night or in poor visibility conditions. Taxiway lighting includes taxiway edge lights, taxiway centrelines lights, clearance bar lights, runway guard lights and stop bar lights. These light emit blue light. Clearance bar lights are installed at holding positions on taxiways in order to increase the conspicuity of the holding position in low visibility conditions. Clearance bars consists of three impalement steady burning yellow lights. Runway Guard lights are installed at intersections of runways and taxiways. They are either a pair of elevated flashing yellow lights installed on either side of the taxiway or a row of in-pavement yellow lights installed across the entire runway, at the runway holding position marking. Stop bar lights are used to confirm instructions form air traffic controller's clearance to enter or cross an active runway in low-visibility conditions.

NAVIGATIONAL AIDS

- NDB (Non Directional Beacon)
- ADF (Automatic Direction Finder)
- VOR (VHF Omni-directional Range)
- DME (Distance Measuring Equipment)
- ILS (Instrument Landing System)





Many general aviation-type airplanes are equipped with automatic direction finder (ADF) radio receiving equipment. To navigate using the ADF, the pilot tunes the receiving equipment to a ground station known as a NONDIRECTIONAL RADIOBEACON (NDB). The NDB stations normally operate in a low or medium frequency band of 200 to 415 kHz.

One of the older types of radio navigation is the automatic direction finder (ADF) or no directional beacon (NDB). The ADF receiver, a "backup" system for the VHF equipment, can be used when line-of-sight transmission becomes unreliable or when there is no VOR equipment on the ground or in the aircraft. It is used as a means of identifying positions, receiving low and medium frequency voice communications, homing, tracking, and for navigation on instrument approach procedures

ADF (Automatic Direction Finder) is the radio signals in the low to medium frequency band of 190 KHz. to 1750 KHz. It was widely used today. It has the major advantage over VOR navigation in the reception is not limited to line of sight distance. The ADF signals follow the curvature of the earth. The maximum of distance is depending on the power of the beacon. The ADF can receive on both AM radio station and NDB (Non-Directional Beacon). Commercial AM radio stations broadcast on 540 to 1620 KHz. Non-Directional Beacon operate in the frequency band of 190 to 535 KHz.

A non-directional (radio) beacon (NDB) is a radio transmitter at a known location, used as an aviation or marine navigational aid. NDB signals follow the curvature of the earth, so they can be received at much greater distances at lower altitudes, a major advantage over VOR.

Non Directional Beacon (NDB) is used in conjunction with Automatic Direction Finder (ADF) in the cockpit.

The NDB equipment is installed at en-route areas as well as on the airports to provide navigational guidance to the pilot. It must be used together with ADF-Automatic Direction Finder

VOR, short for VHF omnidirectional radio range, is a type of radio navigation system for aircraft. A VOR ground station broadcasts a VHF radio composite signal including the station's identifier, voice (if equipped), and navigation signal. The identifier is Morse code





VOR is the primary navigational aid (NAVAID) used by civil aviation in the National Airspace System (NAS).

VOR ground installations are strategically located along air routes and airport to ensure continuity of guidance.

When military tactical air navigation (TACAN) equipment is installed with the VOR, it is known as a VORTAC.

Distance measuring equipment (DME) is a transponder-based radio navigation technology that measures distance by timing the propagation delay of VHF or UHF radio signals.

The DME system is to provide continuous and accurate indication of the slant range distance (expressed in nautical miles) of an equipped ground reference point (i.e. ground DME facility).

The DME system is composed of a UHF transmitter/receiver (interrogator) in the aircraft and a UHF receiver/transmitter (transponder) on the ground.

A low-power DME can also be co-located with an ILS glide slope or localizer where it provides an accurate distance function.

An instrument landing system (ILS) is a ground-based instrument approach system that provides precision guidance to an aircraft approaching and landing on a runway, using a combination of radio signals and, in many cases, high-intensity lighting arrays to enable a safe landing. The first scheduled passenger airliner to land using ILS was in 1938.

To guide the pilot during the approach and landing. It is very helpful when visibility is limited and the pilot cannot see the airport and runway. To provide an aircraft with a precision final approach.

ILS consists of Ground Installations and Airborne Equipment's

• There are 3 equipment's for Ground Installations, which are:

Ground Localizer (LLZ) Antenna – To provide horizontal navigation 2. Ground Glide path (GP) Antenna – To provide vertical navigation





- 3. Marker Beacons To enable the pilot cross check the aircraft's height.
- There are 2 equipment's for Airborne Equipment's, which are:
- 1. LLZ and GP antennas located on the aircraft nose.
- 2. ILS indicator inside the cockpit

LANDSIDE

Landside Services is For Passengers operations facilities associated with the Movement of passengers and Baggage.

Passenger's Movement

Check-in

Airport Check-in are service counters found at commercial airports handling commercial air travel. The check-in is normally handled by an airline or a handling agent working on behalf of an airline. Passengers usually hand over any baggage they do not wish or are not allowed to carry-on to the aircraft's cabin and receive a boarding pass before they can proceed to board their aircraft

Immigration Duties

- Immigration responsible for:
- Monitor persons who leave or enter the country,
- Checking for appropriate documentation,
- Arresting people wanted by international arrest warrants.
- Block the entry of dangerous people to the country

Security Checks

One of the most important security measures at an airport is confirming the identity of travellers. This is done by checking a photo ID, such as a driver's license.





If you are travelling internationally, you need to present your passport

Custom Duties

- The processing of people, carriers, cargo, and mail into and out of the country.(including animals & hazardous items)
- The proper collection of taxes, fees, penalties for imported items.
- The prohibition of narcotics and illegal drugs.

BAGGAGE HANDLING

Goals of the system

Deliver each bag individually – including transfers – automatically from check-in or the unloading of the aircraft to the outward bound aircraft or baggage claim

Maximum delivery times:

- Wide body aircraft 30 minutes
- Narrow body aircraft 20 minutes
- Designed to allow transport of baggage anywhere within the airport to or from the main terminal within 10 minutes
- Must move the baggage at a rate => the rate at which travellers move
- Deliver over 1000 bags per minute

Baggage Handling Principles

- Minimize the number of handling operations
- Baggage handling system consistent with the aircraft movement characteristics (type of passenger, size of aircraft, frequency of flights).
- Avoid turns & level changes.
- Ensure that the conveyor belt slopes do not exceed 15 deg.
 - Avoid baggage flow crossing passenger flows, aircraft flows, & air freight flows.





• Place baggage sorting areas nearby to the apron.

Security Considerations in Terminal Design

- 1. Building design separates airside from groundside
- 2. Security Screening Requirements
- 3. Baggage Screening Requirements
- 4. Terminal Surveillance
- 5. Separation of Domestic from International Passengers

Airport Ground Access Plans

Key Considerations:

- Entry and Exit Road System
- Parking for passengers, staff, car rentals, shuttle buses, taxis, etc.
- Curb side drop-off pickup
- Public Transit
- Rail Systems

Baggage Handling Process

DCVs

- Metal cart with wheels on the bottom and a plastic tub on top (mounted on a pivot) that tilts into three positions for automatically loading, carrying and unloading baggage
- Ride on a metal track like a roller coaster
- Travel up to 24 mph
- Slow to 4.5 mph for loading and 8.5 mph for unloading
- Photo-electric sensors trigger laser scanner when DCV is present and associate the bag with the





DCV

- Located every 150 to 200 feet of track
- Data from scanners is transmitted to a computer that translates it by using a look up table to match the flight number with the appropriate gate











Even small airports take up a lot of space, with department managers spread out over many acres. Airport managers usually have an office in the main terminal, but they also spend a lot of time in other parts of the airport, depending on how hands-on they are. It's also common for airport managers to be active in their communities, so they may spend some time in the surrounding municipalities their airports serve, working with community leaders.

Airport managers typically work during normal business hours, but they may need to be available to respond to emergencies or when weather or other factors impact flight schedules.

Strengths:

- Employees and company are highly getting empowered by airport manager.
- Strong Communication Network.
- Good co-operation between employees.
- · Always lead from front.





CONCIUSION





Based on the results of the literature review and the survey of airport managers, the research team reached a number of conclusions regarding the state of practice for managing small airports topics and information to be included in the guidebook. The research team's primary conclusions are discussed below. There is an enormous amount of information pertinent to managing small airport available through a variety of sources. However, small airport managers often have questions related to specific topics and do not have the time necessary to wade through voluminous amounts of information online or read through non-pertinent material in general airport management publications. What would be most useful to small airport managers is a list of relevant publications, descriptions of each publication, Internet links to those publications that are available on line (e.g., FAA Advisory Circulars), and sources of additional information on specific topics, such as land use planning. Although the guidebook will be useful to a broad spectrum of readers, the primary audience is likely to be airport managers for public use airports. The main secondary audience is likely to consist of airport advisory board and commission members with oversight responsibility for airports. Most airport managers possessyears of experience and with this experience comes a wealth of practical knowledge. In many respects, airport managers are the best source of information and innovative practices for other airport managers, particularly for airports that are located in the same general geographic area and have similar operational characteristics. However, the managers of small airports can learn a great deal from larger airport managers who may face certain problems, issues, or situations more frequently and, thus, gain knowledge more quickly regarding what techniques do and do not work. Terrorism is not a concern for small airports. The managers for small airports are much more concerned with locally-oriented safety and security issues, such as wildlife, theft, vandalism, and airport incursions. There is room for improvement at small airports with respect to utilizing and recording self- inspections, distributing appropriate safety information to contractors prior to construction projects, and involving all relevant airport stakeholders in pre-construction meetings. In general, small airports are doing an excellent job of coordinating airport zoning rules with local land use and zoning planning. However, the survey respondents may not be representative of the small airport manager population as a whole in this regard. Also, since zoning ordinances can change frequently as well as zoning board membership and airport managers, this is an important topic that requires adequate discussion in the guidebook. In addition, the guidebook should reference the forthcoming land use planning guidebook being developed under a separate ACRP project.





A majority of small airports operate on miniscule budgets. This situation necessitates maximizing every dollar allocated to the airport. Although small airport mangers are subject to various state, county, and municipal requirements when it comes to budgeting and tracking airport expenses, financial management is another area of opportunity for improvement. In addition, to discussing general financial management topics for small airports, the guidebook should encourage the development of better financial systems for small airports and provide sources of information to do so. Marketing is an enormous area of improvement for small airports. Marketing plans should include certain basic elements regardless of the enterprise and need not be overly complicated to develop, particularly for small airports. In the Internet age, one of the most important marketing tools for an airport is a web site. Although many airports indicated having a web site, there is a difference between a web site and a useful and user friendly website. Improved marketing is necessary to both airports' economic viability and standing with in the community. Perhaps the most important role a small airport manager possesses is to ensure the safety of the airport for all its stakeholders. There are many facets to the airport safety equation but one of the most important is adequate training of airport staff and personnel. Since small airport managers may not have the time to develop their own unique training programs and often use staff from other county or municipal departments to complete airport maintenance task, information about easily customizable training templates and classes would be of great benefit to small airport managers.





RBLOGRAPEY





- 1. https://www.nap.edu/read/23024/chapter/5#16
- 2. <a href="https://www.google.com/search?sxsrf=ALeKk00fk55OAedoxkwXGTBVp3I8RBtlmw%3A1582798678795&ei=VpdXXtCMMM3w9QO93Z2AAw&q=conclusion+on+responsibility+of+airport+management&oq=conclusion+on+responsibility+of+airport+&gs l=psy-ab.1.0.33i160l3.2542.11432..13787...0.2..0.455.2617.2-5j3j1.....0....1..gws-wiz......0i71j0i8i67j0i22i30j33i22i29i30.MRL6mWmk hs
- 3. https://www.researchgate.net/publication/324154050 Analysis of Airport Operations
- 4. https://www.google.com/search?sxsrf=ALeKk00FtUL8RZbacfW qXa8iDeltEPzzQ%3A1582797627124&ei=O5N XXtWZB4al9QOznpnQBg&q=findings+and+analysis+of+airport+management&oq=findings+and+analysis+of+airport+management&gs l=psy-ab.1.0.33i22i29i30.336606.340214..342238...0.2..0.269.759.2-3.....0...1..gws-wiz......0i71j35i39.3alXdzF2z0c
- 5. https://www.sita.aero/solutions-and-services/solutions/airport-management?gclid=CjwKCAiA7t3yBRADEiwA4GFII5TAIB01FdolVkisQO3kMV861mSO6MONN7eURjHJdRuKwORxR5I9uxoCgf0QAvDBwE
- **6.** https://aci.aero/services/airport-job-search/listing/business-analytics-manager/
- 7. https://www.airlinejobfinder.com/members/airport-jobs/airport-asstmgr/
- 8. https://www.thebalancecareers.com/airport-management-and-administration-job-282636
- $9. \\ \underline{\text{https://en.wikipedia.org/w/index.php?search=Responsibility+of+airport+manager\&title=Special%3ASearch\&g} \\ \underline{\text{o=Go\&ns0=1}}$
- 10. https://en.wikipedia.org/wiki/Aviation
- 12. https://en.wikipedia.org/wiki/Total Airport Management Systems
- 13. https://en.wikipedia.org/wiki/Total Airport Management Systems
- 14. https://www.google.com/search?sxsrf=ALeKk03r8n2CsfyoS4YVbVH2bos0aaiukQ%3A1582782768555 &ei=MFIXXpPQIf3E4-

EPpK6buAk&q=introduction+of+airport+manager&oq=introduction+of+airport+manager&gs l=psy-ab.3..35i39.13223.13223..14600...0.2..0.218.218.2-1.....0....1..gws-wiz......0i71.hEKZynmsfEQ&ved=0ahUKEwiTqLSlhfHnAhV94jgGHSTXBpcQ4dUDCAs&uact=5



Vinay Sharma

Contemporary Training Academy, 1st floor,8 Ho Chi Minh Sarani, 23, Harrington Mansion, Opp. American Consulate, Kolkata, West Bengal 700071

Mail id: - vinay.sharma@contemporaryonline.co.in

Phone no.: - 8582979926

Subject: - Willingness for guiding dissertation of Indranil Mukherjee of 500063410

Dear Sir,

INDRANIL MUKHERJEE is registered for (BBA IN AVIATION OPERATION) with the University of Petroleum & Energy Studies, Dehradun in 2017-2020 batch.

I hereby give my acceptance to guide the above student through the Dissertation work 'AIR SIDE', which is a mandatory requirement for the award of BBA degree.

Thanking You

Yours Sincerely,

Vinay Sharma

Head : Training and Development Contemporary Training Academy

Kolkata