

CHAPTER 1

INTERNATIONAL FRAMEWORK FOR AVIATION AND CARGO SECURITY

Introduction

In assessing the current security measures used at air and sea ports of entry in South Africa, the obvious first step was to investigate these systems in their entirety. Only when their processes, procedures and requirements were fully understood would it be possible to identify any shortcomings and establish whether these could be exploited by traffickers in firearms. Detailed case studies of the Johannesburg International Airport (JIA), Durban Harbour and the City Deep Container Terminal (an internal port) were undertaken, and supplemented by visits to Lanseria Airport, Durban Airport and Richards Bay Harbour to assess whether the security systems used were comparable.

Over the last half of 2002, levels of security at South African airports have been raised in response to a number of events and issues. These include the 11 September 2001 attacks in the United States of America (USA); the implementation of the new Firearms Control Act (FCA); the implementation of the new South African Police Service (SAPS) National Firearms Programme; and the final drafting and acceptance of the *Border Police: Procedure Manual* in May 2002. Other issues that have contributed to the heightening of security measures include prevention of valuable cargo thefts and increased surveillance for drugs (in line with the new Southern Africa anti-drug strategy sponsored by the United Nations—UN—Office for Crime Prevention and Drug Control).

The renewed emphasis on security measures at ports of entry worldwide applies not only to the movement of people but also of goods. In some countries, like America and the United Kingdom (UK), mechanisms have been introduced to tighten up entry and screening procedures for persons, cargo and baggage. The USA in particular has imposed stricter entry requirements on citizens of countries perceived to be hostile to American policies, or of harbouring terrorist organisations. Goods originating from certain countries are also more stringently inspected, and the country refuses to allow entry to cargo containers unless they are certified as having been properly checked and cleared at their points of exit.

For a number of years the South African authorities have been tightening up border controls and improving other security measures at both air and sea international ports of entry. In the context of preventing weapons smuggling, the new FCA and the associated National Firearms Programme of the SAPS have led to the introduction of additional measures for the inspection of goods, whether imported or exported.

International regulatory framework

Security measures and standards for goods inspections and the movement of people are governed by a number of international conventions and treaties. These are currently administered and monitored by international organisations affiliated to the UN. For sea and air ports of entry the relevant organisations are the International Civil Aviation Organisation (ICAO) and the International Maritime Organisation (IMO). Both are governed by conventions that set out the required regulatory frameworks and standards to which international sea and air ports must conform if they want to be accredited and recognised as international entry and exit points.

International aviation and cargo security

International aviation security has been a concern of governments since the inception of air travel in the early 1900s. The first conference for the formulation of an international air code law was held in Paris in 1910. As aviation developed technically and international travel was launched in the period following the First World War, governments realised that aviation needed to be regulated on an international level. Accordingly, 26 of the 32 Allied and Associated Powers that attended the Paris Peace Conference of 1919 signed the first International Air Convention, which also set up the International Commission for Air Navigation (ICAN) to monitor developments in civil aviation. While the period between the two wars witnessed relatively slow growth in this field, the Second World War gave impetus to further developments. The USA convened an International Civil Aviation Conference in Chicago in November 1944, at which the Convention on International Civil Aviation (the so-called Chicago Convention) was drawn up and signed by 32 states. This Convention not only governed all aspects of civil aviation from passenger safety to technical aspects of flying, but also set up the permanent International Civil Aviation Organisation. An interim secretariat was established, and ICAO was formally instituted in April 1947. ICAO became a specialised agency of

the UN linked to the Economic and Social Council (UN ECOSOC) in October of that year. Its main objective was described as securing international co-operation and the highest possible degree of uniformity in regulations and standards, procedures and organisations relating to civil aviation matters.¹

International Civil Aviation Organisation

The early work of ICAO dealt largely with technical matters ranging from air traffic control to international air navigation, registration, and aeronautical maps and charts. Another factor incorporated into its technical responsibilities was aircraft and passenger safety. Inspection of goods and baggage was required to protect aeroplanes in flight from carrying dangerous goods like explosives, which might pose a threat to air safety. The *International Standards and Recommended Practices, Security (Safeguarding International Civil Aviation Against Acts of Unlawful Interference)* document, designated as Annex 17 of the Chicago Convention,² stipulates the safety measures required at an airport. These cover the securing of the apron area, boarding gates and baggage handling areas, and baggage and passenger screening functions.

As a signatory to the Chicago Convention, South Africa has given its Civil Aviation Authority (CAA) the responsibility of ensuring that all operators at any airport designated as an international port of entry adhere to the security requirements and safety measures contained in Annex 17. These standards apply to all users such as airlines, maintenance and technical staff, caterers and agents or freight forwarders.

At its 35th Session held in Montreal in October 2001, the ICAO Council resolved to expand the objectives of the Aviation Security Mechanism (ASM). These had initially aimed only to assist states to strengthen their implementation of, and co-operation with, the provisions of Annex 17. The expanded objectives involved the following:³

- conducting international aviation security surveys and assessments on a confidential basis, upon request, and recommending methods for the introduction of aviation security measures to meet the requirements of Annex 17;
- co-ordinating an aviation security training programme, providing on-the-job counterpart training and the staging of ICAO-sponsored, topic-focused workshops and regional training seminars;

- providing aviation security equipment, training aids and other equipment appropriate for the enhancement of aviation security in fully justified and selected cases, subject to supply by donor states; and
- conducting international aviation security audits on a voluntary basis with a view to assessing the level of implementation.⁴

Again these measures emanated from the security concerns that arose in the wake of 11 September. ICAO encouraged Contracting States to implement them or avail themselves of ICAO assistance. Aviation security was further strengthened by expanding the Universal Safety Oversight Audit Programme (USOAP) to include air traffic services, aerodromes and the core elements of accident and incident investigation. These were added to the mandatory, regular, systematic and harmonised safety audits of the airworthiness and operation of aircraft.⁵

Until the events of 11 September 2001, the ICAO model was regarded as adequate and sufficient to ensure the safety of passengers, aircraft and goods. However, in December 2001 the ICAO adopted an amendment to Annex 17, called Amendment 10, which set out a number of additional safety and security requirements. These include the following:⁶

- **Aircraft security check** This calls for an inspection of the interior of an aircraft to which passengers may have had access, and an inspection of the hold to look for any suspicious objects, weapons or other dangerous devices.
- **Background check** This requests a check on the identity and previous experience, including any criminal history, of any individual requiring unescorted access to a security restricted area. (This is part of the assessment of a person's suitability to be employed in any of the restricted sections of an airport.)
- **Screening** This adds the term "identify and/or" to the requirement to "detect weapons, explosives or other dangerous devices which may be used to commit an act of unlawful interference", placing an additional onus on screening operators not only to find but also to identify dangerous objects. Equipment additional to X-ray machines would be required for effective detection and identification.
- **Security** This removes the word "international" from "international civil aviation", meaning that security arrangements and measures should be extended to all civil aviation inclusive of domestic travel.

- **Security restricted areas** The definition of such areas has been extended to include, for the first time, the airside areas of an airport to which access is controlled. Security areas normally include all passenger departure areas between the screening checkpoint and the aircraft, the ramp, baggage make-up areas, cargo sheds, mail centres, airside catering and aircraft cleaning premises. This amendment to Annex 17 extends security requirements to areas outside the actual aeroplane and apron areas, and thus covers a much wider physical area than previously. A commensurate augmentation of security services and manpower is required to accommodate these additional responsibilities.
- **Objectives** This requires each Contracting State to ensure that the principles governing measures designed to prevent acts of unlawful interference with international civil aviation are applied to domestic operations as far as is practicable.
- **International co-operation** This calls for each Contracting State to share with other Contracting States any threat information that applies to the aviation security interests of those States, as far as is practicable.
- **National organization and appropriate authority** This obliges each Contracting State to empower the appropriate authority to manage the national civil aviation security programme. This involves defining and allocating tasks and co-ordinating activities between not only the departments, agencies and other organizations of the State but also airport and aircraft operators and other entities concerned with, or responsible for, the implementation of the programme. The co-ordinating function should be undertaken by a national aviation security committee appointed for that purpose.
- **Airport operations** This calls for each Contracting State to require each airport serving international civil aviation to establish and implement a written airport security programme conforming to the requirements of the national aviation security programme.

The date upon which Amendment 10 was to become effective was 15 April 2002 (unless a majority of the Contracting States registered their disapproval of any parts of it with ICAO before then).

While on the surface these amendments, prompted by heightened security concerns, might appear merely superficial changes in terminology, they con-

tain a significant new emphasis. This is particularly noticeable in improvements relating to better co-ordination of security arrangements, the sharing of information, the enlargement of security areas and the extension of security to domestic flights. In the overall scheme of aviation and airport security, they represent a distinct hardening of airport controls and security measures. Within the South African context they complement existing plans for the stricter application of all forms of security, especially the screening of goods, passengers and baggage.

The Ministerial Meeting of ICAO held in Montreal in February 2002 endorsed an ICAO Aviation Security Plan of Action, which recognised “the need for strengthening measures to prevent all acts of unlawful interference with civil aviation”. It also reaffirmed “the responsibility of States for the security and the safety of civil aviation, irrespective of whether air transport and related services are provided by Government, autonomous or private entities”. It also acknowledged that “a uniform approach in a global system is essential to ensure aviation security throughout the world and that deficiencies in any part of the system constitute a threat to the entire global system”.⁷

International Air Transport Association

Another international aviation industry organisation, the International Air Transport Association (IATA),⁸ has also had a significant impact on security and cargo handling at airports. IATA is the prime vehicle for inter-airline co-operation in promoting safe, reliable, secure and economical air services for the benefit of air travellers. Its membership consists solely of airline and air carrier operators.⁹

As with other organisations serving the aviation industry, in the aftermath of the terrorist attacks in 2001 IATA refocused the industry’s efforts. It identified three priorities for achieving the recovery of civil aviation. The first and highest was security: the industry should focus on “ensuring that new and enhanced measures are effective, internationally harmonized and minimally disruptive to passengers and shippers”.¹⁰ The Association already has a Security Department¹¹ that collects, analyses and disseminates information on international civil aviation security to its members, while concurrently developing policies and procedures to combat threats to civil aviation in general and airline customers, personnel and property in particular. This department, which is directed by a Security Committee of IATA members, was established in the late 1960s following a worldwide wave of aircraft hijackings.

IATA also assists the policy-making of government and appropriate international organisations by representing the security concerns of the airlines. This contribution takes the following forms:

- assisting in the development of international standards and recommended practices;
- participating in the ICAO Aviation Security Panel of Experts;
- encouraging governments to ratify, implement and adhere to international security conventions; and
- conducting on-site security surveys of international airports under the IATA Intensified Aviation Security Programme.

In terms of providing specific security services to member airlines, IATA has been involved in the development of industry policies and guidelines and the provision of security expertise to industry working groups. In addition, the IATA Security Department offers Airline and Aviation Security Training Courses. These have been designed by the Department to train airline staff to an international standard in developing, implementing and managing aviation security programmes, as required by airlines and states, and to guide those involved in the everyday implementation of various forms of protection. IATA has also developed a Security Manual whose sale is restricted to companies with a direct involvement in the protection of civil aviation and air cargo against unlawful interference or criminal acts.

There is also the Cargo Security Task Force (CSTF), which was established to define the airline industry's position on cargo security and to ensure that all members implement cargo security measures properly. The CSTF co-ordinates its actions with the IATA Security Committee on issues relating to lobbying international organisations such as the ICAO and national regulatory bodies (like the US Federal Aviation Administration or the South African Civil Aviation Authority). The CSTF is also actively involved in promoting the implementation of harmonised cargo security standards worldwide. IATA Cargo, together with the CSTF, works with airline members, freight forwarders, customs administrators, shippers and government authorities to improve standards in shipment documentation and the automated tracking of cargo. It also helps to develop streamlined procedures supporting cargo agent activities and to refine regulations governing the transportation of dangerous goods.

Linked to these activities is the important co-ordinating role of the Global Aviation Security Action Group (GASAG).¹² This organisation collates all information on security from the aviation industry in order to provide an effective worldwide security system.

Since the early 1950s IATA has played a pivotal role in the development of standardised regulations for the transportation of dangerous goods by air. These rules provide not only for the safe and efficient transportation of these materials, but also for the identification of undeclared and other potentially hazardous shipments. A team of airline and technical experts produced the first set of IATA's Restricted Article Regulations (RARs), issued in 1956, which govern the international transport of dangerous goods. While all the main carriers used these RARs, they were applicable only to IATA members. Consequently, their adoption and use by other airlines was voluntary. Nevertheless, more than 80 countries adopted the RARs in their national legislation. However, these regulations could have only a limited effect in the (relatively small) global air transport industry of that time because they could not be universally enforced.

With the rapid expansion in the 1970s and 1980s not only of air transport but also the carrying of cargo, IATA approached ICAO and asked it to incorporate the RARs in a new set of rules. These would be binding on all states involved in civil aviation and on all members of the Chicago Convention. ICAO subsequently promulgated its Technical Instructions for the Safe Transport of Dangerous Goods by Air. Also, to support government legislation and the enforcement of regulatory instructions, IATA continues to publish its regulations on dangerous goods annually, specifying the latest rules on their control as formulated by states, operators and ICAO.

An important element in complying with the dangerous goods regulations is the establishment and use of proper training programmes at all levels. Unless all personnel involved in every link of the dangerous goods transportation chain are adequately instructed, the regulations cannot be effectively applied. Therefore IATA has created a Dangerous Goods Training Task Force that continually monitors the standards of dangerous goods training worldwide.

Federal Aviation Administration

The final level of international influence on security requirements in the aviation industry is the security and safety requirements of the Federal Aviation Administration (FAA) of the USA. A large proportion of passengers and goods

from South Africa have the USA as their destination. Since goods and passengers that do not comply with the FAA's requirements are not accepted by the American authorities, it has become doubly important for operators and carriers to comply with these rules and standards. In essence the FAA regulations have become an international benchmark for best practice.

In terms of external security and safety requirements, the FAA¹³ has developed Federal Air Regulations (FARs), based on domestic USA Airport and Air Carrier Security Programmes. Generally, FARs establish only broad objectives. International airports and carriers are required by the FAA to design their own security programmes to provide a safe operating environment. While Air Security Programmes (ASPs) are tailored to the specific needs of each airport, they all include standard requirements for ensuring that:

- law enforcement officials respond to various security threats;
- physical security (such as airport perimeter fencing) is provided; and
- access to operations areas (for example the taxi-way and jet-way) is restricted.

Once the ASP programme has been approved by the FAA Office of Civil Aviation Security, airport and air carrier managers must comply with the programme requirements or face enforcement action (that is, refusal of entry into the USA of passengers and goods).

The USA's International Security and Development Co-operation Act, passed in 1985, significantly expanded the FAA's role in aviation security. Specifically, it required assessment of the effectiveness of the security measures at certain foreign airports. Accordingly international airports and air carriers outside the USA are periodically inspected by FAA Special Agents, to ensure they continue to meet the requirements of their ASPs. The assessment applies the minimum standards and recommended practices established by the ICAO under Annex 17 as its criteria. The results of each assessment are shared with the host government. When deficiencies are found, the type of corrective action recommended is based on the severity of the problem. Whenever possible, every effort is made to bring the airport or air carrier into voluntary compliance. Failing that, enforcement action is taken.

The FAA requires airport managers to ensure that the following security actions are enforced:

- screening of passengers and their baggage, including the training and testing of those persons responsible for the screening;
- securing of the aircraft against the introduction of explosive or incendiary devices in checked baggage;
- monitoring and securing of all sterile areas under the carrier's control; and
- controlling the handling of baggage and cargo.

The FAA security requirements also include indirect air carrier operators (that is, those agents not directly involved in transporting goods and passengers in the air). These include operators who deal with accepting and delivering cargo to commercial airlines for transport. Due to the vulnerability of aircraft to fire and explosions, indirect carriers are also required to develop security programmes designed to prevent explosives and incendiaries from being loaded onto aircraft in cargo or mail. Air carriers and shippers who send dangerous goods to the USA are also required to transport the materials in accordance with the FAA's Hazardous Materials Regulations. These give shippers the option of complying with them or the regulatory requirements of the ICAO's Technical Instructions for the Safe Transport of Dangerous Goods by Air. To ensure adherence, Special Agents periodically inspect air carriers' operations relating to hazardous materials shipments, and investigate any violations noted.

Civil Aviation Authority

The security requirements of the ICAO, IATA and the FAA have largely determined the implementation of airport and cargo security in South Africa. As a signatory to the Chicago Convention, South Africa is bound to adhere to all its provisions. Before 1998, South Africa's aviation safety and security fell under the Chief Directorate: Civil Aviation of the Department of Transport (DOT).¹⁴ The establishment of the South African CAA—and the parallel creation of the South African Maritime Safety Authority—was consistent with international trends in regulating civil aviation. The CAA performs the key oversight role for aviation in South Africa in the areas of aircraft, airports, airspace and personnel. The procedures followed in airports for the screening of passengers and baggage, for access control in terms of fencing and lighting, and for the handling, packaging and documentation of hazardous substances are all super-

vised by the CAA. Generally, all relevant organisations and services are monitored by the CAA to ensure that personnel and standards meet international levels.¹⁵

The functions of the CAA's Aviation Security Department encompass all airport, airline and cargo security. In addition, it undertakes inspections of the security programmes and processes of operators in relation to their handling of passengers, baggage and dangerous goods. Furthermore, local and international trends and key safety indicators are continually monitored, researched and analysed in order to establish whether South Africa's security standards are on a par with those of the global civil aviation community. Regular inspections are carried out to enable the CAA to identify lapses in any of the security systems implemented in and around airports; to determine deficiencies; to recommend ways of rectifying them; and to suggest new regulations. Finally, the CAA can revise any security programme to maintain its effectiveness. Its security inspectors perform their duties in terms of the Civil Aviation Offences Act, but the ICAO Security Manual, Annex 17 and the National Aviation Safety Plan (NASP), as approved by the Minister of Transport, remain the key documents that guide aviation and airport security.¹⁶

At ground level, the physical implementation of security measures remains the duty of the airport operating company and the cargo operators. In the majority of internationally designated airports in South Africa (with the exception of Lanseria),¹⁷ the operating companies would be either the Airports Company of South Africa (ACSA) or South African Cargo (SAC) and the security companies subcontracted by them. However, certain aspects of responsibility (for example policing crime at borders, goods inspections, goods clearances and securing cargo areas) overlap with those of functionaries such as the South African Police Service (SAPS) (the Border Police), the Customs and Excise section of the South African Revenue Services (SARS) and cargo operators, freight forwarders and agents. (The role and involvement of all these will be dealt with later.)

International maritime traffic regulation

In 1948 an international conference in Geneva adopted a convention that formally established the Inter-Governmental Maritime Consultative Organization (IMCO). The name was changed in 1982 to the International Maritime Organization (IMO), which from 1958 onwards has taken responsibility for the safety and movement of shipping traffic and cargo containers. Having

been set up as a permanent international body to promote maritime safety more effectively, the IMO turned its attention to revising the International Convention for the Safety of Life at Sea (SOLAS), which is the most important of all the treaties dealing with maritime safety.

The IMO has introduced a series of measures to improve shipping safety and related maritime issues. These include the prevention of sea pollution; the facilitation of ship traffic; the marking of load lines; the introduction of maritime distress and search and rescue systems; the safe carriage of dangerous goods; and container security. Maritime legislation is still the IMO's main concern. Around 40 conventions and protocols have been adopted by the Organization. Most of them have been amended several times to accommodate the changes taking place in world shipping. Two recent initiatives are of especial importance. On 1 February 1997 the 1995 amendments to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers of 1978, granting the IMO the power to check on government actions,¹⁸ came into force. Then on 1 July 1998 the International Safety Management Code for ships (passenger, oil and chemical tankers, bulk and gas carriers) of 500 gross tonnage and above became operational.

But while the IMO sets maritime safety standards, the adoption and implementation of treaties remain the responsibility of governments. The IMO has encouraged states to introduce port control systems that adhere to the safety regulations, and also undertakes inspections of ships to ensure they meet IMO standards. Unlike the ICAO, the IMO does not have specific security and safety manuals relating to port side security (that is, the securing of restricted areas and goods).¹⁹ These responsibilities are left to the local port authorities, the cargo and warehouse operators or their agents, and the border police and customs and excise inspectors at harbours. (The differing roles and responsibilities of these functionaries will be outlined in a later section.)

In order to contextualise the current security systems in operation at air and sea ports of entry in South Africa, using the Johannesburg International Airport, Durban Harbour and City Deep Internal Port as case studies, it is necessary to begin by describing the efforts to tighten border controls made by the government from 1994 onwards. Such a review will also allow some comparisons to be made between the security situation then and its present situation.