CEJISS

The Adequacy of Aviation Security Laws and Airport Security

Gautam Acharya[1]

Introduction

The era of sustained controlled powered flight began little more than a hundred years ago. Since then the civil aviation industry has grown into a sector of immense importance. As flight trajectories and planes themselves took on a more complex character, airports too had to evolve to accommodate the growing number of destinations and flights served, and passengers imposed upon them. Later, when aircraft started to become the targets of terrorist operations, lawmakers sought solutions in mandating security procedures at airports. However, as security levels increased, perpetrators of aviation related offences found newer and more ingenious ways to challenge the system.

The contest between lawmakers and law-breakers continued until the tragic events of 11 September 2001, which questioned the adequacy of airport security in North America.[2] The consequence of 9/11, on other air-faring states, was profound. Many states were forced to re-examine how security is handled at their own airports, and speculate on the probability of similar threats to their territories. The events of 9/11 clearly highlighted the inadequacy of the various laws and security systems that had previously been enacted and designed to prevent such events from occurring.

Such security systems often served to detect and *weed-out* 'sky criminals', before they board an aircraft, at a number of 'check points' operated by different personnel and equipment. However, such preventive strategies were not as well defined, nor developed, as the domestic and international laws that had continually been enacted and tightened to serve as deterrent measures.

---

[1] Gautam Acharya is a practitioner of law. He is currently employed at Barlow Lyde and Gilbert, LLP, in London, UK and is a specialist in Air and Space Law. He may be contacted at: ninctobinkus@yahoo.com .

[2] For a review of US airport security before and after 9/11, see Paul Stephen Dempsey, "Aviation Security: The Role of Law in the War Against Terrorism." (2003) 41:3 Columbia journal of transnational law (2003), volume 41, issue 3, pp. 719–726. [Dempsey, Aviation Security].

In 1944 the representatives of many states gathered in Chicago to enact a Convention on International Civil Aviation.[3] The Chicago Convention established the International Civil Aviation Organization.[4] According to Article 44 of the Chicago Convention:

> The aims and objectives of the Organization are to develop the principles and techniques of international air navigation and to foster the planning and development of international air transport so as to:
>
> 1. Insure the safe and orderly growth of international civil aviation throughout the world;
> 2. Encourage the arts of aircraft design and operation for peaceful purposes;
> 3. Encourage the development of airways, airports, and air navigation facilities for international civil aviation;
> 4. Meet the needs of the peoples of the world for safe, regular, efficient and economical air transport;
> 5. Prevent economic waste caused by unreasonable competition;
> 6. Insure that the rights of contracting States are fully respected and that every contracting State has a fair opportunity to operate international airlines;
> 7. Avoid discrimination between contracting States;
> 8. Promote safety of flight in international air navigation;
> 9. Promote generally the development of all aspects of international civil aeronautics.

Despite these provisions, the Chicago Convention contained no article specifically related to acts of unlawful interference with civil aviation. Such acts were extensively dealt with the ratification of the Chicago Convention to include Annex 17.[5] From 1944 until the enactment of Annex 17 (2002) and beyond, various instruments of international law have been introduced specifically addressing aviation security.

The remainder of this research examines various legal approaches to regulating aviation security, with an emphasis on airport security. The cases of the US, UK and India are utilised, in a comparative manner, and aim to illustrate the relationship between law and aviation security from the perspective of three continents, each facing its own set of unique circumstances.

---

[3] *Convention on International Civil Aviation* signed in Chicago in 1944, ICAO Doc. 7300/8 [Chicago Convention, 1944].

[4] International Civil Aviation Organization, for a discussion of the role of the International Civil Aviation Organization, see: Assad Kotaite, «Security of International Civil Aviation-Role of ICAO.» (1982) VII Annals of Air and Space Law, L. 95.

[5] *International Standards and Recommended Practices: Security; Annex 17 to the Convention on International Civil Aviation,* 7d ed. April 2002, [Annex 17].

A key argument of this research suggests that if security at airports is accorded high priority, there would be less need to maintain the array of cumbersome aviation security laws which are presently deployed.

It should be noted that this research explores security at passenger, not cargo or freight airports. Further, the airports mentioned within this text are those which handle scheduled flights. Owing to the vastness of the topic, areas of airport security dealing with airport complex construction and perimeter security have been omitted. This research limits its scope to the laws and procedures existing and required with respect to the movement of passengers and their luggage to, from, and within an airport complex.

ICAO Driven Initiatives Concerning Aviation and Airport Security

Without specifying the processes that led to their establishment or commenting on their implications, it is prudent to present some initiatives of the ICAO which seek to regulate aviation security. It is critical to do this since certain national initiatives, especially in India, are based on ICAO policies and directives. These initiatives include:

1. Convention on Offences and Certain Other Acts Committed on Board Aircraft signed in Tokyo in 1963[6]
2. Convention for the Suppression of Unlawful Seizure of Aircraft signed in the Hague in 1970[7]
3. Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation signed in Montréal in 1971[8]
4. Annex 17 to the Chicago Convention, 1944,[9] read with select provisions of Annexes 6[10], 9[11], 13[12], 14[13] and 18[14]

---

[6] *Convention on Offences and Certain Other Acts Committed on Board Aircraft* signed in Tokyo in 1963, International Civil Aviation Organization Doc. 8364 [Tokyo Convention, 1963].

[7] *Convention for the Suppression of Unlawful Seizure of Aircraft* signed in the Hague in 1970, International Civil Aviation Organization Doc. 8920 [Hague Convention, 1970].

[8] *Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation* signed in Montréal in 1971, International Civil Aviation Organization Doc. 8966 [Montréal Convention, 1971].

[9] Annex 17, *supra* note 6.

[10] *International Standards and Recommended Practices: Operation of Aircraft; Annex 6 to the Convention on International Civil Aviation,* 8th ed. July 2001.

[11] *International Standards and Recommended Practices: Facilitation; Annex 9 to the Convention on International Civil Aviation,* 11th ed. July 2002.

[12] *International Standards and Recommended Practices: Aircraft Accident and Incident Investigation; Annex 13 to the Convention on International Civil Aviation,* 9th ed. July 2001.

[13] *International Standards and Recommended Practices: Aerodromes; Annex 14 to the Convention on International Civil Aviation,* 4th ed. July 2001.

[14] *International Standards and Recommended Practices: The Safe Transport of Dangerous Goods by Air; Annex 18 to the Convention on International Civil Aviation,* 3d ed. July 2001.

5. The Security Manual for Safeguarding Civil Aviation Against Acts of Unlawful Interference[15]
6. European Convention on the Suppression of Terrorism signed in 1977[16]
7. Joint Statement on International Terrorism signed in Bonn in 1978[17]
8. Protocol for the Suppression of Unlawful Acts of Violence at Airports Serving International Civil Aviation, Supplementary to the Montréal Convention, 1971, signed in Montréal in 1988[18]
9. Convention on the Marking of Plastic Explosives for the Purposes of Detection signed in Montréal in 1991[19]

US laws

This segment presents the laws the US has established has and deploys in an attempt to increase aviation security.

Antihijacking Act (1974)[20]

The Antihijacking Act (1974), implements the 1970 Hague Convention. It imposes penalties for carrying weapons or explosives on-board an aircraft, and a penalty of twenty years imprisonment or face the death penalty, if a passenger is killed during a hijacking. It also empowers the US President to suspend the landing rights of any state known to harbour hijackers.[21]

Air Transportation Security Act (1974)[22]

The Air Transportation Security Act (1974), authorizes the screening of passengers and baggage for weapons. As a consequence, US airports have been

---

15 International Civil Aviation Organization, *Security Manual for Safeguarding Civil Aviation Against Acts of Unlawful Interference* 6th ed. 2002, ICAO Doc. 8793.

16 *European Convention on the Suppression of Terrorism* signed in 1977, 15 I.L.M.1272 (1975).

17 *Joint Statement on International Terrorism* signed in Bonn in 1978, 17 I.L.M.1285.

18 *Protocol for the Suppression of Unlawful Acts of Violence at Airports Serving International Civil Aviation, Supplementary to the Montréal Convention, 1971*, signed in Montréal in 1988, International Civil Aviation Organization Doc. 9518 [Montréal Protocol, 1988].

19 *Convention on the Marking of Plastic Explosives for the Purposes of Detection* signed in Montréal in 1991, International Civil Aviation Organization Doc. 9571.

20 *Antihijacking Act, 1974*, Pub. L. 93–366, tit. I 88 Stat. 409 (1974).

21 Dempsey, Aviation Security, *supra* note 2 at 697. Accord Dempsey, Aviation Security, *supra* note 2, pp. 699–700. Accord Paul Stephen Dempsey, "Airline and Airport Security: Law as a Deterrent to Aerial Terrorism" (2002) XXVII Annals of Air and Space Law. L, 167 pp. 207–209 [Dempsey, Airline and Airport Security]. Accord Paul Stephen Dempsey, *Law and Foreign Policy in International Aviation*, (Dobbs Ferry: Transnational, 1987) pp. 372–373.

22 *Air Transportation Security Act, 1974,* Pub. L. 93–366, tit. II 88 Stat. 415 (1974).

equipped with magnetometers to inspect passengers for illicit materials, and X-ray machines to inspect luggage.[23]

Aircraft Sabotage Act (1984)[24]

The Aircraft Sabotage Act (1984), implements the 1971 Montréal Convention. It imposes penalties of up to $100,000 (USD) or twenty years imprisonment, or both, for the hijacking, damage, destruction or disabling of an aircraft or air navigation facility.[25] The most significant effect of this statute was the establishment of "criminal jurisdiction over certain aircraft-related offences, including extraterritorial jurisdiction over some offences, including aircraft or air navigation facilities of other countries that are not a party to the Montréal Convention, 1971, if the perpetrator is found in a signatory country."[26]

International Security and Development Cooperation Act (1985)[27]

The International Security and Development Cooperation Act (1985), authorises expenditure for enhancing security at foreign airports.[28]

Air Traveller Protection Act (1985)[29]

The Air Traveller Protection Act (1985) amends the 1958 Federal Aviation Act[30] and directs the Secretary of Transportation to assess the efficacy of security measures at foreign airports which serve US carriers or from which foreign air carriers serve the US.[31]

Foreign Airport Security Act (1985)[32]

The Foreign Airport Security Act (1985) requires that the Secretary of the US Department of Transportation[33] assesses security at foreign airports and

---

[23] Dempsey, Aviation Security, *supra* note 2 pp. 701–702. Accord Dempsey, Airline and Airport Security, *supra* note 23 pp. 209–211.

[24] *Aircraft Sabotage Act, 1984,* Pub. L. 98–473, tit. II, Ch. XX, pt. B, 98 Stat. 2187 (1984).

[25] Dempsey, Aviation Security, *supra* note 2 p. 697. Accord Dempsey, Aviation Security, *supra* note 2 pp. 702–703. Accord Dempsey, Airline and Airport Security, *supra* note 23 p. 211. Accord Dempsey, Law and Foreign Policy, *supra* note 23 pp. 373–374.

[26] 1984 US Code Cong. & Ad. News 3682.

[27] *International Security and Development Cooperation Act, 1985,* Pub. L. 99–83, tit. V, pt. A, 99 Stat. 219 (1985).

[28] Dempsey, Aviation Security, *supra* note 2 p. 697. Accord Dempsey, Aviation Security, *supra* note 2 pp. 703–705. Accord Dempsey, Airline and Airport Security, *supra* note 23 pp. 211–213. Accord Dempsey, Law and Foreign Policy, *supra* note 23 p. 374.

[29] Dempsey, Aviation Law and Foreign Policy, *ibid.* pp. 374–376.

[30] *Federal Aviation Act, 1958,* Pub. L. No. 85–726, 72 Stat. 731.

[31] Bill Summary and Status for the 99th Congress, online: http://thomas.loc.gov/cgi-bin/bdquery/z?d099:HR02796:@@@L&summ2=m& (date accessed: November 1st, 2007).

[32] *Foreign Airport Security Act, 1985,* Pub. L. 99–83, tit. V, pt. B, 99 Stat. 222 (1985).

[33] Hereinafter "DOT".

notifies the public, or suspends services, if a foreign airport fails to correct a security breach. This act also requires that foreign airlines serving the US adopt and implement security procedures prescribed by the US government.[34]

Aviation Security Improvement Act (1990)[35]

The Aviation Security Improvement Act (1990) mandates background checks for airline and airport employees and imposes additional training, educational and employment standards upon them. It also requires the deployment of bomb-detection technology for baggage.[36]

Federal Aviation Administration Reauthorization Act (1996)[37]

The Federal Aviation Administration Reauthorization Act (1996) requires passenger profiling, explosive detection technology, procedures for passenger-bag matching, and certification for screening companies.[38]

Omnibus Consolidated Appropriations Act (1997)[39]

The Omnibus Consolidated Appropriations Act (1997) authorizes the purchase of advanced screening equipment for baggage.[40]

Airport Security Improvement Act (2000)[41]

The Airport Security Improvement Act (2000) , requires fingerprinting and background checks of airport and airline security personnel[42] at Category X airports.[43]

---

[34] Dempsey, Aviation Security, *supra* note 2 p. 697. Accord Dempsey, Aviation Security, *supra* note 2 pp. 705–707. Accord Dempsey, Airline and Airport Security, *supra* note 23 pp. 213–217.

[35] *Aviation Security Improvement Act, 1990*, Pub. L. 101–604, 104 Stat. 3066 (codified as amended in scattered sections of 22 U.S.C.; 26 U.S.C.; 49 U.S.C.).

[36] Dempsey, Aviation Security, *supra* note 2 at 697–698. Accord Dempsey, Aviation Security, *supra* note 2 pp. 707–708. Accord Dempsey, Airline and Airport Security, *supra* note 23 p. 217.

[37] *Federal Aviation Administration Reauthorization Act, 1996,* Pub. L. 104–264, 110 Stat. 3213 (1996).

[38] Dempsey, Aviation Security, *supra* note 2 p. 698. Accord Dempsey, Aviation Security, *supra* note 2 pp. 708–710. Accord Dempsey, Airline and Airport Security, *supra* note 23 pp. 217–222.

[39] *Omnibus Consolidated Appropriations Act, 1997,* Pub. L. No. 104–208, 570(f) (2), 110 Stat. 3009 (1996).

[40] Dempsey, Aviation Security, *supra* note 2 p. 698. Accord Dempsey, Aviation Security, *supra* note 2 pp. 710–711. Accord Dempsey, Airline and Airport Security, *supra* note 23 at 223.

[41] *Airport Security Improvement Act, 2000,* Pub. L. 106–528, 114 Stat. 2517 (codified as amended in scattered sections of 49 U.S.C).

[42] Category X airports consist of the nineteen highest risk airports, such as John F. Kennedy international airport in New York, Dulles international airport in Washington D.C. and Los Angeles international airport.

[43] Dempsey, Aviation Security, *supra* note 2 p. 698. Accord Dempsey, Aviation Security, *supra* note 2 p. 711. Accord Dempsey, Airline and Airport Security, *supra* note 23 p. 223.

Aviation and Transportation Security Act (2001)[44]

The Aviation and Transportation Security Act (2001) federalizes the airport screening function and establishes the new Transportation Security Administration[45] under the Department of Transportation (DOT), to regulate security in all modes of transportation. The legislation also enhances baggage screening procedures and imposes more stringent personnel qualifications on security employees.[46]

Air Transportation Safety and System Stabilization Act (2001)[47]

The Air Transportation Safety and System Stabilization Act (2001) is one of two statutes spawned by the events of 9/11. This statute does not address aviation security *per se* though it attempts to ameliorate the devastating legal and financial impact of the events of 9/11.[48]

Homeland Security Act (2002)[49]

The Homeland Security Act (2002) consolidates twenty-two agencies, including the TSA, into a new cabinet level Department of Homeland Security. This agency is conferred jurisdiction over; *inter alia*, transportation security, customs, immigration and agricultural inspections.[50]

Federal Aviation Regulations

Federal Aviation Regulations are designed to ensure the security of airports serving scheduled air carriers required to have screening programs. In other words, air carriers have the responsibility to prevent and deter carriage of weapons and explosives aboard their aircraft by potential hijackers. Conversely, airports serving the applicable air carriers are responsible for preventing and

---

[44] *Aviation and Transportation Security Act, 2001,* Pub. L. 107–71, 15 Stat. 597 (codified in scattered sections of 5 U.S.C; 26 U.S.C; 31 U.S.C; 42 U.S.C; 49 U.S.C).

[45] Hereinafter "TSA".

[46] Dempsey, Aviation Security, *supra* note 2 p. 698. Accord Dempsey, Aviation Security, *supra* note 2 pp. 712–717. Accord Dempsey, Airline and Airport Security, *supra* note 23, pp 226–234.

[47] *Air Transportation Safety and System Stabilization Act, 2001,* Pub. L. 107–42, 115 Stat. 230 (codified in scattered sections of 15 U.S.C; 19 U.S.C; 42 U.S.C; 49 U.S.C).

[48] Dempsey, Aviation Security, *supra* note 2 p. 712. Accord Dempsey, Airline and Airport Security, *supra* note 23 p. 226.

[49] *Homeland Security Act, 2002,* Pub. L. 107–296, 116 Stat. 2135 (codified as amended in 3 U.S.C; 5 U.S.C; 6 U.S.C; 7 U.S.C; 8 U.S.C; 10 U.S.C; 14 U.S.C; 15 U.S.C; 18 U.S.C; 19 U.S.C; 20 U.S.C; 21 U.S.C; 26 U.S.C; 28 U.S.C; 31 U.S.C; 37 U.S.C; 38 U.S.C; 40 U.S.C; 41 U.S.C; 42 U.S.C; 44 U.S.C; 49 U.S.C; 50 U.S.C).

[50] Dempsey, Aviation Security, *supra* note 2 at 698. Accord Dempsey, Aviation Security, *supra* note 2 pp. 717–719. Accord Dempsey, Airline and Airport Security, *supra* note 23 pp. 237–238.

deterring unauthorized access to the air operations area and for providing law enforcement support at passenger screening stations.[51]

Federal Aviation Regulations Parts 107, 108 and 109 provide for the safety of persons and property against acts of criminal violence and air piracy.[52]

Part 107 provides for the control of access to air operations areas by unauthorized persons and ground vehicles. No person may enter a sterile area without submitting to the screening of his or her person and property in accordance with the procedures being applied by the airport to control access to that area.[53]

Part 108 is designed to prevent or deter the carriage aboard airplanes of any explosive, incendiary or a deadly or dangerous weapon on or about each individual's person or accessible property, and the carriage of any explosive or incendiary in checked baggage. Under part 108, airlines are to prohibit unauthorized access to their airplanes; to ensure that baggage carried aboard their aircraft is checked-in by an identified agent; to prohibit unauthorized access to cargo and checked baggage; and to conduct security inspections of their airplanes.[54]

Part 109 (Indirect Air Carrier Security) provides additional protection against criminal activity. This part prescribes aviation security rules governing each air carrier, including air freight forwarders and cooperative shipping associations, engaged indirectly in air transportation of property. Each indirect air carrier is required to have a security program designed to prevent or deter the unauthorized introduction of explosives or incendiary devices into any package cargo intended for carriage by air.[55]

Other Instruments Seeking to Reaffirm US Commitment to Aviation Security

A protocol between the US and Belgium relating to air transport signed in Brussels in 1978, reaffirms, under Article 12, the commitment of both governments to act under and constantly with the Tokyo Convention (1963), the Hague Convention, 1970, and the Montréal Convention, 1971.[56]

Similarly, the US' current model 'open skies' agreement released by the Bureau of Economics and Business Affairs of the US Department of State reaffirms under, Article 7, the commitment of both parties to act under and constantly with the Tokyo Convention (1963), the Hague Convention (1970), the Montréal Convention (1971), and the Montréal Protocol (1988).[57]

---

[51] Gesell, *Aviation and the Law*, 3rd ed. (Chandler: Coast Aire, 1998) p. 179.
[52] *Ibid.*
[53] *Ibid.*
[54] *Ibid.*
[55] *Ibid.*
[56] 30 U.S.T. 217, T.I.A.S. # 9903.
[57] Current Model Open Skies Agreement Text, under: http://www.state.gov/e/eb/rls/othr/19514.htm (date accessed: November 1st, 2007).

Further, a multilateral agreement on the liberalization of international air transportation signed by the Asia Pacific Economic Cooperation members in Washington DC in 2001, reaffirms, under Article 7, the commitment of parties to act under and constantly with the Tokyo Convention (1963), the Hague Convention (1970), the Montréal Convention (1971), and the Montréal Protocol (1988).[58]

UK Laws

This segment examines specific UK laws which have been invoked to bolster aviation security.

Aviation Security Act (1982)

The Aviation Security Act (1982) is a statute consolidating certain enactments relating to aviation security.[59] Part I deals with offences against the safety of the aircraft and addresses the issue of hijacking, *inter alia*, and prescribes the form and nature of trial and punishment in the event of a breach of airport or aircraft security.

Apropos airport security, the statute addresses "offences relating to security at aerodromes etc".[60] Sections 21A through 21E of the statute deal with topics such as false statements relating to baggage and cargo[61] and identity documents[62]; unauthorized presence in a restricted zone[63] and on board aircraft[64]; and offences relating to unauthorized persons.[65]

The aforementioned sections lack details about the subject they are addressing and are merely used as enforcement mechanisms **after** the offence has been committed and in some cases, plausibly, as a deterrent. These sections, while *prima facie* substantive and procedural, are in fact punitive.

Airports Act (1986)

Although the Airports Act (1986) pertains to airports in the UK, the enactment is not authoritative in terms of the law with respect to airport security. The closest it comes in this regard is under a section titled "Directions to airport operators in the interests of national security".[66]

---

[58] Multilateral Agreement on the Liberalization of International Air Transportation, online: http://www.maliat.gov.nz/other/index.shtml (date accessed: November 1st, 2007).
[59] *Aviation Security Act 1982* (U.K.), 1982, Preamble.
[60] *Ibid*. at Sec. 21A to 21E.
[61] *Ibid*. at Sec. 21A.
[62] *Ibid*. at Sec. 21B.
[63] *Ibid*. at Sec. 21C.
[64] *Ibid*. at Sec. 21D.
[65] *Ibid*. at Sec. 21E.
[66] *Airports Act 1986* (U.K.), 1986, Sec. 30.

Aviation and Maritime Security Act, (1990)

The Aviation and Maritime Security Act (1990) is UK legislation to give effect to the Montréal Protocol (1988).[67] Like its preceding enactments this legislation is substantive, procedural and punitive in nature, and borrows in part from the Aviation Security Act (1982), notably from sections 21A through 21E.

Terrorism Act (2000)

The Terrorism Act (2000) was enacted to make temporary provisions for the prosecution and punishment of certain offences, and for the preservation of peace and the maintenance of order in Northern Ireland.[68] It may be instructive to note the contents of section 53 read with Schedule 7[69] of the said legislation as they collectively deal with, *inter alia*: the power to stop, question and detain; searches; detention of property; embarkation and disembarkation; carding and provision of passenger information.

Aviation (Offences) Act (2003)

The Aviation (Offences) Act (2003) was established to make provisions for the enforcement of 'certain offences' related to aviation.[70] While this Act does not squarely address airport security related crimes, it may be used in a supplementary fashion – when and where the need arises – to fill any gaps in existing laws.

Indian Laws

This segment examines some specific laws developed by India in its quest to increase security in its airports and aircraft.

Aircraft Act (1934)

The Aircraft Act (1934) is regarded as the basic constitutional law of aviation in India.[71] While it appears that this status was acquired due to it being the first statute to regulate civil aviation in India,[72] this statute, on closer scrutiny, fails to address certain key issues[73] of importance to civil aviation today. One

---

67 *Aviation and Maritime Security Act 1990* (U.K.), 1990, Preamble.

68 *Terrorism Act 2000* (U.K.), 2000, Preamble.

69 Port and Border Controls.

70 *Aviation (Offences) Act 2003* (U.K.), 2003, Preamble.

71 Bhatt, "A Survey of Current Air Law in India" in S.Bhatt, V.S. Mani, V.Balakista Reddy, eds., *Air Law and Policy in India* (New Delhi: Lancer Books, 1994) 53 p. 54 [Bhatt].

72 The Indian Aircraft Rules, 1920 (Rules 53 through 63) predate the Aircraft Act, 1934. However, they seem to apply only to aircraft arriving or departing from India and are applicable customs rules. *Ibid.* at 70.

73 Airport security, biometric testing, facilitation, insurance, machine readable travel documents, terrorism to name but a few.

might excuse these omissions in light of the fact that they were not matters of importance in 1934. However, this statute covers most other aspects of civil aviation by vesting/granting power in/to authorities/bodies to make laws governing civil aviation in India.

The purpose of the Airport Act (1934) is to make better provision for the control of the manufacturing, possession, use, operation, sale, import and export of aircraft.[74] This said, the concept of aviation security, let alone airport security, is not once mentioned. However, it is noteworthy that for the *security* of India and to *secure the safety* of aircraft operations, it does make provision:

> The Director-General of Civil Aviation or any other officer specially empowered in this behalf by the Central Government may, from time to time, by order, issue directions, consistent with the provisions of this act and the rules made there under, with respect to any of the matters specified in clauses (b), (c), (e), (f), (g), (h) and (m) of sub-section (2) of section 5, to any person or persons engaged in aircraft operations or using any aerodrome, in any case where the Director-General of Civil Aviation or such other officer is satisfied that in the interests of the security of India or for securing the safety of aircraft operations it is necessary so to do.[75]

Aircraft Rules (1937)

The Aircraft Rules (1937) contain rules that apply to the operation and use of aircraft as well as rules of the air relating to the public order of air space.[76] Part XI (Rules 78 through 92) deals with airports (management aspects), but here again airport security does not seem to feature into the drafters' agenda.

International Airports Authority Act (1971); National Airports Authority Act (1985); and Airports Authority of India Act (1994)

These laws share commonalities in that all are concerned with the administration and management of airports in India. However, like the other Indian laws discussed above, none of these has any bearing on airport security. Nevertheless, they do grant authorities, established under them, with the power to make rules and regulations to deal with, *inter alia*, "securing the safety of aircraft, vehicles and persons using the airport *or civil enclave* and preventing danger to the public arising from the use and operation of aircraft in the airport *or civil enclave*".[77]

---

[74] *Aircraft Act, 1934,* Preamble.

[75] *Ibid.* at Sec. 5(a).

[76] Bhatt, *supra* note 73 p. 58.

[77] *National Airports Authority Act, 1985.* Sec. 38(2) (h); *Airports Authority of India Act, 1994,* Sec. 42(2) (h). *International Airports Authority Act, 1971,* Sec. 37(2) (g). It is must be noted that the *International Airports Authority Act, 1971* under sec. 37(2) (g) does not include the *italicized* part of the text ("*or civil enclave*") being referenced here.

Tokyo Convention Act (1975)

The Indian law makers did not perform any feat of originality as they enacted this statute to give effect to the Tokyo Convention (1963) in India. Portions of the Tokyo Convention were incorporated into this statute *mutatis mutandis*. Chapter III (Sections. 3 through 8) of the Tokyo Convention Act (1975) contains the substantive provisions and details the offences that are to be considered. Since the Tokyo Convention has already been discussed, it shall not be addressed further.

Anti-Hijacking Act (1982)

This law was enacted on the lines of the Tokyo Convention Act (1975). It gives effect to the Hague Convention (1970) in India. Chapter II (Sections 3 through 6C) of the Anti-Hijacking Act contains substantive provisions and details the offences that are to be considered. Since the Hague Convention (1970) has already been discussed, it shall not be further addressed here.[78]

Suppression of Unlawful Acts Against Safety of Civil Aviation Act (1982)

Similar to the previous two Indian laws under discussion, this law was given weight by the Indian law makers so as to give effect to the Montréal Convention, 1971, in India. Chapter II (Sections 3 through 5D) of this legislation contains the substantive provisions and details the offences that are to be considered. Since the Montréal Convention (1971) has already been discussed, it shall not be addressed further.

Statutory Notifications Affecting Aviation in India

The Aircraft Manual of India contains important notifications issued by the Government of India under the Aircraft Act (1934) affecting civil aviation in India.

A notification of 1966 authorizes certain officers of the Directorate General of Civil Aviation to exercise powers under the Aircraft Act (1934), and the Aircraft Rules (1937).[79]

A 1981 notification confers power on an officer, under rule 8A of the Aircraft Rules (1937) for security check of persons boarding aircraft.[80]

---

[78] It may be interesting to note that the Indian drafters, in all their wisdom of the English language, have decided to *redefine* (maybe even *redraft*) the concept of 'hijacking' when they, in the Table of Contents to the Anti-Hijacking Act, 1982, spell hijacking as 'highjacking [sic]'. High-ly amusing!

[79] Bhatt, *supra* note 73 p. 83.

[80] *Ibid*.

Observations

As is evident from the examination of the existing laws in UK and India, few directly regulate airport security. The US however is somewhat more advanced in this respect, but one might argue that such advancement is more as a result of genuine paranoia and that some statutes were created reactively and not proactively, after 9/11. The US, in some senses, needed a metaphorical 'shot in the arm' before it could swing into action and one hopes other countries do not wait until they themselves are victims of a 9/11 type of attack before placing adequate security of airport facilities on top of their domestic policy priorities.

Looking at the variety of laws that have been introduced to address aviation security, it may well be questioned whether reactive approaches are the most efficient methods for tackling international problems in general and (international) terrorism in particular. It is opined that what governments really do, is solely or largely a mere public relations exercise in order to show that something has been done and that some response has been made. On this point, it may be prudent to identify and explain some of the tools currently deployed by governments to enhance airport and thus aircraft security.

Extant Airport Security Procedures

Common passenger screening technologies across airports may be broadly categorized as imaging technologies, trace detection technologies and non imaging electromagnetic technologies.[81]

Firstly, imaging technologies can detect metallic and non metallic objects in varying degrees of concealment using the same principles as an X-ray machine.[82]

Secondly, trace detection technologies are based on the direct chemical identification of either particles of explosive materials or vapour containing explosive material. The primary distinguishing feature between trace detection technologies and the other technologies is that in the former, a sample of the explosive material must be transported to the detection instrument in concentrations that exceed the detection limit. Trace detection technologies cannot be used to detect the presence of metallic weapons.[83]

Finally, non-imaging electromagnetic technologies are commonly found in, *inter alia*, libraries and stores. This technology functions as a metal detector

[81] U.S., National Research Council, *Airline Passenger Security Screening* (Washington DC: 1996) pp. 13–21.
[82] *Ibid.* p. 14.
[83] *Ibid.* p. 16.

to detect theft. For airport use, a potential improvement would be necessary to make these technologies specifically sensitive to weapons.[84]

An acceptable airport security system employs one or more of the following for screening passengers and/or cargo:

1. *Common X-ray machines*. These machines have, in larger airports, given way to thermal neutron analysis.[85] X-Ray machines have traditionally been used at airports to screen baggage and cargo;
2. *Explosives detectors and metal detector gateways*;
3. *Primitive body search, wanding and sniffer-dog searches*;
4. *Trained airline staff*. Particularly in methods of psychological screening where they are exposed to the psychological profiles of potential hijackers. Staff may be trained on identification techniques and if their suspicions are aroused, they notify airport security officials who then conduct a thorough search of the suspect.[86]

In airports which are financially successful and where the daily traffic would justify the investment, quadruple resonance devices seem to be advancement on the traditional X-ray machines. Quadruple resonance devices, which are a variant of the magnetic resonance imaging used in hospitals, are now being used for the purposes of baggage scanning. The technology operates under the principle that a magnetic resonance signal can be detected from explosives without applying a large external magnetic field.[87]

Biometric testing is another trend which is gaining popularity in the aviation industry. Biometric security systems consider unique physical characteristics (fingerprints, voices, retinas) before confirming the identity of an individual.[88] This way, impersonating another individual becomes nearly impossible.

Effective airport security involves planning, anticipation and the ability to out-think potential terrorists and others sky criminals. It also involves close cooperation between law enforcement and intelligent agencies that may work together to effectively close security loopholes. Most successful models of airport security consider the following facets:

1. the Physical layout and design of the airport
2. the wide use X-Ray and sniffer technology

---

[84] *Ibid.* p. 19.

[85] This process, analyzes the gamma rays emitted by bombarding luggage with neutrons. During the analysis, if large amounts of nitrogen are detected, then there is a strong likelihood of the presence of an explosive.

[86] Taylor, "Aerial Piracy- A pilot Viewpoint" in Yonah Alexander & Eugene Sochor, eds. *Aerial Piracy and Aviation Security* (Dordrecht: Martinus Nijhoff, 1990) 33 pp. 44–48.

[87] Sweet, *Terrorism and Airport Security* (Lewiston: Edwin Mellen Press, 2002) p. 479.

[88] *Ibid*. p. 482.

3. Qualified security personnel
4. adequate emergency response teams and internal airport policing
5. the maintenance of shared jurisdictions between airlines, airports and governments
6. the on-hands role of the airport manager[89]

As far back as 1967, the International Air Transport Association (IATA) working with security chiefs of major airlines formed what was called the Security Advisory Committee (SAC). This committee developed eight rules to ensure safety and security in air travel. The specific conditions (which remain relevant today) SAC called for were:

1. A creation of *sterile* areas for the boarding of all flights. A security screening of all passengers and their hand luggage was to be required prior to entering this sterile boarding zone. *All* persons and items entering the sterile boarding area require authorisation and are subject to security control measures.
2. The development of a direct and discrete communication system to link passenger screening points, and other access points, to an airport control centre capable and designated to act quickly in cases of unlawful action.
3. The establishment of an authorized law enforcement body armed and equipped to conduct patrols within the airport complex and be readily available to assist in cases of suspected or actual unlawful interference with civil aviation operations.
4. The creation of restricted access areas to be adequately enclosed thus preventing unauthorized entry to the *airside* of the airport.
5. The obligation of all staff working on the *airside* of an airport to display positive airport identification at all times.
6. The installation of physical barriers to separate public areas from all baggage, cargo and postal holds, and facilities to enable the screening of such items.
7. The standard that aircraft parking areas be adequately policed at all times
8. Establishing the security norm that all public observation view-points which overlook an airport's *airside* be adequately protected.[90]

---

[89] St. John, *Air Piracy, Airport Security and International Terrorism*, (New York: Quorum Books, 1991) p. 78.

[90] Wallis, *How Safe Are Our Skies?: Assessing the Airlines' Response to Terrorism* (Westport: Praeger, 2003) p. 70.

Points to Consider

There are several other important points to consider with regard to airport security. While it is certain that law making and enforcement bodies have – most likely – already identified, and may be working on these, it is useful to briefly mention and present them. These points will assist in painting a clearer picture of airport security, and what still needs to be done to protect this increasingly important civilian facility.

1. Airline and airport staff must be trained to broadcast seemingly innocuous messages on the public announcement system to draw the attention of law enforcement officers in instances of an actual (recognised) or potential threat. This may ensure that a person (or persons) under scrutiny will not be able to identify that law enforcement authorities have already been summoned, and might as a result, keep his guard down.
2. Airline and airport authorities must utilise, on a wide level, plain-clothed security and first aid personnel trained in a variety of emergency services. These plain-clothed personnel should be present throughout an airport facility including in the 'extra sterile' area of the airport. Plain-clothed personnel can observe the activities of waiting passengers and act promptly if they note anything suspicious. In this manner, the advantage of the element of surprise can be shifted to airport authorities and away from potential air criminals.
3. Given the current practice at airports in India (perhaps elsewhere as well), where passengers are subject to several security checks prior to boarding an aircraft, and where each security check is conducted by a different security agency, concern may arise regarding the thoroughness of each check. It is likely that in having more than one security check, each repetition of procedure may undermine the credibility of its predecessor. Airport authorities must guard against this when drawing up a plan to establish a sound security check procedure.
4. While screening passengers, no form of preferential treatment must be accorded to dignitaries, diplomats, heads of state or other high ranking officials. In the eyes of airport authorities, all passengers must be equal irrespective of their age, category of travel, gender and race.

Conclusions

Undeniably, laws play a vital role in ensuring the safety and security of civil aviation. However, the mere fact of their existence is not enough; rather, they must be complemented by sound procedures which have been tested for loopholes, ease of universal application, efficacy and feasibility. Unilateral actions by states (such as the US) to require additionally high levels of security for

incoming flights and a correspondingly lower level for outbound (international) flights is not a panacea.[91] To help bridge this perceived gulf, the following proposal may hold promise.[92]

A Model for Improving Check-In Procedures at Airports and Thereby Enhance Security

Airport facilities are not comparable to shopping malls. While, admittedly, a place of commerce, its true purpose should not be diluted by an inundation of merchant establishments.[93] The *sterile* areas of an airport should remain just that – sterile – and efforts must be made to minimize the number of people, other than legitimate passengers, accessing it.

It is proposed that airport complexes be made accessible only to legitimate passengers and the work-force required to staff it. Friends, relatives and an assortment of other visitors who now have access to it, ostensibly to see off or receive their acquaintances, should be kept out of the airport complex thus rendering the number of people to an accountable and manageable level.[94] Only those people who *must* be there should be granted access.

In an attempt to deter non-essential persons frequenting airport complexes, it would be prudent to efface expansive parking facilities. It is proposed to establish a centre, located at a reasonable distance from the airport complex itself, at which passengers could be dropped off by their guests, and then be transported to the airport complex by the appropriate authorities and/or airlines. This system would likely cause a marginal rise in operational costs, but one which could reasonably be considered a very small price to pay for enhancing airport (and as a consequence aviation) security.[95]

---

[91] The security procedures for flights into Washington DC's Reagan National airport (DCA) is far higher than those departing from it or into nearby Baltimore Washington International (BWI). A reason for this could be the vulnerability of the White House due to its proximity to DCA. One may argue, though, that the lives of those in the vicinity of BWI are equally precious as those found inhabiting the White House, thus calling for a standard level of security across *all* airports.

[92] This proposal is made while keeping a medium sized airport in mind. For larger or smaller airports with increased or reduced volumes of passengers and traffic, this proposal may be used *mutatis mutandis*.

[93] However, it would be foolish to ignore the substantial revenue airports generate from the merchant establishments they host- not just from the rent paid but also from the 'last minute' sales in which air passengers indulge With flight cancellations and delays, passengers often require facilities within the airport complex itself to help them tide over their hunger, thirst and the most natural concomitant of flight cancellations and delays- ennui.

[94] An added benefit of this move would be a decrease in the possibility of terrorist activities at the airport complex itself.

[95] While the elimination of parking facilities would reduce revenues generated from parking fees, the move would significantly reduce the incidence of terrorists planting vehicle bombs targeting airport facilities.

Once a passenger reaches an airport complex, all check-in baggage should be thoroughly screened.[96] When the airport security official handling this operation is satisfied that the bag is safe and 'clean', a tamper proof seal should be affixed to it, and the bag returned to the passenger.[97]

The passenger would then proceed with his/her bags, to the check-in counter to obtain his/her boarding card. Once the airline representative is satisfied with the credentials and identification documents of the passenger, and has noted that the check-in baggage has been cleared for acceptance, the passenger should be relieved of such baggage, issued a baggage acceptance receipt and boarding card and given instructions to submit him/herself and his/her carry-on baggage for security clearance.

At this point, the computer system should be able to correlate the advance passenger information and the passenger name record with details on 'no fly' and similar other lists to alert airline security staff of any potential threat posed by a particular passenger. Any positive response to this computer generated query should then be communicated to the airport security officials who would proceed to scrutinize such a passenger and his/her baggage (check-in and carry-on) more closely before allowing him/her to access the aircraft.[98]

When the passenger has obtained security clearance, s/he would be admitted to an 'extra sterile' pre-boarding waiting area, one with little or no external contact, such that s/he cannot accept any additional (and potentially hazardous) items to take on board.

Airport authorities should ensure that this 'extra sterile' area is equipped with sufficiently screened commercial establishments stocking products which are legitimately permitted on board aircraft.[99]

Further, this area should be staffed with individuals who have been subject to extensive and exhaustive background checks, decreasing the possibility of an 'accomplice' acquired or known to be in this 'extra sterile' area.

Once a passenger is asked to board a flight, and the airline takes note of his/her having boarded the aircraft, computer systems should alert baggage

---

[96] The advantages of screening check-in baggage in the presence of the passenger are two fold. First, it would increase confidence in the passenger that his belongings were not tampered with. Second, should the airport security official so require, he could request the passenger to open his bags thus vitiating the need to break open locks.

[97] Opening the bag at any time after this security procedure is complete must render the seal invalid thus alerting airport security officials to the fact that another security check on the bag is required. Upon arrival, if a passenger discovers a tampered seal, his ability to make a claim against the airline would be simplified. Of course, this last issue may be considered controversial and may require fine tuning in order to avoid vexatious and false claims.

[98] The airline staff should be in a position to inform airport security officials in a discrete and innocuous manner without arousing unnecessary anxiety or suspicion.

[99] Swiss army knives, cigarette lighters and souvenirs that could potentially be used as weapons on board aircraft are some of the items which should be proscribed.

handlers that a passenger-bag match has taken place and that his/her checked-in baggage may safely be loaded onto the aircraft. This process would not only ensure that the passenger accompanies his/her baggage, but would also reduce the chance of misplaced luggage.

It is also suggested that the procedure described above be applied to transit passengers as well. Should this procedure gain universal acceptance and application, air-faring nations would likely be more confident in the security of flights to and from other countries and could then devote their efforts to other, more productive, aspects of civil aviation.

Final Remarks

As discussed throughout this study, there is no shortage of laws aimed at handling situations after an attack on an aircraft or airport has occurred. States, together with international organisations, must realize that laws made reactively are of little consolation to those who have already suffered grief and loss. There is little solace in securing the metaphorical 'stable door' after a horse has bolted. What states and international organisations must focus on is the formulation of stringent laws, procedures and requirements applicable at an early stage, mitigating dangers before they come to fruition. For the civil aviation industry, the early stage is the airport.

If airport security laws, procedures and requirements were tightened and rigorously monitored for consistency, then much time, effort and money could be saved – resources currently being expended on enacting, implementing, enforcing and interpreting *new* aviation security laws. It is hoped that ideas of a similar nature to those contained in the model proposed above will perhaps inspire others to carry on researching the most efficient methods for increasing aviation security in the air and on the ground. But research is not enough. It is further hoped that those responsible for providing secure air travel take heed of the warnings and follow through with programmes to ensure that human lives are saved in a preventive manner – by adequately securing vulnerable public spaces of which the airport ranks high.