

Aviation safety and security research paper examples

[Engineering](#), [Aviation](#)



Aviation safety deals with accidents and incidents involving aircraft, aircraft operations, airport and other related fields. Accidents are unexpected and undesirable events associated with aircraft operations from the time passengers aboard the aircraft to the time they disembark at their destination whereby a person suffers from serious injuries, death, or the aircraft has received extensive damage. Incidents are events, which are associated with the operations of an aircraft within and without the confines of an airport that directly affect safety operations. Aviation security refers to the measures taken to guard against the causes of occurrences that may hinder the smooth operation of an aircraft and making it a safe to operate environment.

Laws and security measures put in place function to regulate aviation operations. This is with the intention of reducing accidents and incidences. So far, they have helped to curb these events and have enhanced aviation security. Due to the recent incidents in the aviation sector, aviation security management is a global thing. It has called for integration of best practices from all over in a global scale (Price & Forrest 2013). Safety management systems establishments will handle the ever-rising cases of threats and insecurity that are affecting the aviation industry.

Aviation safety systems integrate modern safety risk management and safety assurance concepts into practical systems. This involves the activities of coordinating joint efforts of people to achieve set goals using available resources efficiently and effectively. Like every other aspect of management, it includes planning, organizing, staffing directing and controlling the organization to attain set goals. Every endeavor has goals attached to them

and in this case, having a secure, incident free sector is the objective. This has led to the establishment of security systems. The systems organization falls into structures set towards achieving the goals to achieve maximum safety.

Planning involves the development and the maintenance of a plan. In security and safety, it is essential to come up with plans or integrate them with other plans to achieve desired results. Plans are highly related to experiences and this leads to objectives that either prevent the occurrence of past incidents or stop the causes of those incidents. This brings about the development and application of infrastructure that will help the process. Once the objectives have been set, strategy establishment to attain the objective starts. Enhancing security at the airport would require installation of extra closed circuit television cameras at strategic positions within the facilities involved. Planning increases the efficiency of safety and security management.

Organizing is fundamental in aviation safety and security. It involves the correct arrangement and order of all that is involved in the process of enhancing security and safety. Personnel management is a priority within this management function. Tasks are grouped and assigned and the necessary resources allocated. This ensures that personnel are working in the fields they are qualified at, with the equipment's that are necessary for the particular job. An organized security and safety department involves, formal reporting of incidents, well defined chains of command, well distributed responsibilities and strong decision making hierarchies. It also identifies a system structure set to ensure effective coordination of the

personnel involved in safety and security. A well-organized structure will ensure a highly efficient system that will be quick to prevent incidents and take efficient measures should they occur.

The human resource factor in aviation security and safety is important to the organization function. Human resource is the group of people who make up the organization, in this case the security or safety organization. With the increased incidences of aviation insecurity and accidents, people who are involved in the prevention and reduction of these incidents should be highly skilled and keep a high level of professionalism. As trends in the aviation, industry change there is a need for highly skilled personnel. The personnel have assignments in the various jobs that lie under the security and safety departments. The organization of these individuals will determine the efficiency of the processes. It will also set the speed for the achievement of the goals of the organization. Leadership is also a management function directly related to human resource. Strong leadership will see the achievement of the set goals. Leadership will provide a clear direction for the subordinates to follow. Leaders set goals and help individuals build great teams to achieve the goals. This reduces the occurrence of incidents on a large scale because the employees have the attachment to the organization.

The effectiveness of aviation safety and security is highly reliant on an efficient feedback system. The organization must make good and achievable standards of security and safety. Control is the management function that's helps check the progress towards the attainment of these goals, identifies errors if any and takes corrective action to minimize deviation from set

standards. It also ensures that the goal achievement in the desired manner. It also seeks to ascertain the emerging trends in the industry and provide updates necessary to the improvements of the system.

References

Price, J., & Forrest, J. (2013). Practical Aviation Security: Predicting and Preventing Future Threats. Oxford: Elsevier Science.