

**OCCUPATIONAL SAFETY AND HEALTH PRACTICES**  
**IN THE**  
**AVIATION INDUSTRY**

*Project Report Submitted in partial fulfilment*

**BACHELOR OF BUSSINESS ADMINISTRATION :**  
**AVIATION MANAGEMENT**

*Submitted by*

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**IN**

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**SCHOOL OF BUSINESS**

**Under the supervision of**



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**BONAFIDE CERTIFICATE**

Certified that this project report **“OCCUPATIONAL SAFETY AND HEALTH PRACTICES IN THE AVIATION INDUSTRY”** is the bonafide work of **“AFTAB ALAM / 19SLAM1020049”** who carried out the project work under my supervision .

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## **DECLARATION**

**I AFTAB ALAM Student of BBA of school of Business Galgotias university , Greater Noida, hereby declare that the project report on “OCCUPATIONAL SAFETY AND HEALTH PRACTICES IN AVIATION INDUSTRY” is an original and authenticated work done by me.**

**I further declare that it has not been submitted elsewhere by any other person in any of the institute for the award of any degree or diploma.**

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## **ABSTRACT**

Exposure to the hazardous substances, noise, and working at the height is affecting the safety and health of the aviation workers and leads to the major concern towards the occupational safety and health practices in the aviation industry. The purpose of this study is to investigate the connection between the aviation operation with the health and safety issue of the aviation employees. Occupational safety and health practices is a matter of concern for the aviation industry because of its vast operation.

Using a cross sectional analysis this study analysed the relation ,affects and reason that are affective to the occupational safety and health practices .

Reference from OSHA ( work to provide employers and airline industry workers with information and assistance to help create a healthy and safe working environment ) and measures these results against a similar studies.

**Keywords: OHS , Civil Aviation, flight attendants, pilot, ground staffs, DGCA, FAA, IATA, DOT ,**

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## **INTRODUCTION**

Occupational health and safety reflects the effect of the work environment on employees , groups and work units in organizations , and organizations as a whole . In Air Medical journal 24 (2) , 73- 78 , Noise -induced hearing loss is a major hazard in many workplace and in society . additionally, the literature on occupational stress literature , discusses the employee- employer relationship from a psychological contract perspective.

Occupational safety and health ( OSH) has become a very important issue for stakeholders to take care of the human resource . Rowman & Littlefield , 2018 . The seventh edition of the popular handbook provides a through and up to date overview of the occupational safety and health field and the issues safety professional face today , and does so in an accessible and engaging manner . For this reason, and in order to know how OSH research in aviation sector has evolved over time .

## **OBJECTIVES**

This study focus on the different type of safety and health practices perform in aviation industry reduce the chances of the harm for the aviation workers and employees at the time of performing their duties . Different variables is measured like the private and government bodies responsible for the implication of the rules and regulation for the occupational health and safety in aviation industry like ICAO ( International Civil Aviation Organization). In this project report different references from other research paper is used as the primary and secondary data to drive conclusion on the basis of comparison .

This study is limited to only the safety and health practices in the aviation industry and not involved the vast security measures which are taken place in the aviation industry.

Occupational health and safety management protects the wellness, health and the safety of the employee in a workplace. In aviation sector its very important to take occupational health and safety seriously to perform in a better way to avoid damages.

## **OCCUPATION HEALTH AND SAFETY OF PILOT**

As we all well aware of that, in aviation sector everything should be in a perfect manner to avoid any type of incident and accident from the technical to the human factor everything required to handle in a very precise manner.

A pilot is overall responsible for the aircraft at the time of flight, pilot works environment is very much different from the other sector of aviation as pilot poses numerous health risk at the time of flight as exposed to cosmic radiation, a arid atmosphere, noise, and communicable diseases with other risk too.

In order to enhance the safety and health practices of the pilot FAA's introduced the aerospace safety through research, medical standards to prevent the damage. Its also found that the number of health related issues such as

- Fatigue
- Smoke protection in cockpit
- Aircraft infection
- Cosmic radiation
- Ozone
- Ambient flight deck noise in flight

are either ignored or not taken seriously by the responsible authority which are the major cause of the increasing number of health related issues in the aviation sector employees.

Some acts like Occupational Safety and Health Act (OSH) 1970 is introduced to ensure a safe and healthful working environment which later introduce the

National Institute For Occupational Safety and Health (NIOSH) for the prevention and disease control.

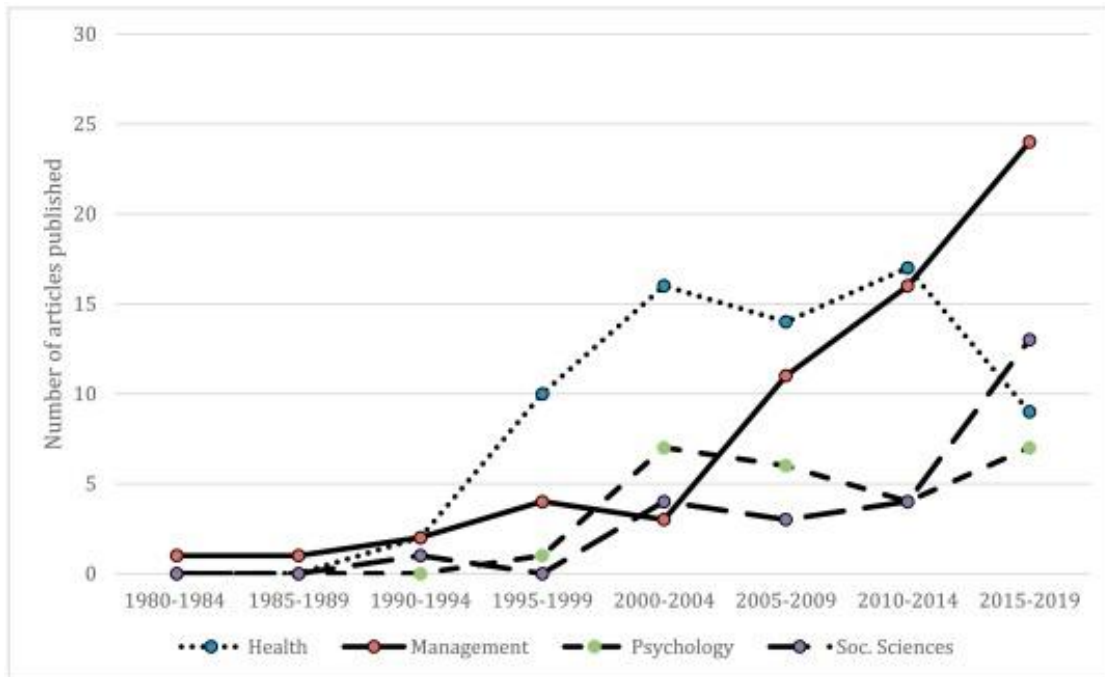
## **OCCUPATIONAL HEALTH AND SAFETY OF FLIGHT ATTENDANT**

After pilot, flight attendants are the most important responsible person in an aircraft. Crew fatigue is a very dangerous situation that mainly occurs in flight and it can threaten the passengers; however, many concerns arise about the mental health, injury preventions. Flight attendants engage in a complex work and they often stay most of the time in the aircraft flights and stay at different locations which make an impact on their health because of different weather and climate that increases the chance of being tired.

A study found that 30% of turbulence-related injuries to flight attendants occurred while they were in the aisle and 21% of their turbulence-related injuries were serious injuries.

Many governments focus on applying fatigue risk management policies and it is now a big concern for countries like the United States and the European Union. Concerns are raised on various policies like statutory medical certification for cabin crew staffs will not benefit for the flight safety or occupational health.

Stress is a threat to aviation safety as stress creates impairment of alertness in the performance of the staff which could lead to an incident which causes a bigger loss of life and capital.



## OCCUPATIONAL SAFETY OF GROUND

### HANDLING

### STAFFS

We all well aware of that the ground handling is an important part of the civil aviation and its very important to manage ground work to perform the flight operation smoothly. Ground handling involves safe and secure performance at the time of refueling , loading and unloading , towing and ramp works. Ramp is also considered as not so safe for the front-line personnel. In aviation aircraft is the one of the most vulnerable asset and its required to much care and a good technique to handle. Aircrafts are so expensive and its required lots of effort and capital to repair and due to improper handling leads to the delayed and cancelation of flight which is directly affects the revenue of the airline .

For any airline its very much important to have a well-functioning safety management work plays a decisive role in minimizing the risk of damage to both the workers and the aircraft.

Fatigue is very common in the ground staffs worker in the aviation industry and has been managed by prescriptive limits on maximum hours of work and minimum breaks . Managing fatigue risk is not only the responsibility of the employees but also the regulation authorities and the government.



Fatigue Risk Management Strategy (FRMS) developments and implementation takes time and effort and the most important its required commitment from the organisation at the whole level including the company and the regulatory level .

For the aviation industry implementation of occupational health and safety management system ensure the safety of the ground handling staffs and play an important role in increasing their productivity.

Civil Aviation Safety Regulation (CASRs) are adopting the United States Federal Aviation Regulation on aviation security and safety. The main OHS act has been also applied for the OSHs in general under ministry of labour but it is not part of the main legal frame work for NCASP .

## **APPLICATION OF OSHA**

On 7 August of 2000 (FAA) Federal Aviation Administration ,enter into Memorandum Of Understanding (MOU) with the ( OSHA) Occupational Safety and Health Administration . The purpose of this collaboration is to enhance the health and safety in the aviation industry. Both the authorities agreed to form a joint team to identify the area of work which requires the application of the OSHA without any compromising in the safety .

After the first report of the combined authorities , they reached at the conclusion to seven area

1. **RECORDKEEPING**, ( recording and reporting occupational illness and injuries)
2. **BLOODBORNE OATHOGENS** , ( vaccination and PPE requirement)
3. **NOISE**, (training and tested equipment)
4. **SANITATION**, ( rules on sanitary handling)
5. **HAZARD COMMUNICATION**,
6. **ANTI DISCRIMINATION**, ( right to refuge the task in unfavourable and certain limited conditions )
7. **EMPLOYEE EXPOSURE AND MEDICAL RECORDS**, ( OSHA access to employees record )

Recently congress enacted protection who engaged these seven area. Aviation Investment and Reform act for the 21<sup>st</sup> century called as the “AIR Act” provides that “no air carrier , or contractor or subcontractor of an air carrier may discharge or otherwise discriminate against an employee who provides information to his / her employer or to the federal government regarding a violation of an order regulation , standard , or provision of federal law relating to air carrier safety )

If any employee believes that a discrimination is taken place with his/her and felt discriminated against in violation of the AIR act can file a complaint with the secretary within 90 days from the date of alleged discriminatory act and the secretary of labour have to conduct a proper investigation into the complaint . The AIR act permits some civil penalties to the person who violate the act.

## **GAP BETWEEN CIVIL AVIATION AUTHORITIES AND OHSA**

There are so many civil aviation authorities available internationally as well as state wise , but there is no specific authority which directly focus on occupational health and safety measures in civil aviation. Its seems like there is a missing link between the civil aviation authorities and the OSH.

After analysing such gap the , the Department of labour and the Department of Transportation provide an ideal civil aviation ohs system to ensure the focus of on the occupational health and safety practices .

The objective of the partnership is mainly focus on the de elopement of an precise framework for the aviation OSH rules and regulation. These included reduction in health hazards, job related illness and management of injury , maintenance of health management , worker compensation . The civil authority bodies also performing their duties to promote civil aviation OSH system.

The partnership also focus to form safety management systems , which involve the decision making , operating the airport , creating a safe and good culture

among the employees and the employer that will create a strong and beneficial outcomes in long term perspective.

After some major accident like Yogyakarta accident, the DGCA ( Directorate General of Civil Aviation ) feels the requirement of reviewing the training and operational procedure for the pilot and the flight attendants. The DGCA also starts to ensure that the maintenance organizations follow the appropriate rules and procedure , personnel have a good and examine training and airline have to inform the authorities about the safety requirements. Also the DGCA started to reviewing the guidelines and policies related to the surveillance .

After considering that the many airlines and airport among the world needs to give aviation medical examiner at least one in every airport. Currently the medical certificate for the cabin crew and pilot issued by the respective civil aviation authority of that country. After all the efforts and promotion its reality that there is a small number of medical practitioners who involve in the aviation medicine training. DGCA also perform a special training program for the medical practitioner in aviation medicine to fulfill the requirement of the aviation medical examiner .

## **CONCLUSION**

The major incident happens in aviation and their investigation points out the involvement of the employees like pilot and crew staffs that a concern for the OHS. This could be removed by the reducing the gap between the civil aviation authorities and the OHS . A strong coordination between the civil aviation authorities and the occupational health and safety measuring authorities is needed to support and improve the working condition and make aware about the important of occupational health.

This classified document carried out the occupational health and safety measures which composed of regulation, education, training, . This paper also included that occupational safety is directly related to the quality of work perform in the aviation industry which make occupational health and safety ass a critical point which should not neglected by civil aviation industry.

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