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# A Legal Study on the Promotion of the In-Flight Security Officers System

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## ABSTRACT

The purpose of this study is to provide in-flight security in situations where aviation security is constantly threatened by the increase in illegal interference in aircraft and the threat of terrorism that still exists. It is to identify legal operational problems such as education and qualification of the original system and to propose improvement measures. To this end, the need for revision based on relevant laws and guidelines such as "Operation Guidelines for In-Flight Security Officers" is to be discussed based on international standards such as ICAO and Federal Air Marshal. The research method was based on interviews with SEMs such as cabin managers, which focused on ensuring the legal status of In-Flight Security Officer, establishing relationships with captains, and improving education and training.

**Key Words** : In-Flight Security Officer(항공기내보안요원), Cabin Crew(객실승무원), Illegal Interference(불법방해행위), Federal Air Marshal(연방에어마샬)

## I. INTRODUCTION

A passenger disturbance incident that occurred on a K airline flight from Hanoi to Incheon International Airport in 2016 brought an unsavory ripple effect in South Korea and abroad: based on the cabin crew's unskilled responses, it showed that there was a huge problem with aviation security. South Korea's aviation security authority delegates the legal role and responsibility of in-flight security to cabin crew. The current "Operational Guidelines for In-Flight Security Officers of Airline Ope-

rators" prepared by the South Korean government stipulates that cabin crew should perform the role of the in-flight security officer (IFSO).

In-flight security is a very important issue because there always is a possibility that various types of aviation security incidents such as aircraft terrorism and hijacking, in-flight disturbance, and illegal activities can occur (Park and Moon, 2017). Chung et al. (2014) investigated the security awareness of cabin crew in the South Korean airlines and presented problems that the cabin crew are aware of the effective role and effectiveness of IFSO at a moderate level, and their perceived crisis response capabilities are below expectations. In fact, cabin crew members take a passive attitude in performing safety and security work because of the burden of passenger service work; and even neglect to carry out in-flight security checks, which should be performed every 30 minutes because of the passenger response and service

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work (Choi, 2018). Furthermore, Damos et al. (2013) suggested an implication that the in-flight service has an adverse effect on prompt execution of aviation safety and security work.

These past studies imply that there is room for improvement regarding the problem in the current system, in which cabin crew concurrently perform the role of IFSO. Therefore, this study comparatively analyzed the international examples of IFSO and the standards recommended by the International Civil Aviation Organization (ICAO) based on the operational guidelines for IFSO in South Korea. Furthermore, subject matter experts (SEM) were used to secure objective proofs in this study. Five cabin managers with hands-on IFSO experience were selected as SEM, and their opinions on the current operation status of IFSO were compiled.

This study analyzes the legal operational issues, such as qualification, training, and role relationship with the captain, for IFSOs who are appointed to respond to illegal or disturbance activities such as in-flight disturbance and aviation security threats such as terrorism, among external variables affecting the airline business and brand image. This is to provide basic data and implications for practical and effective improvements.

## II. BODY

### 2.1 Concept of In-Flight Security Officers (IFSO)

The ICAO stipulates in Annex 17 that IFSO must be specially selected and trained government personnel and the in-flight deployment of IFSO must be kept confidential. The Federal Air Marshals (FAM) in the U.S. execute the laws that regulate the security in airports and civilian aircraft, such as aircraft terrorism/ hijacking and passenger disturbances such as assault and violent language (Jin, 2011).

In South Korea, the Aviation Security Act (Article 2) stipulates that "IFSO" refers to a judicial police officer in charge of duties to prevent any act of unlawful interference on the aircraft or any person designated by an aircraft operator to perform such duties. Based on this law, the IFSO job delegated to the airline companies is applied the same as the U.S. FAM, and in addition, it is stipulated to perform the security inspection in the aircraft before the passenger boarding, and perform the security patrol duty on board during the flight. South Korea has been maintaining a peculiar way, which is difficult to find in other countries: airline cabin crew also work as IFSOs, performing both the in-flight security work and passenger service work in parallel.

In many countries around the world, including the U.K., Australia, Canada, Japan, China, Singapore, and India, the governments, not the airlines, operate the IFSOs following the recommendation of the ICAO, modeled after the U.S. FAM (Jin, 2011).

### 2.2 A Comparison of IFSO in USA and Korea

The operational differences between the U.S. FAM and South Korea's IFSO are clearly visible, as shown in Table 1. The biggest differences between these countries lie in their status, the organization they belong to, and the education/training period. In the U.S., the government employees under the Transportation Security Administration (TSA) perform the role of air marshal, whereas in South Korea, the cabin crew of airlines, which are private companies, are responsible for the duties of IFSO. In terms of education, the U.S. has a 16-week long-term training system for FAM, whereas South Korea grants the IFSO eligibility upon completion of an 8-hour initial training. Furthermore, there is a regulation restricting the age of FAM to between 21 and 57 years, but there is no age restriction in South Korea. For FAM, flights are

Table 1. A comparison of IFSO in USA and Korea

Division	USA	KOREA
Title	Federal Air Marshal	In-Flight Security Officer
Belong	TSA	Airline
Status	Government personnel	Cabin crew
Retirement age	57	Unlimited
Initial training	16 weeks	8 Hours
Clothes	Plain clothes	Cabin crew uniform
Duty	Security	Security & in-flight service
Designated flight	Specific route	All route

specifically designated and limited, but in South Korea, there are IFSOs in every international/domestic flight.

### 2.3 Problems with Qualification of IFSO and Improvement Measures

Among the countries that operate IFSO, South Korea is peculiar in that airline cabin crew are eligible to be IFSO. According to the Operational Guidelines of IFSO of Airline Operators (Article 5) in South Korea, the airline operators select IFSO from those who have at least two-year experience as a purser or cabin crew member, considering the age and gender. In South Korean airlines, a two-year cabin crew experience requirement may mean that new flight attendants who have completed the internships are qualified. It is questionable whether cabin crew members who just completed the internships will be able to deal with aircraft terrorism and hijacking effectively if they are given the qualification for handling the in-flight security. The background for having a two-year experience as the baseline is attributed to the lack of experienced flight attendants in low-cost airlines that have

short histories in South Korea. In a study on qualifications of aviation security workers, Hwang (2015) suggested implementing a government-accredited qualification system of cabin crew to recruit and train them. In many countries around the world, the IFSO eligibility is given to those selected by the government, which is different from the method of South Korea, as shown in Table 2.

Since in-flight security personnel experience difficulties in performing the duty due to work stress and physical/psychological burden, the gender and educational level should be considered for selection and recruitment (Yarandi et al., 2020). Therefore, if the regulations cannot be amended to appoint government personnel as IFSO according to the recommendation of the ICAO, the IFSO eligibility criteria should be changed to raise the bar in terms of the career experience to at least five years from the current two years, which can be obtained upon completion of the internship. Furthermore, the cabin crew position rank system can be used to place the deputy cabin crew manager position as the lower limit. This way, a work environment can be created to let the IFSO perform the leading role in practical aviation security and perform the IFSO job responsibly.

### 2.4 Problems of IFSO Training and Improvement Measures

The IFSO training of South Korean airlines is

Table 2. Qualification of in-flight security officers by country

Nation	Qualification person
Australia, Canada, Austria, Germany, Japan, United Kingdom	National police
United States America, Israel, China, Singapore, India, Pakistan	Military and security experience
South Korea	Cabin crew

an 8-hour initial training, and the regular training is specified to be three hours long. The scope of training content that has to be completed by IFSO is insufficient due to the limited training time and is difficult to implement fully. The 3-hour regular training is focused on the use of a Taser gun, a weapon on board, and dealing with in-flight disturbance of passengers. Meanwhile, training on unarmed attack and defense techniques that can be used to subdue terrorists and methods of conveying information with flight crew have been neglected. For example, the training program contents include the recognition of explosive hazards and location and the duties and responsibilities of flight attendants. However, they can be performed by ordinary cabin crew, and do not fit the duties of IFSO.

The U.S. FAMS are trained long-term for 16 weeks, even though professionals with security experiences are specially recruited, and the training includes marksmanship, arrest technique, physical training, self-defense, and criminal law related to investigation and arrest (Park and Moon, 2017). It is interesting to note that the training is conducted in a real-life simulation environment using a practical training room of an in-flight model.

As an improvement of the IFSO training in South Korea, the training time should be extended from the current three hours to eight hours per day to strengthen the programs on physical training, self-defense, negotiation skills, etc. Furthermore, education on criminal law knowledge is required to prevent problems such as human right violation when the IFSO exercises the right to arrest (Park et al., 2019).

## 2.5 Problems in Relationship between IFSO and Aircraft Captain and Improvement Measures

There is a problem that the relationship

between the IFSO and the captain is not clearly stated in the current laws and guidelines, which may cause confusion when the IFSO performs the job (Jin, 2011). According to the "Act on the Persons Performing the Duties of Judicial Police Officers and the Scope of Their Duties (Article 7 Clause 2)", the captain and flight crew perform the duties of the judicial police officer for crimes occurring in the aircraft according to Clause 1. Here, the judicial police officer refers to the cabin crew member who is delegated by the captain according to the Aviation Security Act. The current Aviation Security Act does not include regulations on the relationship between the IFSO and the captain.

The Aviation Security Act has a provision that the crew member delegated with power by the captain must follow the command of the captain. On the other hand, there is no specific regulation on whether the IFSO is under the command of the captain. "The Operational Guidelines for In-flight Security Officers of Airline Operators" provides the method of communicating information about cabin situations between the IFSO and flight crew in the education and training, but does not define the relationship. Furthermore, the Aviation Safety Act (Article 62: Authority of Pilot in Command) stipulates that the captain is responsible for the flight safety of the aircraft and directs/ supervises the crew of the aircraft, but there is no provision for the relationship with the IFSO.

To prevent effectively and respond quickly to aircraft security incidents, including aircraft terrorisms, relevant rules need to be prepared for the role relationship between the IFSO and the captain. With the independent status and right, the FAM is in a mutually cooperating relationship with the captain.

Considering that the IFSO is a cabin crew member, the Aviation Security Act needs to be revised regarding the relationship with the captain by referencing the laws and regulations

on judicial police duties.

### III. CONCLUSION

In this study, we investigated the problems of the current laws, regulations, and guidelines regarding the IFSO whose duties are concurrently performed by a cabin crew member. Based on the results of analyzing the ICAO recommendations and the cases of the US and some foreign countries regarding the operation of IFSO, we present the following implications. First, Considering that the IFSO eligibility is given to the cabin crew who also have to perform the passenger service work in parallel with the aircraft security work, the relevant laws and regulations such as the Aviation Security Act should be revised to raise the bar for the eligibility from the current two-year flight attendant experience to a minimum of five years.

Second, the result of comparing the IFSO training program to that of the US FAM shows that it lacks practical effectiveness. Some training contents, such as the handling of explosives on board, are already included in the in-flight security training of the cabin crew and are not suitable for the duties of IFSO. Therefore, we suggest that the education and training time should be extended and the education and training programs should include physical training, self-defense, and criminal laws to bring practical effectiveness on board and to be able to subdue criminals on board quickly.

Third, considering that IFSOs are also cabin crew members, the current laws, regulations, and guidelines, in which the duties of the two groups are viewed as the same, do not clearly stipulate who bears the responsibility if an aviation security problem occurs. The Aviation Security Act states that the captain is responsible for all in-flight operations as a judicial police officer, but does not clearly stipulate the responsibility of the captain regarding the execution

of the duties of the IFSO. Rules regarding the role relationship between the captain and IFSO should be provided in aviation security-related laws and regulations.

The conclusions and implications of this study are expected to be used as basic data for legal and institutional improvements for establishing efficient aviation security on a preventative level, as well as enhancing the expertise in the in-flight security area.

### References

1. Choi, Y. M., "The effect of occupation image and service job pressure of flight attendants on safety work", Master's Thesis, Korea Aerospace University, 2018.
2. Chung, S. H., Jo, S., and Kim, D. J., "The study on domestic flight attendants is view of security awareness and crisis management capacity of in-flight security officers", *Journal of Korean Public Police and Security Studies*, 11(3), 2014, pp.141-162.
3. Damos, D. L., Boyett, K. S., and Gibbs, P., "Safety versus passenger service: The flight attendants' dilemma", *National Library of Medicine*, 23(2), 2013, pp.91-112.
4. Hwang, H. W., "A study on introduction of certification system for the airline", *Journal of Aviation Management Society of Korea*, 13(2), 2015, pp.63-79.
5. Jin, S. H., "A study on legal status of in-flight security officers subject in aviation security", Master's Thesis, Korea Aerospace University, August 2011.
6. Park, H. K., and Moon, J. S., "A study on developmental plan of in-flight security officer in Korea - Focused on U.S. federal air marshal service", *Journal of Korea Security Science Association*, 53, 2017, pp.83-105.
7. Park, S. J., Yun, Y. H., and Hwang, H. W., "Law and practice of measures to respond to in-flight interruption acts: Focused on

- the investigation procedures of cabin crew”, *Journal of Aviation Management Society of Korea*, 17(4), 2019, pp.35-52.
8. Yarandi, M. S., Ghasemi, M., and Ghanjal A., “The relationship between individual, physical and psychosocial risk factors with musculoskeletal disorders and related disabilities in flight security personnel”, *International Journal of Occupational Safety and Ergonomics*, 7, 2020, pp.1-11.