

## A study of influences of the workers' compensation and injury management regulations on aviation safety at a workplace

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As the aviation industries developed, so too did the recognition that there must be an effective regulatory framework to address issues related to the workers' compensation and rehabilitation. All employees would like to work and return home safely from their workplace. Therefore, the efficient management of workplace injury and disease reduces the cost of aviation operations and improves flight safety. Workers' compensation and injury management laws regulate a majority of rehabilitation and compensation issues, but achieving an injury-free workplace remains a major challenge for the regulators. This paper examines the clauses of the workers' compensation and injury management laws of Western Australia related to workplace safety, compensation, and rehabilitations of the injured workers. It also discusses various provisions of common law under the relevant workers' health injury management legislations.

**Keywords:** aircraft; airline; aviation; flight; regulation; safety

### 1. Introduction

Expanding aviation industry requires an efficient regulatory system covering workers' compensation, rehabilitation, and injury management in order to promote an injury-free workplace. An efficient management of work-related injuries and disease reduces negative influences of the injuries on a worker. Furthermore, it has already been established that a healthy worker and the safe workplace contribute significantly towards safe outcomes of safety sensitive aviation activities.

Workers' compensation and injury management regulatory framework plays an important role in reducing injuries at workplace and in ensuring that only healthy workers perform safety sensitive aviation activities. For example, Federal Aviation Regulations of the United States of America (USA) have provisions for prevention of accidents and injuries resulting from the misuse of alcohol by employees who perform safety sensitive functions in aviation (Li, Baker, Qiang, Rebok, & McCarthy, 2007). The regulations specify rules and procedures for alcohol testing in the aviation industry. Similarly, the Workers' Compensation and Injury Management Act, 1981 of Western Australia (WA) regulates most rehabilitation and compensation issues related to workers who get injured at workplace or while carrying out work-related activities, but achieving an injury-free workplace remains a major challenge for regulators nationally and internationally. This paper examines the

clauses of the Workers' Compensation and Injury Management Act, 1981 and other legislations related to workplace safety, compensation, and rehabilitations of an injured worker. Though the Act does not directly refer to workplace safety issues, but it promotes safety measures to reduce injuries at workplace in WA. Other federal and state legislations, such as civil aviation regulations and the Occupational Safety and Health Act, 1984 (WA) cover workplace safety-related laws in this state. This paper focuses on provisions of the legislations associated with health and injury management of safety sensitive aviation workers, because a section of the workers are vulnerable to injuries associated with emotional labour. These injuries negatively affect overall aviation safety. This has not been well recognized by current legislations. The paper also examines provisions of common law that partially addresses this issue.

### 2. Role of regulations and personnel in aviation safety

The aviation industry requires a marked and highly dependable human performance to ensure high level of flight safety. Various activities, such as airworthiness of aircraft, ground handling, proper loading of aircraft, and air traffic control are considered as core tasks of the flight safety chain. Therefore, human performance of a worker

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involved in any of these safety sensitive tasks significantly influences the aviation safety. An integrated civil aviation regulatory framework related to these activities may be required to regulate health and human performance issues at workplace. Federal Aviation Administration (2010) reports that a regulatory authority can no longer rely solely on training and experience of a person to accurately predict human performance. The key safety personnel involving in aviation safety sensitive activities are pilots, aircraft engineers, air traffic controllers (ATC), and aeronautical staff of airport operations specifically trained under civil aviation regulations about their responsibility of ensuring the safety of flights. Accurate human processing skills of these workers are necessary and they are required to be current and continually improved in interest of aviation safety. Effective management of health and injury of the worker improves operational performance and safety in relation to how people interact with equipment, environment, and other people. Highly crowded airspace requires complex decisions to make by flight crew, ground crew, and air traffic staff. This increases the magnitude of potential human errors. A professional error in modern sophisticated aviation environment, such as miscommunication between ATC and pilots, distraction to an aircraft engineer during testing of an aircraft system, lack of situational awareness of a pilot on the airfield, and ATC or pilot judgement error may lead to a serious accident. Therefore, a workers' health and injury management regulatory framework addressing the aviation specific human performance issues may compliment civil aviation regulations in improving aviation safety.

According to Beardsley, Bugrov, and Enriquez (2005), a regulation generally forms a formal contract between the industry and society. Noncompliance may instigate a shift from self-regulation toward explicit rules. Governments make regulations through an ongoing negotiating process with stakeholders, such as relevant organizations, public, and the industry specific experts. Despite increasing importance of regulations in ensuring safety, many businesses do not have a clear understanding of trade-offs between maximizing profits and broader social factors. Consequently, they adopt a confrontational approach to industry regulators. Sometimes, companies struggle with their responses to regulatory challenges, because some regulatory issues are often extremely complex and interdependent. Thus, contemporary aviation industry is slowly moving from prescriptive aviation safety rules to performance-based aviation safety regulations.

### 3. Workers' compensation and injury management system

Primary goal of workers' injury management and rehabilitation programme is to enable the injured worker to return to work (RTW). Under the Workers' Compensation and

Injury Management Act, the system must also provide financial assistance and payments of medical expenses as compensation to workers who have sustained work-related injury. Barrett and Browne (2006) suggest that in order to establish an effective system and a successful programme, an organization needs to have a support structure, effective policy, and a sincere commitment from the management in providing an injury-free workplace to their employees. According to Guthrie (2001), whenever a worker gets injured at workplace, the employer can expect disruption in the work unless members of established workers' compensation system work together to return the injured worker back to work. WorkCover (1998) also found that the involvement of employer, worker, and treating medical practitioner in managing injury or disease is fundamental. This has a potential to achieve positive outcomes in terms of cost control and RTW.

According to part II of the Occupational Safety and Health Act, the WorkSafe WA has a significant role to play in order to reduce a number of employees who need to call on the workers' compensation system. However, it is important that when an employee gets injured or contracts a work-related disease reports it to his or her employer. Harrison and Allen (2001) found that the legislative and constitutional framework defines the extent to which social and economic costs are imposed on employers, workers, and governments for work-related injury and disease. Provisions of injury management system that emanate from the legislative framework existing in WA require an employer to establish content, make service delivery plan for RTW, and develop implementation procedures for the programme (WorkCover, 2005a). Section 155 A of the Workers' Compensation and Injury Management Act specifies relevant code of practice and it also authorizes the WorkCover WA to administer implementation of the code. Similarly, the Act put employers under statutory obligation to ensure that an injured worker gets proper injury management support following a work-related injury. Likewise, Part IX of the Act has provisions for approval of vocational rehabilitation providers, powers of arbitrators, responsibilities of WorkCover WA for providing information and advice on injury management, and relevant insurers' obligations in injury management. Additionally, the Act sets criteria for retraining the worker to assist in RTW and it identifies eligibility requirements for participation in specialized retraining programmes.

An injury management system can be established in-house as an integral component of occupational health safety management system (OHSMS) of an organization. According to Australian Standard New Zealand Standard (2001), an effective OHSMS requires commitment and participation from all sections of the organization. Furthermore, the Australian Standard New Zealand Standard (2001) also identifies policy, planning, implementation, measurement and evaluation, and review and improvement

as key elements of an OHSMS. Under the Act, providing insurance cover to employees for work-related injuries is a responsibility of their employer. Activities of an insurer under the Act depend on a specific workers' compensation scheme, but generally it includes processing, managing compensation claims, and paying for medical and rehabilitation expenses. Legally, the section 160 of the Act requires employers to obtain an insurance policy from an approved insurer that covers their liability to pay compensation to their employees. However, section 164 of the Act, allows an employer to become self-insurer, provided the employer meets certain additional legislative requirements related to insurance coverage. WorkCover (2008a) indicates that employers in WA have maintained self-insurance arrangements for their own employees for many decades and position of the self-insurance scheme has been strengthened significantly in the last ten years. Furthermore, organizations in WA are encouraged to become self-insurers. As a result, the self-insurers in WA range from large multinational industrial organizations to small local companies in recent decade. According to WorkCover (2008b), the federal legislation of Australia enables certain companies to join a federal agency for workers' compensation. Consequently, regulatory authorities of state governments are concerned about the federal government's use of its constitutional powers to extend activities into areas that have previously been responsibilities of state governments. Consequently, Head of Workers' Compensation Authorities has established a working group to increase harmonization of occupational health and safety regulations across all Australian jurisdictions.

Under part III of the Act, an employer is liable to pay compensation for workplace-linked injuries to their workers subject to certain conditions. Similarly, the Act also has provisions under two regimes for lump sum payments for certain specified injuries. However, the statutory benefits remain available on no fault basis, if the injury was work-related. Nevertheless, Guthrie (2001) maintains that earning-related compensations are now capped at a specified rate per week. An injured worker is entitled for weekly payment on normal pay day, reasonable medical expenses resulting from work-related injury or disease, and vocational rehabilitation expenses. Furthermore, the worker can also make some small claims, such as statutory expenses claims under part XII of the Act. There were 41,573 workers' compensation claims lodged with approved insurers and self-insurers during 2006–2007 in WA (WorkCover, 2008a). This does not include journey, asbestos-related diseases, and duplicated or disallowed claims. Further to that 18,421 claims caused the time lost from work of one day or more increasing the annual number of lost-time claims lodged has increased by 1.5% since 2003–2004.

#### 4. Workers' compensation legislation and common law

Under the early workers' compensation legislation, any worker who suffered serious injury potentially faced adversity. The first statutory compensation scheme was introduced in WA in 1902 and the no fault workers' compensation legislation was established in 1973 to allow claims across all types of work (WorkCover 2007a). Presently, the workers' compensation system in WA primarily permits two types of benefits for compensable impairment. Foremost compensation may be claimed through the statutory system under the Workers' Compensation and Injury Management Act. Primary purpose of the Act is to make provision for compensation of injured workers. Similarly, the major themes of the reform Act were fairness, balance between statutory and common law systems, and certainty (WorkCover, 2007a). Additionally, the compensation for damages may be claimed under common law subject to the limitations of the Act (WorkCover, 2007a, 2007b).

The legislative requirements to be met in order to pursue a claim for damages under common law are level of impairment and timeframes. Presently, two schemes to control common law proceedings are embedded in the legislation (WorkCover, 2007b). Furthermore, the Workers' Compensation (Common Law Proceedings) Act (2004) also ascertains that the workers are not disadvantaged by provisions of section 93 D of the Workers' Compensation and Injury Management Act. This section of the Act deals with assessment of disabilities and it interfaces with the Workers' Compensation (Common Law Proceedings) Act (2004). A level of permanent injury affects statutory benefits, if an injured worker elects to pursue common law actions. However, it will depend on whether the statutory limitations apply to the common law proceedings (WorkCover, 2007b). Similarly, the workers' compensation will also vary according to section 93D of Workers' Compensation and Injury Management Act. Under section 19 of the Occupational Safety and Health Act, 1984, an employer has a duty of care to ensure safe workplace for its employees. According to common law, an injured worker can pursue a claim for damages outside the statutory compensation system, if his or her work-related injuries were caused by negligence of his or her employer. However, the workers who pursue claims under common law provisions need to meet certain eligibility requirements (WorkCover, 2005b). Hence, if a worker meets required criteria and chooses to pursue common law damages against their employer must elect to do so within a certain timeframe. Furthermore, the Workers' Compensation and Injury Management Act also specify that the election cannot be made after termination day. Similar to duty of care for employers, the Occupational Safety and Health Act also stipulates duties of an

employee. Under provisions of section 20 of the Occupational Safety and Health Act, an employee has a duty of care to ensure his or her own safety at work and also he or she must not adversely affect safety or health of any other person at work.

## 5. Discussion and analysis

An increasing demand of civil aviation traffic capacity and environmental issues while keeping flight safety risks at an acceptable level put tremendous pressure on relevant regulatory framework and stakeholders. Aviation safety risks related to worker's health and performance need an integrated regulatory approach that can be incorporated with national and international civil aviation regulations. Complex integration of contemporary aviation systems also demands such approach. According to Rose (2008), policies of one section of an organization may significantly influence the total risks associated with the industry. For example, changes in airport regulations could impact safety of flight operations carried out by an airline or a private operator, even if flight rules remain unchanged. Therefore, an integrated regulatory approach covering civil aviation safety regulations and workers' injury management laws may help in improving overall aviation safety and reducing potential injury to the aviation workers. Rose (2008) reports further that the aviation safety regulations in Europe are controlled by various regulatory bodies responsible for different sections of aviation field. For example, aircraft design and operation is regulated by the European Aviation Safety Agency,<sup>1</sup> but air traffic services are regulated by individual member state regulators. This approach makes it difficult to coordinate overall aviation risk.

Similarly, the workers' injury management regulatory system in WA has various pieces of state government managed regulations in addition to federal civil aviation safety regulations of Australia. This creates significant confusions and conflicts in managing human performance related aviation safety issues influenced by work-related injuries of a worker. Work-related injury management legislation in WA primarily covers duty of care of employers and workers related to health and safety, but it does not have any provisions for injury management in context of emotional labour-related injuries. These subtle injuries are topical phenomenon in various sections of the airline industry, such as in-flight services, passenger check-in services at airport, etc. These invisible injuries of an aviation worker may adversely affect safety of a flight, indirectly. Consequently, it will add to overall aviation risks.

Williams (2003) found emotional labour damaging to individual flight attendants and other stakeholders. The researcher further observed that this crucial occupational health and safety issue has been overlooked by airlines

and the civil aviation regulators in Australia. It is important to understand that flight attendants are primarily safety personnel and customer service is their secondary task, but a fundamental tension exists between the safety duties and customer service tasks. For example, some airline encourages excessive alcohol consumption and sexual fantasies of women flight attendants as their marketing strategies. This lowers the standards of passenger behaviour on board a flight. Though this environment does not amount to sexual harassment, but it provides a breeding ground for it, especially when alcohol is supplied as part of in-flight services. Thus, the flight attendants have to consume themselves in a less important but more publicly visible display of service involving emotional labour. As a result, the in-flight workers have to deal with this and they become vulnerable to emotional labour-related injuries. Consequently, the affected worker may not able to perform his or her in-flight safety functions accurately in the event of a potential incident or accident. This adversely affects overall aviation safety.

Traditionally, a flight attendant is expected to control his or her feelings and needs to smile to create good feeling for passengers, no matter how the attendant feels at that particular moment. This expected emotional labour on board might cause serious injuries to the worker that would influence his or her human performance on board an aircraft affecting safety of the flight, negatively. The safety of cabin crew is paramount during flight, because if cabin crew are injured emotionally or otherwise, they may not be able to meet passenger's needs in an in-flight emergency situation (Civil Aviation Authority, 2009). This may also be true when cabin crew have to deal with excessive workload during flight operations. For example, an amended civil aviation regulation of Australia requires only four cabin crew on a flight of Boeing 737-800 aircraft (Civil Aviation Safety Authority, 2007). As a result, there is no cabin crew available to open over-wing exit doors of the aircraft in case of emergency evacuation. Consequently, the regulation permits this task to be carried out by passengers sitting near the respective over-wing exit doors of the aircraft only in an emergency situation. Furthermore, the ratio of cabin crew to passengers on board a flight has also been reduced according to the regulation. It used to be one cabin crew for 36 passengers, but it is one cabin crew for 50 passengers now (Civil Aviation Safety Authority, 2007). The regulation discusses issues of opening the exit doors and allowing passengers to operate them in emergency, but it does not address the increase in routine workload of cabin crew as a consequence of reducing the number of cabin crew to four from six. According to Civil Aviation Authority (2009), a high workload packing many activities into a limited period of time causes extra fatigue that degrades human performance as a result. Civil Aviation Authority (2009) further

argued that the degradation causes people become more forgetful, inattentive, apathetic, and moody. Consequently, they make poorer decisions and become less vigilant. As a result, their response will be slow and variable at times, which will affect the safety of the aircraft and its occupants negatively during emergency situations. This kind of subtle increase in workload and emotional labour-related injuries involving airlines workers who plays safety critical roles at their workplace has not yet been recognized completely by the injury management legislations discussed in this paper. Although general psychological sickness caused by bullying and workplace harassments etc. are covered, but current occupational health and safety models and policies are still biased towards sudden traumatic injuries. Jobs carried out by safety sensitive aviation workers do not readily stand into one-fit-all industrial frameworks (Williams, 2003). There is a common belief that a customer service worker who showed anger could be censured or lose his or her job. Therefore, there is a need for a third party regulation covering all type of work-related injury management including those caused by emotional labour tasks under civil aviation safety regulations in the interest of overall aviation safety. This will assist in preventing contradictory goals of airlines, such as conflicts between marketing, profit, and aircraft safety. This may also help in reducing human performance-related errors in safety sensitive areas of the aviation industry.

## 6. Conclusions

An expansion of industries instigates development of contemporary legislative framework to address issues related to the growth or changes in operating procedures. Employees at every workplace want to be safe and healthy. Hence, a well-established workplace injury and disease control system is advantageous for both employer and employees.

The Workers' Compensation and Injury Management Act, 1981 of WA stipulates provisions for issues associated with injury management of workers who suffer work-related injuries. Various clauses of the Act that are linked to safety, compensation, and rehabilitations of the injured worker are investigated in this paper. Similarly, the paper has also analysed provisions of common law and the Occupational Safety and Health Act, 1984 of WA related to injury management, claims, and workplace safety. It has been observed that the injuries associated with emotional labour-related tasks of aviation workers that could hamper aviation safety are not well recognized by the current legislation. Therefore, a need of integrated regulatory framework incorporating the injury management legislation with civil aviation safety regulations is suggested by this research.

## Note

1. European Aviation Safety Agency is a representative body of European Union member countries.

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